

VGB-Standard KKS Identification System for Power Stations

Guideline for Application and Key Part

8th revised edition 2018
(formerly VGB-B 105e)

VGB-S-811-01-2018-01-EN



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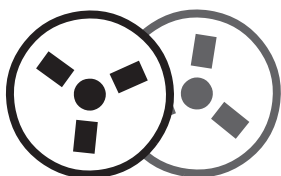
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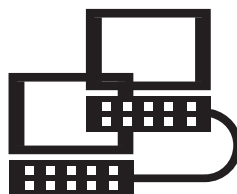
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VGB-Standard

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(formerly VGB-B 105e)
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Publisher:
VGB PowerTech e.V.

Publishing house:
VGB PowerTech Service GmbH
Verlag technisch-wissenschaftlicher Schriften
Deilbachtal 173, 45257 Essen, Germany
Phone: +49 201 8128-200
Fax: +49 201 8128-302
E-mail: mark@vgb.org

ISBN 978-3-96284-043-3 (Print, Hardcover)
ISBN 978-3-96284-044-0 (Print, Folder)
ISBN 978-3-96284-045-7 (eBook)



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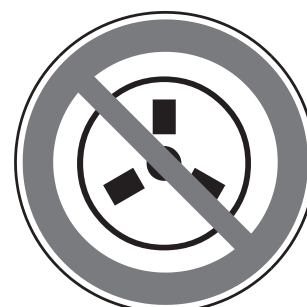
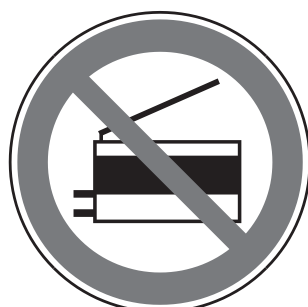
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Preface

Owing to the national and international standardization process, the KKS Identification System for Power Stations (hereinafter referred to as “KKS”) is being replaced by the RDS-PP® Reference Designation System for Power Plants based on DIN ISO 81346-10. Thus, RDS-PP® is thus considered to be a generally accepted good engineering practice and can be applied in planning, construction, operation and dismantling of energy supply plants and equipment as a an unambiguous identification system.

Existing power plants with identification coding to KKS will not be re-coded to RDS-PP®. Consequently, it will be necessary to continue to apply the KKS system in the event of additions to existing plants and conversion measures, I&C retrofits etc.

Technical progress made over time called for adjustments to the KKS rules. Some examples were added to the KKS guidelines and the KKS keys were updated. The examples given in the KKS guidelines are intended only for explanation of the defined rules.

The KKS Rules as a code of practice consist of the KKS Guidelines and the KKS Keys.

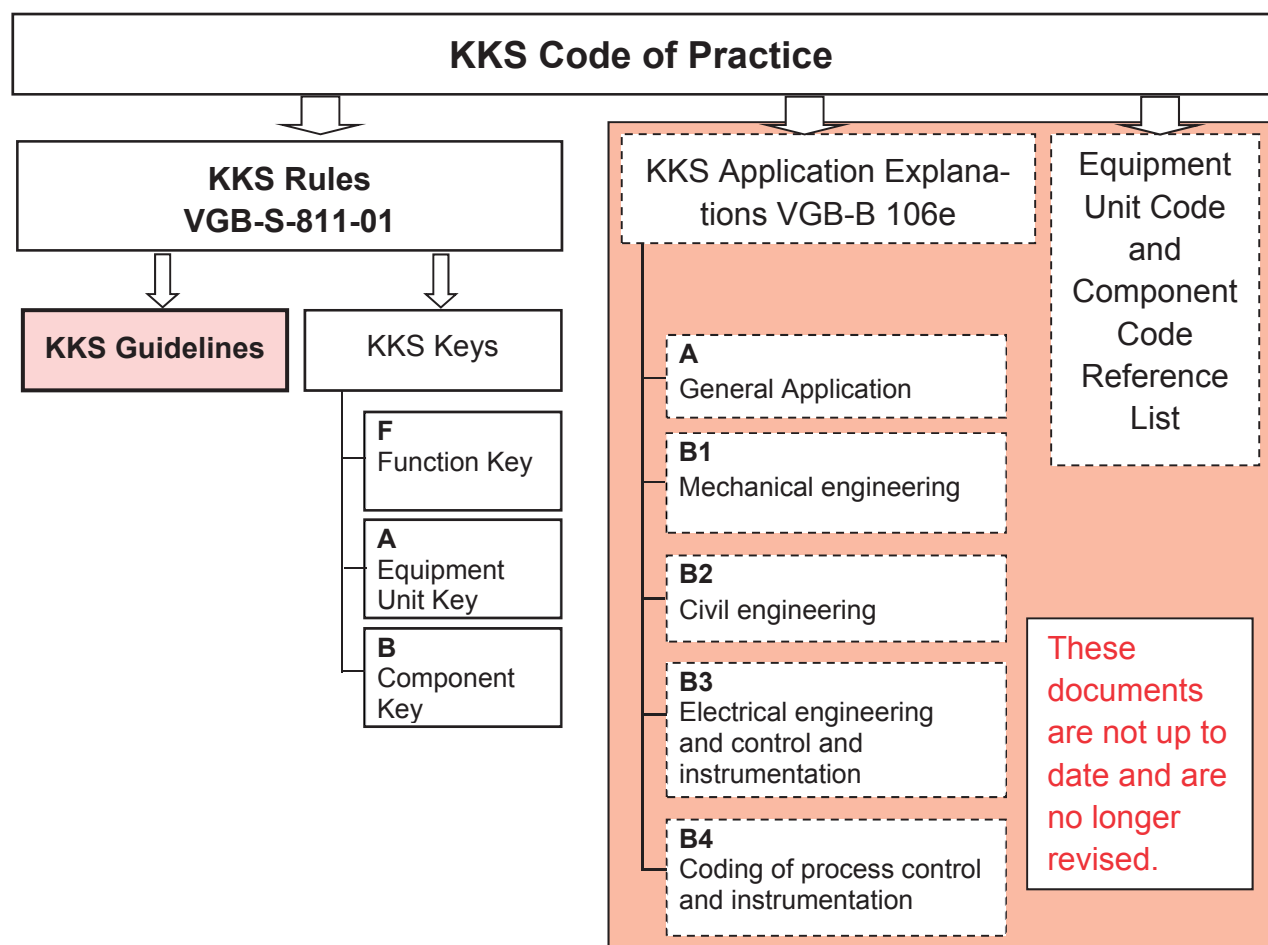


Figure 1: KKS Code of Practice.

The Application Explanations (VGB-B 106e parts A, B1, B2, B3 and B4 covering general application, mechanical engineering, civil engineering, electrical engineering and process control and instrumentation) and the Equipment Unit Code and Component Code Reference (VGB-B 105.1) were last issued in 1988 and are not updated any more.

Use of the available Application Explanations is at the user's own responsibility.

The present standard was compiled by the VGB Technical Group (TG) "Reference Designation and Plant Documentation" which brings together experts from plant operators, plant maintenance companies, planners and manufacturers for joint work.

Among other tasks, this TG is charged with the tasks of compiling and keeping up to date technical and power plant type specific reference designation standards, in particular the present KKS Identification System for Power Stations.

The members of this TG represent the interests of VGB PowerTech e.V. in national and international standardization bodies.

At the time of publication of the present standard (8th edition 2018), the following companies were represented in the VGB TG "Reference Designation and Plant Documentation":

- ABB AG
- GE Power GmbH
- EnBW AG
- Ingenieurbüro gabo gmbh
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The names listed above are given without any claim to unambiguousness or clear legal identification.

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Essen, January 2018
VGB PowerTech e.V.

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1 Introduction

1.1 Purpose of the Present Guidelines

The present guidelines define the rules for application of the KKS. For application cases not covered by the present rules, additional specifications are to be agreed between the parties involved in the specific project. A practical checklist is provided in section 6 of the present guidelines.

1.2 Scope of Application

The present guidelines apply to conversion, expansion, retrofitting, modernization etc. of energy supply plants with identification coding to the KKS Identification System for Power Stations.

The KKS is used for identification coding and labelling of plants, systems and items equipment in any type of power station according to their function in the process and their location. It applies to the disciplines of mechanical engineering, civil engineering, electrical and C&I and is to be used for planning, licensing, construction, operation and maintenance.

The allocation of redundancy groups (to KTA 3501) is performed outside the scope of the KKS code, using a separate redundancy code. This is not covered by the present guidelines.

The present guidelines are not applicable to the identification of product types, cost centres, work orders, project numbers and the like.

1.3 Main Features of the KKS



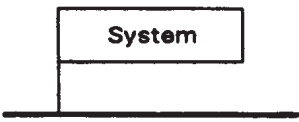
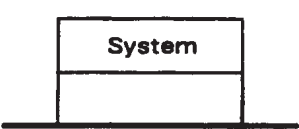
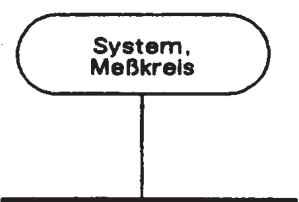
- Uniform identification for all types of power station and any connected processes.
- Sufficient capacity and detail for identification of all systems, components and structures.
- Consistent identification for planning, licensing, construction, operation, maintenance and waste management.
- Interdisciplinary applicability to mechanical engineering, civil engineering, electrical engineering and control and instrumentation combined with ability to identify according to process functions, points of installation and locations.
- Non-language-based coding to ensure international usability.
- Application in computer processing.
- Hierarchically structured format with a maximum of 4 breakdown levels and fixed alphanumeric data characters.

- Three types of identification:
 - Process-related identification,
 - Point of installation identification,
 - Location identification.

1.4 Symbols Used for Presentation of KKS Identification Coding

The graphic symbols defined in ISO 14084-1 are used for presentation of the KKS identification coding. The notation of the identification codes in project documents is to be agreed between the parties involved in the specific project.

Table 1: List of symbols.

Symbol	Explanation
	The “pin with empty pinhead” represents interfaces between systems/ plants and subsystems/plant sections
	The “pin with full pinhead” represents interfaces between piping subsystems.
	The “flag” symbol represents the designation of pipelines. The direction of the flag indicates the flow direction.
	The extended “flag” symbol represents the designation of pipelines whose flow direction changes depending on the operating state.
	The “C & I loop” symbol represents measuring circuits.

2 Structure of the KKS Identification System

2.1 Types of Code and Breakdown Levels

KKS has three different types of code:

- **Process-related code** Process-related identification of systems and items of equipment according to their functions in mechanic, civil, electric, control and instrumentation (C&I) engineering.
- **Point of installation code**
Identification of points of installation of electrical and C&I devices in installation units (e.g. in cabinets, panels, consoles).
- **Location code**
Identification of locations in structures, on floors, in rooms and also of fire zones and topographical stipulations (surface area grid).

These three types of code use the same identification scheme, which is subdivided into a maximum of four breakdown levels.

The titles of the breakdown levels of the three types of code are as follows:

Serial no. of breakdown level	0	1	2	3
Process-related identification	Total plant	System code	Equipment unit code	Component code
Point of installation identification	Total plant	Installation unit code	Installation space code	
Location identification	Total plant	Structure code	Room code	

Figure 2: Overall structure of identification coding, types of code and titles of code breakdown levels.

2.2 Prefix Symbols and Breakdown Symbols for Types of Code

The types of code are distinguished by means of prefix symbols and breakdown symbols.

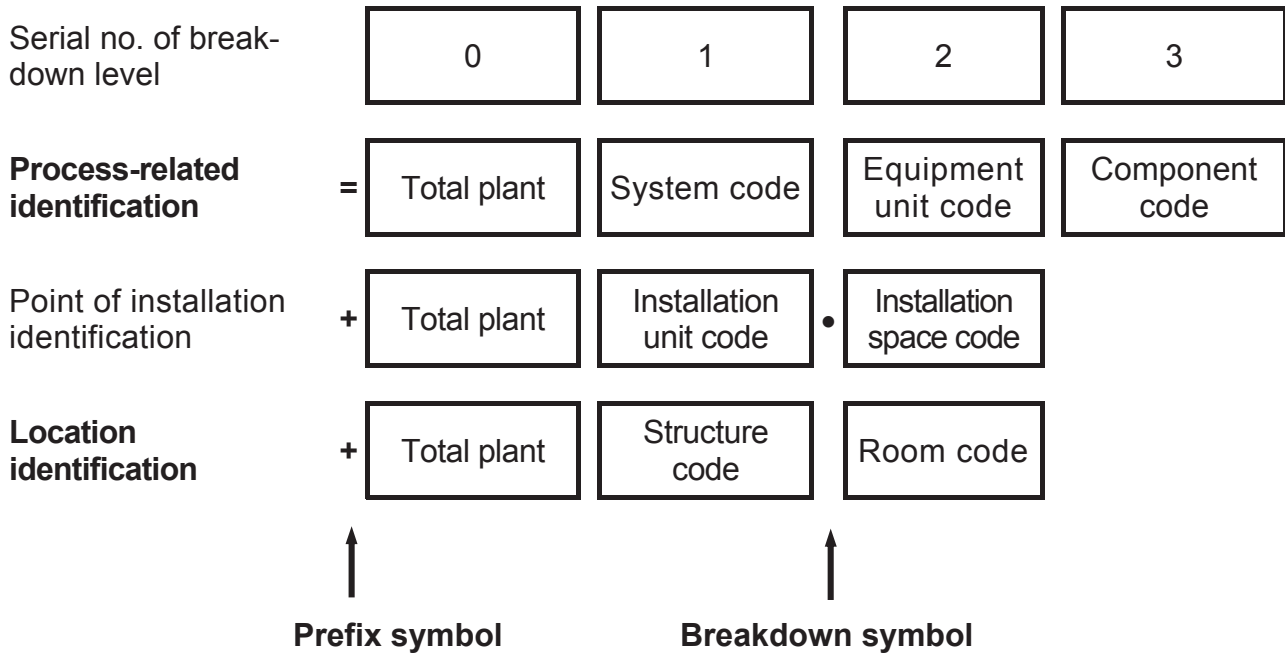


Figure 3: Prefix symbol and breakdown symbol.

The prefixes need not to be written if the message of the code remains unique (e.g., in tables with appropriate column headings).

The breakdown symbol “dot” for the marking “point of installation” must always be written.

2.3 General Format of the Code

The code consists of a maximum of four breakdown levels. The individual breakdown levels have different formats. They consist of classifying and numbering code elements which consist of data characters occupied by alpha characters and numeric characters:

Serial no. of breakdown level	0	1	2	3
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character	A or N	N A A A N N	A A N N N A	A A N N

A = Alpha characters (Roman letters except I and O, and special symbols)

N = Numeric characters (Arabic numerals)

Figure 4: General format of the code.

Within the code, the units identified by the breakdown levels get smaller from left to right.

Read from left to right no data characters may be omitted.

Special guidelines apply to data characters G, F₀ and A₃.

2.3.1 Classifying Code Elements

The alpha code elements F_1 , F_2 , F_3 , A_1 , A_2 and B_1 , B_2 have a classifying function.

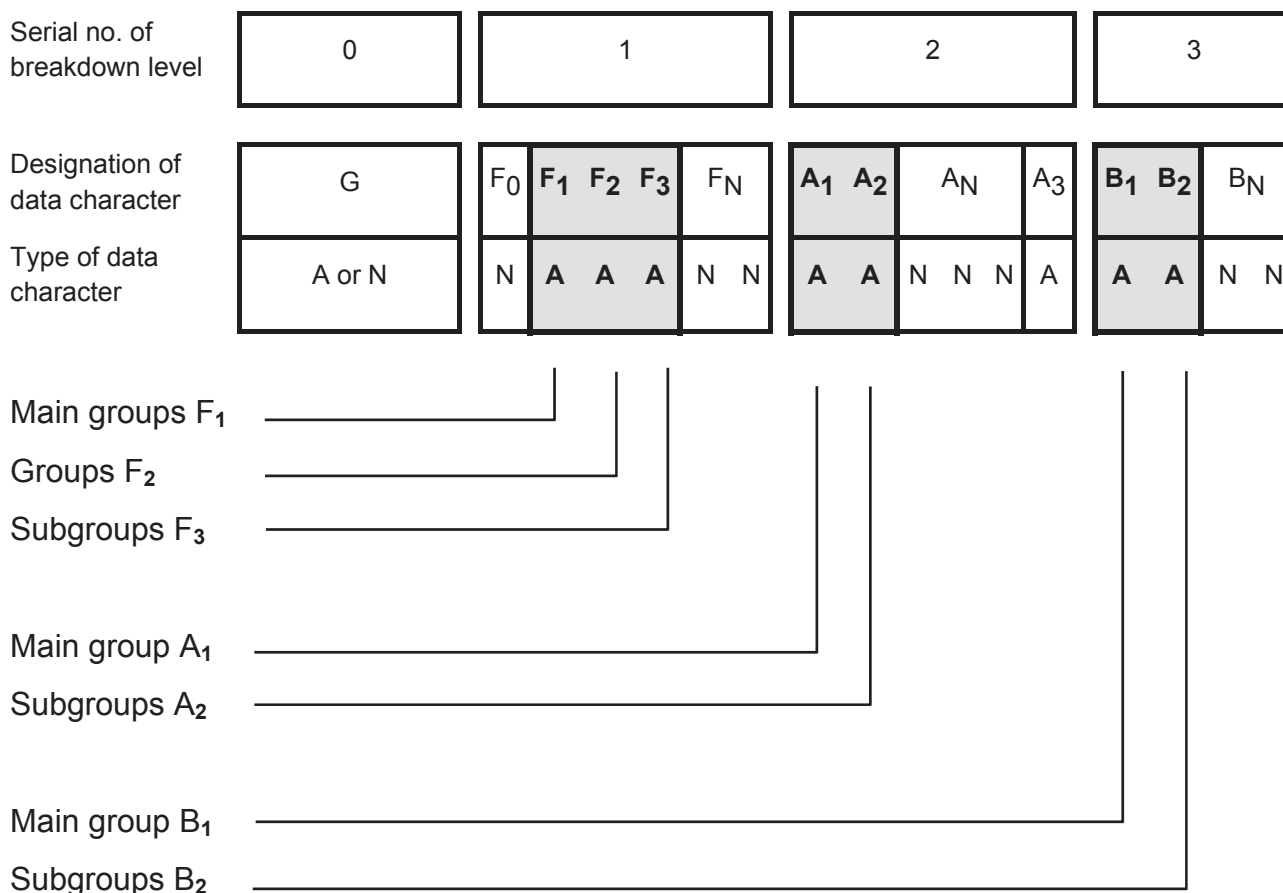


Figure 5: Classifying code elements.

The classifying coding letters and designations are defined project-independently in the KKS keys as follows:

- Function key, for F_1 / $F_1 F_2$ / $F_1 F_2 F_3$ on breakdown level 1,
- Equipment unit key, for A_1 / $A_1 A_2$ on breakdown level 2,
- Component key, for B_1 / $B_1 B_2$ on breakdown level 3.

The plain text designation of the key may be modified on a project-specific basis, provided that this does not result in changes to the content. Modifications must be agreed by the parties to the project and documented in project-specific identification guidelines.

“Blocked” coding letters are reserved for future technologies and new engineering systems. They may only be allocated and released by the VGB TG “Reference Designation and Plant Designation”.

2.3.2 Numbering Code Elements

The code elements G , F_0 , F_N , A_N , A_3 and B_N have a numbering function.

Serial no. of breakdown level	0	1	2	3
Designation of data character	G	F₀ F_1 F_2 F_3 F_N	A_1 A_2 A_N A₃	B_1 B_2 B_N
Type of data character	A or N	N A A A N N	A A N N N A	A A N N

Figure 6: Numbering code elements.

The following principles apply to numbering codes:

- As a rule, numbering starts anew when one of the preceding code elements changes.
- Numbering may be consecutive or grouping.
- Numbering need not be continuous.
- Numbering conventions, once established, may not be altered, not even in the event of changes made in the progress of planning.
- Leading zeros must be written.
- An application-specific scheme of numbering may be established. However, such schemes may not have the effect of reserving numbers in other applications, not even within the same engineering discipline.

Other principles have to be determined for each project separately.

3 Contents of Data Characters

3.1 Total Plant

Breakdown level 0 is used to identify

- power station units,
- non-unit-specific plants,
- extensions

within the power plant site.

Serial no. of breakdown level	0	1	2	3
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character	(A or N)	N A A A N N	A A N N N A	A A N N

Total Plant



Figure 7: Data character "Total plant".

For a specific application case, the parties to the project must specify the following for breakdown level 0:

- content,
- type of data character (A or N), and
- direction of numbering.

The direction of numbering depends on local characteristics of the specific project. The direction of number on breakdown level 0 should be defined together with the direction of numbering in the prefix number of breakdown level 1 (see also there).

The direction of numbering can be defined on the basis of the following criteria:

- Flow direction of flow of
 - Material,
 - energy.

- Viewing direction from a defined point, for instance:
 - from left to right,
 - from bottom to top,
 - from front to rear,
 - from inside to outside.
- Geographic directions
- Expansion stages
- Cartesian coordinates
- Polar coordinates
- Priorities

Breakdown level 0 may be omitted if the remaining code remains unique. This has to be agreed between the parties to the project.

The stipulations for the breakdown level “Total plant” are the same for all three code types in all disciplines. It is therefore not described again in the following sections of this standard.

Figure 8 shows an example of the breakdown level “Total plant”.

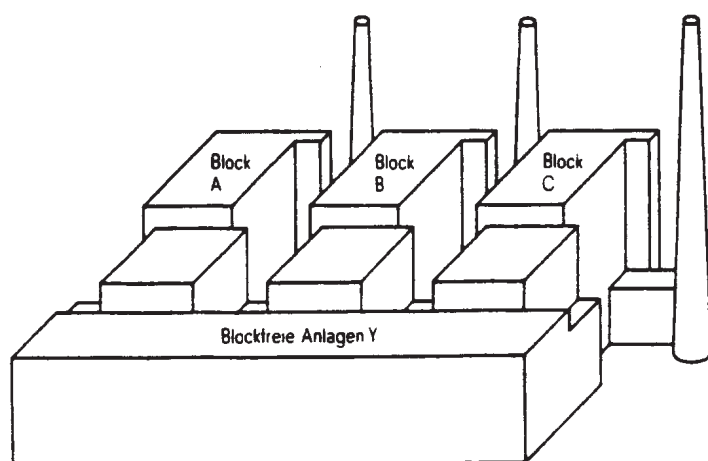


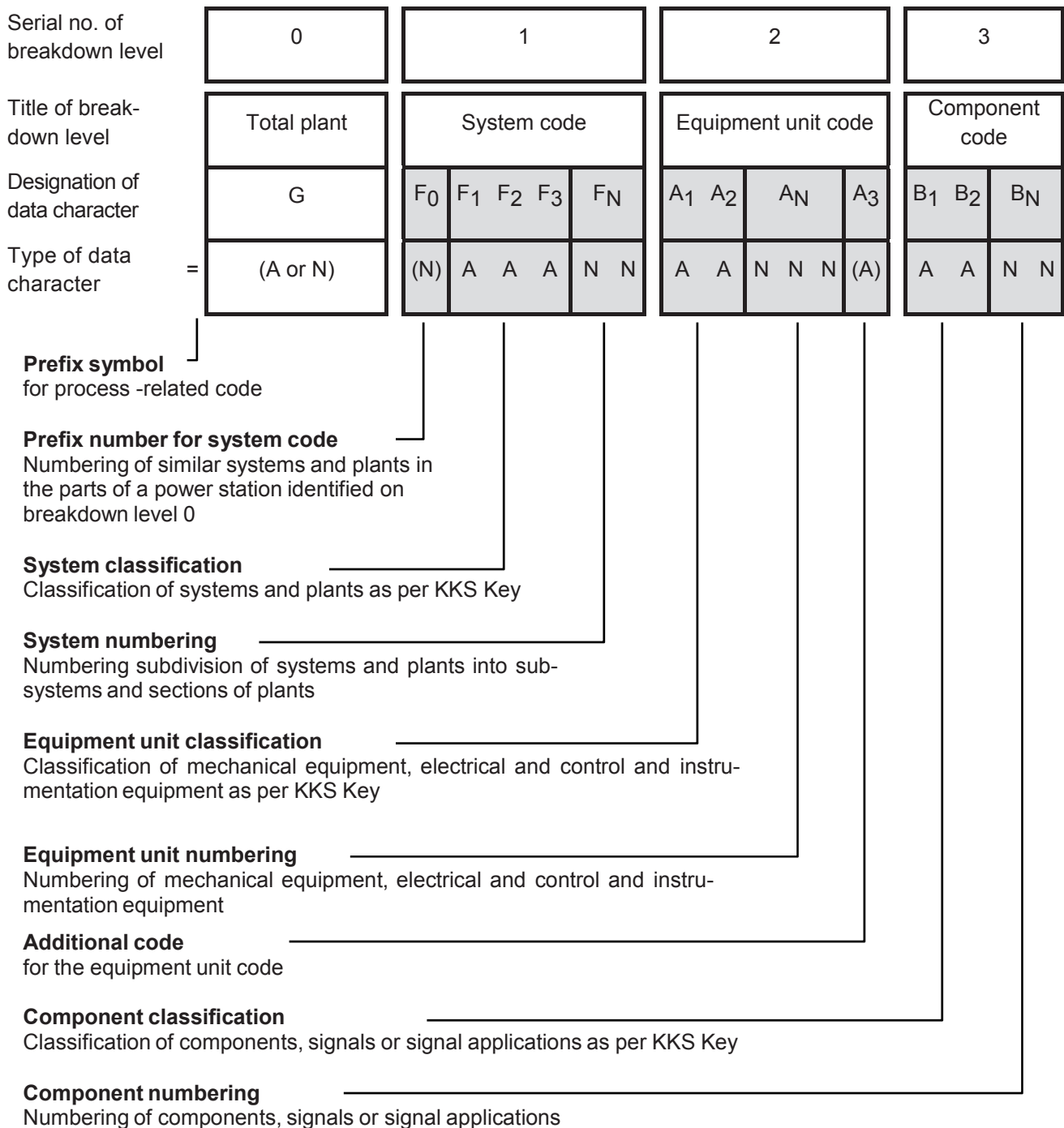
Figure 8: Example.

Legend to Figure 8	
Block A	Unit A
Block B	Unit B
Block C	Unit C
Blockfreie Anlagen Y	Shared plants Y

3.2 Process-Related Identification

3.2.1 Format of Breakdown Levels

Process-related identification of systems and items of equipment according to their functions in mechanical, civil, electrical and control and instrumentation engineering.



The data characters in parentheses () may be omitted if the code remains unique. This has to be agreed between the parties to the project.

Figure 9: Format of Breakdown Levels.

3.2.2 System Code

3.2.2.1 General

The system code is used to identify systems of all disciplines. For mechanical engineering, these include, for instance: fuel supply, heat generation, water/steam cycle, machine sets, auxiliary and ancillary units. For electrical engineering, these include, for instance: Grid and distribution system, power transmission, auxiliary power supply. For civil engineering, these include structures and open spaces.

3.2.2.2 Prefix Number for System Code

The prefix number for the system code is used to differentiate between similar systems and plants with reference to F_1 or F_1F_2 (see, Figure 11, Figure 12, Figure 13).

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F_0 F_1 F_2 F_3 F_N	A_1 A_2 A_N A_3	B_1 B_2 B_N
Type of data character =	(A or N)	(N) A A A N N	A A N N N (A)	A A N N


Prefix number for system code 

Figure 10: Data character "Prefix number for system code".

The prefix number does not replace the identification in breakdown level 0 or the numbering in F_N . If the prefix number for the system code is used in a project, then it must always be written in order to avoid confusion with the data character G.

Details of application are to be agreed between the parties to the project.

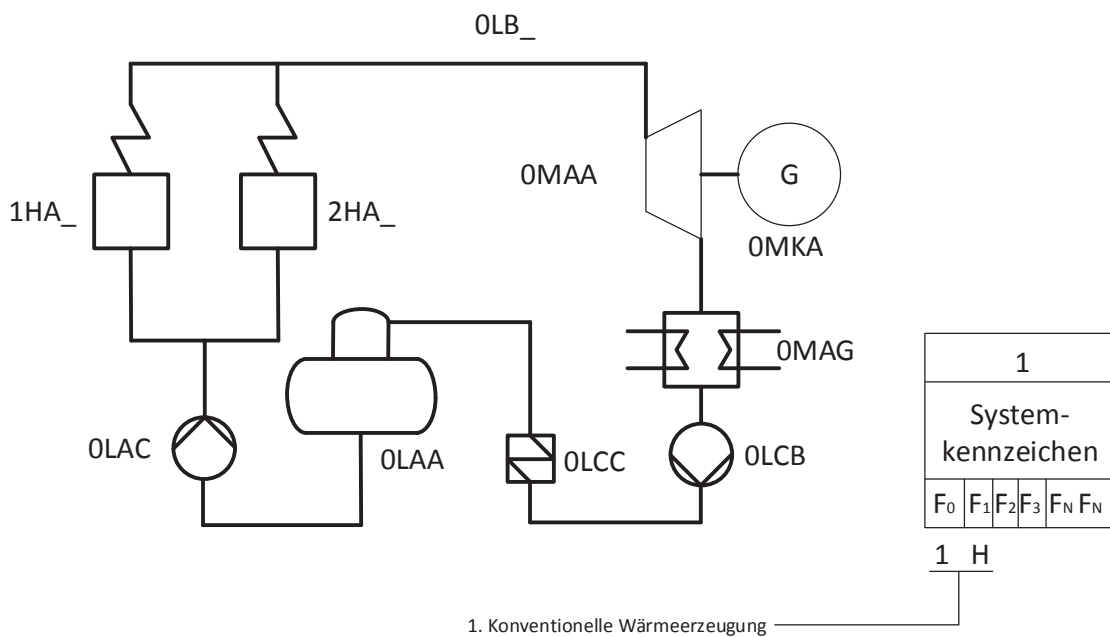


Figure 11: Example of prefix number for system code in mechanical engineering (two 50% boilers of one unit).

Legend to Figure 11:	
Systemkennzeichen	System code
1. Konventionelle Wärmeerzeugung	1 st conventional heat generation

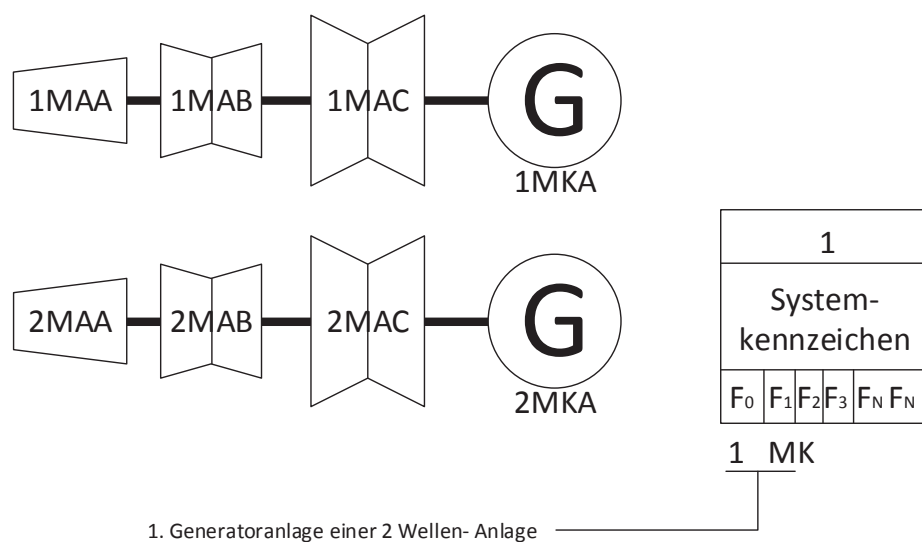


Figure 12: Example of prefix number for system code in mechanical engineering (machine sets in a two-shaft plant).

Legend to Figure 12:	
Systemkennzeichen	System code
1. Generatoranlage einer 2-Wellen-Anlage	1 st generator system of a 2-shaft plant

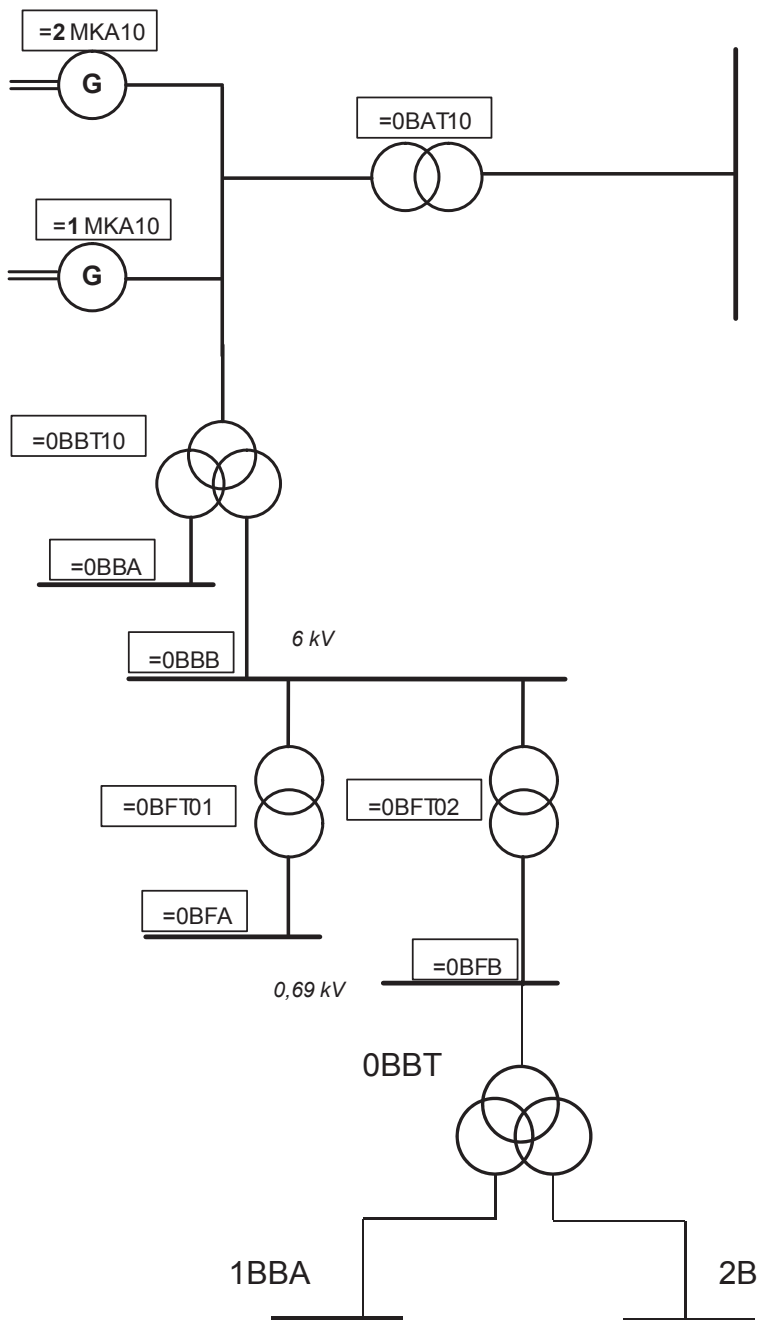


Figure 13: Example of prefix number for system code in electrical engineering (two half bus bars of auxiliary power supply).

3.2.2.3 System Classification

Classification of systems in mechanical engineering, electrical/C&I and civil engineering.

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character =	A or N	N A A A N N	A A N N N A	A A N N

System classification

Figure 14: Breakdown level System Classification.

For system classification, the coding letters and designations of the main groups F₁ from the Function Key shall be applied:

- A** Grid and distribution system
- B** Power transmission and auxiliary power supply
- C** Control and instrumentation equipment
- D** - blocked -
- E** Conventional fuel supply and residues disposal
- F** Handling of nuclear equipment
- G** Water supply and disposal
- H** Conventional heat generation
- J** Nuclear heat generation
- K** Nuclear auxiliary system
- L** Water, steam, gas cycle
- M** Main machine sets
- N** Process energy supply, supply of fluids to external users
- P** Cooling water system
- Q** Auxiliary system
- R** Gas generation and treatment
- S** Ancillary system
- T** - blocked -

- U** Structure
- V** - blocked -
- W** System for renewable energies
- X** Heavy machinery (other than main machine sets)
- Y** - blocked -
- Z** Workshop and office equipment

The subdivisions in F_2 and F_3 are likewise given in the applicable Function Key.

3.2.2.3.1 Application of System Classification to Mechanical Systems

Figure 15 illustrates system classification and system interfaces on the basis of an example from the water/steam cycle:

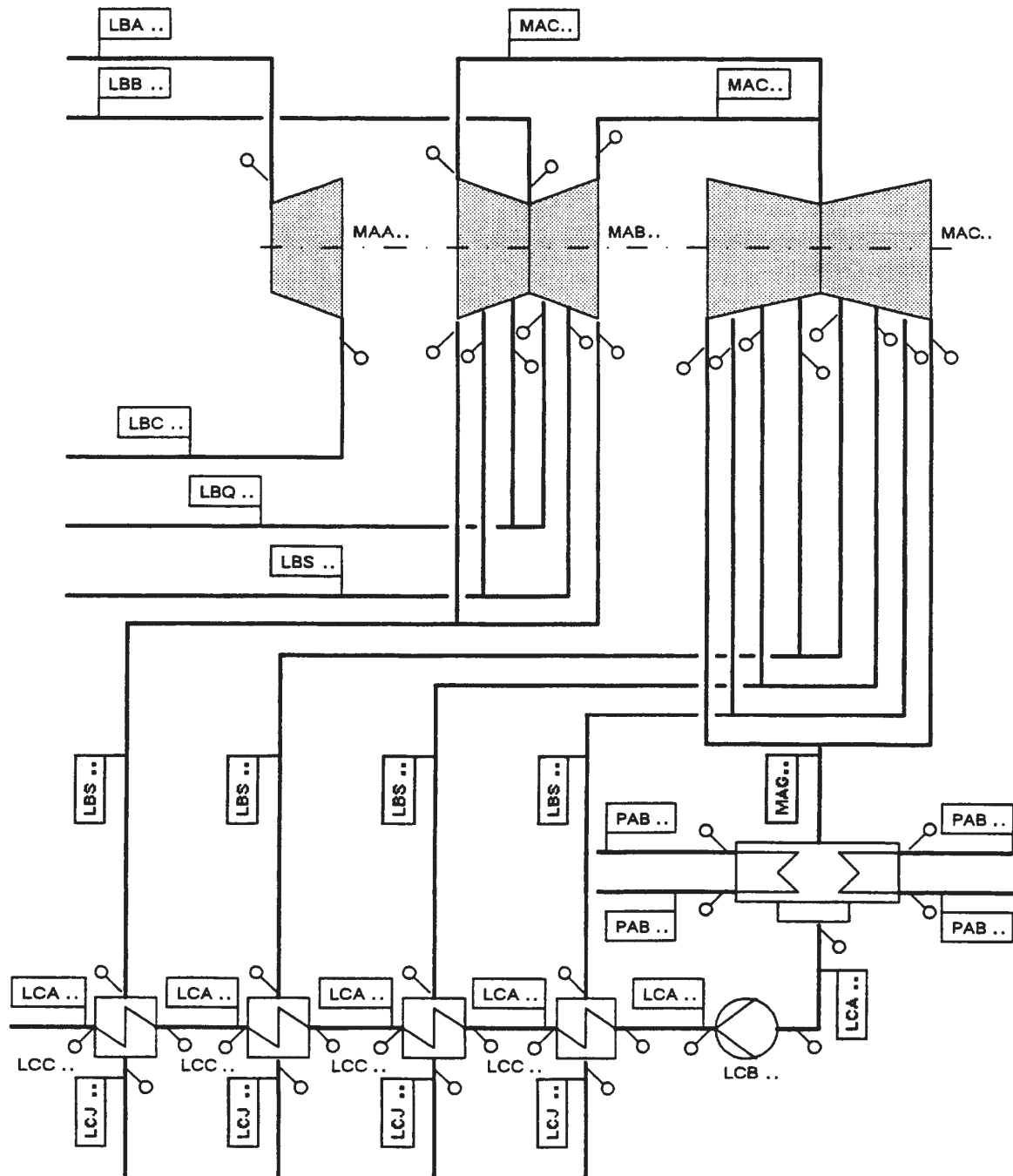


Figure 15: Example of system classification and system interfaces.

3.2.2.3.2 Application of System Classification to Electrical Systems

The following specifications apply to **system classification**, i.e. for the groups and sub-groups and for the allocation of the electrical and C&I equipment to the main groups F₁:

- **Grid and distribution systems** which are operated jointly with the power plant (e.g. grid and distribution systems whose operations management is effected in the power plant control room) are to be identified in accordance with the rules and principles of the KKS Rules (guidelines and keys). For the system main group (data character F₁) the letter A has been defined.

Where **grid and distribution systems** are independently operated units – identified using the identification system for energy distribution systems, where appropriate – it is recommended to specify and agree the interfaces in detail (i.e. down to the signal level) for the specific project.

The interfaces between the **grid and distribution systems** and the power plant (system main group with F₁ letter B) are illustrated in Figure 16.

Figure 16 shows the interfaces between **grid and distribution systems** and **power transmission and auxiliary power supply** at the high-voltage terminals of the generator transformer BAT and the start-up transformer BCT.

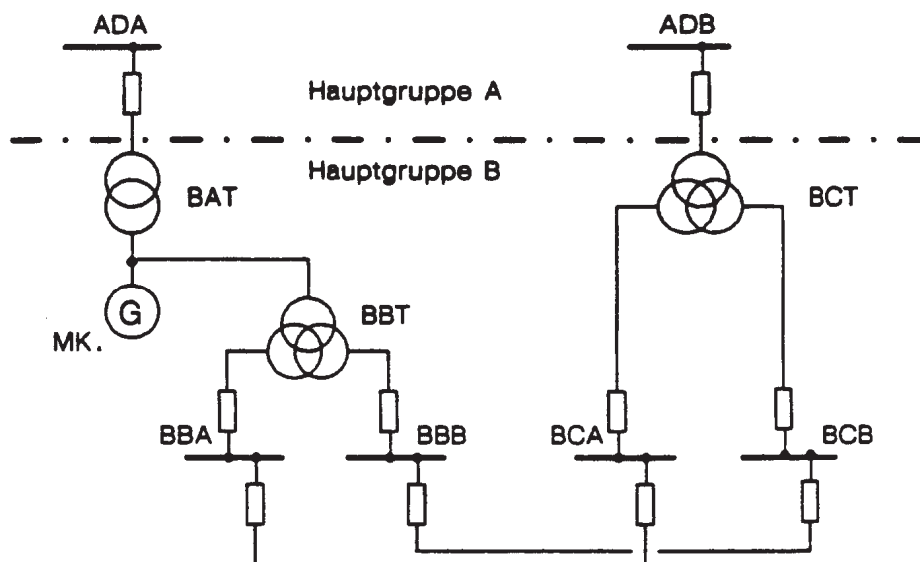


Figure 16: Interface between grid and distribution systems and power transmission and auxiliary power supply.

Legend to Figure 16:	
Hauptgruppe A	Main group A
Hauptgruppe B	Main group B

- **Power transmission and auxiliary power supply systems**

These include:

- Generator leads (up to HV side of generator transformer),
- Transformers,
- Switchgear,
- Converters, inverters, batteries,
- Power installations for large variable-speed drives.

The following are not included:

- Generators, including exciter equipment (in combination with main group M or X),
- Diesel systems (in combination with main group X),
- Power installations combined with control and instrumentation equipment (main group C).

Auxiliary power supply systems are classified regardless of their location; this also applies to decentralised installations such as motor control centres.

Additional concepts are defined in the Function Key, which are explained in the following paragraphs:

Type of power system

- Normal system
Power supply for loads necessary for normal duty operation of a power plant unit (unit auxiliary power supply).
- General purpose system
Power supply for loads which are not directly necessary for normal duty operation of the power plant unit (e.g. lighting, elevators, intake structure, coal store).
- Emergency power system
Secured power supply for loads necessary in the event of failure of the normal power system.

Distribution boards

The following distinction is made between medium voltage and low voltage:

- Medium voltage > 1 kV
All switchgear for the medium-voltage level are referred to as
DISTRIBUTION BOARDS

- Low voltage < 1 kV
Here, distinctions are made between
 - MAIN DISTRIBUTION BOARDS
Switchgear supplied directly by the LV transformer,
 - DISTRIBUTION BOARDS
Switchgear supplied by main distribution boards,
 - SUBDISTRIBUTION BOARDS
Switchgear supplied by distribution boards (often local).

Figure 17 illustrates the concepts defined for switchgear.

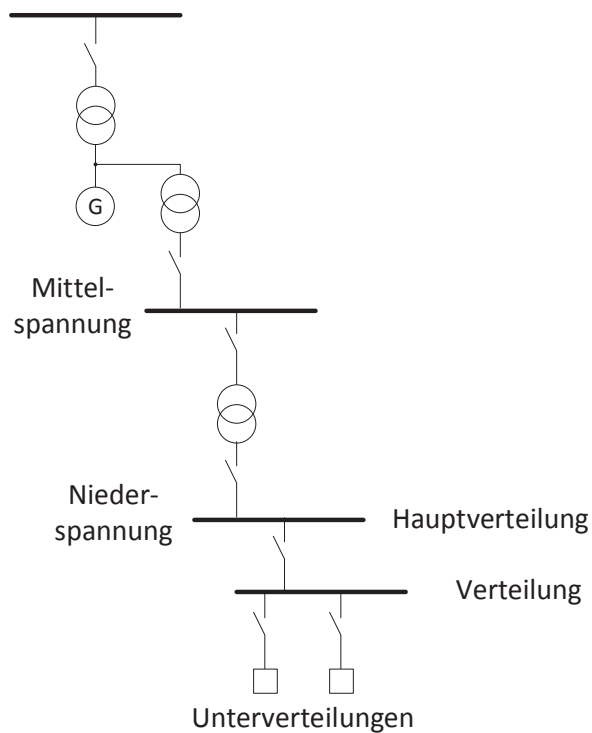


Figure 17: Definition of voltage levels and distribution.

Legend to Figure 17:	
Mittelspannung	Medium voltage
Niederspannung	Low voltage
Hauptverteilung	Main distribution boards
Verteilung	Distribution boards
Unterverteilung	Subdistribution boards

3.2.2.3.3 Application of System Classification to C&I systems

Control and instrumentation (C&I) equipment is classified in main group C. Main group C is subdivided as appropriate to application either according to hardware system/task (such as instrumentation, open-loop control, closed-loop control) or according to functional aspects (such as unit protection, reactor protection).

Groups CM_, CN_ and CT_ are provided for combinations of control and instrumentation systems, such as mixed cabinets with or without power unit or programmable systems for instrumentation, open-loop control and closed-loop control. Classification is not affected by location.

Subdivision in F₃ is to be established on an application-specific basis.

Figure 18 shows an overview of the structure of a C&I system, using the open-loop control system as an example.

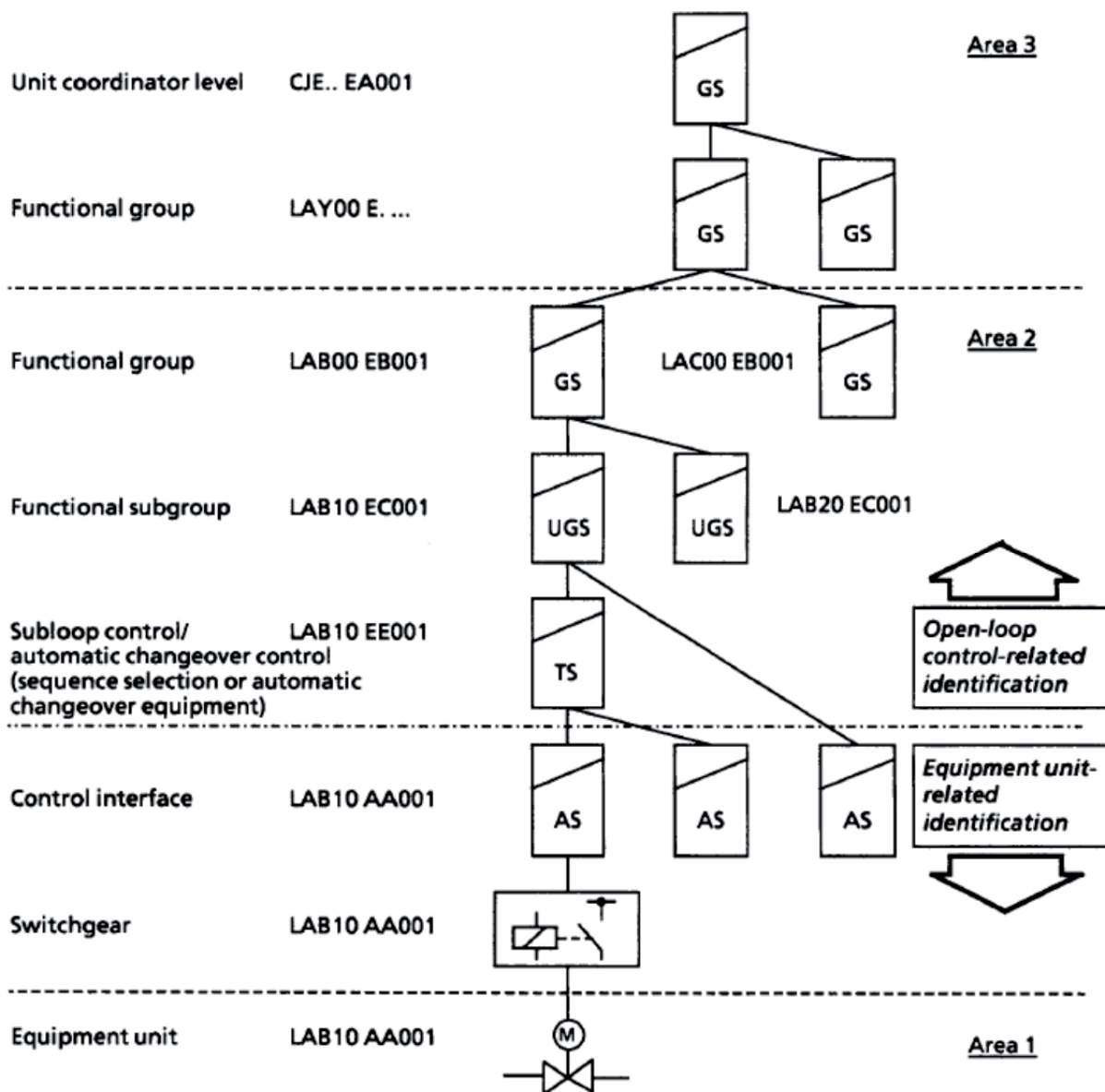


Figure 18: Structure of a C&I system.

3.2.2.3.4 Application of System Classification to Shared Electrical and C&I Systems

Shared electrical and C&I equipment in one system is normally assigned to main group C, groups CM_, CN_ and CT_. Consequently, control and instrumentation considerations take priority for shared equipment of this type. If necessary, grouping may be used in F_N.

Where such units are designed and supplied as dedicated items by the system or component supplier, the associated process-related (mechanical engineering) system code may be used to identify the C&I systems on breakdown level 1. For this purpose, a Y for control and protection equipment is to be written in data character F₃.

3.2.2.3.5 Application of System Classification to Supply Systems

Supply systems which serve more than one main group of breakdown level 1 are treated as independent supply systems and identified in the following main groups in F₁:

- G** Water supply and disposal
- K** Nuclear auxiliary system
- Q** Auxiliary system
- S** Ancillary system

User (system)		Supply system	
Code	Designation	Code	Designation
L..	Steam, water, gas cycle	Q ..	Auxiliary system (jointly for L.. and M..)
M..	Main machine set		

Where a supply system serves more than one user system identified in F₂ or F₃, the following coding letters are used in the pertinent data character F₂ or F₃ of the system code for supply systems:

- V** Lubricant supply system
- W** Sealing fluid supply system
- X** Fluid supply for control and protection equipment.

The stipulations for V and W are not applicable to the system main groups A, B, C, U and Z.

Use of the coding letters in the data characters F_2 and F_3 is explained in the following table.

User (system)		Supply system	
Code	Designation	Code	Designation
LA.	Feed water system	LW.	Sealing fluid supply for steam water and gas cycles (together for LA., LB. and LC)
LB.	Steam system		
LC.	Condensate system		
LAB	Feed water piping system	LAW	Sealing system (together for LAB, LAG and LAD)
LAC	Feed water pump system		
LAD	Feed water heating system		

3.2.2.3.6 Application of System Classification where Measured Value Processing Serves More than One Process System

Where C&I equipment serves several more than one process system (identified in F_2 and F_3), the letter Y may be used in the appropriate data character on breakdown level 1 to identify higher-level control and protection systems. C&I equipment which serves more than one main group may be identified under main group C = Control and instrumentation, e.g. unit control systems = CJA.

Process systems		Higher-level function key	
Code	Designation	Code	Designation
LAB	Feed water piping system	LAY	Function key common to LAB, LAG, LAD for control and protection equipment for feed water system
LAC	Feed water pump system		
LAD	Feed water heating system		
LA.	Feed water system	LY.	Function key common to LA. and LB. for control and protection equipment for steam, water, gas cycle
LB.	Steam system		
H..	Conventional heat generation	CJA	Function key common to H., L, M., e.g. for unit control system
L..	Steam, water, gas cycle		
M..	Main machine set		

Given the possibilities shown in the table, it is not practicable to meet all possible requirements for unambiguous identification of discrete process-related functions (e.g. functional group control). Thus for example, it may be necessary to use items which are identified differently on breakdown level 1 (main system and associated parts of auxiliary and ancillary systems) in order to fulfil a given process-related task (functional group). Identification of the functional group involved in process-related tasks so as to relate them to the principal task concerned may be performed by using the alpha characters in $F_1 F_2 F_3$ of the principal process-related task.

In this application, however, a suitable identifier such as a prefixed Y should be used to indicate that a software coding unit is concerned, so as to rule out confusion with process related codes. This code is subject to agreement between the parties to the project.

3.2.2.4 System Numbering

Numbering subdivision of systems and plants into sections of systems, subsystems and sections of plants.

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	$F_0 F_1 F_2 F_3 F_N$	$A_1 A_2 A_N A_3$	$B_1 B_2 B_N$
Type of data character =	A or N	N A A A N N	A A N N N A	A A N N

System numbering

Figure 19: Breakdown level "System numbering".

The rules for system numbering are described in chapter 2.3.2.

Figure 20 shows the four basic options for system numbering.

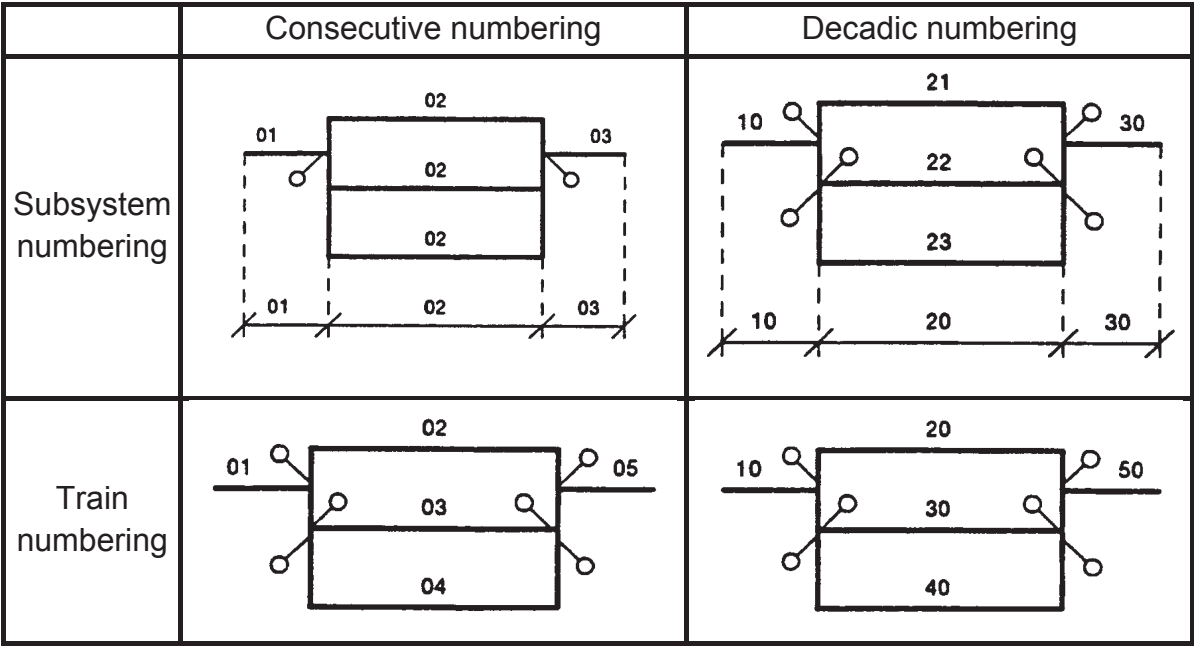


Figure 20: Basic options for system numbering.

Figure 21 and Figure 22 show a single-line diagram with system classification and system numbering examples:

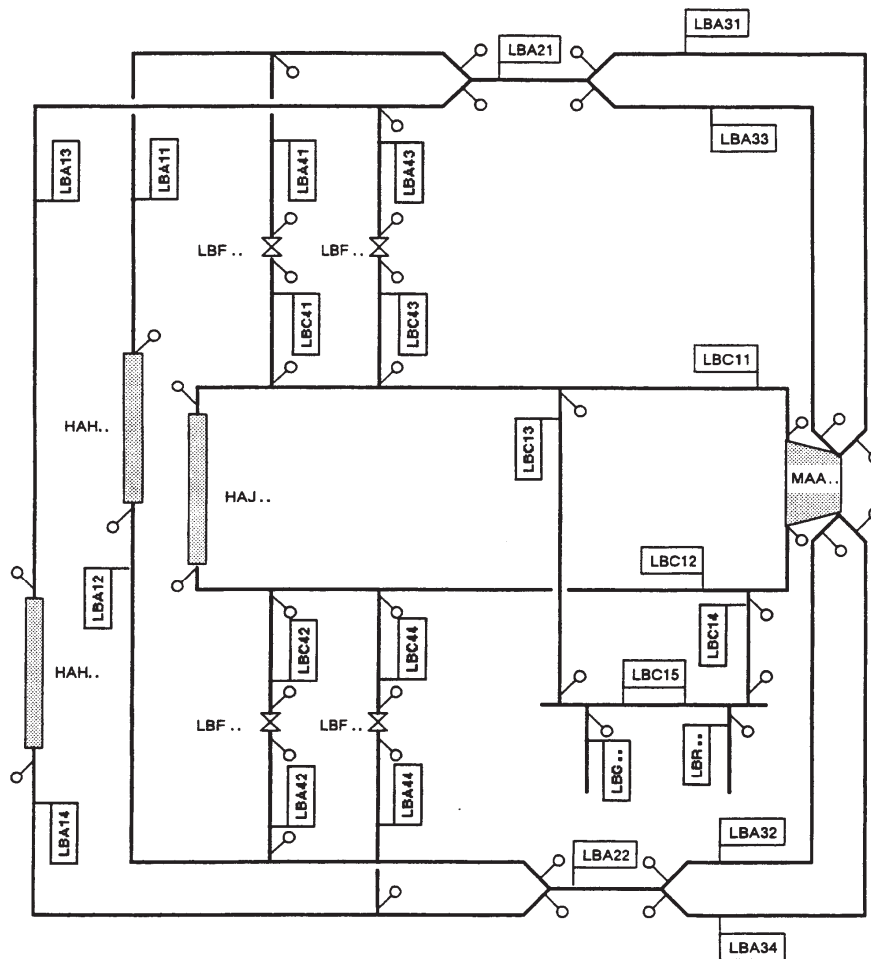


Figure 21: Example of system numbering, showing interfaces.

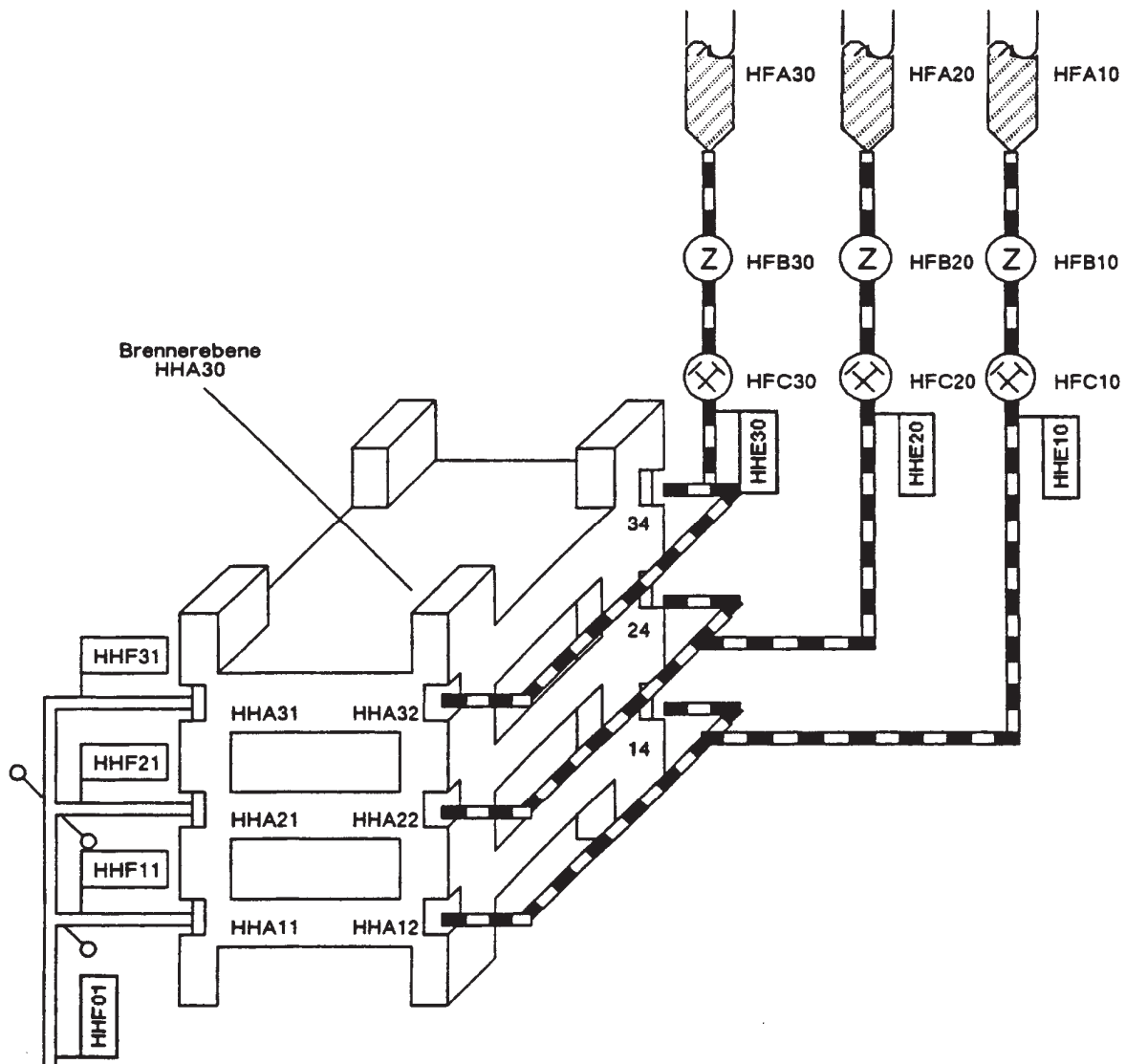


Figure 22: Example of system numbering with different classification, showing interfaces.

Legend to Figure 22:	
Brennererebene	Burner level

Figure 23 shows an example of a single-line diagram with system classification and system numbering.

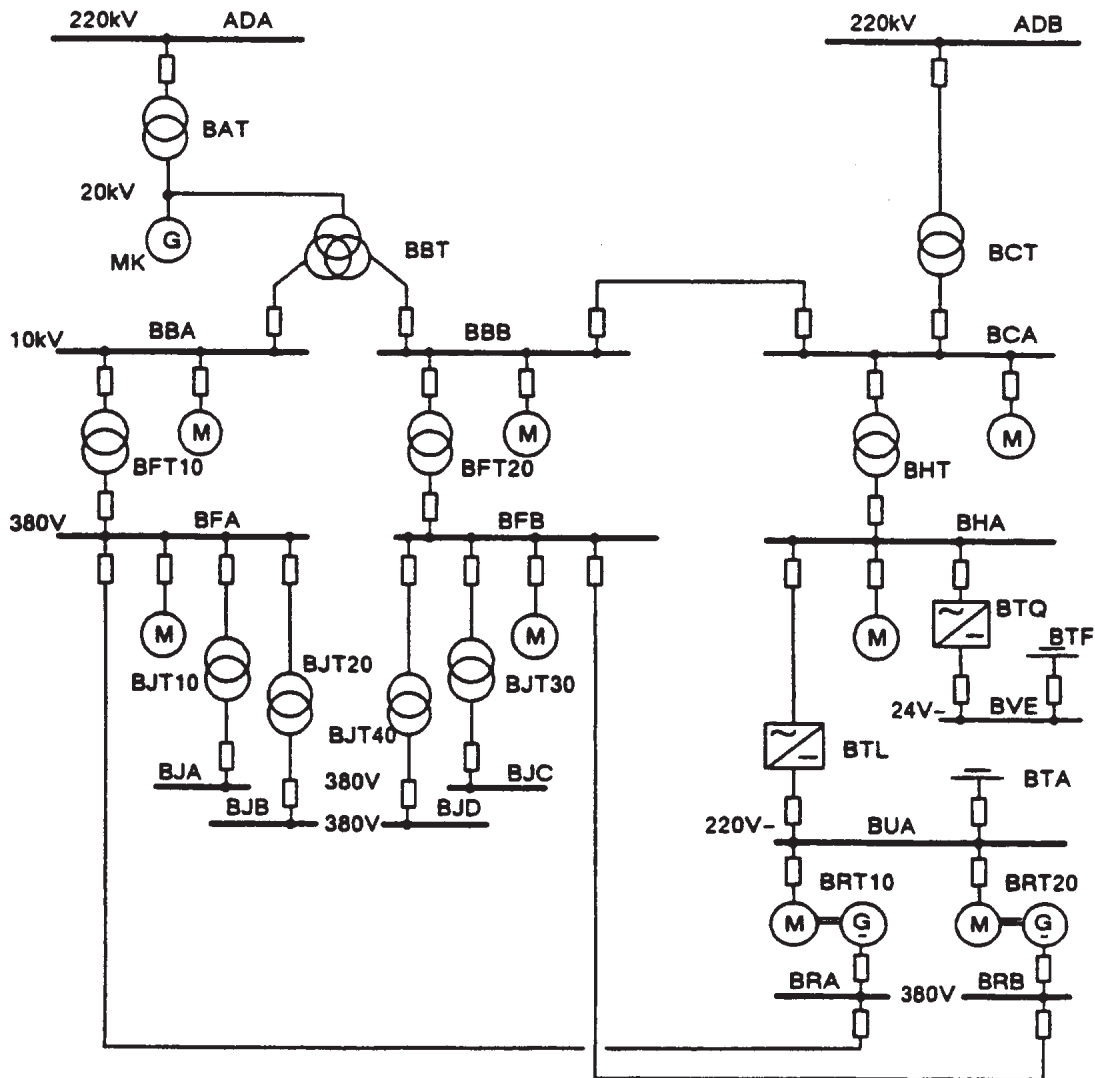


Figure 23: Example of system classification and system numbering in electrical engineering.

3.2.3 Equipment Unit Code

3.2.3.1 General

The equipment unit code is used to identify technical equipment of all engineering disciplines. In mechanical engineering this includes, e.g.: process apparatuses and mechanical equipment; in electrical engineering, e.g.: subdistribution boards, converters, switches; in C&I engineering, e.g.: measuring circuits, closed-loop control circuits and signal processing; and civil engineering structures.

3.2.3.2 Equipment Unit Classification

Classification of mechanical equipment, process apparatuses, direct measuring circuits, closed-loop control circuits, electrical/C&I equipment, and civil engineering structures.

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character =	A or N	N A A A N N	A A N N N A	A A N N

Equipment unit classification

Figure 24: Breakdown level "Equipment Unit Classification".

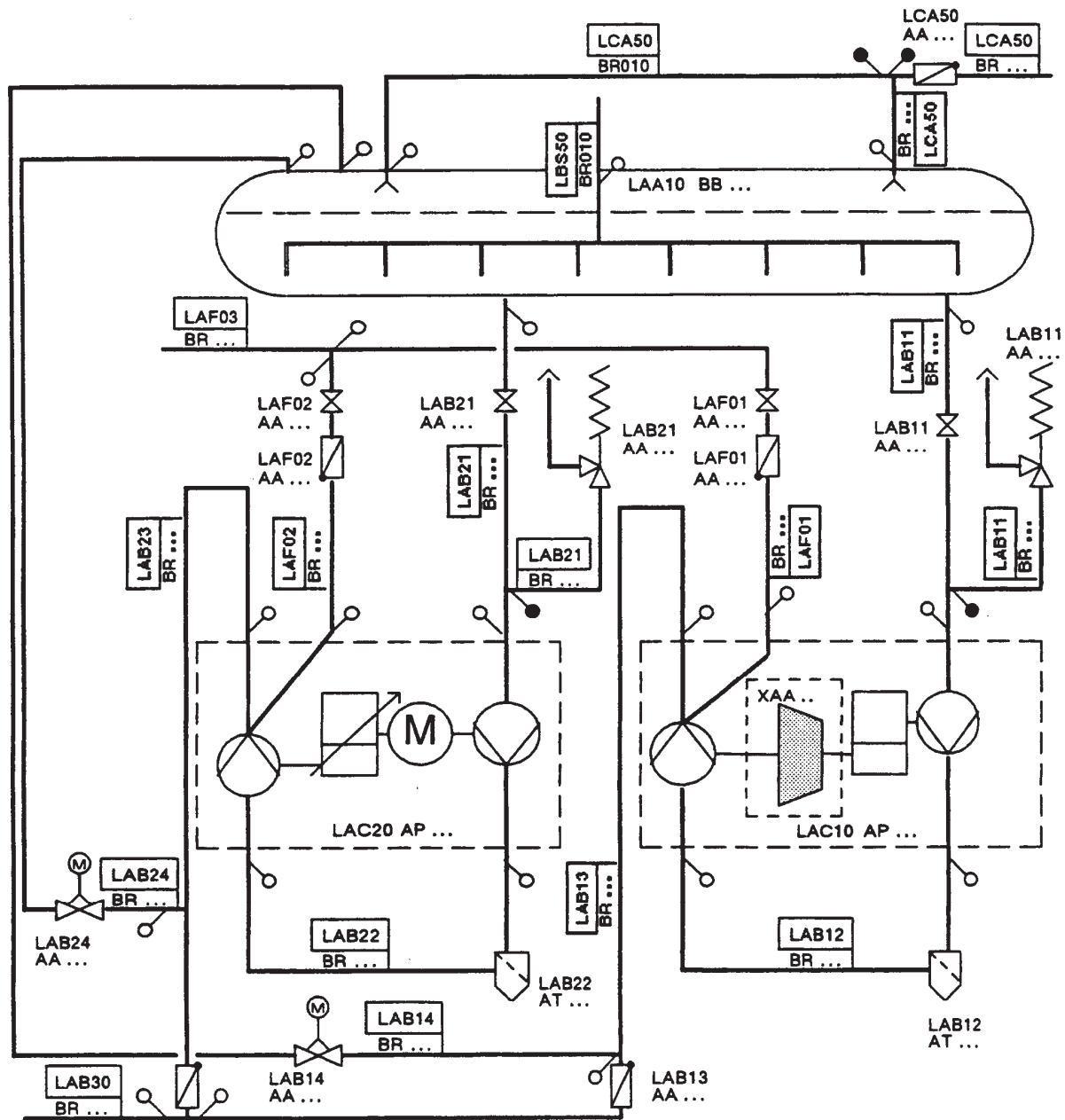
Coding letters and designations of the main groups A₁, as given in the Equipment Unit Key:

- A** Mechanical equipment
- B** Mechanical equipment
- C** Direct measuring circuit
- D** Closed-loop control circuit
- E** Analog and binary signal conditioning
- F** Indirect measuring circuits
- G** Electrical, Instrumentation and Control equipment

- | | |
|----------|---|
| H | Subassembly of main and heavy machinery |
| J | Nuclear assembly |
| U | Civil engineering structure |

The subdivisions in A₂ are given in the applicable Equipment Unit Key.

Figure 25, Figure 26 and Figure 27 show examples of equipment unit classification in mechanical engineering and electrical and C&I engineering:



Codes are shown without the prefix =

Figure 25: Example of equipment unit classification of mechanical equipment.

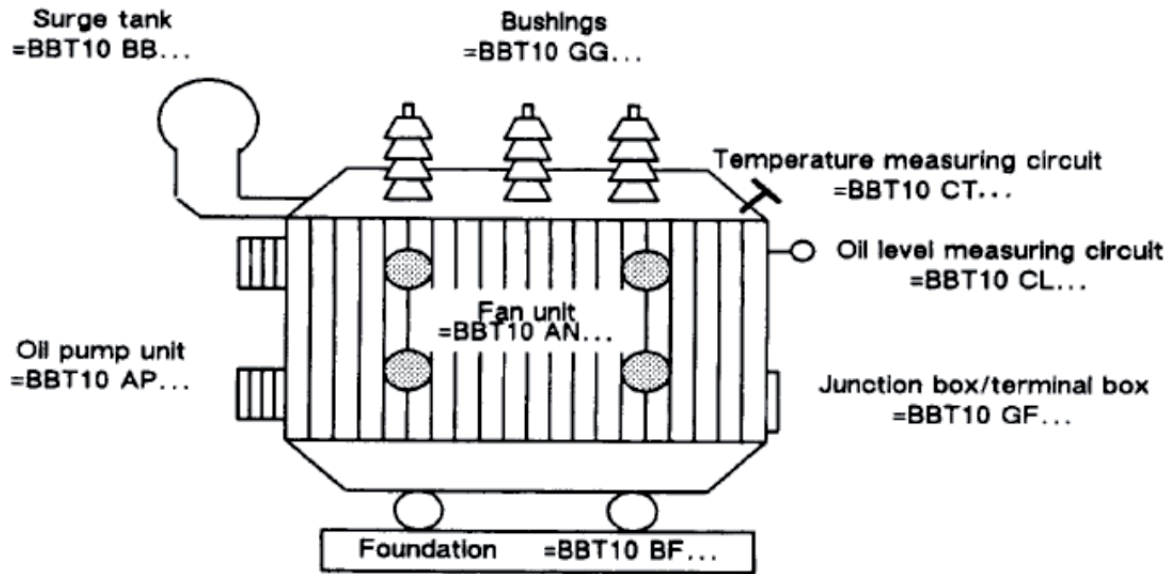


Figure 26: Example of equipment unit classification of electrical equipment.

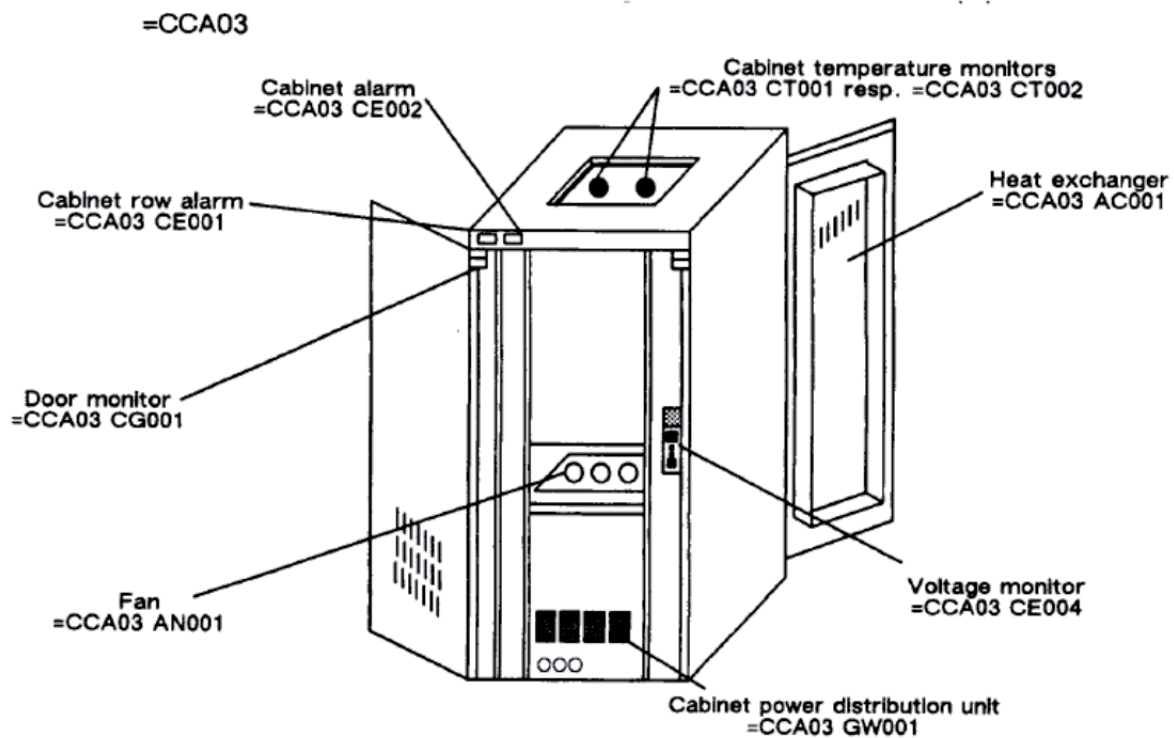


Figure 27: Example of equipment unit classification of C&I equipment.

3.2.3.3 Equipment Unit Numbering

Numbering of mechanical equipment, process apparatuses, direct measuring circuits, closed-loop control circuits, electrical/C&I equipment, and civil engineering structures.

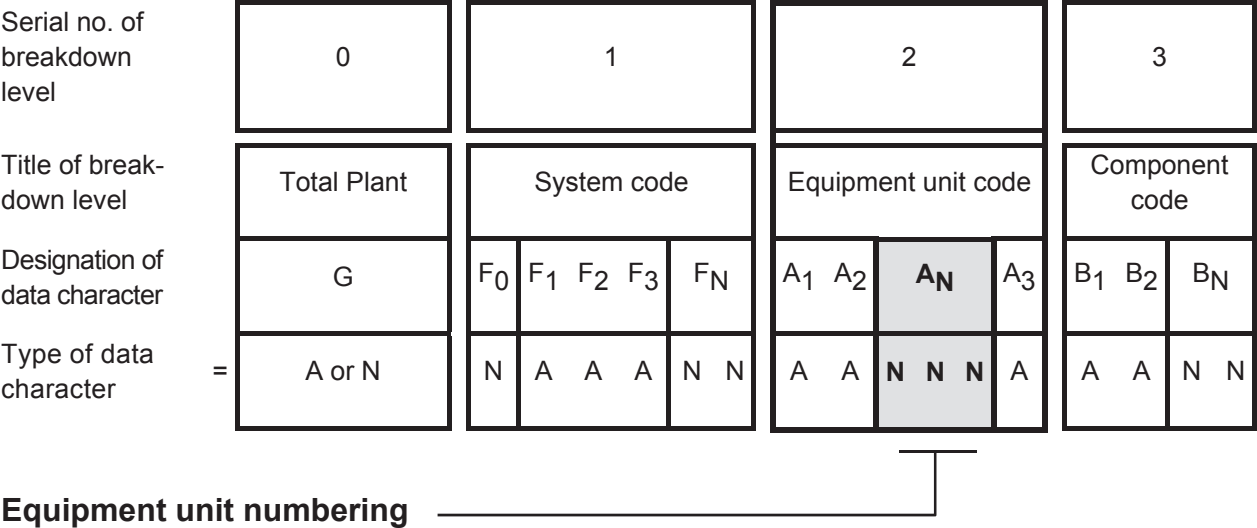


Figure 28: Breakdown level “Equipment unit numbering”.

The rules for equipment unit numbering are described in chapter 2.3.2.

Figure 29 and Figure 30 show examples of equipment unit numbering of mechanical and electrical equipment.

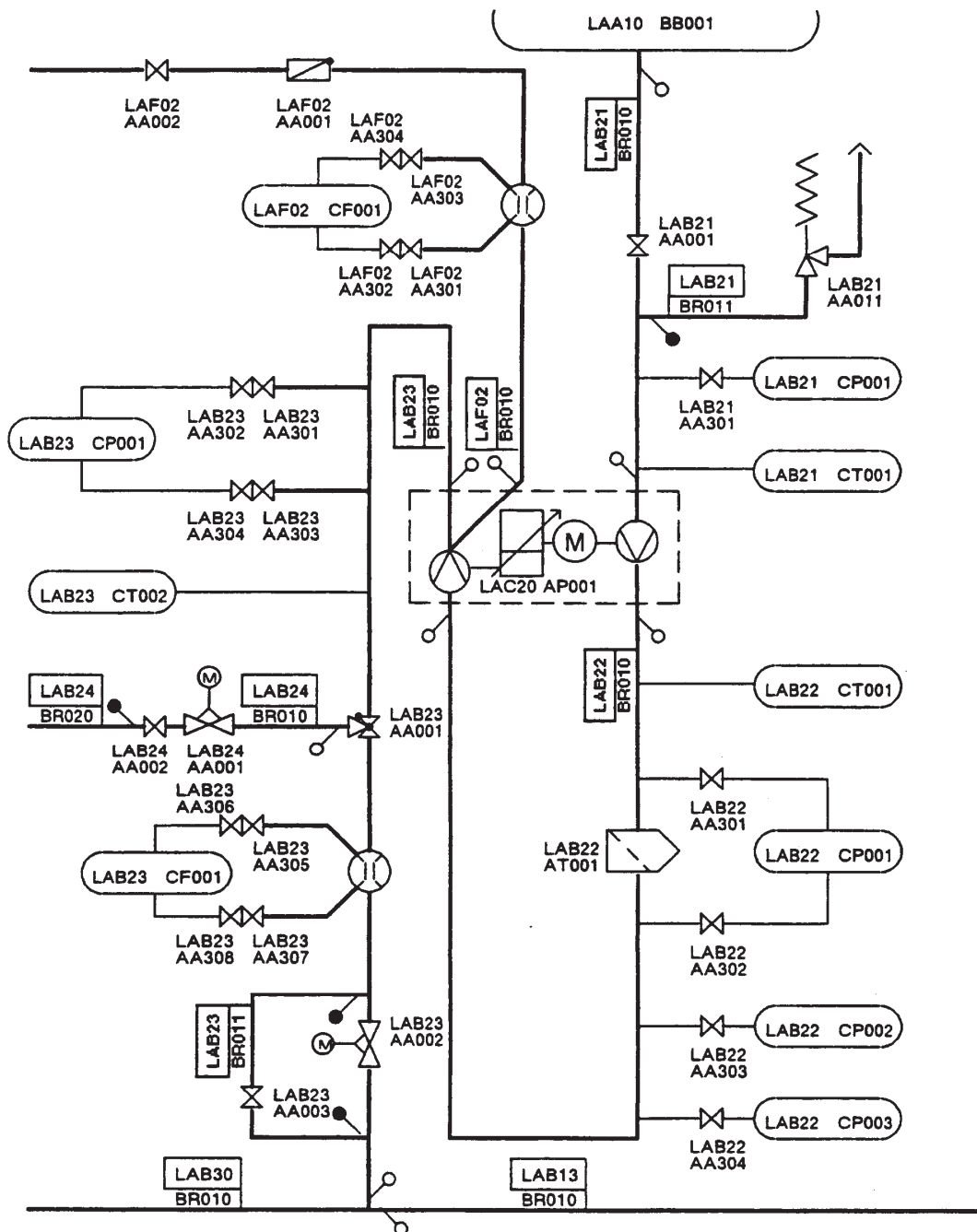


Figure 29: Example of equipment unit numbering of mechanical equipment.

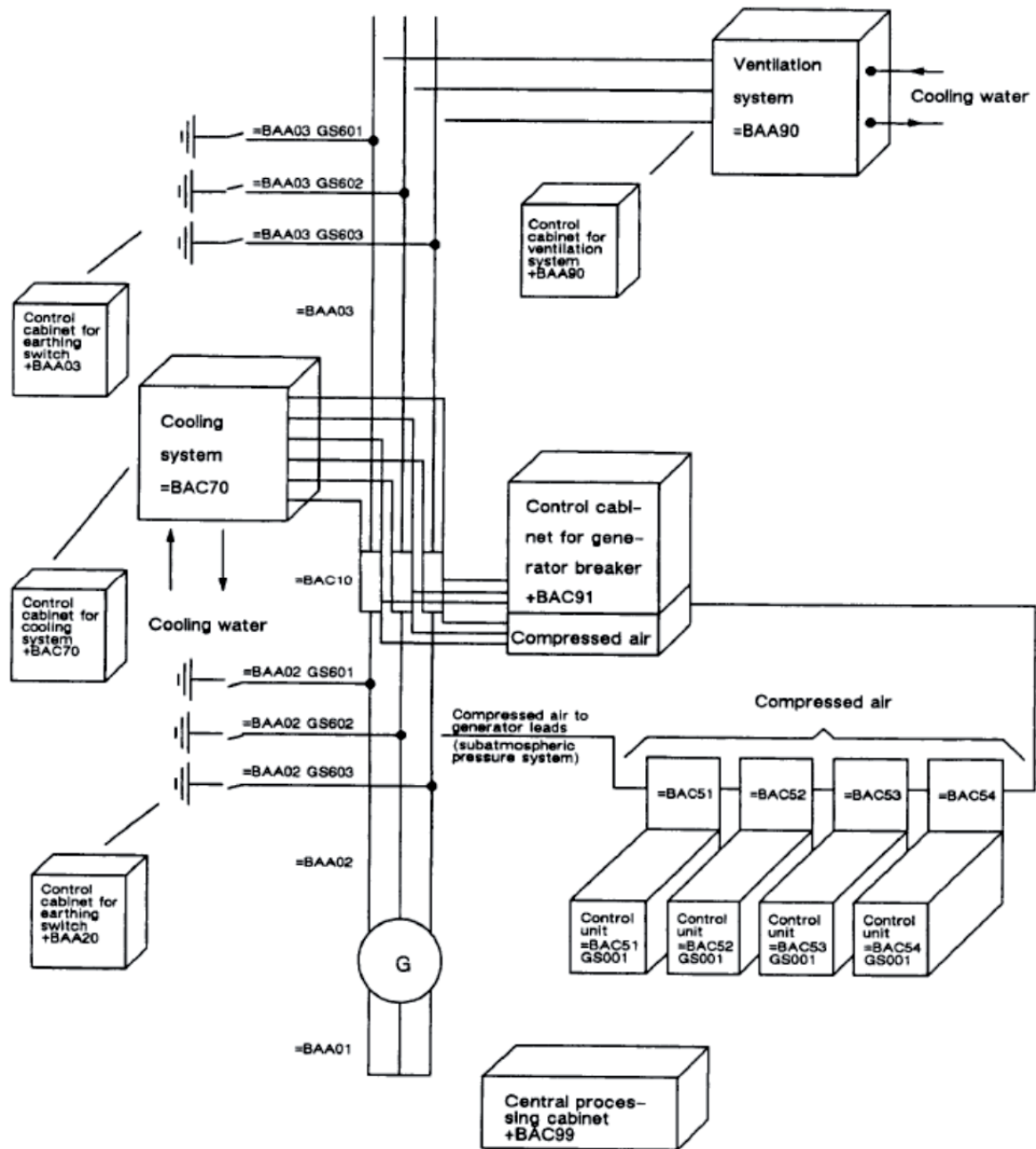


Figure 30: Example of equipment unit numbering of electrical equipment.

3.2.3.4 Additional Code for the Equipment Unit Code

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A₃	B ₁ B ₂ B _N
Type of data character =	A or N	N A A A N N	A A N N N (A)	A A N N

**Additional code
for the equipment unit code**

Figure 31: Breakdown level "Additional code for Equipment Unit Code".

The additional code A₃ is used for the numbering of:

- Pilot valves and overpressure protection equipment
- Electro technical multiple supplies
- Measuring circuits sharing one sensor

The additional code is not a replacement code for the components designated in breakdown level 3.

It may be omitted if the code remains unambiguous.

Further applications are to be agreed between the parties to the project.

Figure 32 shows the application of the additional code A_3 for the equipment unit code, using the example of a safety valve for system medium with solenoid pilot valves in “1-out-of-3 configuration” (load principle)

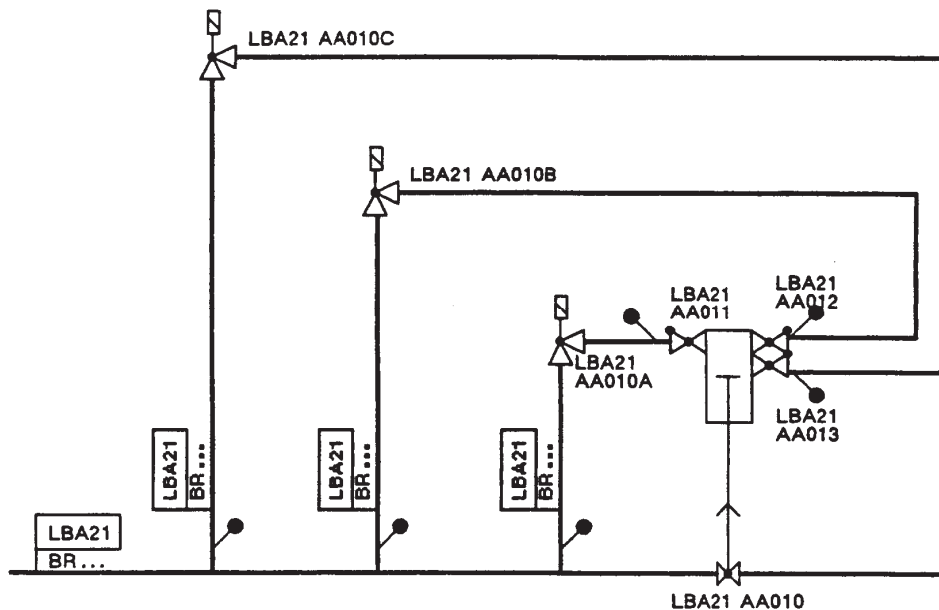


Figure 32: Example of application of the additional code A_3 for mechanical equipment (pilot valves).

Figure 33 shows the application of the additional code A_3 for the equipment unit code, using the example of a multiple power supply for an electronic equipment cabinet.

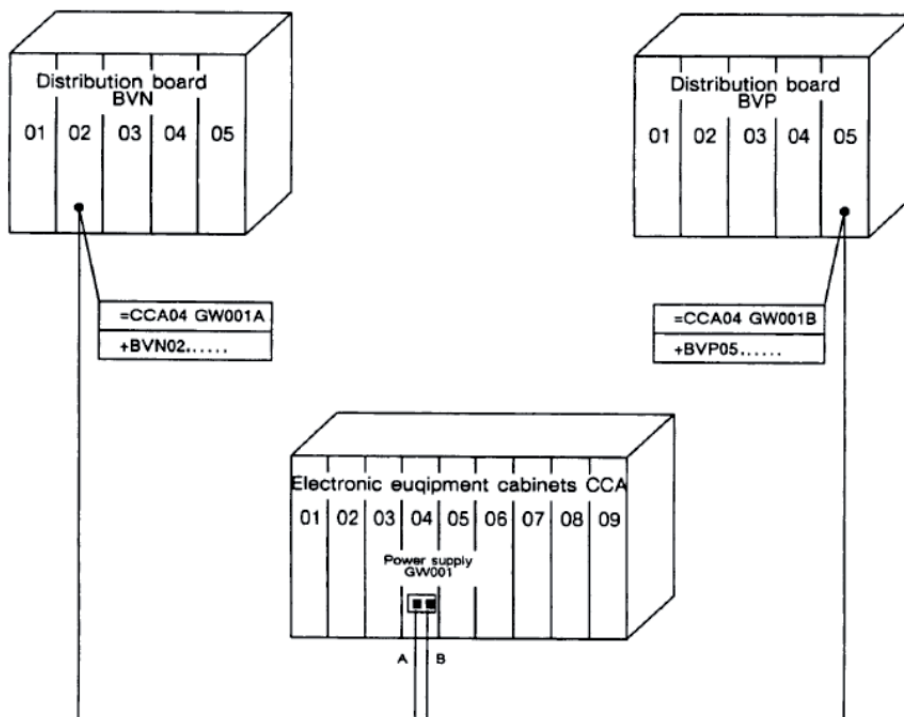


Figure 33: Example of application of the additional code A_3 for electrical equipment (multiple power supply).

Figure 34 shows the application of the additional code A₃ for the equipment unit code, using the example of plant protection by means of multi-core current transformers.

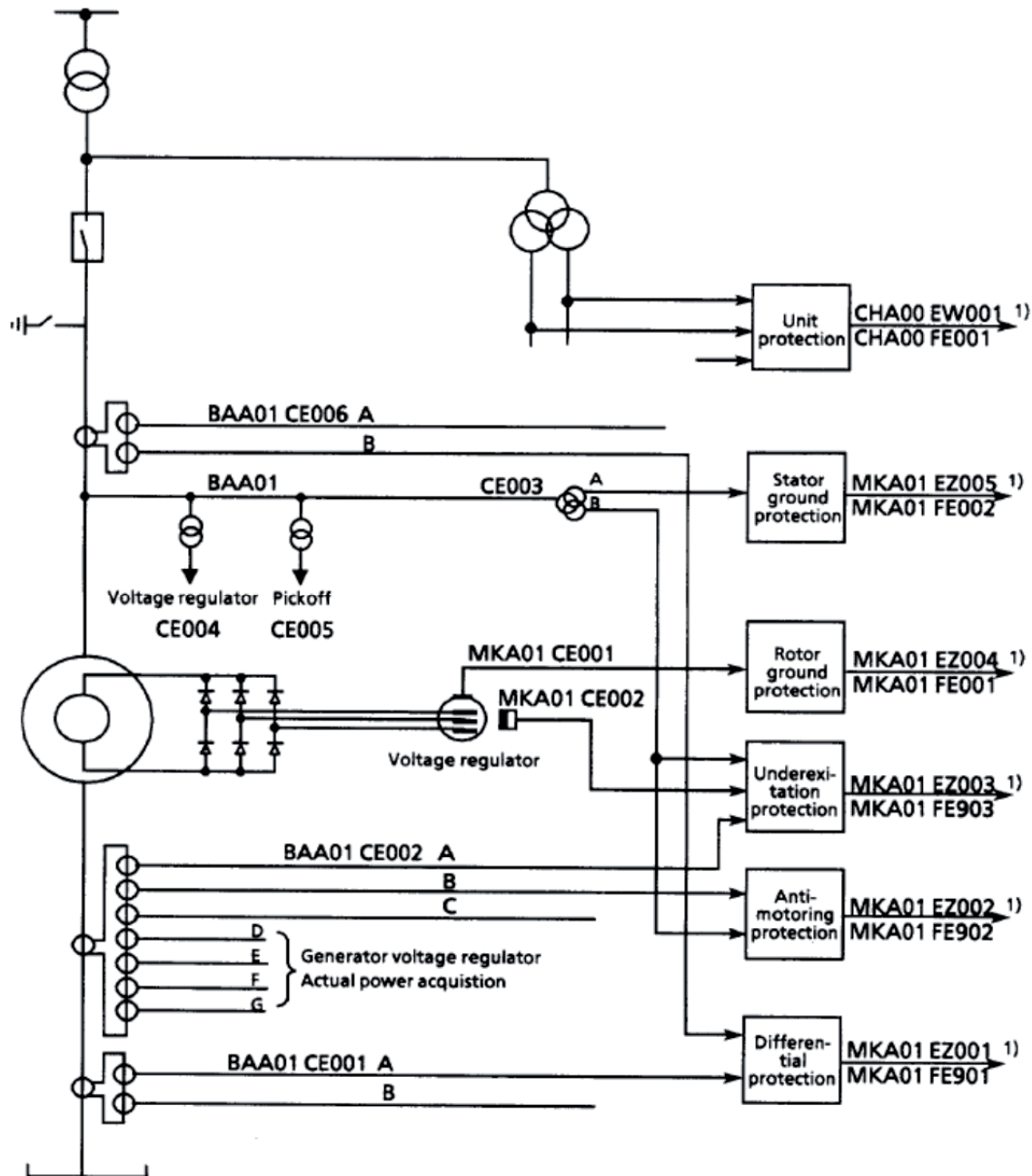


Figure 34: Example of application of the additional code A₃ for electrical equipment (multi-core measurement).

Figure 35 shows the application of the additional code A_3 for the equipment unit code, using the example of a double thermometer.

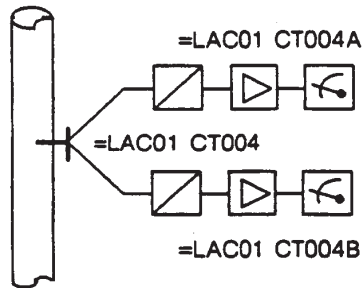


Figure 35: Example of application of the additional code A_3 for C&I equipment (double thermometer).

3.2.4 Component Code

3.2.4.1 General

The component code is used to identify components of all engineering disciplines. . In mechanical engineering this includes, e.g.: valves, pipes, pumps; in electrical engineering, e.g.: motors, circuit breakers, batteries; in C&I engineering, e.g.: transducers, transmitters, sensors; and civil engineering components.

3.2.4.2 Component Classification

Classification of mechanical, structural and electrical components, such as pumps, valves, motors, switches, doors.

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character =	A or N	N A A A N N	A A N N N A	A A N N

Component Classification

Figure 36: Breakdown level "Component Classification".

Coding letters and designations of main groups B1:

- K** Mechanical components
- M** Mechanical components
- Q** Control and instrumentation components (non-electrical)
- Electrical components

Subdivisions in B₂ for components are given in the applicable Component Key.

3.2.4.3 Component Numbering

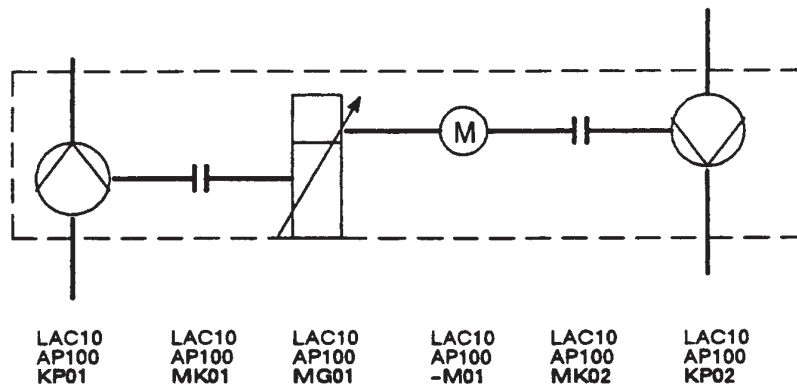
Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character =	A or N	N A A A N N	A A N N N A	A A N N

Component numbering

Figure 37: Breakdown level "Component Numbering".

The rules for component numbering are described in chapter 2.3.2.

Figure 38 shows the component coding using the example of the components of the feed water pump mechanical equipment unit LAC10 AP100.



Component coding letters and designations

- KP01** Main pump
- KP02** Booster pump
- MG01** Gearbox No. 1
- MK01** Coupling of main pump
- MK02** Coupling of booster pump
- M01** Electrical motor no. 1

Figure 38: Example of application of component coding (pump unit).

Figure 39 shows the component coding using the example of a closed-loop control circuit for flow rate.

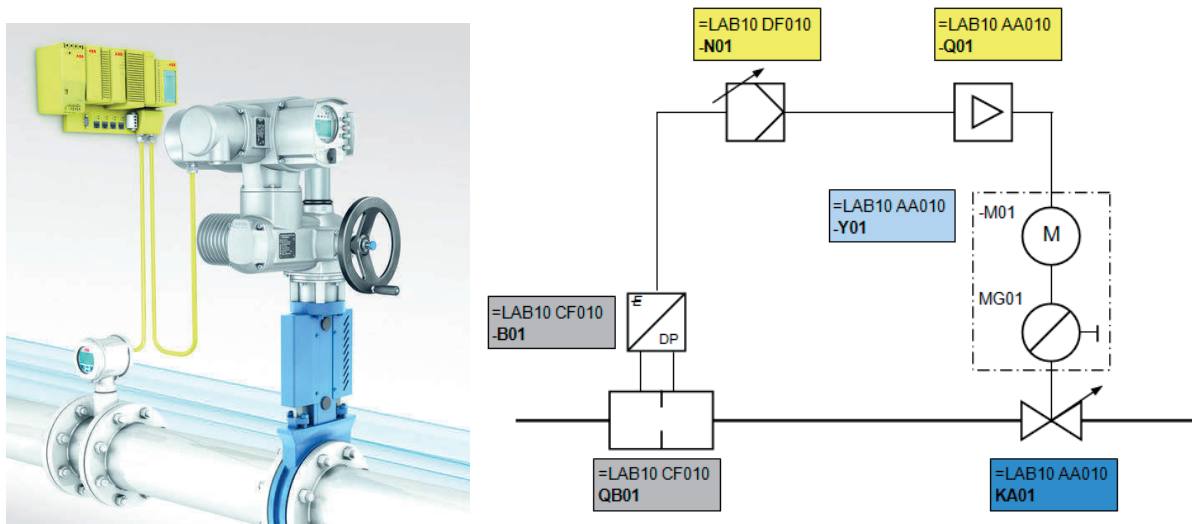


Figure 39: Example of application of component coding (closed-loop control circuit).

Figure 40 shows the component coding using the example of a measuring circuit.

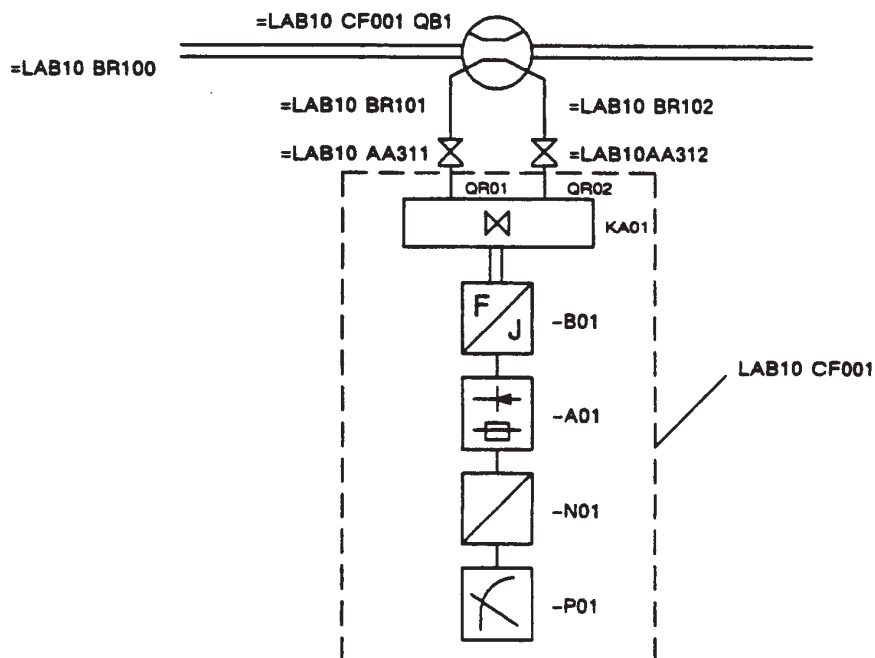


Figure 40: Example of application of component coding (measuring circuit).

3.2.5 Signal Code

3.2.5.1 General

To permit clear differentiation, the component code level is used for identifying the signals from measured data and signal processing identified on the system and equipment unit levels.

A distinction is made between signal origins, signal applications and gated signals.

The identification of signals (origin and application) depends to a large extent on the hardware used and the documentation method used. Any examples given here can thus only illustrate certain recommended aspects.

Details of the identification coding of signals are to be agreed between the parties to the project.

3.2.5.2 Signal Classification

Classification of signals or signal applications.

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character =	A or N	N A A A N N	A A N N N A	A A N N

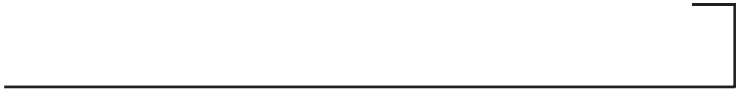
Signal classification 

Figure 41: Breakdown level "Signal Classification".

The coding letters and designations of main group B₁ given in the Component Key apply to signals and signal applications:

In data character B₁ the signals are identified by their origin and application. The following coding letters and designations are defined:

X	Original signal
Y	Signal application
Z	Gated signal

In data character B₂ the signal areas or areas of use are identified. The following coding letters and designations are recommended:

A	Functional group control
B	Drive control
C	Individual control
D	Not reserved
E	Not reserved
F	Not reserved
G	Binary process signal origins (via transducer module)
H	Limit signal generation
J	Non-floating signals (from any area)
K	Equipment unit protection
L	Control room and control stations
M	Non-floating static group signal
N	Not reserved
P	Monitoring computer
Q	Analogy signal origins
R	Higher-level closed-loop control
S	Origins of step signals from functional group controls
T	Binary signals from turbine control system
U	Non-floating dynamic group signal
V	Signal connection
W	Conventional signalling system

The combinations of the two data characters B₁ and B₂ are given in the Component Key.

3.2.5.3 Signal Numbering

Numbering of signals, signal applications and gated signals.

Serial no. of breakdown level	0	1	2	3
Title of breakdown level	Total Plant	System code	Equipment unit code	Component code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃	B ₁ B ₂ B _N
Type of data character =	A or N	N A A A N N	A A N N N A	A A N N

Signal numbering

Figure 42: Breakdown level "Signal numbering".

There are no general stipulations for the numbering level.

The following is recommended for the signal origins XG and XH:

- Identical signal origins within the same equipment unit code should be in ascending order (see Figure 42).
- Decadic numbering may be used for grouping similar signals.
- Numbers in the range from 01 to 49 are to be used where switching points are exceeded.

When switching points are upper limit, numbers in the range of 51 bis 99 are to be used.

- MAX switching points are allocated uneven numbers;
MIN switching points are allocated even numbers.

Figure 43 shows the identification of several limit values given as binary signals formed in limit value monitors.

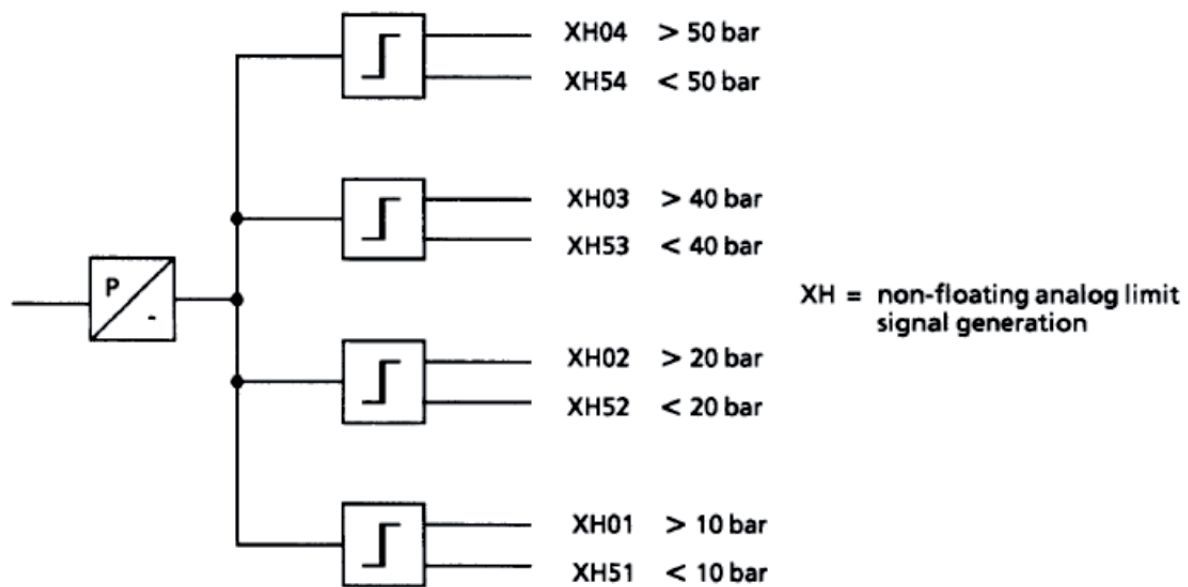


Figure 43: Example of binary signals formed via limit value monitors.

Figure 44 illustrates the identification of binary process signals reflecting different tank levels.

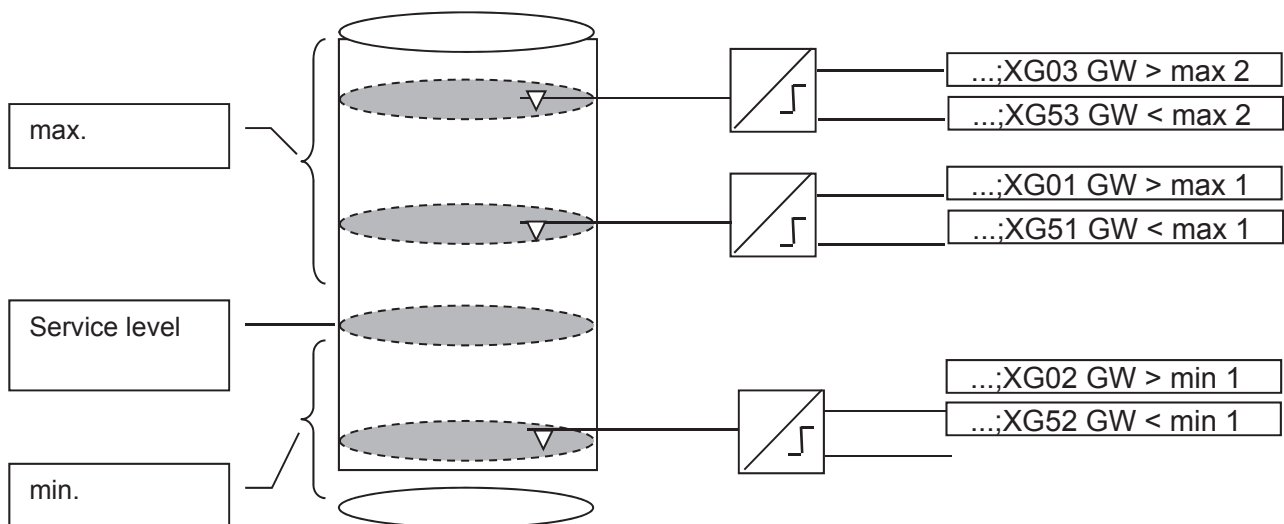
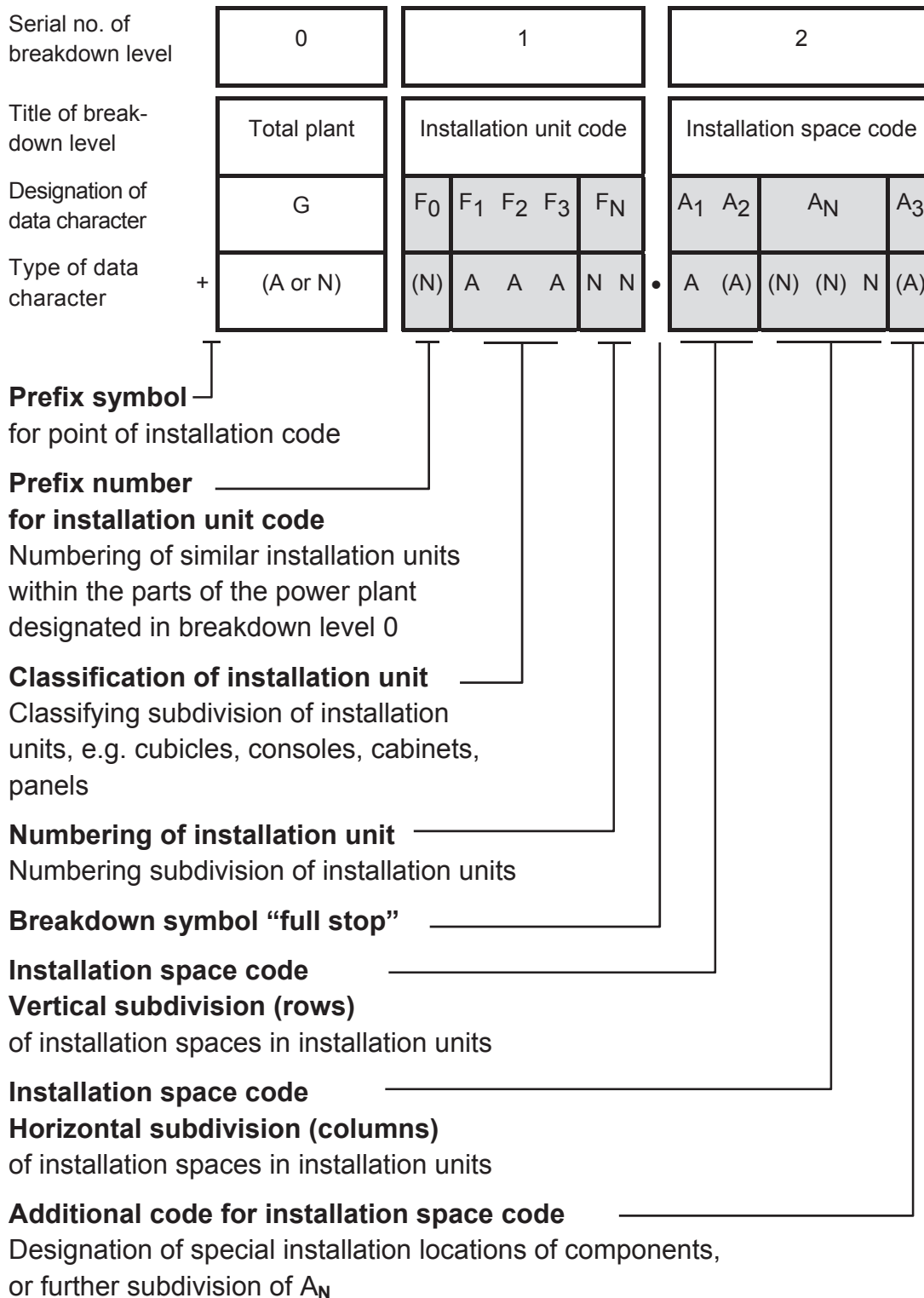


Figure 44: Example of identification of binary process signals.

3.3 Point of Installation Identification

3.3.1 General, Code Structure

Identification of points of installation (installation units and installation spaces, Figure 45) of electrical and C&I devices, for instance in cabinets, panels, consoles. The point of installation code is **not** used for identification of the installed devices.



The “full stop” breakdown symbol must always be written.

The data characters in parentheses () may be omitted if the code remains unique. This has to be agreed between the parties to the project.

Figure 45: Breakdown level Point of Installation Identification.

3.3.2 Installation Unit Code

3.3.2.1 Prefix Number of Installation Unit Code

The prefix number of the installation unit code is used to distinguish between similar installation units with reference to F_1 or F_1F_2 .

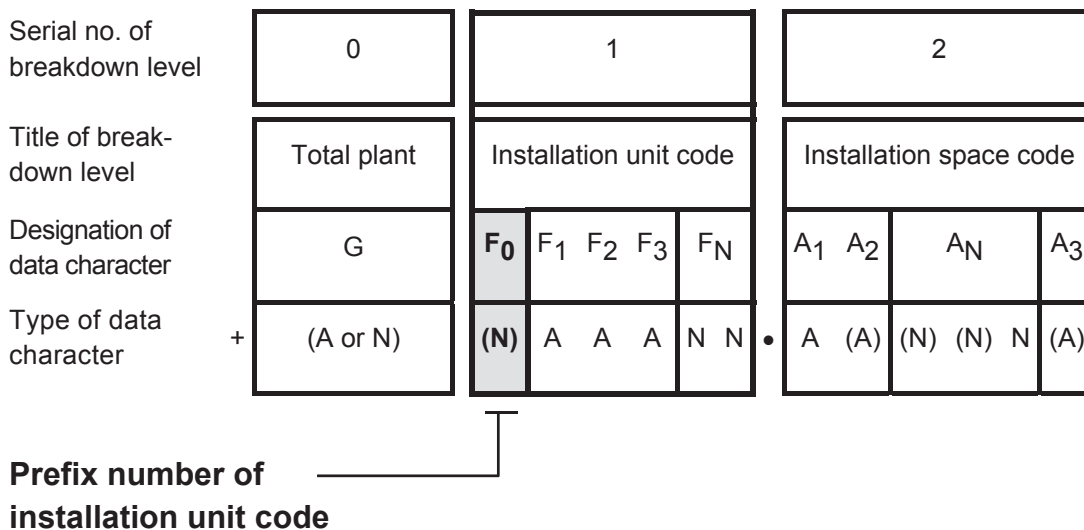


Figure 46: Breakdown level Prefix Number of Installation Unit Code

The prefix number does not replace the identification in breakdown level 0 or the numbering in F_N . If the prefix number for the system code is used in a project, then it must always be written in order to avoid confusion with the data character G.

Details of application are to be agreed between the parties to the project.

The prefix number of the installation unit code is taken from the process-related identification code of the electrical distribution system.

3.3.2.2 Classification of Installation Unit

Classifying subdivision of installation units, e.g. row of cubicles, console, control panel.

Serial no. of breakdown level	0	1	2
Title of breakdown level	Total plant	Installation unit code	Installation space code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃
Type of data character	A or N	N A A A N N	A (A) (N) (N) N (A)

Classification of installation unit

Figure 47: Breakdown level Classification of Installation Unit

The following coding letters and designations of the main groups F₁ from the Function Key are used for the classification of the installation units:

- A** Grid and distribution system
- B** Power transmission and auxiliary power supply
- C** Control and instrumentation equipment

Further subdivisions into groups and subgroups F₂ und F₃ are to be deduced from pertinent process-related identification code of the electrical distribution system (see Figure 48).

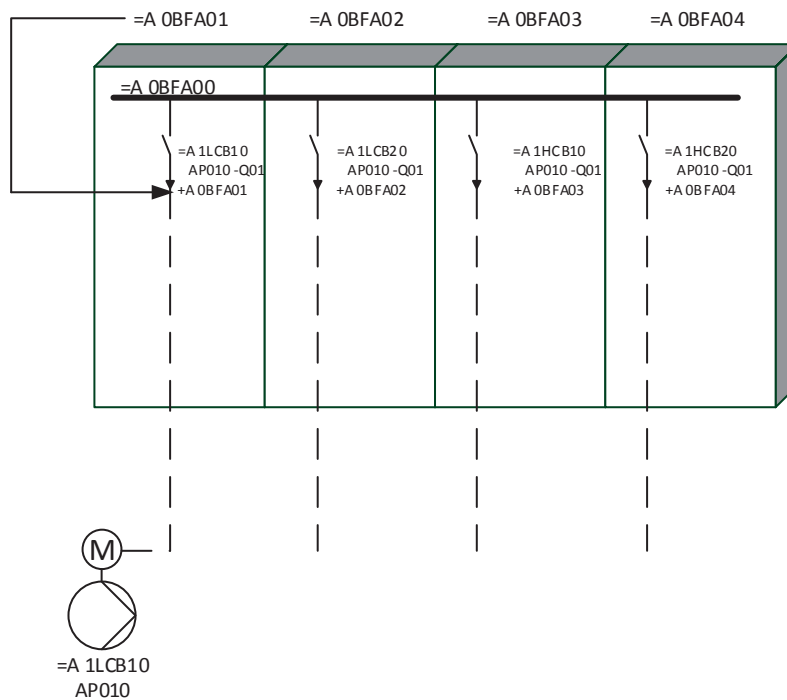


Figure 48: Installation unit identification deduced from the process-related identification of the distribution system.

3.3.2.3 Numbering of Installation Unit

Subdivision of installation units into cubicles, sections, cabinets, etc..

Serial no. of breakdown level	0	1	2
Title of breakdown level	Total plant	Installation unit code	Installation space code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃
Type of data character	A or N	N A A A N N •	A (A) (N) (N) N (A)

Numbering of installation unit

Figure 49: Breakdown level "Numbering of installation unit".

The numbering rules set out in chapter 2.3.2 apply also to the numbering of installation units.

3.3.3 Installation Space Code

Serial no. of breakdown level	0	1	2
Title of breakdown level	Total plant	Installation unit code	Installation space code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃
Type of data character	+ A or N	N A A A N N •	A (A) (N) (N) N (A)

Vertical subdivision (rows)

of installation spaces in installation units

Horizontal subdivision (columns)

of installation spaces in installation units

Additional code

Designation of special installation locations of components or further subdivision of A_N

Figure 50: Breakdown level "Installation space code".

This identification applies to all assembly systems which need a subdivision for unique identification of the individual installation spaces.

Breakdown level 2 "Installation space code" is omitted if no further subdivision of the installation unit is necessary, as for instance in medium-voltage panels. Classifications from the Equipment Unit Key of the process-related identification cannot be used for identification of installation spaces.

The application of the installation space code depends to a large extent on the hardware design and the different options of installing components. Quite often, "delivered" identification labels must be considered. These aspects influence, among other things, the number and type of data characters in breakdown level 2. Viewed from the front (e.g. service side) and starting from the coordinate system origin, the direction of numbering is from top to bottom and from left to right (X axis), and therefore vice versa from right to left as viewed from the rear (e.g. wiring side).

The following figures are intended to illustrate recurrent methods of installation space identification coding.

Figure 51 shows the identification coding of installation spaces within a cabinet without fixed grid. However, it is useful to define and label a coordinate grid so as to permit a precise identification of the position of the installed device. For identification of the position of a component which covers several horizontal spaces, the letter which comes first in the alphabet shall be relevant.

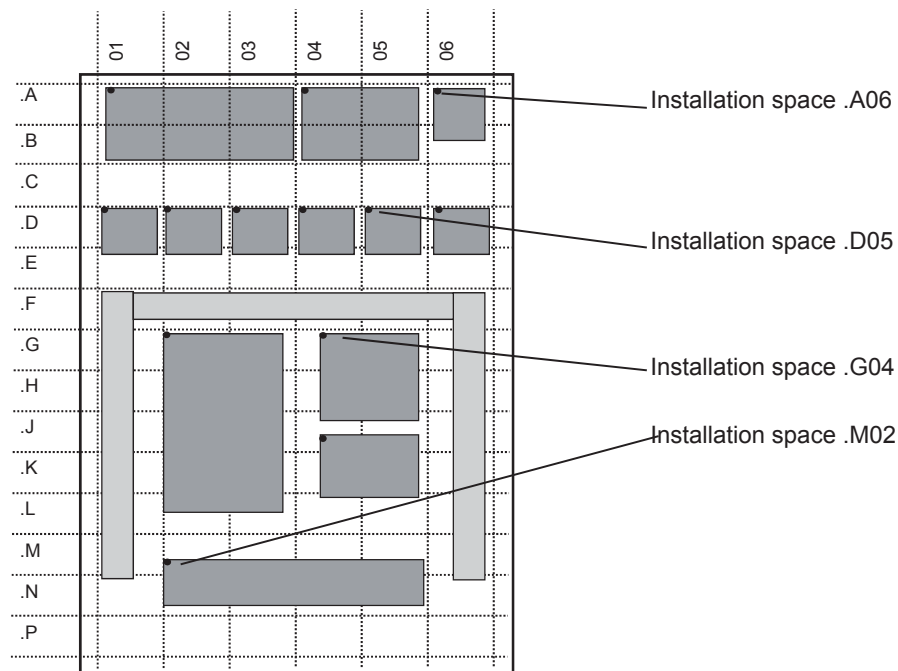


Figure 51: Example of installation space identification in a cabinet.

Figure 52 shows the identification coding of installation spaces by means of “numbering” of the installation units and devices from top to bottom with letters and from left to right with numbers. On row A of the cabinet, there is a module frame which is again subdivided into several tiers. For the A₁ character of this installation unit, the letter of the cabinet row A is used.

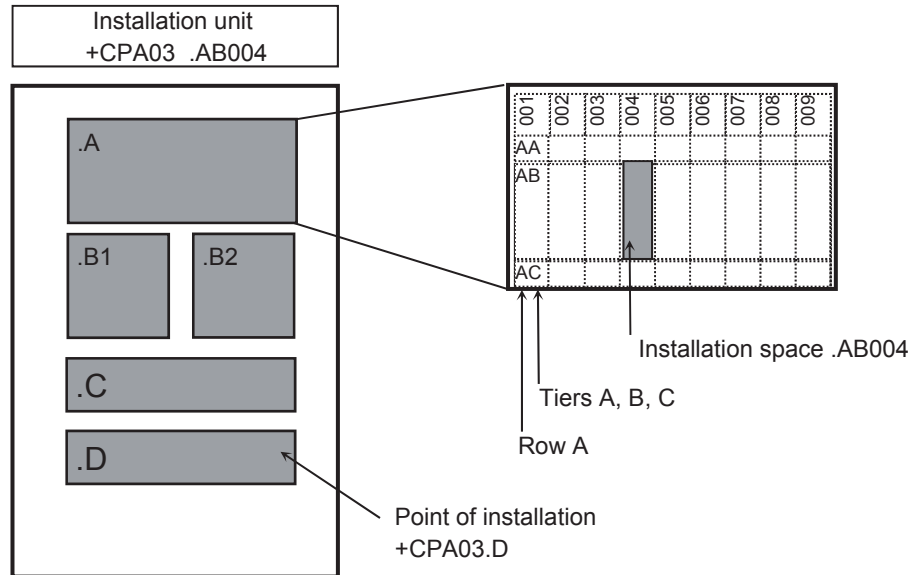


Figure 52: Example of installation space identification in a control cabinet.

Figure 53 shows the installation spaces available for installation of C&I components in a control cabinet.

Recommendation for data character A_1 :

- A to W Grid reference, e.g. for module carrier
- X Left-hand installation zone,
e.g. to the left of the module frame, left-hand side wall
- Y Right-hand installation zone,
e.g. to the right of the module frame, right-hand side wall
- Z Special installation zones, e.g. doors, front plate, base space

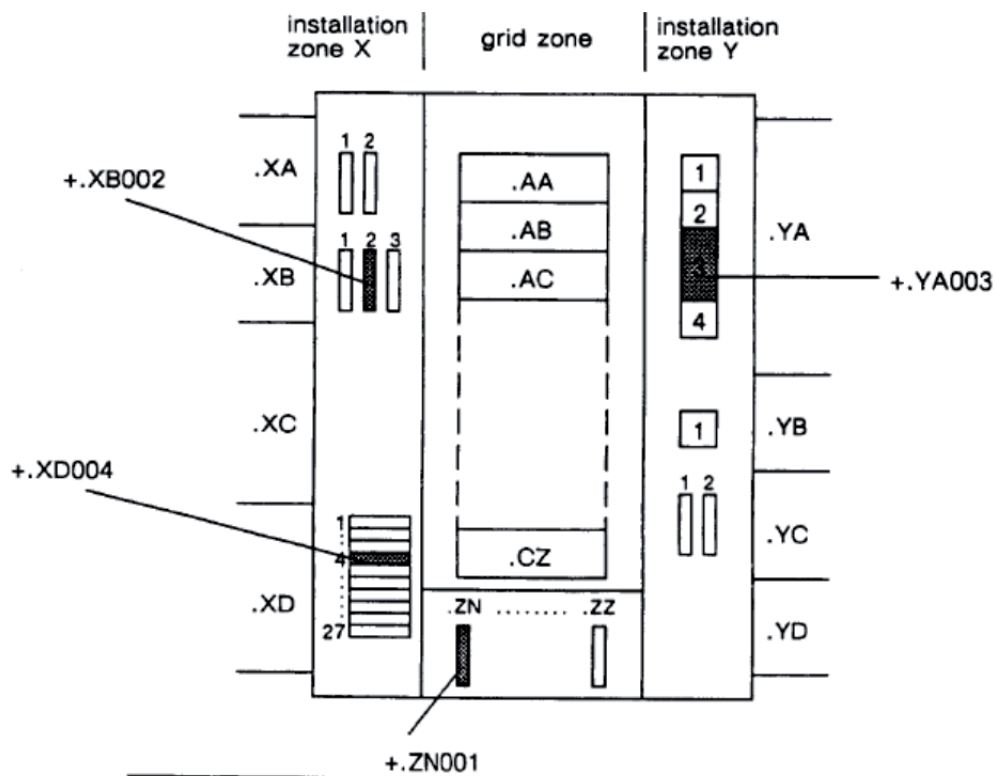


Figure 53: Example of installation space identification in a control cabinet.

Figure 54 shows the identification of installation spaces using the example of a control room panel with fittings extending over several cubicles. For such fittings, a separate installation unit code is to be defined, in this example +CWA00.

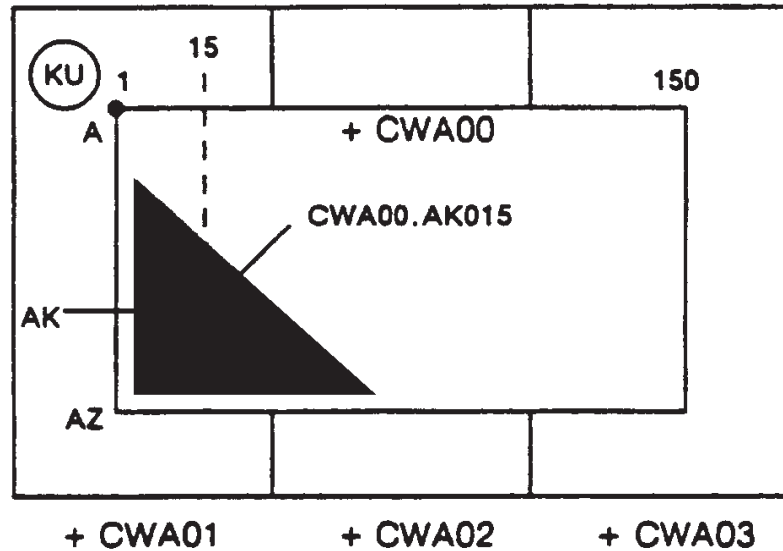
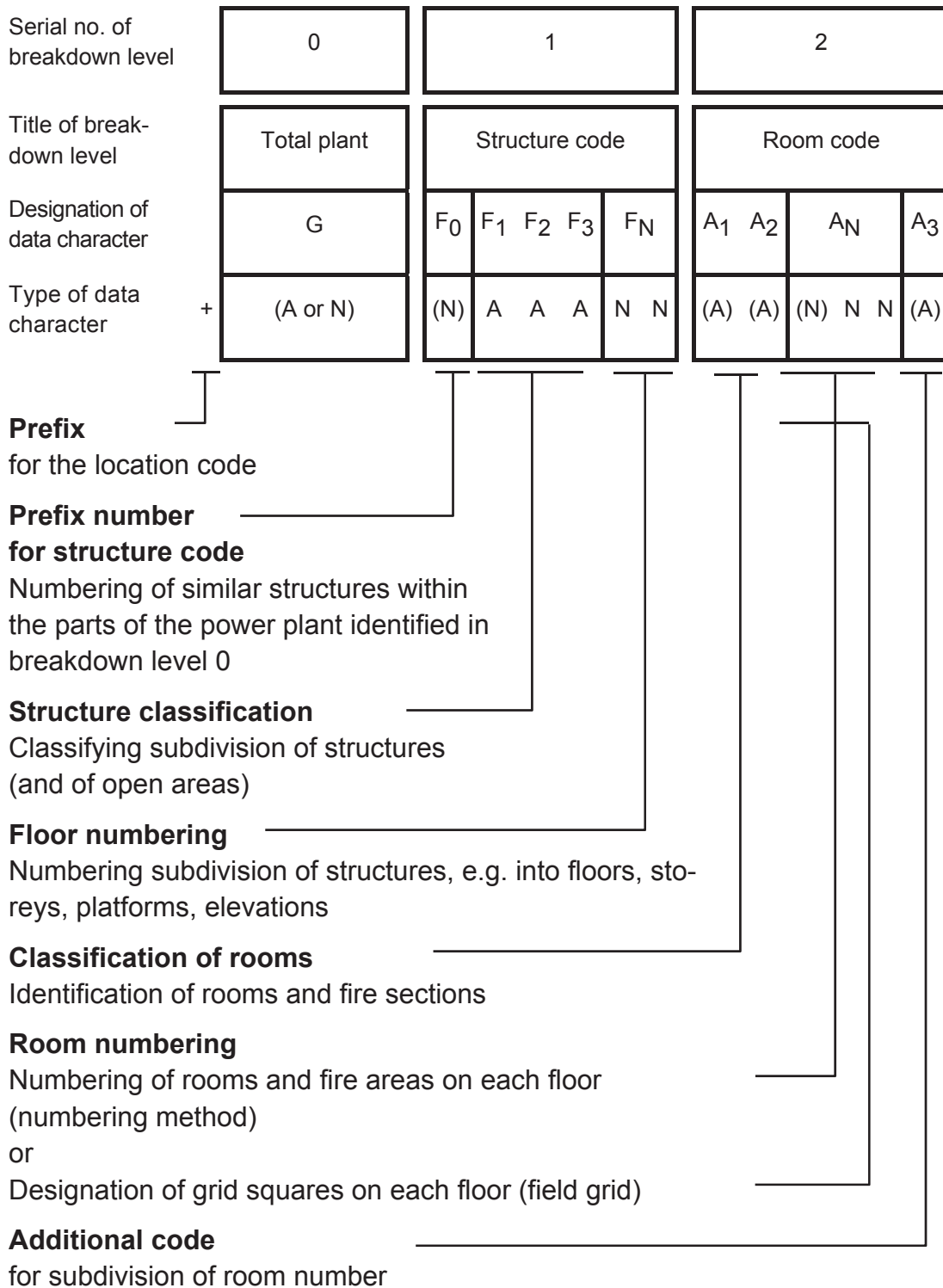


Figure 54: Example of installation space identification in a control room panel.

3.4 Identification of Location

3.4.1 General, Code Structure

Identification of locations (structures and areas, Figure 55) accommodating mechanical, electrical and C&I equipment, e.g. in rooms, floors, ducts, open areas etc. and identification of fire sections. The location code is **n o t** used for identification of the installed equipment items.



The data characters in parentheses () can be omitted if the code remains unique. This is subject to agreement between the parties to the project.

Figure 55: Structure of the location code.

3.4.2 Structure Code

3.4.2.1 Prefix Number for Structure Code

Numbering of similar structures within the power plant parts identified breakdown level 0.

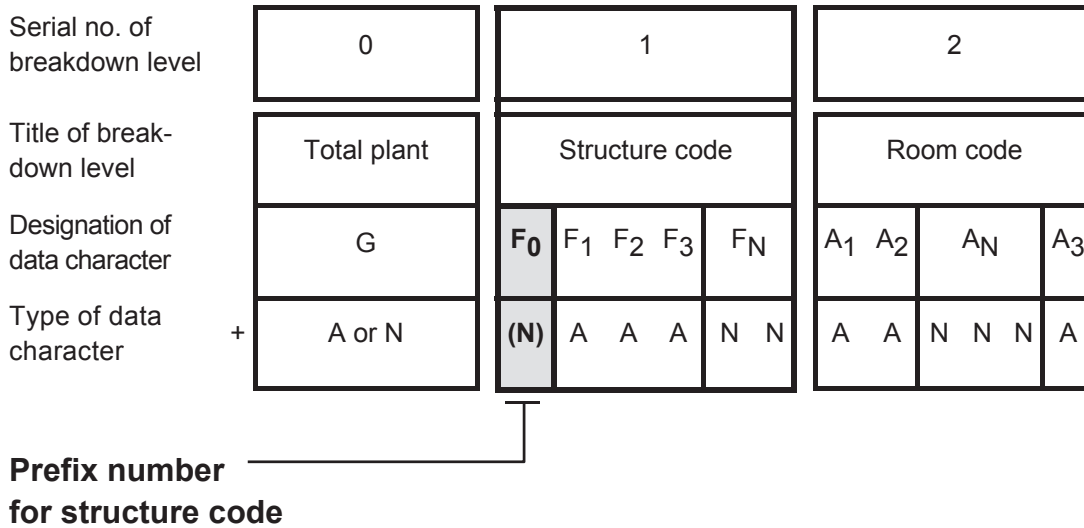


Figure 56: Data character “Prefix number of structure code”.

The prefix number for the structure code is taken from the process-related identification code of the civil engineering system.

Each prefix number applies only to the structures classified in F₁ F₂ F₃. Details of this application are to be agreed between the parties to the project.

3.4.2.2 Structure Classification

Classifying subdivision of structures (and open areas).

Serial no. of breakdown level	0	1	2
Title of breakdown level	Total plant	Structure code	Room code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃
Type of data character	A or N	N A A A N N	A A N N N A

Structure classification —————

Figure 57: Breakdown level "Structure classification".

For structure classification, the coding letter and designation used in main group F₁ is **U** = Structure, as defined in the Function Key. The subdivisions in F₂ and F₃ are likewise given in the applicable Function Key.

Project-specific details are to be agreed between the parties to the project.

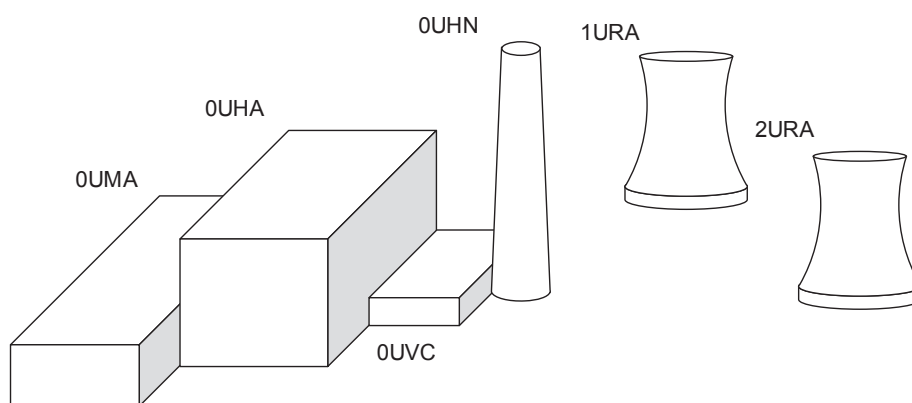


Figure 58: Structure classification.

3.4.2.3 Numbering of Floors

Numbering subdivisions of structures into floors, platforms, elevations etc.

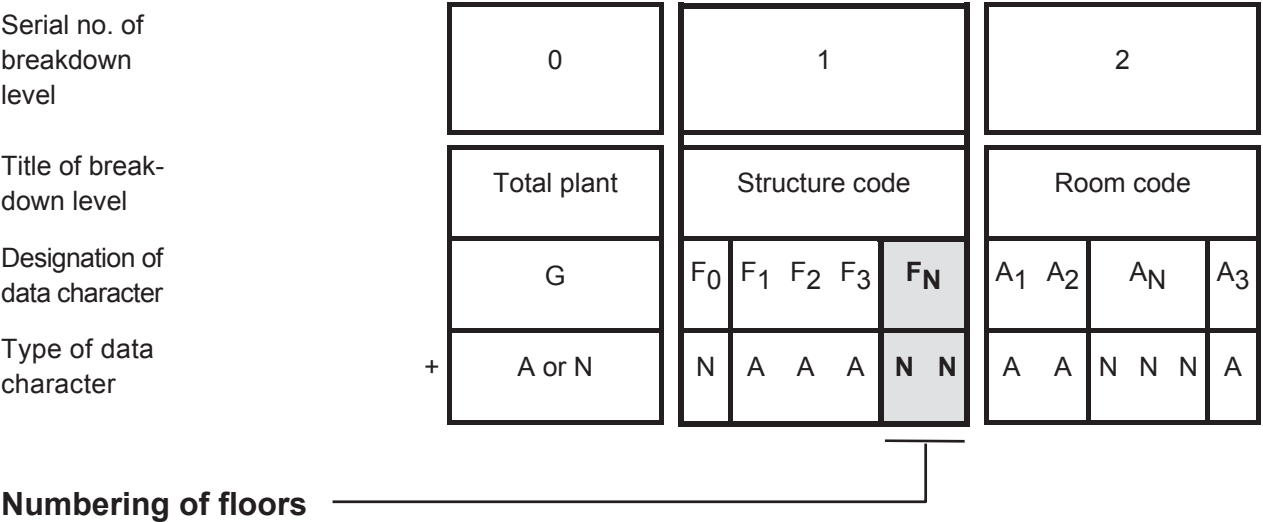
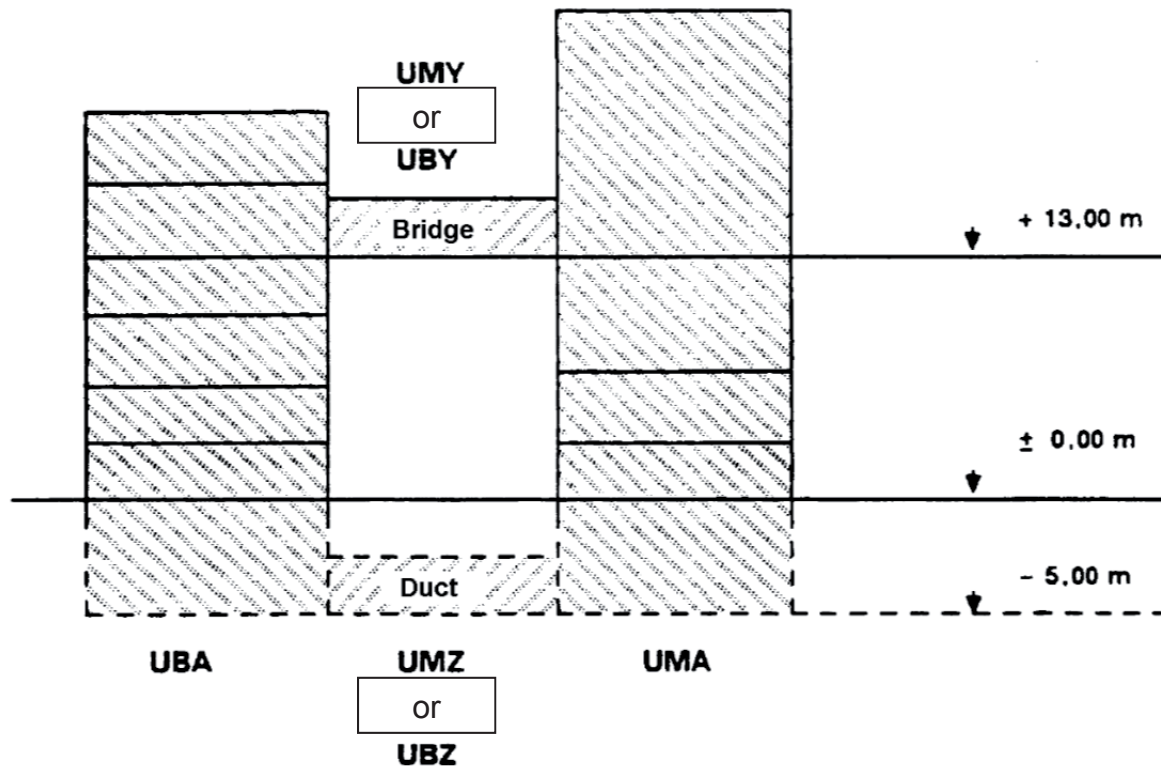


Figure 59: Breakdown level “Numbering of floors”.

Numbering begins anew for each structure.
The direction of numbering is vertical from the lowest floor upward.
Details of application are to be agreed between the parties to the project.

Figure 60 shows the identification of connecting structures between two structures, using the example of bridge and duct structures between turbine building and switchgear building.



Coding letters and designations

U	Structures		
UB	Structures for power transmission and auxiliary power supply		
UBA	Switchgear building		
UM	Structures for main machine sets		
UMA	Steam turbine building		
UBY	Bridge structure	or	UMY Bridge structure
UBZ	Ducting structure	or	UMZ Ducting structure

Figure 60: Identification coding of connecting structures between buildings.

For the purposes of identification, bridge and ducting structures between two structures may alternatively be allocated directly to one structure.

The allocation is subject to agreement between the parties to the project.

3.4.3 Room Code

The room code serves to identify physically separated and fictitious rooms in structures and in open areas.

Physically separated rooms in structures are preferably identified by numbering. Fictitious rooms in structures and areas in the open are identified using the field grid method.

3.4.3.1 Room Identification by Numbering

Serial no. of breakdown level	0	1	2
Title of breakdown level	Total plant	Structure code	Room code
Designation of data character	G	F ₀ F ₁ F ₂ F ₃ F _N	A ₁ A ₂ A _N A ₃
Type of data character +	A or N	N A A A N N	(A) (N) N N (A)

Room classification

A₁ Coding letters and designations

R Room (may be omitted if the code remains unique)

S Fire section (must always be written)

A₂

is not used when numbering method is used for room identification

Room numbering

Numbering of rooms and fire sections on each floor

Shafts and rooms extending over several floors are given the room number of the lowest floor on all floors. The 100ths place may be omitted if no structure of the total plant counts more than 99 rooms on one floor. If this does not apply, all room numbering codes for the entire plant must be written consistently with three data characters for A_N.

Additional code

for subdivision of room number

Figure 61: Room identification by numbering.

3.4.3.2 Room Identification by Field Grid

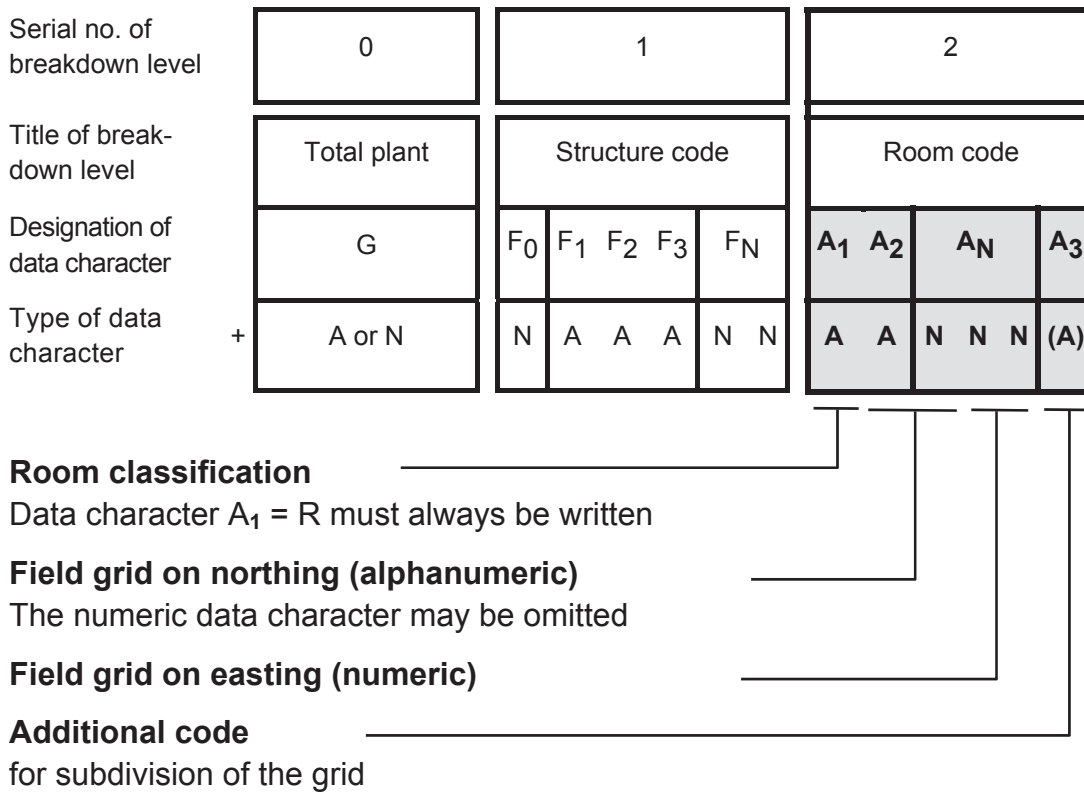


Figure 62: Room identification by field grid.

The dimensions of the grid squares are to be specified in accordance with field grids of suitable scale (see DIN 1356), with reference to an origin of coordinates determined by measurement (e.g. to Gauß-Krüger).

The grid sizes and the meaning and type of the data characters (alpha or numeric) are to be agreed between the parties to the project.

4 Notation of Codes

The codes can be written with and without spacing but it must be represented in such a way that misinterpretations are avoided.

Spaced way of writing supports the legibility and memorability of codes. Spacing can be achieved by adding blank spaces or underscore characters at defined places or by writing the code in multiple lines:

“Small spacing”

Blank spaces or underscore characters between the breakdown levels for codes which do not have to be visually decoded within a given time limit.

“Large spacing”

Blank spaces or underscore characters between the alpha part and the numeric part within the breakdown levels, if these are more than four data characters long, e.g. for codes in the control room which must be read in relatively short periods of time.

	Small spacing	Large spacing
Using blank spaces	A NAAANN AANNNA AANN	A NAAA NN AA NNNA AA NN
Using underscore characters	A_NAAANN_AANNNA_AANN	A_NAAA_NN_AA_NNNA_AA_NN
Multiple lines	A NAAANN AANNNA AANN	A NAAA NN AA NNNA AA NN

If an identification code is written together with abbreviations in a text, the code designation must be enclosed in asterisks (e.g. *LAC*) to avoid confusion.

Details and application of spacing must be agreed between the parties to the project.

5 Special Rules

5.1 Rules Concerning the Keys

The KKS Key is divided into the following keys:

- Function Key
- Equipment Unit Key
- Component Key

Free spaces

A number of coding letters in main groups F_1 groups F_2 and subgroups F_3 have been reserved, for example to allow inclusion of future technologies. In main groups A_1 and B_1 , as well as in some subgroups, some coding letters have also been reserved. All reserved coding letters can only be allocated with the prior consent of the VGB TG "Reference Designation and Plant Documentation".

In the Function Key it is not possible to make generally valid rules for certain coding letters in data characters F_2 and F_3 since they depend exclusively on the configurations and arrangements concerned.

Similar considerations apply to $A_1 = \mathbf{E}$ and \mathbf{G} in the Equipment Unit Key.

In such cases a remark with the following meaning appears in the key part concerned:

“free for use for ...”	the letters marked with this comment may be used within the meaning of the stated definitions,
-------------------------------	--

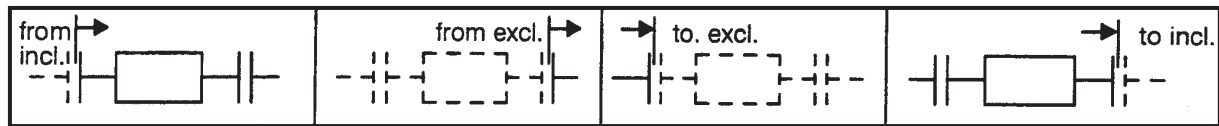
or

“free for use”	the letters marked with this comment may be used without any restrictions within the meaning of the stated definitions in F_1 or F_2 .
-----------------------	--

Details of application are to be agreed between the parties to the project and documented.

Interfaces

The relevant pages of the Function Key show the interface definitions with the meanings given below:



“from incl.” means “including the named item”

“from excl.” means “excluding the named item”

“to excl.” means “excluding the named item”

“to incl.” means “including the named item”

For some main groups F_1 , e.g. for:

- F** Handling of nuclear equipment
- J** Nuclear heat generation
- K** Nuclear auxiliary system

the task of the system concerned is defined in addition to or instead of the interfaces.

5.2 System Codes for Heavy Machinery

Certain “components” such as steam turbines used as drives for feed water pumps can require so many identification details that, as “heavy machinery”, they need separate system codes in order to permit identification of all associated mechanical equipment units and electrical, control and instrumentation facilities. The system codes for such heavy machinery are fixed as **X** in main group F_1 .

5.3 Allocation of System Codes to Mechanical Equipment, Process Apparatuses and Measuring Circuits

Equipment units are allocated to the system in which they are installed. When stipulating system boundaries the originator principle applies.

For identification purposes, measuring circuits are allocated to the system where the parameters are measured.

5.4 Special Rules for Mechanical Engineering

5.4.1 Valves

Valves as control elements in fluid-carrying systems are allocated to the system in which they are installed. Irrespective of their type of actuation they are identified by AA in breakdown level 2.

Valves in fluid-carrying measuring circuits are allocated to the measuring circuit and are identified by KA in breakdown level 3.

Shutoff valves between fluid-carrying systems and a measuring circuit are allocated to the fluid-carrying system and identified by AA in breakdown level 2. Note: the originator principle does not apply here.

Safety equipment comprising safety valves and the connected piping is allocated to the system to which it is connected. Note: the originator principle does not apply here.

5.4.2 Supports

Supports are not identified in line with the originator principle. They can be allocated to a system designation or a structure designation in breakdown level 1.

System-based identification is a natural solution when parts of the support can be allocated to a particular system.

Structure-based identification is preferable when parts of different systems share supports.

Supports are coded BQ in breakdown level 2.

Details of application are to be agreed between the parties to the project.

5.5 Special Rules for Civil Engineering

If a building or structure covers several engineering process systems, the code for this building is priority-specified.

Details of application are to be agreed between the parties to the project.

For the identification of special structures, ducting and bridge structures in main group $F_1 = U$ the subgroups $F_3 =$

- X** Special structures
- Y** Bridge structures
- Z** Ducting structures

are stipulated in almost all cases.

5.6 Special Rules for Electrical and C&I Engineering

5.6.1 Combined Electrical and C&I Equipment

Combined electrical and C&I equipment is not identified according to the originator principle. Combined electrical and C&I equipment for measurement, closed-loop and open-loop control and power unit (e. g. combined in one cabinet) is identified in breakdown level 1 using the letters CM_, CN_ and CT_ C&I Systems (subdivision for system combinations). If necessary a further grouping can be made in F_N.

5.6.2 Transducer Racks, Supports, Scaffolding

These are not identified according to the originator principle. They are allocated the pertinent system code in breakdown level 1 and classified in breakdown level 2 as electrical and C&I equipment with *GZ* on the equipment unit level.

5.6.3 Subdistribution Boards, Penetrations

These are not identified according to the originator principle. In breakdown level 1, they are allocated the code of the structure and floor in which they are located. Exceptions are, for example, the subdistribution boards at the main machine sets and heavy machinery and the subdistribution boards in electrical, control and instrumentation cubicles and cabinets, which in breakdown level 1 are identified according to the main machine set or heavy machinery, cubicle or cabinet.

In breakdown level 2 the subdistribution boards are to be identified by the key A₁ = G (electrotechnical equipment).

5.6.4 Penetrations through the Reactor Containment

Such penetrations are identified by JML=reactor containment, cable penetration in breakdown level 1 according to the originator principle.

5.6.5 Connections

Connections are identified in line with DIN EN 61666 with the prefix “:” (colon). This code block may contain any combination of alphanumeric symbols. The code block “Connection” may only be combined with the process-related code.

6 List of Project-Specific Stipulations to be Agreed between the Parties to the Project

The KKS Guidelines do not contain all stipulations necessary for a project. There is some room for which clear stipulations have to be agreed between the customer (owner/operator) and the contractor (engineer/supplier).

In the Guidelines, such aspects are indicated by the remark “Details of application to be agreed between the parties to the project”. A list of such establishments is given below.

General stipulations	Guideline chapter
1. Changes to KKS designations (only possible as long as contents remain unchanged)	2.3.1
2. Rules on numbering systems and direction of numbering for all numbering code elements	2.3.2
3. Rules on breakdown level 0 regarding - contents - type of data character - direction of numbering	3.1
4. Rules on spacing for code notation	4
5. Allocation of unreserved, “free for use” classifying code elements	5.1
Stipulations relating to process-related identification	
6. Use of data characters in process-related identification	3.2
7. Use of prefix number F_0	3.2.2.2
8. Rules on F_N numbering	3.2.2.4
9. Rules on A_N numbering	3.2.3.3
10. Rules on A_3 numbering	3.2.3.4
11. Rules on B_N numbering	3.2.4.3
12. Rules on the identification of supports	5.4.2
13. Rules on the identification of supply systems	3.2.2.3.5

General stipulations	Guideline chapter
14. Rules on system identification where measured value processing serves more than one process system	3.2.5.2
15. Rules on identification for “Signals and signal application” and for the allocation of the subgroups of main groups X, Y, Z on breakdown level 3	3.2.5.1
Stipulations relating to point of installation identification	
16. Use of data characters in point of installation code	3.3.1
17. Use of prefix number F_0 in point of installation code	3.3.2
18. Rules on F_N numbering in installation unit code	3.3.2.1
19. Installation space code	3.3.3
Stipulations relating to location identification	
20. Use of data characters in location code	3.4.1
21. Use of prefix number F_0 in structure code	3.4.2.1
22. Rules on subgroup F3	3.4.2.2
23. Rules on F_N numbering in structure code	3.4.2.3
24. Rules on room code	3.4.3
25. Rules on structure identification for individual structures combined to form one structure	3.4.2.2
26. Rules on structure identification for ducting and bridge structures as connecting structures	3.4.2.2

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	Function Key in Main Groups						
	A	GRID AND DISTRIBUTION SYSTEMS					
	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY					
	C	INSTRUMENTATION AND CONTROL EQUIPMENT (Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)					
C	D	- blocked -					
	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
	F	HANDLING OF NUCLEAR EQUIPMENT					
	G	WATER SUPPLY AND DISPOSAL					
	H	CONVENTIONAL HEAT GENERATION					
	J	NUCLEAR HEAT GENERATION					
	K	REACTOR AUXILIARY SYSTEMS					
	L	STEAM, WATER, GAS CYCLES					
	M	MAIN MACHINE SETS					
C	N	Process energy/fluid supply for external users					
	P	COOLING WATER SYSTEMS					
	Q	AUXILIARY SYSTEMS					
	R	GAS GENERATION AND TREATMENT					
	S	ANCILLARY SYSTEMS					
	T	-blocked-					
E	U	Civil structures					
	V	-blocked-					
	W	RENEWABLE ENERGY PLANTS					
	X	HEAVY MACHINERY (NOT MAIN MACHINE SETS)					
	Y	-blocked-					
	Z	WORKSHOP AND OFFICE EQUIPMENT					
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ABD > 420 kV systems (free for use)
ABE > 420 kV systems (free for use)
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ACB	380 (420) kV systems (free for use)
ACC	380 (420) kV systems (free for use)
ACD	380 (420) kV systems (free for use)
ACE	380 (420) kV systems (free for use)
ACF	380 (420) kV systems (free for use)
ACG	380 (420) kV systems (free for use)
ACH	380 (420) kV systems (free for use)
ACJ	380 (420) kV systems (free for use)
ACK	380 (420) kV systems (free for use)
ACL	380 (420) kV systems (free for use)
ACM	380 (420) kV systems (free for use)
ACN	380 (420) kV systems (free for use)
ACP	380 (420) kV systems (free for use)
ACQ	380 (420) kV systems (free for use)
ACR	380 (420) kV systems (free for use)
ACS	380 (420) kV systems (free for use)
ACT	380 (420) kV systems (free for use)
ACU	380 (420) kV systems (free for use)
ACV	380 (420) kV systems (free for use)
ACW	380 (420) kV systems (free for use)
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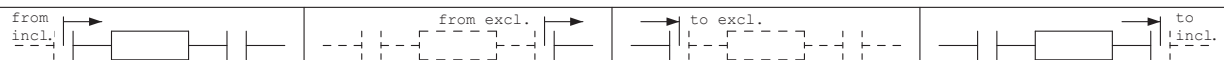
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ADC	220 (245) kV systems (free for use)
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ADH	220 (245) kV systems (free for use)
ADJ	220 (245) kV systems (free for use)
ADK	220 (245) kV systems (free for use)
ADL	220 (245) kV systems (free for use)
ADM	220 (245) kV systems (free for use)
ADN	220 (245) kV systems (free for use)
ADP	220 (245) kV systems (free for use)
ADQ	220 (245) kV systems (free for use)
ADR	220 (245) kV systems (free for use)
ADS	220 (245) kV systems (free for use)
ADT	220 (245) kV systems (free for use)
ADU	220 (245) kV systems (free for use)
ADV	220 (245) kV systems (free for use)
ADW	220 (245) kV systems (free for use)
ADX	220 (245) kV systems (free for use)
ADY	220 (245) kV systems (free for use)
ADZ	220 (245) kV systems (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AE 110 (150) kV systems**

AEA	110 (150) kV systems (free for use)
AEB	110 (150) kV systems (free for use)
AEC	110 (150) kV systems (free for use)
AED	110 (150) kV systems (free for use)
AEE	110 (150) kV systems (free for use)
AEF	110 (150) kV systems (free for use)
AEG	110 (150) kV systems (free for use)
AEH	110 (150) kV systems (free for use)
AEJ	110 (150) kV systems (free for use)
AEK	110 (150) kV systems (free for use)
AEL	110 (150) kV systems (free for use)
AEM	110 (150) kV systems (free for use)
AEN	110 (150) kV systems (free for use)
AEP	110 (150) kV systems (free for use)
AEQ	110 (150) kV systems (free for use)
AER	110 (150) kV systems (free for use)
AES	110 (150) kV systems (free for use)
AET	110 (150) kV systems (free for use)
AEU	110 (150) kV systems (free for use)
AEV	110 (150) kV systems (free for use)
AEW	110 (150) kV systems (free for use)
AEX	110 (150) kV systems (free for use)
AEY	110 (150) kV systems (free for use)
AEZ	110 (150) kV systems (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AF 60 (72) kV systems**

AFA	60 (72) kV systems (free for use)
AFB	60 (72) kV systems (free for use)
AFC	60 (72) kV systems (free for use)
AFD	60 (72) kV systems (free for use)
AFE	60 (72) kV systems (free for use)
AFF	60 (72) kV systems (free for use)
AFG	60 (72) kV systems (free for use)
AFH	60 (72) kV systems (free for use)
AFJ	60 (72) kV systems (free for use)
AFK	60 (72) kV systems (free for use)
AFL	60 (72) kV systems (free for use)
AFM	60 (72) kV systems (free for use)
AFN	60 (72) kV systems (free for use)
AFP	60 (72) kV systems (free for use)
AFQ	60 (72) kV systems (free for use)
AFR	60 (72) kV systems (free for use)
AFS	60 (72) kV systems (free for use)
AFT	60 (72) kV systems (free for use)
AFU	60 (72) kV systems (free for use)
AFV	60 (72) kV systems (free for use)
AFW	60 (72) kV systems (free for use)
AFX	60 (72) kV systems (free for use)
AFY	60 (72) kV systems (free for use)
AFZ	60 (72) kV systems (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AG 45 (50) kV systems**

AGA	45 (50) kV systems (free for use)
AGB	45 (50) kV systems (free for use)
AGC	45 (50) kV systems (free for use)
AGD	45 (50) kV systems (free for use)
AGE	45 (50) kV systems (free for use)
AGF	45 (50) kV systems (free for use)
AGG	45 (50) kV systems (free for use)
AGH	45 (50) kV systems (free for use)
AGJ	45 (50) kV systems (free for use)
AGK	45 (50) kV systems (free for use)
AGL	45 (50) kV systems (free for use)
AGM	45 (50) kV systems (free for use)
AGN	45 (50) kV systems (free for use)
AGP	45 (50) kV systems (free for use)
AGQ	45 (50) kV systems (free for use)
AGR	45 (50) kV systems (free for use)
AGS	45 (50) kV systems (free for use)
AGT	45 (50) kV systems (free for use)
AGU	45 (50) kV systems (free for use)
AGV	45 (50) kV systems (free for use)
AGW	45 (50) kV systems (free for use)
AGX	45 (50) kV systems (free for use)
AGY	45 (50) kV systems (free for use)
AGZ	45 (50) kV systems (free for use)

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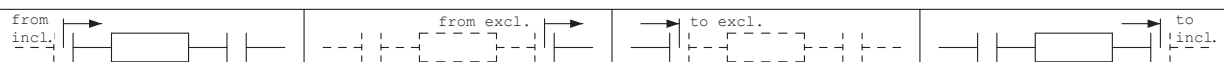
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A GRID AND DISTRIBUTION SYSTEMS**AH 30 (35) kV systems**

AHA	30 (35) kV systems (free for use)
AHB	30 (35) kV systems (free for use)
AHC	30 (35) kV systems (free for use)
AHD	30 (35) kV systems (free for use)
AHE	30 (35) kV systems (free for use)
AHF	30 (35) kV systems (free for use)
AHG	30 (35) kV systems (free for use)
AHH	30 (35) kV systems (free for use)
AHJ	30 (35) kV systems (free for use)
AHK	30 (35) kV systems (free for use)
AHL	30 (35) kV systems (free for use)
AHM	30 (35) kV systems (free for use)
AHN	30 (35) kV systems (free for use)
AHP	30 (35) kV systems (free for use)
AHQ	30 (35) kV systems (free for use)
AHR	30 (35) kV systems (free for use)
AHS	30 (35) kV systems (free for use)
AHT	30 (35) kV systems (free for use)
AHU	30 (35) kV systems (free for use)
AHV	30 (35) kV systems (free for use)
AHW	30 (35) kV systems (free for use)
AHX	30 (35) kV systems (free for use)
AHY	30 (35) kV systems (free for use)
AHZ	30 (35) kV systems (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AJ 20 (25) kV systems**

AJA	20 (25) kV systems (free for use)
AJB	20 (25) kV systems (free for use)
AJC	20 (25) kV systems (free for use)
AJD	20 (25) kV systems (free for use)
AJE	20 (25) kV systems (free for use)
AJF	20 (25) kV systems (free for use)
AJG	20 (25) kV systems (free for use)
AJH	20 (25) kV systems (free for use)
AJJ	20 (25) kV systems (free for use)
AJK	20 (25) kV systems (free for use)
AJL	20 (25) kV systems (free for use)
AJM	20 (25) kV systems (free for use)
AJN	20 (25) kV systems (free for use)
AJP	20 (25) kV systems (free for use)
AJQ	20 (25) kV systems (free for use)
AJR	20 (25) kV systems (free for use)
AJS	20 (25) kV systems (free for use)
AJT	20 (25) kV systems (free for use)
AJU	20 (25) kV systems (free for use)
AJV	20 (25) kV systems (free for use)
AJW	20 (25) kV systems (free for use)
AJX	20 (25) kV systems (free for use)
AJY	20 (25) kV systems (free for use)
AJZ	20 (25) kV systems (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AK 10 (15) kV systems**

AKA	10 (15) kV systems (free for use)
AKB	10 (15) kV systems (free for use)
AKC	10 (15) kV systems (free for use)
AKD	10 (15) kV systems (free for use)
AKE	10 (15) kV systems (free for use)
AKF	10 (15) kV systems (free for use)
AKG	10 (15) kV systems (free for use)
AKH	10 (15) kV systems (free for use)
AKJ	10 (15) kV systems (free for use)
AKK	10 (15) kV systems (free for use)
AKL	10 (15) kV systems (free for use)
AKM	10 (15) kV systems (free for use)
AKN	10 (15) kV systems (free for use)
AKP	10 (15) kV systems (free for use)
AKQ	10 (15) kV systems (free for use)
AKR	10 (15) kV systems (free for use)
AKS	10 (15) kV systems (free for use)
AKT	10 (15) kV systems (free for use)
AKU	10 (15) kV systems (free for use)
AKV	10 (15) kV systems (free for use)
AKW	10 (15) kV systems (free for use)
AKX	10 (15) kV systems (free for use)
AKY	10 (15) kV systems (free for use)
AKZ	10 (15) kV systems (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AL 6 (5) kV systems**

ALA	6 (5) kV systems (free for use)
ALB	6 (5) kV systems (free for use)
ALC	6 (5) kV systems (free for use)
ALD	6 (5) kV systems (free for use)
ALE	6 (5) kV systems (free for use)
ALF	6 (5) kV systems (free for use)
ALG	6 (5) kV systems (free for use)
ALH	6 (5) kV systems (free for use)
ALJ	6 (5) kV systems (free for use)
ALK	6 (5) kV systems (free for use)
ALL	6 (5) kV systems (free for use)
ALM	6 (5) kV systems (free for use)
ALN	6 (5) kV systems (free for use)
ALP	6 (5) kV systems (free for use)
ALQ	6 (5) kV systems (free for use)
ALR	6 (5) kV systems (free for use)
ALS	6 (5) kV systems (free for use)
ALT	6 (5) kV systems (free for use)
ALU	6 (5) kV systems (free for use)
ALV	6 (5) kV systems (free for use)
ALW	6 (5) kV systems (free for use)
ALX	6 (5) kV systems (free for use)
ALY	6 (5) kV systems (free for use)
ALZ	6 (5) kV systems (free for use)

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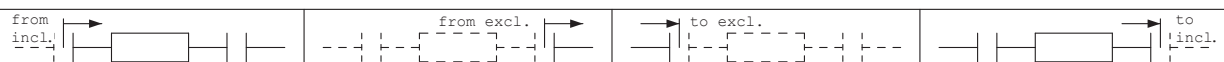
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A GRID AND DISTRIBUTION SYSTEMS**AM 1-3 kV systems**

AMA	1-3 kV systems (free for use)
AMB	1-3 kV systems (free for use)
AMC	1-3 kV systems (free for use)
AMD	1-3 kV systems (free for use)
AME	1-3 kV systems (free for use)
AMF	1-3 kV systems (free for use)
AMG	1-3 kV systems (free for use)
AMH	1-3 kV systems (free for use)
AMJ	1-3 kV systems (free for use)
AMK	1-3 kV systems (free for use)
AML	1-3 kV systems (free for use)
AMM	1-3 kV systems (free for use)
AMN	1-3 kV systems (free for use)
AMP	1-3 kV systems (free for use)
AMQ	1-3 kV systems (free for use)
AMR	1-3 kV systems (free for use)
AMS	1-3 kV systems (free for use)
AMT	1-3 kV systems (free for use)
AMU	1-3 kV systems (free for use)
AMV	1-3 kV systems (free for use)
AMW	1-3 kV systems (free for use)
AMX	1-3 kV systems (free for use)
AMY	1-3 kV systems (free for use)
AMZ	1-3 kV systems (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AN < 1 kV systems****ANA** Low voltage switchgear 500-1000 V, Three-phase/single phase alternating current (free for use)**ANB** Low voltage switchgear 500-1000 V, Three-phase/single phase alternating current (free for use)**ANC** Low voltage switchgear 500-1000 V, Three-phase/single phase alternating current (free for use)**AND** -blocked-**ANE** Low voltage switchgear < 500 V, Three-phase/single phase alternating current (free for use)**ANF** Low voltage switchgear < 500 V, Three-phase/single phase alternating current (free for use)**ANG** Low voltage switchgear < 500 V, Three-phase/single phase alternating current (free for use)**ANH** Low voltage switchgear < 500 V, Three-phase/single phase alternating current (free for use)**ANJ** -blocked-**ANK** Direct voltage switchgear 220/110 V (free for use)**ANL** Direct voltage switchgear 220/110 V (free for use)**ANM** Direct voltage switchgear 220/110 V (free for use)**ANN** Direct voltage switchgear 220/110 V (free for use)**ANP** -blocked-**ANQ** Direct voltage switchgear 60/48 V (free for use)**ANR** Direct voltage switchgear 60/48 V (free for use)**ANS** Direct voltage switchgear 60/48 V (free for use)**ANT** -blocked-**ANU** Direct voltage switchgear 24/12 V (free for use)**ANV** Direct voltage switchgear 24/12 V (free for use)**ANW** Direct voltage switchgear 24/12 V (free for use)**ANX** -blocked-**ANY** -blocked-**ANZ** -blocked-I
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A GRID AND DISTRIBUTION SYSTEMS**AP Control consoles**

APA	Control consoles (free for use)
APB	Control consoles (free for use)
APC	Control consoles (free for use)
APD	Control consoles (free for use)
APE	Control consoles (free for use)
APF	Control consoles (free for use)
APG	Control consoles (free for use)
APH	Control consoles (free for use)
APJ	Control consoles (free for use)
APK	Control consoles (free for use)
APL	Control consoles (free for use)
APM	Control consoles (free for use)
APN	Control consoles (free for use)
APP	Control consoles (free for use)
APQ	Control consoles (free for use)
APR	Control consoles (free for use)
APS	Control consoles (free for use)
APT	Control consoles (free for use)
APU	Control consoles (free for use)
APV	Control consoles (free for use)
APW	Control consoles (free for use)
APX	Control consoles (free for use)
APY	Control consoles (free for use)
APZ	Control consoles (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AQ Measuring and metering equipment**

AQA	Measuring and metering equipment (free for use)
AQB	Measuring and metering equipment (free for use)
AQC	Measuring and metering equipment (free for use)
AQD	Measuring and metering equipment (free for use)
AQE	Measuring and metering equipment (free for use)
AQF	Measuring and metering equipment (free for use)
AQG	Measuring and metering equipment (free for use)
AQH	Measuring and metering equipment (free for use)
AQJ	Measuring and metering equipment (free for use)
AQK	Measuring and metering equipment (free for use)
AQL	Measuring and metering equipment (free for use)
AQM	Measuring and metering equipment (free for use)
AQN	Measuring and metering equipment (free for use)
AQP	Measuring and metering equipment (free for use)
AQQ	Measuring and metering equipment (free for use)
AQR	Measuring and metering equipment (free for use)
AQS	Measuring and metering equipment (free for use)
AQT	Measuring and metering equipment (free for use)
AQU	Measuring and metering equipment (free for use)
AQV	Measuring and metering equipment (free for use)
AQW	Measuring and metering equipment (free for use)
AQX	Measuring and metering equipment (free for use)
AQY	Measuring and metering equipment (free for use)
AQZ	Measuring and metering equipment (free for use)

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
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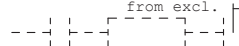
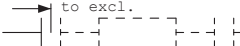
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A GRID AND DISTRIBUTION SYSTEMS**AR Protection equipment**

ARA	Protection equipment (free for use)
ARB	Protection equipment (free for use)
ARC	Protection equipment (free for use)
ARD	Protection equipment (free for use)
ARE	Protection equipment (free for use)
ARF	Protection equipment (free for use)
ARG	Protection equipment (free for use)
ARH	Protection equipment (free for use)
ARJ	Protection equipment (free for use)
ARK	Protection equipment (free for use)
ARL	Protection equipment (free for use)
ARM	Protection equipment (free for use)
ARN	Protection equipment (free for use)
ARP	Protection equipment (free for use)
ARQ	Protection equipment (free for use)
ARR	Protection equipment (free for use)
ARS	Protection equipment (free for use)
ART	Protection equipment (free for use)
ARU	Protection equipment (free for use)
ARV	Protection equipment (free for use)
ARW	Protection equipment (free for use)
ARX	Protection equipment (free for use)
ARY	Protection equipment (free for use)
ARZ	Protection equipment (free for use)

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A	GRID AND DISTRIBUTION SYSTEMS
AS	Decentralized panels and cabinets
ASA	Circuit breaker appurtenances
ASB	Multiplication, conversion, decoupling
ASC	Transducer appurtenances
ASD	Compressed air, hydraulics
ASE	-blocked-
ASF	-blocked-
ASG	-blocked-
ASH	-blocked-
ASJ	Automated controls, closed-loop control
ASK	-blocked-
ASL	Grid simulation, voltage group selection
ASM	Measuring equipment
ASN	Auxiliary power supply
ASP	Recording
ASQ	Metering
ASR	Protection
ASS	Synchronization
AST	Transformation
ASU	Panels and cabinets for auxiliary equipment
ASV	Group, intermediate and general terminal blocks
ASW	Indication, manual operation, monitoring
ASX	Alarm annunciation
ASY	-blocked-
ASZ	-blocked-

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A GRID AND DISTRIBUTION SYSTEMS**AT Transformer equipment**

ATA	Transformer equipment (free for use)
ATB	Transformer equipment (free for use)
ATC	Transformer equipment (free for use)
ATD	Transformer equipment (free for use)
ATE	Transformer equipment (free for use)
ATF	Transformer equipment (free for use)
ATG	Transformer equipment (free for use)
ATH	Transformer equipment (free for use)
ATJ	Transformer equipment (free for use)
ATK	Transformer equipment (free for use)
ATL	Transformer equipment (free for use)
ATM	Transformer equipment (free for use)
ATN	Transformer equipment (free for use)
ATP	Transformer equipment (free for use)
ATQ	Transformer equipment (free for use)
ATR	Transformer equipment (free for use)
ATS	Transformer equipment (free for use)
ATT	Transformer equipment (free for use)
ATU	Transformer equipment (free for use)
ATV	Transformer equipment (free for use)
ATW	Transformer equipment (free for use)
ATX	Transformer equipment (free for use)
ATY	Transformer equipment (free for use)
ATZ	Transformer equipment (free for use)

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


A GRID AND DISTRIBUTION SYSTEMS**AU Open-loop control, checkback and auxiliary equipment****AUA** Open-loop control, checkback and auxiliary equipment (free for use)**AUB** Open-loop control, checkback and auxiliary equipment (free for use)**AUC** Open-loop control, checkback and auxiliary equipment (free for use)**AUD** Open-loop control, checkback and auxiliary equipment (free for use)**AUE** Open-loop control, checkback and auxiliary equipment (free for use)**AUF** Open-loop control, checkback and auxiliary equipment (free for use)**AUG** Open-loop control, checkback and auxiliary equipment (free for use)**AUH** Open-loop control, checkback and auxiliary equipment (free for use)**AUJ** Open-loop control, checkback and auxiliary equipment (free for use)**AUK** Open-loop control, checkback and auxiliary equipment (free for use)**AUL** Open-loop control, checkback and auxiliary equipment (free for use)**AUM** Open-loop control, checkback and auxiliary equipment (free for use)**AUN** Open-loop control, checkback and auxiliary equipment (free for use)**AUP** Open-loop control, checkback and auxiliary equipment (free for use)**AUQ** Open-loop control, checkback and auxiliary equipment (free for use)**AUR** Open-loop control, checkback and auxiliary equipment (free for use)**AUS** Open-loop control, checkback and auxiliary equipment (free for use)**AUT** Open-loop control, checkback and auxiliary equipment (free for use)**AUU** Open-loop control, checkback and auxiliary equipment (free for use)

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- A** **GRID AND DISTRIBUTION SYSTEMS**
- AU** **Open-loop control, checkback and auxiliary equipment**
- AUV** Open-loop control, checkback and auxiliary equipment
 (free for use)
- AUW** Open-loop control, checkback and auxiliary equipment
 (free for use)
- AUX** Open-loop control, checkback and auxiliary equipment
 (free for use)
- AUY** Open-loop control, checkback and auxiliary equipment
 (free for use)
- AUZ** Open-loop control, checkback and auxiliary equipment
 (free for use)

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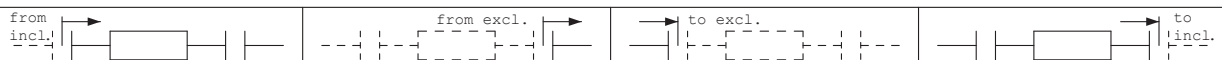
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A GRID AND DISTRIBUTION SYSTEMS**AV Marshalling racks**

AVA	Marshalling racks (free for use)
AVB	Marshalling racks (free for use)
AVC	Marshalling racks (free for use)
AVD	Marshalling racks (free for use)
AVE	Marshalling racks (free for use)
AVF	Marshalling racks (free for use)
AVG	Marshalling racks (free for use)
AVH	Marshalling racks (free for use)
AVJ	Marshalling racks (free for use)
AVK	Marshalling racks (free for use)
AVL	Marshalling racks (free for use)
AVM	Marshalling racks (free for use)
AVN	Marshalling racks (free for use)
AVP	Marshalling racks (free for use)
AVQ	Marshalling racks (free for use)
AVR	Marshalling racks (free for use)
AVS	Marshalling racks (free for use)
AVT	Marshalling racks (free for use)
AVU	Marshalling racks (free for use)
AVV	Marshalling racks (free for use)
AVW	Marshalling racks (free for use)
AVX	Marshalling racks (free for use)
AVY	Marshalling racks (free for use)
AVZ	Marshalling racks (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AW Instrument panels**

AWA	Instrument panels (free for use)
AWB	Instrument panels (free for use)
AWC	Instrument panels (free for use)
AWD	Instrument panels (free for use)
AWE	Instrument panels (free for use)
AWF	Instrument panels (free for use)
AWG	Instrument panels (free for use)
AWH	Instrument panels (free for use)
AWJ	Instrument panels (free for use)
AWK	Instrument panels (free for use)
AWL	Instrument panels (free for use)
AWM	Instrument panels (free for use)
AWN	Instrument panels (free for use)
AWP	Instrument panels (free for use)
AWQ	Instrument panels (free for use)
AWR	Instrument panels (free for use)
AWS	Instrument panels (free for use)
AWT	Instrument panels (free for use)
AWU	Instrument panels (free for use)
AWV	Instrument panels (free for use)
AWW	Instrument panels (free for use)
AWX	Instrument panels (free for use)
AWY	Instrument panels (free for use)
AWZ	Instrument panels (free for use)

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A GRID AND DISTRIBUTION SYSTEMS**AX Central equipment**

AXA	Central equipment (free for use)
AXB	Central equipment (free for use)
AXC	Central equipment (free for use)
AXD	Central equipment (free for use)
AXE	Central equipment (free for use)
AXF	Central equipment (free for use)
AXG	Central equipment (free for use)
AXH	Central equipment (free for use)
AXJ	Central equipment (free for use)
AXK	Central equipment (free for use)
AXL	Central equipment (free for use)
AXM	Central equipment (free for use)
AXN	Central equipment (free for use)
AXP	Central equipment (free for use)
AXQ	Central equipment (free for use)
AXR	Central equipment (free for use)
AXS	Central equipment (free for use)
AXT	Central equipment (free for use)
AXU	Central equipment (free for use)
AXV	Central equipment (free for use)
AXW	Central equipment (free for use)
AXX	Central equipment (free for use)
AXY	Central equipment (free for use)
AXZ	Central equipment (free for use)

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A

A	A	GRID AND DISTRIBUTION SYSTEMS					
	AY	Communication equipment					
	AYA	Telephone system (PABX)					
	AYB	Control console telephone system					
	AYC	Alarm system (acoustic) (Separate systems in nuclear power plants as stipulated by KTA (Nuclear Safety Standards Committee))					
	AYD	Alarm system (optical) (Separate systems in nuclear power plants as stipulated by KTA (Nuclear Safety Standards Committee))					
	AYE	Fire alarm system					
	AYF	Clock system					
	AYG	Remote control system					
	AYH	Telemetry system					
	AYJ	Remote metering system					
	AYK	HF carrier telephone system					
	AYL	Staff paging system, wireless (Separate systems in nuclear power plants as stipulated by KTA (Nuclear Safety Standards Committee))					
	AYM	Staff paging system, inductive (Separate systems in nuclear power plants as stipulated by KTA (Nuclear Safety Standards Committee))					
	AYN	Staff paging system, hardwired (Separate systems in nuclear power plants as stipulated by KTA (Nuclear Safety Standards Committee))					
	AYP	Optical monitoring system					
	AYQ	General gas alarm system (if not assigned to specific system)					
	AYR	-blocked-					
	AYS	Radiotelephone system					
	AYT	-blocked-					
	AYU	-blocked-					
	AYV	-blocked-					
	AYW	-blocked-					
	AYX	-blocked-					
	AYY	-blocked-					
	AYZ	-blocked-					
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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY
	BA	Power transmission
	BB	Medium-voltage distribution boards and transformers, normal system
	BC	Medium voltage distribution boards and transformers, general-purpose
	BD	Medium voltage emergency distribution boards and transformers, (diesel) emergency power system 1
	BE	-blocked-
	BF	Low voltage main distribution boards and transformers, normal system
A	BG	Low voltage distribution boards and transformers, (may be used in addition to *BF., BH., BJ., BK. and BL.*)
	BH	Low voltage main distribution boards and transformers, general-purpose
	BJ	Low voltage subdistribution boards and transformers, normal system
A	BK	Low voltage distribution boards and transformers, (may be used in addition to *BF., BG., BH., BJ. and BL.*)
	BL	Low voltage subdistribution boards and transformers, general-purpose
	BM	Low voltage distribution boards and transformers, (diesel) emergency power system 1
	BN	Low voltage distribution boards and transformers, (diesel) emergency power system 2 (Protection against external impact)
A	BP	Power installations for variable-speed drives (e.g. for feedwater pump, excitation equipment, not power adjusters in switchgear)
	BQ	-blocked-
A	BR	Low voltage distribution boards, uninterruptible (converter) power supply
	BS	-blocked-
	BT	Battery systems
D	BU	Direct current distribution boards, normal system
D	BV	Direct current distribution boards, emergency power system 1
D	BW	Direct current distribution boards, emergency power system 2 (Protection against external impact)
	BX	Fluid supply system for control and protection equipment

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N	Technical Classification Systems							
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E								
X	Änderungen	D05/2007	A07/1993					

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B **POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**

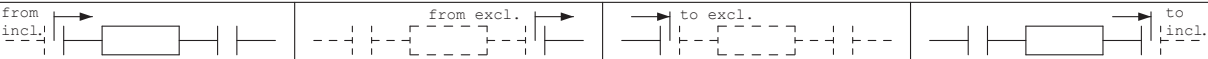
BY Control and protection equipment

BZ -blocked-


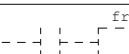
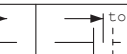
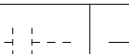
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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY
	BA	Power transmission
R	BAA	Generator leads from excl. generator bushings, incl. current and voltage transformers, cooling and ventilation systems to excl. generator transformer low side bushings or to excl. auxiliary power transformer high side bushings
	BAB	Foundation cabinets
	BAC	Generator circuit breaker, also commutating pole circuit breaker, incl. cooling system
	BAD	-blocked-
g	BAE	Converter
	BAF	-blocked-
	BAG	-blocked-
	BAH	-blocked-
	BAJ	-blocked-
	BAK	-blocked-
	BAL	-blocked-
	BAM	-blocked-
	BAN	-blocked-
	BAP	-blocked-
	BAQ	-blocked-
	BAR	-blocked-
g	BAS	Compensation
	BAT	Generator transformers, including cooling system
E	BAU	Earthing and lightning protection system
	BAV	-blocked-
E	BAW	-blocked-
	BAX	Fluid supply system for control and protection equipment
	BAY	Control and protection equipment
	BAZ	-blocked-
I N D E X	VGB Working Panel Technical Classification Systems <div style="float: right;">Seite BA1</div> <div style="clear: both;"></div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> from incl.  </div> <div style="text-align: center;"> from excl.  </div> <div style="text-align: center;"> to excl.  </div> <div style="text-align: center;"> to incl.  </div> </div> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 5px;"> Änderungen g E10/2008 </div>	

B

B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BB Medium-voltage distribution boards and transformers, normal system****BBA** Medium voltage distribution boards, normal system (free for use)**BBB** Medium voltage distribution boards, normal system (free for use)**BBC** Medium voltage distribution boards, normal system (free for use)**BBD** Medium voltage distribution boards, normal system (free for use)**BBE** Medium voltage distribution boards, normal system (free for use)**BBF** Medium voltage distribution boards, normal system (free for use)**BBG** Medium voltage distribution boards, normal system (free for use)**BBH** Medium voltage distribution boards, normal system (free for use)**BBJ** Medium voltage distribution boards, normal system (free for use)**BBK** Medium voltage distribution boards, normal system (free for use)**BBL** Medium voltage distribution boards, normal system (free for use)**BBM** Medium voltage distribution boards, normal system (free for use)**BBN** Medium voltage distribution boards, normal system (free for use)**BBP** Medium voltage distribution boards, normal system (free for use)**BBQ** Medium voltage distribution boards, normal system (free for use)**BBR** Medium voltage distribution boards, normal system (free for use)**BBS** Medium voltage distribution boards, normal system (free for use)**BBT** Medium voltage auxiliary power transformers**BBU** -blocked-**BBV** -blocked-I
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Revision

	B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY						
	BB Medium-voltage distribution boards and transformers, normal system						
	BBW -blocked-						
	BBX Fluid supply system for control and protection equipment						
	BBY Control and protection equipment						
	BBZ -blocked-						
I N D E X	VGB Technical Group Reference Designation and Plant Documentation						Page BB2
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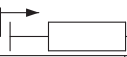
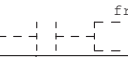
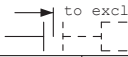
B

B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BC Medium voltage distribution boards and transformers, general-purpose****BCA** Medium voltage distribution boards, general-purpose (free for use)**BCB** Medium voltage distribution boards, general-purpose (free for use)**BCC** Medium voltage distribution boards, general-purpose (free for use)**BCD** Medium voltage distribution boards, general-purpose (free for use)**BCE** Medium voltage distribution boards, general-purpose (free for use)**BCF** Medium voltage distribution boards, general-purpose (free for use)**BCG** Medium voltage distribution boards, general-purpose (free for use)**BCH** Medium voltage distribution boards, general-purpose (free for use)**BCJ** Medium voltage distribution boards, general-purpose (free for use)**BCK** Medium voltage distribution boards, general-purpose (free for use)**BCL** Medium voltage distribution boards, general-purpose (free for use)**BCM** Medium voltage distribution boards, general-purpose (free for use)**BCN** Medium voltage distribution boards, general-purpose (free for use)**BCP** Medium voltage distribution boards, general-purpose (free for use)**BCQ** Medium voltage distribution boards, general-purpose (free for use)**BCR** Medium voltage distribution boards, general-purpose (free for use)**BCS** Medium voltage distribution boards, general-purpose (free for use)**BCT** Start-up, offsite, general-purpose transformers**BCU** -blocked-**BCV** -blocked-I
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Revision

	B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY						
	BC Medium voltage distribution boards and transformers, general-purpose						
	BCW -blocked-						
	BCX Fluid supply system for control and protection equipment						
	BCY Control and protection equipment						
I N D E X	BCZ -blocked-						
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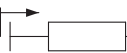
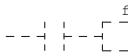
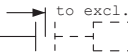
B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BD Medium voltage emergency distribution boards and transformers, (diesel) emergency power system 1**

BDA	Medium voltage emergency distribution boards (free for use)
BDB	Medium voltage emergency distribution boards (free for use)
BDC	Medium voltage emergency distribution boards (free for use)
BDD	Medium voltage emergency distribution boards (free for use)
BDE	Medium voltage emergency distribution boards (free for use)
BDF	Medium voltage emergency distribution boards (free for use)
BDG	Medium voltage emergency distribution boards (free for use)
BDH	Medium voltage emergency distribution boards (free for use)
BDJ	Medium voltage emergency distribution boards (free for use)
BDK	Medium voltage emergency distribution boards (free for use)
BDL	Medium voltage emergency distribution boards (free for use)
BDM	Medium voltage emergency distribution boards (free for use)
BDN	Medium voltage emergency distribution boards (free for use)
BDP	Medium voltage emergency distribution boards (free for use)
BDQ	Medium voltage emergency distribution boards (free for use)
BDR	Medium voltage emergency distribution boards (free for use)
BDS	Medium voltage emergency distribution boards (free for use)
BDT	Medium voltage transformer
BDU	-blocked-
BDV	-blocked-
BDW	-blocked-
BDX	Fluid supply system for control and protection equipment
BDY	Control and protection equipment
BDZ	-blocked-

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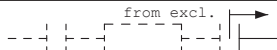
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B

B

B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BF Low voltage main distribution boards and transformers, normal system****BFA** Low voltage main distribution boards, normal system (free for use)**BFB** Low voltage main distribution boards, normal system (free for use)**BFC** Low voltage main distribution boards, normal system (free for use)**BFD** Low voltage main distribution boards, normal system (free for use)**BFE** Low voltage main distribution boards, normal system (free for use)**BFF** Low voltage main distribution boards, normal system (free for use)**BFG** Low voltage main distribution boards, normal system (free for use)**BFH** Low voltage main distribution boards, normal system (free for use)**BFJ** Low voltage main distribution boards, normal system (free for use)**BFK** Low voltage main distribution boards, normal system (free for use)**BFL** Low voltage main distribution boards, normal system (free for use)**BFM** Low voltage main distribution boards, normal system (free for use)**BFN** Low voltage main distribution boards, normal system (free for use)**BFP** Low voltage main distribution boards, normal system (free for use)**BFQ** Low voltage main distribution boards, normal system (free for use)**BFR** Low voltage main distribution boards, normal system (free for use)**BFS** Low voltage main distribution boards, normal system (free for use)**BFT** Low voltage auxiliary power transformers (free for use according to voltage level)**BFU** Low voltage auxiliary power transformers (free for use according to voltage level)

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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY				
	BF	Low voltage main distribution boards and transformers, normal system				
	BFV	Low voltage auxiliary power transformers (free for use according to voltage level)				
	BFW	Low voltage auxiliary power transformers (free for use according to voltage level)				
	BFX	Fluid supply system for control and protection equipment				
	BFY	Control and protection equipment				
	BFZ	-blocked-				
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B

B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY	
A BG	Low voltage distribution boards and transformers, (may be used in addition to *BF., BH., BJ., BK. and BL.*)
A BGA	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGB	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGC	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGD	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGE	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGF	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGG	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGH	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGJ	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGK	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGL	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGM	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGN	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY	
A BG	Low voltage distribution boards and transformers, (may be used in addition to *BF., BH., BJ., BK. and BL.*)
A BGP	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGQ	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGR	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGS	Low voltage distribution boards, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use)
A BGT	Low voltage auxiliary power transformers, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use according to voltage level)
A BGU	Low voltage auxiliary power transformers, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use according to voltage level)
A BGV	Low voltage auxiliary power transformers, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use according to voltage level)
A BGW	Low voltage auxiliary power transformers, (may be used in addition to *BF., BH., BJ., BK. and BL.*) (free for use according to voltage level)
A BGX	Fluid supply system for control and protection equipment
A BGY	Control and protection equipment
A BGZ	-blocked-
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B

B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BH Low voltage main distribution boards and transformers, general-purpose****BHA** Low voltage main distribution boards, general purpose (free for use)**BHB** Low voltage main distribution boards, general-purpose (free for use)**BHC** Low voltage main distribution boards, general-purpose (free for use)**BHD** Low voltage main distribution boards, general-purpose (free for use)**BHE** Low voltage main distribution boards, general-purpose (free for use)**BHF** Low voltage main distribution boards, general-purpose (free for use)**BHG** Low voltage main distribution boards, general-purpose (free for use)**BHH** Low voltage main distribution boards, general-purpose (free for use)**BHJ** Low voltage main distribution boards, general-purpose (free for use)**BHK** Low voltage main distribution boards, general-purpose (free for use)**BHL** Low voltage main distribution boards, general-purpose (free for use)**BHM** Low voltage main distribution boards, general-purpose (free for use)**BHN** Low voltage main distribution boards, general-purpose (free for use)**BHP** Low voltage main distribution boards, general-purpose (free for use)**BHQ** Low voltage main distribution boards, general-purpose (free for use)**BHR** Low voltage main distribution boards, general-purpose (free for use)**BHS** Low voltage main distribution boards, general-purpose (free for use)**BHT** Low voltage auxiliary power transformers (free for use according to voltage level)**BHU** Low voltage auxiliary power transformers (free for use according to voltage level)

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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BH** Low voltage main distribution boards and transformers,
general-purpose**BHV** Low voltage auxiliary power transformers
(free for use according to voltage level)**BHW** Low voltage auxiliary power transformers
(free for use according to voltage level)**BHX** Fluid supply system for control and protection equipment**BHY** Control and protection equipment**BHZ** -blocked-

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

B

B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BJ Low voltage subdistribution boards and transformers, normal system****BJA** Low voltage subdistribution boards, normal system (free for use)**BJB** Low voltage subdistribution boards, normal system (free for use)**BJC** Low voltage subdistribution boards, normal system (free for use)**BJD** Low voltage subdistribution boards, normal system (free for use)**BJE** Low voltage subdistribution boards, normal system (free for use)**BJF** Low voltage subdistribution boards, normal system (free for use)**BJG** Low voltage subdistribution boards, normal system (free for use)**BJH** Low voltage subdistribution boards, normal system (free for use)**BJJ** Low voltage subdistribution boards, normal system (free for use)**BJK** Low voltage subdistribution boards, normal system (free for use)**BJL** Low voltage subdistribution boards, normal system (free for use)**BJM** Low voltage subdistribution boards, normal system (free for use)**BJN** Low voltage subdistribution boards, normal system (free for use)**BJP** Low voltage subdistribution boards, normal system (free for use)**BJQ** Low voltage subdistribution boards, normal system (free for use)**BJR** Low voltage subdistribution boards, normal system (free for use)**BJS** Low voltage subdistribution boards, normal system (free for use)**BJT** Low voltage auxiliary power transformers**BJU** -blocked-**BJV** -blocked-I
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Revision

	B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY						
	BJ Low voltage subdistribution boards and transformers, normal system						
	BJW -blocked-						
	BJX Fluid supply system for control and protection equipment						
	BJY Control and protection equipment						
	BJZ -blocked-						
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B

B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY	
A BK	Low voltage distribution boards and transformers, (may be used in addition to *BF., BG., BH., BJ. and BL.*)
A BKA	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKB	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKC	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKD	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKE	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKF	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKG	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKH	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKJ	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKK	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKL	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKM	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
A BKN	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)
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B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY		
A	BK	Low voltage distribution boards and transformers, (may be used in addition to *BF., BG., BH., BJ. and BL.*)	
A	BKP	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)	
A	BKQ	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)	
A	BKR	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)	
A	BKS	Low voltage distribution boards, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use)	
A	BKT	Low voltage auxiliary power transformers, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use according to voltage level)	
A	BKU	Low voltage auxiliary power transformers, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use according to voltage level)	
A	BKV	Low voltage auxiliary power transformers, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use according to voltage level)	
A	BKW	Low voltage auxiliary power transformers, (may be used in addition to *BF., BG., BH., BJ. and BL.*) (free for use according to voltage level)	
A	BKX	Fluid supply system for control and protection equipment	
A	BKY	Control and protection equipment	
A	BKZ	-blocked-	

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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BL Low voltage subdistribution boards and transformers, general-purpose****BLA** Low voltage subdistribution boards, general-purpose (free for use)**BLB** Low voltage subdistribution boards, general-purpose (free for use)**BLC** Low voltage subdistribution boards, general-purpose (free for use)**BLD** Low voltage subdistribution boards, general-purpose (free for use)**BLE** Low voltage subdistribution boards, general-purpose (free for use)**BLF** Low voltage subdistribution boards, general-purpose (free for use)**BLG** Low voltage subdistribution boards, general-purpose (free for use)**BLH** Low voltage subdistribution boards, general-purpose (free for use)**BLJ** Low voltage subdistribution boards, general-purpose (free for use)**BLK** Low voltage subdistribution boards, general-purpose (free for use)**BLL** Low voltage subdistribution boards, general-purpose (free for use)**BLM** Low voltage subdistribution boards, general-purpose (free for use)**BLN** Low voltage subdistribution boards, general-purpose (free for use)**BLP** Low voltage subdistribution boards, general-purpose (free for use)**BLQ** Low voltage subdistribution boards, general-purpose (free for use)**BLR** Low voltage subdistribution boards, general-purpose (free for use)**BLS** Low voltage subdistribution boards, general-purpose (free for use)**BLT** Low voltage auxiliary power transformers**BLU** -blocked-**BLV** -blocked-

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	B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY						
	BL	Low voltage subdistribution boards and transformers, general-purpose					
	BLW	-blocked-					
	BLX	Fluid supply system for control and protection equipment					
	BLY	Control and protection equipment					
	BLZ	-blocked-					
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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BM Low voltage distribution boards and transformers, (diesel) emergency power system 1**

BMA	Low voltage emergency distribution boards (free for use)
BMB	Low voltage emergency distribution boards (free for use)
BMC	Low voltage emergency distribution boards (free for use)
BMD	Low voltage emergency distribution boards (free for use)
BME	Low voltage emergency distribution boards (free for use)
BMF	Low voltage emergency distribution boards (free for use)
BMG	Low voltage emergency distribution boards (free for use)
BMH	Low voltage emergency distribution boards (free for use)
BMJ	Low voltage emergency distribution boards (free for use)
BMK	Low voltage emergency distribution boards (free for use)
BML	Low voltage emergency distribution boards (free for use)
BMM	Low voltage emergency distribution boards (free for use)
BMN	Low voltage emergency distribution boards (free for use)
BMP	Low voltage emergency distribution boards (free for use)
BMQ	Low voltage emergency distribution boards (free for use)
BMR	Low voltage emergency distribution boards (free for use)
BMS	Low voltage emergency distribution boards (free for use)
BMT	Low voltage auxiliary power transformers (free for use according to voltage level)
BMU	Low voltage auxiliary power transformers (free for use according to voltage level)
BMV	Low voltage auxiliary power transformers (free for use according to voltage level)
BMW	Low voltage auxiliary power transformers (free for use according to voltage level)
BMX	Fluid supply system for control and protection equipment
BMY	Control and protection equipment
BMZ	-blocked-


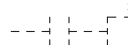
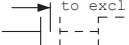

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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BN Low voltage distribution boards and transformers, (diesel) emergency power system 2
(Protection against external impact)**

BNA	Low voltage emergency distribution boards (free for use)
BNB	Low voltage emergency distribution boards (free for use)
BNC	Low voltage emergency distribution boards (free for use)
BND	Low voltage emergency distribution boards (free for use)
BNE	Low voltage emergency distribution boards (free for use)
BNF	Low voltage emergency distribution boards (free for use)
BNG	Low voltage emergency distribution boards (free for use)
BNH	Low voltage emergency distribution boards (free for use)
BNJ	Low voltage emergency distribution boards (free for use)
BNK	Low voltage emergency distribution boards (free for use)
BNL	Low voltage emergency distribution boards (free for use)
BNM	Low voltage emergency distribution boards (free for use)
BNN	Low voltage emergency distribution boards (free for use)
BNP	Low voltage emergency distribution boards (free for use)
BNQ	Low voltage emergency distribution boards (free for use)
BNR	Low voltage emergency distribution boards (free for use)
BNS	Low voltage emergency distribution boards (free for use)
BNT	Low voltage auxiliary power transformers (free for use according to voltage level)
BNU	Low voltage auxiliary power transformers (free for use according to voltage level)
BNV	Low voltage auxiliary power transformers (free for use according to voltage level)
BNW	Low voltage auxiliary power transformers (free for use according to voltage level)
BNX	Fluid supply system for control and protection equipment
BNY	Control and protection equipment
BNZ	-blocked-

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B

B	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY				
	A BP	Power installations for variable-speed drives (e.g. for feedwater pump, excitation equipment, not power adjusters in switchgear)				
	A BPA	Power installations for variable-speed drives (free for use)				
	A BPB	Power installations for variable-speed drives (free for use)				
	A BPC	Power installations for variable-speed drives (free for use)				
	A BPD	Power installations for variable-speed drives (free for use)				
	A BPE	Power installations for variable-speed drives (free for use)				
	A BPF	Power installations for variable-speed drives (free for use)				
	A BPG	Power installations for variable-speed drives (free for use)				
	A BPH	Power installations for variable-speed drives (free for use)				
	A BPJ	Power installations for variable-speed drives (free for use)				
	A BPK	Power installations for variable-speed drives (free for use)				
	A BPL	Power installations for variable-speed drives (free for use)				
	A BPM	Power installations for variable-speed drives (free for use)				
	A BPN	Power installations for variable-speed drives (free for use)				
	A BPP	Power installations for variable-speed drives (free for use)				
	A BPQ	Power installations for variable-speed drives (free for use)				
	A BPR	Power installations for variable-speed drives (free for use)				
	A BPS	Power installations for variable-speed drives (free for use)				
	A BPT	Power installations for variable-speed drives (free for use)				
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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY					
A	BP	Power installations for variable-speed drives (e.g. for feedwater pump, excitation equipment, not power adjusters in switchgear)					
A	BPU	Power installations for variable-speed drives (free for use)					
	BPV	-blocked-					
	BPW	-blocked-					
	BPX	Fluid supply system for control and protection equipment					
	BPY	Control and protection equipment					
	BPZ	-blocked-					
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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY

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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY					
A	BR	Low voltage distribution boards, uninterruptible (converter) power supply					
A	BRA	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRB	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRC	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRD	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRE	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRF	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRG	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRH	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRJ	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRK	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRL	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRM	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRN	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRP	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRQ	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRR	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
A	BRS	Low voltage distribution boards, uninterruptible (converter) power supply, (free for use)					
	BRT	Converter (rotary)					
	BRU	Converter (static), inverter					
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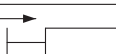
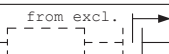
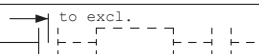

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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY					
	BT	Battery systems					
	BTA	Batteries (free for use according to voltage level)					
	BTB	Batteries (free for use according to voltage level)					
	BTC	Batteries (free for use according to voltage level)					
	BSD	Batteries (free for use according to voltage level)					
	BTE	Batteries (free for use according to voltage level)					
	BTf	Batteries (free for use according to voltage level)					
	BTG	Batteries (free for use according to voltage level)					
	BTH	Batteries (free for use according to voltage level)					
	BTJ	Batteries (free for use according to voltage level)					
	BTK	Batteries (free for use according to voltage level)					
B	BTL	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTM	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTN	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTP	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTQ	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTR	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTS	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTt	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTU	Rectifiers, battery chargers (free for use according to voltage level)					
B	BTv	Rectifiers, battery chargers (free for use according to voltage level)					
	BTW	Common equipment (free for use)					
	BTX	Common equipment (free for use)					
	BTY	Common equipment (free for use)					
	BTZ	Common equipment (free for use)					
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




	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY					
D	BU	Direct current distribution boards, normal system					
D	BUA	Direct current distribution boards, normal system (free for use)					
D	BUB	Direct current distribution boards, normal system (free for use)					
D	BUC	Direct current distribution boards, normal system (free for use)					
D	BUD	Direct current distribution boards, normal system (free for use)					
D	BUE	Direct current distribution boards, normal system (free for use)					
D	BUF	Direct current distribution boards, normal system (free for use)					
D	BUG	Direct current distribution boards, normal system (free for use)					
D	BUH	Direct current distribution boards, normal system (free for use)					
D	BUJ	Direct current distribution boards, normal system (free for use)					
D	BUK	Direct current distribution boards, normal system (free for use)					
D	BUL	Direct current distribution boards, normal system (free for use)					
D	BUM	Direct current distribution boards, normal system (free for use)					
D	BUN	Direct current distribution boards, normal system (free for use)					
D	BUP	Direct current distribution boards, normal system (free for use)					
D	BUQ	Direct current distribution boards, normal system (free for use)					
D	BUR	Direct current distribution boards, normal system (free for use)					
D	BUS	Direct current distribution boards, normal system (free for use)					
	BUT	-blocked-					
	BUU	-blocked-					
	BUV	-blocked-					
	BUW	-blocked-					
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D	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY					
	BU	Direct current distribution boards, normal system					
	BUX	Fluid supply system for control and protection equipment					
	BUY	Control and protection equipment					
	BUZ	-blocked-					
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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY						
D	BV	Direct current distribution boards, emergency power system 1						
D	BVA	Direct current emergency distribution boards (free for use)						
D	BVB	Direct current emergency distribution boards (free for use)						
D	BVC	Direct current emergency distribution boards (free for use)						
D	BVD	Direct current emergency distribution boards (free for use)						
D	BVE	Direct current emergency distribution boards (free for use)						
D	BVF	Direct current emergency distribution boards (free for use)						
D	BVG	Direct current emergency distribution boards (free for use)						
D	BVH	Direct current emergency distribution boards (free for use)						
D	BVJ	Direct current emergency distribution boards (free for use)						
D	BVK	Direct current emergency distribution boards (free for use)						
D	BVL	Direct current emergency distribution boards (free for use)						
D	BVM	Direct current emergency distribution boards (free for use)						
D	BVN	Direct current emergency distribution boards (free for use)						
D	BVP	Direct current emergency distribution boards (free for use)						
D	BVQ	Direct current emergency distribution boards (free for use)						
D	BVR	Direct current emergency distribution boards (free for use)						
D	BVS	Direct current emergency distribution boards (free for use)						
	BVT	-blocked-						
	BVU	-blocked-						
	BVV	-blocked-						
	BVW	-blocked-						
	BVX	Fluid supply system for control and protection equipment						
	BVY	Control and protection equipment						
	BVZ	-blocked-						
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	B	POWER TRANSMISSION AND AUXILIARY POWER SUPPLY				
D	BW	Direct current distribution boards, emergency power system 2(Protection against external impact)				
D	BWA	Direct current emergency distribution boards (free for use)				
D	BWB	Direct current emergency distribution boards (free for use)				
D	BWC	Direct current emergency distribution boards (free for use)				
D	BWD	Direct current emergency distribution boards (free for use)				
D	BWE	Direct current emergency distribution boards (free for use)				
D	BWF	Direct current emergency distribution boards (free for use)				
D	BWG	Direct current emergency distribution boards (free for use)				
D	BWH	Direct current emergency distribution boards (free for use)				
D	BWJ	Direct current emergency distribution boards (free for use)				
D	BWK	Direct current emergency distribution boards (free for use)				
D	BWL	Direct current emergency distribution boards (free for use)				
D	BWM	Direct current emergency distribution boards (free for use)				
D	BWN	Direct current emergency distribution boards (free for use)				
D	BWP	Direct current emergency distribution boards (free for use)				
D	BWQ	Direct current emergency distribution boards (free for use)				
D	BWR	Direct current emergency distribution boards (free for use)				
D	BWS	Direct current emergency distribution boards (free for use)				
	BWT	-blocked-				
	BWU	-blocked-				
	BWV	-blocked-				
	BWW	-blocked-				
	BWX	Fluid supply system for control and protection equipment				
	BWY	Control and protection equipment				
	BWZ	-blocked-				
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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BX Fluid supply system for control and protection equipment****BXA** Fluid supply system for control and protection equipment (free for use)**BXB** Fluid supply system for control and protection equipment (free for use)**BXC** Fluid supply system for control and protection equipment (free for use)**BXD** Fluid supply system for control and protection equipment (free for use)**BXE** Fluid supply system for control and protection equipment (free for use)**BXF** Fluid supply system for control and protection equipment (free for use)**BXG** Fluid supply system for control and protection equipment (free for use)**BXH** Fluid supply system for control and protection equipment (free for use)**BXJ** Fluid supply system for control and protection equipment (free for use)**BXK** Fluid supply system for control and protection equipment (free for use)**BXL** Fluid supply system for control and protection equipment (free for use)**BXM** Fluid supply system for control and protection equipment (free for use)**BXN** Fluid supply system for control and protection equipment (free for use)**BXP** Fluid supply system for control and protection equipment (free for use)**BXQ** Fluid supply system for control and protection equipment (free for use)**BXR** Fluid supply system for control and protection equipment (free for use)**BXS** Fluid supply system for control and protection equipment (free for use)**BXT** Fluid supply system for control and protection equipment (free for use)**BXU** Fluid supply system for control and protection equipment (free for use)

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B **POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**

BX **Fluid supply system for control and protection equipment**





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BXW -blocked-

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BXY -blocked-

BXZ -blocked-

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B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY**BY Control and protection equipment**

BYA	Control and protection equipment (free for use)
BYB	Control and protection equipment (free for use)
BYC	Control and protection equipment (free for use)
BYD	Control and protection equipment (free for use)
BYE	Control and protection equipment (free for use)
BYF	Control and protection equipment (free for use)
BYG	Control and protection equipment (free for use)
BYH	Control and protection equipment (free for use)
BYJ	Control and protection equipment (free for use)
BYK	Control and protection equipment (free for use)
BYL	Control and protection equipment (free for use)
BYM	Control and protection equipment (free for use)
BYN	Control and protection equipment (free for use)
BYP	Control and protection equipment (free for use)
BYQ	Control and protection equipment (free for use)
BYR	Control and protection equipment (free for use)
BYS	Control and protection equipment (free for use)
BYT	Control and protection equipment (free for use)
BYU	Control and protection equipment (free for use)
BYV	-blocked-
BYW	-blocked-
BYX	-blocked-
BY Y	-blocked-
BYZ	-blocked-

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	<div>C</div> <div>INSTRUMENTATION AND CONTROL EQUIPMENT (Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)</div>
	<div>CA</div> <div>Protective interlocks</div>
	<div>CB</div> <div>Functional group control, subloop control</div>
	<div>CC</div> <div>Binary signal conditioning</div>
	<div>CD</div> <div>Drive control interface</div>
	<div>CE</div> <div>Annunciation</div>
	<div>CF</div> <div>Measurement, recording</div>
	<div>CG</div> <div>Closed-loop control (excl. power section)</div>
	<div>CH</div> <div>Protection (excl. reactor protection)</div>
	<div>CJ</div> <div>Unit coordination level</div>
	<div>CK</div> <div>Process computer system</div>
	<div>CL</div> <div>Reactor protection</div>
	<div>CM</div> <div>Instrumentation and control equipment (free for use for system combination)</div>
	<div>CN</div> <div>Instrumentation and control equipment (free for use for system combination)</div>
C	<div>CP</div> <div>Separate automation system</div>
	<div>CQ</div> <div>Instrumentation and control equipment (free for use for system combination)</div>
C	<div>CR</div> <div>Process control system</div>
	<div>CS</div> <div>Instrumentation and control equipment (free for use for system combination)</div>
	<div>CT</div> <div>Instrumentation and control equipment (free for use for system combination)</div>
	<div>CU</div> <div>Closed-loop control (power section)</div>
	<div>CV</div> <div>Marshalling racks</div>
	<div>CW</div> <div>Control rooms</div>
	<div>CX</div> <div>Local control stations (e.g. for coal handling plants, ash handling plants, cooling water systems, diesel units, supervision of generator cooling, remote shutdown station)</div>
C	<div>CY</div> <div>Communication and information system</div>
	<div>CZ</div> <div>-blocked-</div>




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C

C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CA Protective interlocks

- CAA** Cabinets for protective interlocks (free for use)
CAB Cabinets for protective interlocks (free for use)
CAC Cabinets for protective interlocks (free for use)
CAD Cabinets for protective interlocks (free for use)
CAE Cabinets for protective interlocks (free for use)
CAF Cabinets for protective interlocks (free for use)
CAG Cabinets for protective interlocks (free for use)
CAH Cabinets for protective interlocks (free for use)
CAJ Cabinets for protective interlocks (free for use)
CAK Cabinets for protective interlocks (free for use)
CAL Cabinets for protective interlocks (free for use)
CAM Cabinets for protective interlocks (free for use)
CAN Cabinets for protective interlocks (free for use)
CAP Cabinets for protective interlocks (free for use)
CAQ Cabinets for protective interlocks (free for use)
CAR Cabinets for protective interlocks
 Installation in the secured area (of the nuclear power plant) (free for use)
CAS Cabinets for protective interlocks
 Installation in the secured area (of the nuclear power plant) (free for use)
CAT Cabinets for protective interlocks
 Installation in the secured area (of the nuclear power plant) (free for use)
CAU Cabinets for protective interlocks
 Installation in the secured area (of the nuclear power plant) (free for use)
CAV Cabinets for protective interlocks
 Installation in the secured area (of the nuclear power plant) (free for use)
CAW Cabinets for protective interlocks
 Installation in the secured area (of the nuclear power plant) (free for use)

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


C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CA Protective interlocks

CAX Cabinets for protective interlocks
Installation in the secured area (of the nuclear power plant) (free for use)

CAY Cabinets for protective interlocks
Installation in the secured area (of the nuclear power plant) (free for use)

CAZ -blocked-

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C

C INSTRUMENTATION AND CONTROL EQUIPMENT

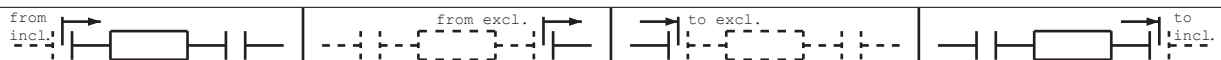
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CB Functional group control, subloop control THIS IS FOR COMMON PLANT**CBA** Cabinets for functional group control (free for use)**CBB** Cabinets for functional group control (free for use)**CBC** Cabinets for functional group control (free for use)**CBD** Cabinets for functional group control (free for use)**CBE** Cabinets for functional group control (free for use)**CBF** Cabinets for functional group control (free for use)**CBG** Cabinets for functional group control (free for use)**CBH** Cabinets for functional group control (free for use)**CBJ** Cabinets for functional group control (free for use)**CBK** Cabinets for functional group control (free for use)**CBL** Cabinets for functional group control (free for use)**CBM** Cabinets for functional group control (free for use)**CBN** Cabinets for functional group control (free for use)**CBP** Cabinets for synchronization**CBQ** Cabinets for auxiliary power changeover**CBR** Cabinets for functional group control
Installation in the secured area (of the nuclear power plant) (free for use)**CBS** Cabinets for functional group control
Installation in the secured area (of the nuclear power plant) (free for use)**CBT** Cabinets for functional group control
Installation in the secured area (of the nuclear power plant) (free for use)**CBU** Cabinets for functional group control
Installation in the secured area (of the nuclear power plant) (free for use)**CBV** Cabinets for functional group control
Installation in the secured area (of the nuclear power plant) (free for use)**CBW** Cabinets for functional group control
Installation in the secured area (of the nuclear power plant) (free for use)**CBX** Cabinets for functional group control
plant) (free for use)

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	<div>C INSTRUMENTATION AND CONTROL EQUIPMENT (Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)</div> <div>CB Functional group control, subloop control</div> <div>CBY Cabinets for functional group control Installation in the secured area (of the nuclear power plant) (free for use)</div> <div>CBZ -blocked-</div>						
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

C





C

C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CC Binary signal conditioning

- CCA** Cabinets for binary signal conditioning (free for use)
- CCB** Cabinets for binary signal conditioning (free for use)
- CCC** Cabinets for binary signal conditioning (free for use)
- CCD** Cabinets for binary signal conditioning (free for use)
- CCE** Cabinets for binary signal conditioning (free for use)
- CCF** Cabinets for binary signal conditioning (free for use)
- CCG** Cabinets for binary signal conditioning (free for use)
- CCH** Cabinets for binary signal conditioning (free for use)
- CCJ** Cabinets for binary signal conditioning (free for use)
- CCK** Cabinets for binary signal conditioning (free for use)
- CCL** Cabinets for binary signal conditioning (free for use)
- CCM** Cabinets for binary signal conditioning (free for use)
- CCN** Cabinets for binary signal conditioning (free for use)
- CCP** Cabinets for binary signal conditioning (free for use)
- CCQ** Cabinets for binary signal conditioning (free for use)
- CCR** Cabinets for binary signal conditioning
Installation in the secured area (of the nuclear power plant) (free for use)
- CCS** Cabinets for binary signal conditioning
Installation in the secured area (of the nuclear power plant) (free for use)
- CCT** Cabinets for binary signal conditioning
Installation in the secured area (of the nuclear power plant) (free for use)
- CCU** Cabinets for binary signal conditioning
Installation in the secured area (of the nuclear power plant) (free for use)
- CCV** Cabinets for binary signal conditioning
Installation in the secured area (of the nuclear power plant) (free for use)
- CCW** Cabinets for binary signal conditioning
Installation in the secured area (of the nuclear power plant) (free for use)

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	CC Binary signal conditioning						
	CCX Cabinets for binary signal conditioning Installation in the secured area (of the nuclear power plant) (free for use)						
	CCY Cabinets for binary signal conditioning Installation in the secured area (of the nuclear power plant) (free for use)						
	CCZ -blocked-						
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

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

C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CD Drive control interface

CDA Cabinets for drive control interface (free for use)
CDB Cabinets for drive control interface (free for use)
CDC Cabinets for drive control interface (free for use)
CDD Cabinets for drive control interface (free for use)
CDE Cabinets for drive control interface (free for use)
CDF Cabinets for drive control interface (free for use)
CDG Cabinets for drive control interface (free for use)
CDH Cabinets for drive control interface (free for use)
CDJ Cabinets for drive control interface (free for use)
CDK Cabinets for drive control interface (free for use)
CDL Cabinets for drive control interface (free for use)
CDM Cabinets for drive control interface (free for use)
CDN Cabinets for drive control interface (free for use)
CDP Cabinets for drive control interface (free for use)
CDQ Cabinets for drive control interface (free for use)
CDR Cabinets for drive control interface
 Installation in the secured area (of the nuclear power plant) (free for use)
CDS Cabinets for drive control interface
 Installation in the secured area (of the nuclear power plant) (free for use)
CDT Cabinets for drive control interface
 Installation in the secured area (of the nuclear power plant) (free for use)
CDU Cabinets for drive control interface
 Installation in the secured area (of the nuclear power plant) (free for use)
CDV Cabinets for drive control interface
 Installation in the secured area (of the nuclear power plant) (free for use)
CDW Cabinets for drive control interface
 Installation in the secured area (of the nuclear power plant) (free for use)

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- C INSTRUMENTATION AND CONTROL EQUIPMENT**
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
- CD Drive control interface**
- CDX** Cabinets for drive control interface
Installation in the secured area (of the nuclear power plant) (free for use)
- CDY** Cabinets for drive control interface
Installation in the secured area (of the nuclear power plant) (free for use)
- CDZ** -blocked-




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


C

C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CE Annunciation

CEA Cabinets for annunciation systems (free for use)
CEB Cabinets for annunciation systems (free for use)
CEC Cabinets for annunciation systems (free for use)
CED Cabinets for annunciation systems (free for use)
CEE Cabinets for annunciation systems (free for use)
CEF Cabinets for annunciation systems (free for use)
CEG Cabinets for annunciation systems (free for use)
CEH Cabinets for annunciation systems (free for use)
CEJ Fault recording (free for use)
CEK Fault recording (free for use)
CEL Fault recording (free for use)
CEM Fault recording (free for use)
CEN Fault recording (free for use)
CEP Fault recording (free for use)
CEQ Fault recording (free for use)
CER Cabinets for annunciation systems
 Installation in the secured area (of the nuclear power plant) (free for use)
CES Cabinets for annunciation systems
 Installation in the secured area (of the nuclear power plant) (free for use)
CET Cabinets for annunciation systems
 Installation in the secured area (of the nuclear power plant) (free for use)
CEU Cabinets for annunciation systems
 Installation in the secured area (of the nuclear power plant) (free for use)
CEV Cabinets for annunciation systems
 Installation in the secured area (of the nuclear power plant) (free for use)
CEW Cabinets for annunciation systems
 Installation in the secured area (of the nuclear power plant) (free for use)

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	CE Annunciation						
	CEX Cabinets for annunciation systems Installation in the secured area (of the nuclear power plant) (free for use)						
	CEY Cabinets for annunciation systems Installation in the secured area (of the nuclear power plant) (free for use)						
	CEZ -blocked-						
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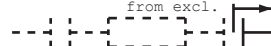
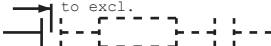
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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CF Measurement, recording

- CFA** Cabinets for measurement (free for use)
CFB Cabinets for measurement (free for use)
CFC Cabinets for measurement (free for use)
CFD Cabinets for measurement (free for use)
CFE Cabinets for measurement (free for use)
CFE Cabinets for measurement (free for use)
CFG Cabinets for reactor instrumentation (free for use)
CFH Cabinets for reactor instrumentation (free for use)
CFJ Cabinets for reactor instrumentation (free for use)
CFK Cabinets for reactor instrumentation (free for use)
CFL Cabinets for radiation measurement (free for use)
CFM Cabinets for radiation measurement (free for use)
CFN Cabinets for radiation measurement (free for use)
CFP Cabinets for radiation measurement (free for use)
CFQ Cabinets for recording (meters, pen recorders)
CFR Cabinets for measurement
 Installation in the secured area (of the nuclear power plant) (free for use)
CFS Cabinets for measurement
 Installation in the secured area (of the nuclear power plant) (free for use)
CFT Cabinets for measurement
 Installation in the secured area (of the nuclear power plant) (free for use)
CFU Cabinets for measurement
 Installation in the secured area (of the nuclear power plant) (free for use)
CFV Cabinets for measurement
 Installation in the secured area (of the nuclear power plant) (free for use)
CFW Cabinets for measurement
 Installation in the secured area (of the nuclear power plant) (free for use)

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







C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CF Measurement, recording

CFX Cabinets for measurement
Installation in the secured area (of the nuclear power plant) (free for use)

CFY Cabinets for measurement
Installation in the secured area (of the nuclear power plant) (free for use)

CFZ -blocked-

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CG Closed-loop control (excl. power section)

CGA Cabinets for closed-loop control (free for use)

CGB Cabinets for closed-loop control (free for use)

CGC Cabinets for closed-loop control (free for use)

CGD Cabinets for closed-loop control (free for use)

CGE Cabinets for closed-loop control (free for use)

CGF Cabinets for closed-loop control (free for use)

CGG Cabinets for closed-loop control (free for use)

CGH Cabinets for closed-loop control (free for use)

CGJ Cabinets for reactor control (free for use)

CGK Cabinets for reactor control (free for use)

CGL Cabinets for reactor control (free for use)

CGM Cabinets for reactor control (free for use)

CGN Cabinets for reactor control (free for use)

CGP Cabinets for reactor control (free for use)

CGQ Cabinets for reactor control (free for use)

CGR Cabinets for closed-loop control
Installation in the secured area (of the nuclear power plant) (free for use)




CGS Cabinets for closed-loop control
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CGT Cabinets for closed-loop control
Installation in the secured area (of the nuclear power plant) (free for use)




CGU Cabinets for closed-loop control
Installation in the secured area (of the nuclear power plant) (free for use)

CGV Cabinets for closed-loop control
Installation in the secured area (of the nuclear power plant) (free for use)

CGW Cabinets for closed-loop control
Installation in the secured area (of the nuclear power plant) (free for use)

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- C INSTRUMENTATION AND CONTROL EQUIPMENT**
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
- CG Closed-loop control (excl. power section)**
- CGX** Cabinets for closed-loop control
Installation in the secured area (of the nuclear power plant) (free for use)
- CGY** Cabinets for closed-loop control
Installation in the secured area (of the nuclear power plant) (free for use)
- CGZ** -blocked-

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C

C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CH Protection (excl. reactor protection)

CHA Cabinets for generator and transformer protection (free for use)

CHB Cabinets for generator and transformer protection (free for use)

CHC Cabinets for generator and transformer protection (free for use)

CHD Cabinets for generator and transformer protection (free for use)

CHE Protection (excl. reactor protection) (free for use)

CHF Protection (excl. reactor protection) (free for use)

CHG Protection (excl. reactor protection) (free for use)

CHH Protection (excl. reactor protection) (free for use)

CHJ Protection (excl. reactor protection) (free for use)

CHK Protection (excl. reactor protection) (free for use)

CHL Protection (excl. reactor protection) (free for use)

CHM Protection (excl. reactor protection) (free for use)

CHN Protection (excl. reactor protection) (free for use)

CHP Protection (excl. reactor protection) (free for use)

CHQ Protection (excl. reactor protection) (free for use)

CHR Protection (excl. reactor protection) (free for use)

CHS Protection (excl. reactor protection) (free for use)

CHT Protection (excl. reactor protection) (free for use)

CHU Protection (excl. reactor protection) (free for use)

CHV Protection (excl. reactor protection) (free for use)

CHW Protection (excl. reactor protection) (free for use)

CHX Protection (excl. reactor protection) (free for use)

CHY Protection (excl. reactor protection) (free for use)

CHZ -blocked-

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
C	INSTRUMENTATION AND CONTROL EQUIPMENT (Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
CJ	Unit coordination level
CJA	Unit control system (including cabinets)
CJB	-blocked-
CJC	-blocked-
CJD	Start-up control, setpoint control (unit) (incl. cabinets)
CJE	-blocked-
CJF	Boiler control system (incl. cabinets)
CJG	-blocked-
CJH	-blocked-
CJJ	Instrumentation and control cabinets for steam turbine set (free for use)
CJK	Instrumentation and control cabinets for steam turbine set (free for use)
CJL	Instrumentation and control cabinets for steam turbine set (free for use)
CJM	Instrumentation and control cabinets for steam turbine set (free for use)
CJN	Instrumentation and control cabinets for steam turbine set (free for use)
CJP	Instrumentation and control cabinets for gas turbine set (free for use)
CJQ	Instrumentation and control cabinets for gas turbine set (free for use)
CJR	Instrumentation and control cabinets for gas turbine set (free for use)
CJS	Instrumentation and control cabinets for gas turbine set (free for use)
CJT	Instrumentation and control cabinets for gas turbine set (free for use)
CJU	Instrumentation and control cabinets for other main and heavy machinery (free for use)
CJV	Instrumentation and control cabinets for other main and heavy machinery (free for use)
CJW	Instrumentation and control cabinets for other main and heavy machinery (free for use)

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C

- C** **INSTRUMENTATION AND CONTROL EQUIPMENT**
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
- CJ** **Unit coordination level**
- CJX** Instrumentation and control cabinets for other main and heavy machinery (free for use)
- CJY** Instrumentation and control cabinets for other main and heavy machinery (free for use)
- CJZ** -blocked-



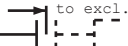
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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CK Process computer system

CKA Online supervisory and diagnostic computer (free for use)
CKB Online supervisory and diagnostic computer (free for use)
CKC Online supervisory and diagnostic computer (free for use)
CKD Online supervisory and diagnostic computer (free for use)
CKE Online supervisory and diagnostic computer (free for use)
CKF Online supervisory and diagnostic computer (free for use)
CKG Online supervisory and diagnostic computer (free for use)
CKH Online supervisory and diagnostic computer (free for use)
CKJ Access control computer (free for use)
CKK Access control computer (free for use)
CKL Access control computer (free for use)
CKM Access control computer (free for use)
CKN Process computer system (free for use)
CKP Process computer system (free for use)
CKQ Process computer system (free for use)
CKR Process computer system (free for use)
CKS Process computer system (free for use)
CKT Process computer system (free for use)
CKU Process computer system (free for use)
CKV Process computer system (free for use)
CKW Process computer system (free for use)
CKX Process computer system (free for use)
CKY Process computer system (free for use)
CKZ Process computer system (free for use)




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C

C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CL Reactor protection

CLA Reactor protection (free for use)
CLB Reactor protection (free for use)
CLC Reactor protection (free for use)
CLD Reactor protection (free for use)
CLE Reactor protection (free for use)
CLF Reactor protection (free for use)
CLG Reactor protection (free for use)
CLH Reactor protection (free for use)
CLJ Reactor protection (free for use)
CLK Reactor protection (free for use)
CLL Reactor protection (free for use)
CLM Reactor protection (free for use)
CLN Reactor protection (free for use)
CLP Reactor protection (free for use)
CLQ Reactor protection (free for use)
CLR Reactor protection (free for use)
CLS Reactor protection (free for use)
CLT Reactor protection (free for use)
CLU Reactor protection (free for use)
CLV Reactor protection (free for use)
CLW Reactor protection (free for use)
CLX Reactor protection (free for use)
CLY Reactor protection (free for use)
CLZ Reactor protection (free for use)

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CM Instrumentation and control equipment
(free for use for system combination)

CMA Instrumentation and control equipment
(free for use for system combination)

CMB Instrumentation and control equipment
(free for use for system combination)

CMC Instrumentation and control equipment
(free for use for system combination)

CMD Instrumentation and control equipment
(free for use for system combination)

CME Instrumentation and control equipment
(free for use for system combination)

CMF Instrumentation and control equipment
(free for use for system combination)

CMG Instrumentation and control equipment
(free for use for system combination)

CMH Instrumentation and control equipment
(free for use for system combination)

CMJ Instrumentation and control equipment
(free for use for system combination)

CMK Instrumentation and control equipment
(free for use for system combination)

CML Instrumentation and control equipment
(free for use for system combination)

CMM Instrumentation and control equipment
(free for use for system combination)

CMN Instrumentation and control equipment
(free for use for system combination)

CMP Instrumentation and control equipment
(free for use for system combination)

CMQ Instrumentation and control equipment
(free for use for system combination)

CMR Instrumentation and control equipment
(free for use for system combination)




CMS Instrumentation and control equipment
(free for use for system combination)

CMT Instrumentation and control equipment
(free for use for system combination)

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C

- C INSTRUMENTATION AND CONTROL EQUIPMENT**
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
- CM Instrumentation and control equipment**
(free for use for system combination)
- CMU** Instrumentation and control equipment
(free for use for system combination)
- CMV** Instrumentation and control equipment
(free for use for system combination)
- CMW** Instrumentation and control equipment
(free for use for system combination)
- CMX** Instrumentation and control equipment
(free for use for system combination)
- CMY** Instrumentation and control equipment
(free for use for system combination)
- CMZ** Instrumentation and control equipment
(free for use for system combination)

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CN Instrumentation and control equipment
(free for use for system combination)

CNA Instrumentation and control equipment
(free for use for system combination)

CNB Instrumentation and control equipment
(free for use for system combination)

CNC Instrumentation and control equipment
(free for use for system combination)

CND Instrumentation and control equipment
(free for use for system combination)

CNE Instrumentation and control equipment
(free for use for system combination)

CNF Instrumentation and control equipment
(free for use for system combination)

CNG Instrumentation and control equipment
(free for use for system combination)

CNH Instrumentation and control equipment
(free for use for system combination)

CNJ Instrumentation and control equipment
(free for use for system combination)

CNK Instrumentation and control equipment
(free for use for system combination)

CNL Instrumentation and control equipment
(free for use for system combination)

CNM Instrumentation and control equipment
(free for use for system combination)

CNN Instrumentation and control equipment
(free for use for system combination)

CNP Instrumentation and control equipment
(free for use for system combination)

CNQ Instrumentation and control equipment
(free for use for system combination)

CNR Instrumentation and control equipment
(free for use for system combination)




CNS Instrumentation and control equipment
(free for use for system combination)












CNT Instrumentation and control equipment
(free for use for system combination)

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- C INSTRUMENTATION AND CONTROL EQUIPMENT**
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- CN Instrumentation and control equipment**
(free for use for system combination)
- CNU** Instrumentation and control equipment
(free for use for system combination)
- CNV** Instrumentation and control equipment
(free for use for system combination)
- CNW** Instrumentation and control equipment
(free for use for system combination)
- CNX** Instrumentation and control equipment
(free for use for system combination)
- CNY** Instrumentation and control equipment
(free for use for system combination)
- CNZ** Instrumentation and control equipment
(free for use for system combination)

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C	INSTRUMENTATION AND CONTROL EQUIPMENT (Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)				
C	CP	Separate automation system			
C	CPA	Separate automation system (available for use)			
C	CPB	Separate automation system (available for use)			
C	CPC	Separate automation system (available for use)			
C	CPD	Separate automation system (available for use)			
C	CPE	Separate automation system (available for use)			
C	CPF	Separate automation system (available for use)			
C	CPG	Separate automation system (available for use)			
C	CPH	Separate automation system (available for use)			
C	CPJ	Separate automation system (available for use)			
C	CPK	Separate automation system (available for use)			
C	CPL	Separate automation system (available for use)			
C	CPM	Separate automation system (available for use)			
C	CPN	Separate automation system (available for use)			
C	CPP	Separate automation system (available for use)			
C	CPQ	Separate automation system (available for use)			
C	CPR	Separate automation system (available for use)			
C	CPS	Separate automation system (available for use)			
C	CPT	Separate automation system (available for use)			
C	CPU	Separate automation system (available for use)			
C	CPV	Separate automation system (available for use)			
C	CPW	Separate automation system (available for use)			
C	CPX	Separate automation system (available for use)			
C	CPY	Separate automation system (available for use)			
C	CPZ	Separate automation system (available for use)			
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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CQ Instrumentation and control equipment
(free for use for system combination)

CQA Instrumentation and control equipment
(free for use for system combination)

CQB Instrumentation and control equipment
(free for use for system combination)

CQC Instrumentation and control equipment
(free for use for system combination)

CQD Instrumentation and control equipment
(free for use for system combination)

CQE Instrumentation and control equipment
(free for use for system combination)

CQF Instrumentation and control equipment
(free for use for system combination)

CQG Instrumentation and control equipment
(free for use for system combination)

CQH Instrumentation and control equipment
(free for use for system combination)

CQJ Instrumentation and control equipment
(free for use for system combination)

CQK Instrumentation and control equipment
(free for use for system combination)

CQL Instrumentation and control equipment
(free for use for system combination)

CQM Instrumentation and control equipment
(free for use for system combination)

CQN Instrumentation and control equipment
(free for use for system combination)

CQP Instrumentation and control equipment
(free for use for system combination)

CQQ Instrumentation and control equipment
(free for use for system combination)




CQR Instrumentation and control equipment
(free for use for system combination)

CQS Instrumentation and control equipment
(free for use for system combination)

CQT Instrumentation and control equipment
(free for use for system combination)

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- C INSTRUMENTATION AND CONTROL EQUIPMENT**
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
- CQ Instrumentation and control equipment**
(free for use for system combination)
- CQU** Instrumentation and control equipment
(free for use for system combination)
- CQV** Instrumentation and control equipment
(free for use for system combination)
- CQW** Instrumentation and control equipment
(free for use for system combination)
- CQX** Instrumentation and control equipment
(free for use for system combination)
- CQY** Instrumentation and control equipment
(free for use for system combination)
- CQZ** Instrumentation and control equipment
(free for use for system combination)

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C	INSTRUMENTATION AND CONTROL EQUIPMENT (Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)						
C	CR	Process control system					
C	CRA	Automation system, non-fail-safe					
C	CRB	Automation system, non-fail-safe					
C	CRC	Automation system, non-fail-safe					
C	CRD	Automation system, non-fail-safe					
C	CRE	Automation system, non-fail-safe					
C	CRF	Automation system, non-fail-safe					
C	CRG	Automation system, non-fail-safe					
C	CRH	Automation system, non-fail-safe					
C	CRJ	Automation system, fail-safe					
C	CRK	Automation system, high-availability					
C	CRL	Enclosure (e.g. cabinet)					
C	CRM	Enclosure (e.g. local box)					
C	CRN	Process control system (available for use)					
C	CRP	Process control system (available for use)					
C	CRQ	Process control system (available for use)					
C	CRR	Communication (e.g. terminal bus)					
C	CRS	Communication (e.g. plant bus)					
C	CRT	Communication (e.g. field bus)					
C	CRU	Operation and monitoring					
C	CRV	Engineering					
C	CRW	Control system diagnostics					
C	CRX	Process optimization					
C	CRY	Process control system (available for use)					
C	CRZ	Process control system (available for use)					
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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CS Instrumentation and control equipment
(free for use for system combination)

CSA Instrumentation and control equipment
(free for use for system combination)

CSB Instrumentation and control equipment
(free for use for system combination)

CSC Instrumentation and control equipment
(free for use for system combination)

CSD Instrumentation and control equipment
(free for use for system combination)

CSE Instrumentation and control equipment
(free for use for system combination)

CSF Instrumentation and control equipment
(free for use for system combination)

CSG Instrumentation and control equipment
(free for use for system combination)

CSH Instrumentation and control equipment
(free for use for system combination)

CSJ Instrumentation and control equipment
(free for use for system combination)

CSK Instrumentation and control equipment
(free for use for system combination)

CSL Instrumentation and control equipment
(free for use for system combination)

CSM Instrumentation and control equipment
(free for use for system combination)

CSN Instrumentation and control equipment
(free for use for system combination)

CSP Instrumentation and control equipment
(free for use for system combination)

CSQ Instrumentation and control equipment
(free for use for system combination)

CSR Instrumentation and control equipment
(free for use for system combination)









CSS Instrumentation and control equipment
(free for use for system combination)

CST Instrumentation and control equipment
(free for use for system combination)

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C

- C** **INSTRUMENTATION AND CONTROL EQUIPMENT**
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
- CS** **Instrumentation and control equipment**
(free for use for system combination)
- CSU** Instrumentation and control equipment
(free for use for system combination)
- CSV** Instrumentation and control equipment
(free for use for system combination)
- CSW** Instrumentation and control equipment
(free for use for system combination)
- CSX** Instrumentation and control equipment
(free for use for system combination)
- CSY** Instrumentation and control equipment
(free for use for system combination)
- CSZ** Instrumentation and control equipment
(free for use for system combination)

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CT Instrumentation and control equipment
(free for use for system combination)

CTA Instrumentation and control equipment
(free for use for system combination)

CTB Instrumentation and control equipment
(free for use for system combination)

CTC Instrumentation and control equipment
(free for use for system combination)

CTD Instrumentation and control equipment
(free for use for system combination)

CTE Instrumentation and control equipment
(free for use for system combination)

CTF Instrumentation and control equipment
(free for use for system combination)

CTG Instrumentation and control equipment
(free for use for system combination)

CTH Instrumentation and control equipment
(free for use for system combination)

CTJ Instrumentation and control equipment
(free for use for system combination)

CTK Instrumentation and control equipment
(free for use for system combination)

CTL Instrumentation and control equipment
(free for use for system combination)

CTM Instrumentation and control equipment
(free for use for system combination)

CTN Instrumentation and control equipment
(free for use for system combination)




CTP Instrumentation and control equipment
(free for use for system combination)

CTQ Instrumentation and control equipment
(free for use for system combination)

CTR Instrumentation and control equipment
(free for use for system combination)

CTS Instrumentation and control equipment
(free for use for system combination)

CTT Instrumentation and control equipment
(free for use for system combination)

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CT Instrumentation and control equipment
(free for use for system combination)

CTU Instrumentation and control equipment
(free for use for system combination)




CTV Instrumentation and control equipment
(free for use for system combination)

CTW Instrumentation and control equipment
(free for use for system combination)

CTX Instrumentation and control equipment
(free for use for system combination)

CTY Instrumentation and control equipment
(free for use for system combination)

CTZ Instrumentation and control equipment
(free for use for system combination)

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CU Closed-loop control (power section)

CUA Closed-loop control (power section) (free for use)
CUB Closed-loop control (power section) (free for use)
CUC Closed-loop control (power section) (free for use)
CUD Closed-loop control (power section) (free for use)
CUE Closed-loop control (power section) (free for use)
CUF Closed-loop control (power section) (free for use)
CUG Closed-loop control (power section) (free for use)
CUH Closed-loop control (power section) (free for use)
CUJ Closed-loop control (power section) (free for use)
CUK Closed-loop control (power section) (free for use)
CUL Closed-loop control (power section) (free for use)
CUM Closed-loop control (power section) (free for use)
CUN Closed-loop control (power section) (free for use)
CUP Closed-loop control (power section) (free for use)
CUQ Closed-loop control (power section) (free for use)
CUR Closed-loop control (power section)
Installation in the secured area (of the nuclear power plant) (free for use)
CUS Closed-loop control (power section)
Installation in the secured area (of the nuclear power plant) (free for use)
CUT Closed-loop control (power section)
Installation in the secured area (of the nuclear power plant) (free for use)
CUU Closed-loop control (power section)
Installation in the secured area (of the nuclear power plant) (free for use)
CUV Closed-loop control (power section)
Installation in the secured area (of the nuclear power plant) (free for use)
CUW Closed-loop control (power sections)
Installation in the secured area (of the nuclear power plant) (free for use)

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C

- C** **INSTRUMENTATION AND CONTROL EQUIPMENT**
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)
- CU** **Closed-loop control (power section)**
- CUX** Closed-loop control (power section)
Installation in the secured area (of the nuclear power plant) (free for use)
- CUY** Closed-loop control (power section)
Installation in the secured area (of the nuclear power plant) (free for use)
- CUZ** -blocked-





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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CV Marshalling racks

CVA Marshalling racks (free for use)
CVB Marshalling racks (free for use)
CVC Marshalling racks (free for use)
CVD Marshalling racks (free for use)
CVE Marshalling racks (free for use)
CVF Marshalling racks (free for use)
CVG Marshalling racks (free for use)
CVH Marshalling racks (free for use)
CVJ Marshalling racks (free for use)
CVK Marshalling racks (free for use)
CVL Marshalling racks (free for use)
CVM Marshalling racks (free for use)
CVN Marshalling racks (free for use)
CVP Marshalling racks (free for use)
CVQ Marshalling racks (free for use)
CVR Marshalling racks (free for use)
CVS Marshalling racks (free for use)
CVT Marshalling racks (free for use)
CVU Marshalling racks (free for use)
CVV Marshalling racks (free for use)
CVW Marshalling racks (free for use)
CVX Marshalling racks (free for use)
CVY Marshalling racks (free for use)
CVZ Marshalling racks (free for use)




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C

C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CW Control rooms

CWA Main control consoles (free for use)
CWB Main control consoles (free for use)
CWC Main control consoles (free for use)
CWD Main control consoles (free for use)
CWE Main control consoles (free for use)
CWF Main control panels (free for use)
CWG Main control panels (free for use)
CWH Main control panels (free for use)
CWJ Main control panels (free for use)
CWK Main control panels (free for use)
CWL Main control panels (free for use)
CWM Main control panels (free for use)
CWN Main control panels (free for use)
CWP Main control panels (free for use)
CWQ Control rooms (free for use)
CWR Control rooms (free for use)
CWS Control rooms (free for use)
CWT Control rooms (free for use)
CWU Control rooms (free for use)
CWV Control rooms (free for use)
CWW Control rooms (free for use)
CWX Control rooms (free for use)
CWY Control rooms (free for use)
CWZ -blocked-

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CX Local control stations
(e.g. for coal handling plants, ash handling plants, cooling water systems, diesel units, supervision of generator cooling, remote shutdown station)

CXA Local control stations (free for use)

CXB Local control stations (free for use)

CXC Local control stations (free for use)

CXD Local control stations (free for use)

CXE Local control stations (free for use)

CXF Local control stations (free for use)

CXG Local control stations (free for use)

CXH Local control stations (free for use)

CXJ Local control stations (free for use)

CXK Local control stations (free for use)

CXL Local control stations (free for use)

CXM Local control stations (free for use)

CXN Local control stations (free for use)

CXP Local control stations (free for use)

CXQ Local control stations (free for use)

CXR Local control stations (free for use)

CXS Local control stations (free for use)

CXT Local control stations (free for use)

CXU Local control stations (free for use)

CXV Local control stations (free for use)

CXW Local control stations (free for use)

CXX Local control stations (free for use)

CXY Local control stations (free for use)

CXZ Local control stations (free for use)

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C INSTRUMENTATION AND CONTROL EQUIPMENT
(Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)

CYA Telephone system (PABX)

C	CYC	Alarm system (acoustic)
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CYE Fire alarm system

CYF Clock system

CYG Remote control system

CYH Telemetry system

CYJ Remote metering system

CYK HF carrier telephone system

C	CYL	Staff paging system
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C	CYM	- blocked -
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C	CYN	- blocked -
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CYP Optical monitoring system

C	CYQ	Gas detection system
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CYR Pneumatic tube conveyor

CYS Radiotelephone system

C	CYT	Intrusion detection system
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C	CYU	Access control system
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C	CYV	Plant and production management system
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C	CYW	Communication and information system (available for use)
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C	CYX	Communication and information system (available for use)
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C	CYY	Communication and information system (available for use)
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C	CYZ	Communication and information system (available for use)
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I N D E X	<p>C INSTRUMENTATION AND CONTROL EQUIPMENT (Identification on a priority basis according to main instrumentation and control function also acceptable in composite structure hardware packaging systems.)</p> <p>CZ -blocked-</p>						
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D

	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
D	EA	Loading, unloading and storage of solid fuels					
	EB	Mechanical treatment of solid fuels (also for gas generation and treatment) (Crushing, mixing, drying, etc.)					
	EC	Distribution of solid fuels					
	ED	Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant)					
	EE	Conversion of solid fuels (Gas generation and treatment see function key *R*)					
	EF	-blocked-					
	EG	Supply of liquid fuels					
	EH	Chemical treatment of liquid fuels incl. residues removal					
	EJ	-blocked-					
	EK	Supply of gaseous fuels					
	EL	Chemical treatment of gaseous fuels incl. residues removal					
A	EM	Supply and treatment of fluxing agents					
C	EN	Supply of other fuels (only for combinations of different fuel types as main fuel)					
C	EP	Treatment of other fuels (only for combinations of different fuel types as main fuel)					
C	EQ	Conversion of other fuels (only for combinations of different fuel types as main fuel)					
	ER	Ignition fuel supply					
C	ES	Supply and treatment of supplementary fuels					
	ET	Ash and slag removal system (from excl. removal equipment)					
	EU	Treatment and transport system for combustion, fuel treatment, fuel conversion, flue gas cleaning, gas generation residues					
	EV	Lubricant supply system					
C	EW	Sealing fluid supply system/decompacting medium supply system					
	EX	Fluid supply system for control and protection equipment					
	EY	Control and protection equipment					
	EZ	-blocked-					
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	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
D	EA	Loading, unloading and storage of solid fuels					
D	EAA	Ship loading and unloading system from incl. loading and unloading equipment to excl. transport or storage plant					
D	EAB	Rail wagon and truck loading and unloading bay from incl. loading and unloading equipment to excl. transport or storage plant					
D	EAC	Transport system from incl. receiving point to excl. storage incl. internal transport system within loading, unloading and storage plant to excl. stacker					
	EAD	Stacking system from excl. transport system to excl. storage plant					
D	EAE	Bunker system, storage area (stockyard) from excl. loading and unloading equipment or transport system to excl. transport or bucket wheel or reclaimer or stacking system					
	EAF	Bucket wheel system, reclaimer system from excl. bunker system or stockyard to excl. transport system					
	EAG	-blocked-					
	EAH	-blocked-					
	EAJ	-blocked-					
	EAK	-blocked-					
	EAL	-blocked-					
	EAM	-blocked-					
	EAN	-blocked-					
	EAP	-blocked-					
	EAQ	-blocked-					
	EAR	-blocked-					
	EAS	-blocked-					
	EAT	Weighing equipment					
	EAU	Sampling equipment					
	EAV	Lubricant supply system					
	EAW	-blocked-					
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E

D	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
	EA	Loading, unloading and storage of solid fuels					
	EAX	Fluid supply system for control and protection equipment					
	EAY	Control and protection equipment					
	EAZ	-blocked-					
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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EB Mechanical treatment of solid fuels
(also for gas generation and treatment)
(Crushing, mixing, drying, etc.)**

EBA Transport system
from incl. receiving point
to excl. discharge into treatment or mixing system

EBB Mixing system
from incl. receiving point
to excl. discharge into other system

EBC Crushing system, pulverizing system
from incl. receiving point
to excl. discharge into other system

EBD Screening system
from incl. receiving point
to excl. discharge into other system

EBE Separator system and discharge equipment thereof
- unless not structural part of one of the former systems
(*EBA* to *EBD*) -
from incl. receiving point
to excl. discharge into other system

EBF Temporary storage system for milled raw coal
from incl. receiving point
to excl. discharge into other system

EBG Predrying system
from incl. receiving point
to excl. discharge into other system

EBH Main drying system
from incl. receiving point
to excl. discharge into other system

EBJ Dried coal transport system incl. aftercooling
from incl. receiving point
to excl. discharge into other system

EBK Dried coal temporary storage system
from incl. receiving point
to excl. discharge into other system

EBL Vapor compressor system
from incl. receiving point
to excl. discharge into other system

EBM Exhaust system
from incl. receiving point
to excl. discharge into other system

EBN -blocked-

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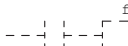
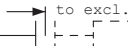
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Revision

E

- E** **CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**
- EB** **Mechanical treatment of solid fuels**
 (also for gas generation and treatment)
 (Crushing, mixing, drying, etc.)
- EBP** -blocked-
- EBQ** -blocked-
- EBR** Residues removal system
- EBS** -blocked-
- EBT** Weighing equipment
- EBU** Sampling equipment
- EBV** Lubricant supply system
- EBW** -blocked-
- EBX** Fluid supply system for control and protection equipment
- EBY** Control and protection equipment
- EBZ** -blocked-

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EC Distribution of solid fuels**

ECA Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECB Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECC Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECD Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECE Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECF Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECG Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECH Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECJ Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECK Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECL Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EC Distribution of solid fuels**

ECM Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECN Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECP Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECQ Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECR Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECS Distribution of solid fuels
(free for use according to transport systems)
from incl. receiving point
to excl. discharge into other systems

ECT Weighing equipment

ECU Sampling equipment

ECV -blocked-

ECW -blocked-

ECX Fluid supply system for control and protection equipment

ECY Control and protection equipment

ECZ -blocked-

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**ED Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant)****EDA** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDB** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDC** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDD** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDE** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDF** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDG** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDH** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDJ** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDK** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDL** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDM** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDN** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDP** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDQ** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDR** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDS** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDT** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)**EDU** Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant) (free for use)

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E

- E** **CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**
- ED** **Chemical treatment of solid fuels incl. residues removal (e.g. desulfurization plant)**
- EDV** Lubricant supply system
- EDW** -blocked-
- EDX** Fluid supply system for control and protection equipment
- EDY** Control and protection equipment
- EDZ** -blocked-

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EE Conversion of solid fuels**
(Gas generation and treatment see function key *R*)

- EEA** Conversion of solid fuels (free for use)
EEB Conversion of solid fuels (free for use)
EEC Conversion of solid fuels (free for use)
EED Conversion of solid fuels (free for use)
EEE Conversion of solid fuels (free for use)
EEF Conversion of solid fuels (free for use)
EEG Conversion of solid fuels (free for use)
EEH Conversion of solid fuels (free for use)
EEJ Conversion of solid fuels (free for use)
EEK Conversion of solid fuels (free for use)
EEL Conversion of solid fuels (free for use)
EEM Conversion of solid fuels (free for use)
EEN Conversion of solid fuels (free for use)
EEP Conversion of solid fuels (free for use)
EEQ Conversion of solid fuels (free for use)
EER Conversion of solid fuels (free for use)
EES Conversion of solid fuels (free for use)
EET Conversion of solid fuels (free for use)
EEU Conversion of solid fuels (free for use)
EEV Lubricant supply system
EEW -blocked-
EEX Fluid supply system for control and protection equipment
EEY Control and protection equipment
EEZ -blocked-

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E

E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL

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	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL						
	EG	Supply of liquid fuels						
	EGA	Receiving equipment incl. pipeline from excl. receiving point to excl. tank, incl. pump						
	EGB	Tank farm from incl. tank inlet to incl. tank outlet						
	EGC	Pump system from incl. pump system suction nozzle to incl. pump system discharge nozzle						
	EGD	Piping system from excl. tank outlet to excl. temporary storage system or branch to user						
C	EGE	Mechanical cleaning, scrubbing						
C	EGF	Temporary storage system						
C	EGG	Preheating						
	EGH	-blocked-						
	EGJ	-blocked-						
	EGK	-blocked-						
	EGL	-blocked-						
	EGM	-blocked-						
	EGN	-blocked-						
	EGP	-blocked-						
	EGQ	-blocked-						
	EGR	Residues removal system						
	EGS	-blocked-						
	EGT	Heating medium system from excl. branch off supply system to excl. user and from excl. user to excl. inlet to other system						
C	EGU	Billing meter station						
	EGV	Lubricant supply system						
	EGW	-blocked-						
	EGX	Fluid supply system for control and protection equipment						
	EGY	Control and protection equipment						
	EGZ	-blocked-						
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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EH Chemical treatment of liquid fuels incl. residues removal****EHA** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHB** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHC** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHD** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHE** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHF** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHG** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHH** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHJ** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHK** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHL** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHM** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHN** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHP** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHQ** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHR** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHS** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHT** Chemical treatment of liquid fuels incl. residues removal (free for use)**EHU** Chemical treatment of liquid fuels incl. residues removal (free for use)

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E

- E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL
- EH Chemical treatment of liquid fuels incl. residues removal
- EHV Lubricant supply system
- EHW -blocked-
- EHX Fluid supply system for control and protection equipment
- EHY Control and protection equipment
- EHZ -blocked-

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E

E

	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
	EK	Supply of gaseous fuels					
	EKA	Receiving equipment incl. pipeline from excl. receiving point to incl. inlet to other system					
C	EKB	scrubber system from incl. moisture separator inlet to incl. moisture separator outlet					
	EKC	Heating system from incl. heater inlet to incl. heater outlet					
	EKD	Main reducing station, expansion turbine from incl. main reducing station inlet, expansion turbine inlet to incl. main reducing station outlet, expansion turbine outlet					
	EKE	Mechanical cleaning, scrubbing from incl. inlet of mechanical cleaning, scrubbing system to incl. outlet mechanical cleaning, scrubbing system					
	EKF	Storage system from incl. storage system inlet to incl. storage system outlet					
	EKG	Piping system from excl. receiving point to excl. branch to user					
C	EKH	Main pressure boosting system from incl. pump system suction nozzle to incl. pump system discharge nozzle					
	EKJ	-blocked-					
	EKK	-blocked-					
	EKL	-blocked-					
	EKM	-blocked-					
	EKN	-blocked-					
	EKP	-blocked-					
	EKQ	-blocked-					
	EKR	Residues removal system					
	EKS	-blocked-					
	EKT	Heating medium system from excl. branch off supply system to excl. user and from excl. user to excl. inlet to other system					
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C	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
	EK	Supply of gaseous fuels					
	EKU	Billing meter station					
	EKV	Lubricant supply system					
	EKW	Sealing fluid supply system					
	EKX	Fluid supply system for control and protection equipment					
	EKY	Control and protection equipment					
	EKZ	-blocked-					
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E

E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EL Chemical treatment of gaseous fuels incl. residues removal****ELA** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELB** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELC** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELD** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELE** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELF** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELG** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELH** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELJ** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELK** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELL** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELM** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELN** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELP** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELQ** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELR** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELS** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELT** Chemical treatment of gaseous fuels incl. residues removal (free for use)**ELU** Chemical treatment of gaseous fuels incl. residues removal (free for use)

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	E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
	EL Chemical treatment of gaseous fuels incl. residues removal					
	ELV Lubricant supply system					
	ELW Sealing fluid supply system					
	ELX Fluid supply system for control and protection equipment					
	ELY Control and protection equipment					
	ELZ -blocked-					
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E

E

	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
A	EM	Supply and treatment of fluxing agents					
A	EMA	Supply and treatment of fluxing agents (free for use)					
A	EMB	Supply and treatment of fluxing agents (free for use)					
A	EMC	Supply and treatment of fluxing agents (free for use)					
A	EMD	Supply and treatment of fluxing agents (free for use)					
A	EME	Supply and treatment of fluxing agents (free for use)					
A	EMF	Supply and treatment of fluxing agents (free for use)					
A	EMG	Supply and treatment of fluxing agents (free for use)					
A	EMH	Supply and treatment of fluxing agents (free for use)					
A	EMJ	Supply and treatment of fluxing agents (free for use)					
A	EMK	Supply and treatment of fluxing agents (free for use)					
A	EML	Supply and treatment of fluxing agents (free for use)					
A	EMM	Supply and treatment of fluxing agents (free for use)					
A	EMN	Supply and treatment of fluxing agents (free for use)					
A	EMP	Supply and treatment of fluxing agents (free for use)					
A	EMQ	Supply and treatment of fluxing agents (free for use)					
A	EMR	Supply and treatment of fluxing agents (free for use)					
A	EMS	Supply and treatment of fluxing agents (free for use)					
A	EMT	Supply and treatment of fluxing agents (free for use)					
A	EMU	Supply and treatment of fluxing agents (free for use)					
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	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
A	EM	Supply and treatment of fluxing agents					
A	EMV	Lubricant supply system					
	EMW	-blocked-					
A	EMX	Fluid supply system for control and protection equipment					
A	EMY	Control and protection equipment					
	EMZ	-blocked-					










E

E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL						
C EN	Supply of other fuels (only for combinations of different fuel types as main fuel)						
C ENA	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENB	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENC	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C END	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENE	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENF	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENG	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENH	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENJ	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENK	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENL	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENM	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENN	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENP	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENQ	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENR	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENS	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
C ENT	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)						
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E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL						
C	EN	Supply of other fuels (only for combinations of different fuel types as main fuel)					
C	ENU	Supply of other fuels (only for combinations of different fuel types as main fuel, available for use)					
	ENV	Lubricant supply system					
	ENW	-blocked-					
	ENX	Fluid supply system for control and protection equipment					
	ENY	Control and protection equipment					
	ENZ	-blocked-					
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	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL				
C	EP	Treatment of other fuels (only for combinations of different fuel types as main fuel)				
C	EPA	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPB	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPC	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPD	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPE	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPF	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPG	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPH	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPJ	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPK	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPL	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPM	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPN	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPP	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPQ	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPR	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPS	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPT	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C	EPU	Treatment of other fuels (only for combinations of different fuel types as main fuel, available for use)				
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C	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL														
	EP	Treatment of other fuels (only for combinations of different fuel types as main fuel)														
	EPV	Lubricant supply system														
	EPW	-blocked-														
	EPX	Fluid supply system for control and protection equipment														
	EPY	Control and protection equipment														
	EPZ	-blocked-														
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E

E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL				
C EQ	Conversion of other fuels (only for combinations of different fuel types as main fuel)				
C EQA	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQB	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQC	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQD	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQE	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQF	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQG	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQH	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQJ	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQK	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQL	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQM	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQN	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQP	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQQ	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQR	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQS	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQT	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
C EQU	Conversion of other fuels (only for combinations of different fuel types as main fuel, available for use)				
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C	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL					
	EQ	Conversion of other fuels (only for combinations of different fuel types as main fuel)					
	EQV	Lubricant supply system					
	EQW	-blocked-					
	EQX	Fluid supply system for control and protection equipment					
	EQY	Control and protection equipment					
	EQZ	-blocked-					
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E

E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**ER Ignition fuel supply**

ERA Pulverized coal supply system
 from excl. receiving point
 to excl. branch to boiler or
 to excl. other users

ERB Oil supply system
 from excl. receiving point
 to excl. branch to boiler or
 to excl. other users


ERC Gas supply system
 from excl. receiving point
 to excl. branch to boiler or
 to excl. other users

ERD -blocked-**ERE** -blocked-**ERF** -blocked-**ERG** -blocked-**ERH** -blocked-**ERJ** -blocked-**ERK** -blocked-**ERL** -blocked-**ERM** -blocked-**ERN** -blocked-**ERP** -blocked-**ERQ** -blocked-**ERR** -blocked-**ERS** -blocked-**ERT** -blocked-**ERU** -blocked-**ERV** Lubricant supply system**ERW** -blocked-**ERX** Fluid supply system for control and protection equipment**ERY** Control and protection equipment**ERZ** -blocked-I
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	E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL				
C	ES	Supply and treatment of supplementary fuels				
C	ESA	Unloading and storage, including removal from incl. unloading equipment to excl. forwarding				
C	ESB	Forwarding and distribution, including temporary storage				
C	ESC	Supply and treatment of supplementary fuels (available for use)				
C	ESD	- blocked -				
C	ESE	Lubricant supply and proportioning system				
C	ESF	- blocked -				
C	ESG	- blocked -				
C	ESH	- blocked -				
C	ESJ	- blocked -				
C	ESK	- blocked -				
C	ESL	- blocked -				
C	ESM	- blocked -				
C	ESN	Inerting				
C	ESP	- blocked -				
C	ESQ	- blocked -				
C	ESR	- blocked -				
C	ESS	Exhaust extraction				
C	EST	Exhaust cleaning, excluding extraction				
C	ESU	- blocked -				
C	ESV	Lubricant supply system				
C	ESW	- blocked -				
C	ESX	Fluid supply system for control and protection equipment				
C	ESY	Control and protection equipment				
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E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL				
ET	Ash and slag removal system (from excl. removal equipment)				
ETA	Wet ash conveying system from excl. removal equipment or from excl. receiving point to excl. storage facility or to excl. discharge into other system				
F	ETB	Storage or settlement system for wet ash from excl. receiving point to incl. removal equipment			
	ETC	Wet ash dredger from excl. receiving point to excl. discharge into other system			
	ETD	Conveying system for granulate from excl. removal equipment to excl. storage facility or to excl. discharge into other system			
	ETE	Storage system for granulate from excl. receiving point to incl. removal equipment			
	ETF	-blocked-			
	ETG	Conveying system for dry ash from excl. removal equipment (boiler, electrostatic precipitator) to excl. storage facilities or to excl. discharge into other system			
	ETH	Storage system for dry ash from excl. receiving point to incl. removal equipment			
	ETJ	-blocked-			
	ETK	Common conveying system for wet and dry ash from excl. receiving point to excl. storage facility or to excl. discharge into other system			
	ETL	Common storage system for wet and dry ash from excl. receiving point to incl. removal equipment			
F	ETM	Settling system for wet and dry ash from excl. receiving point from conveying system to excl. pit or to excl. discharge to other system			
	ETN	Forwarding, distribution, recovery and disposal systems for flushing and ash water from excl. inlet or from incl. branch to excl. inlet to other system			
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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**ET Ash and slag removal system (from excl. removal equipment)**

ETP Generation and distribution systems for carrier air
 from excl. branch or
 from incl. compressor system
 to excl. inlet to conveying system

ETQ -blocked-

ETR -blocked-

ETS -blocked-

ETT -blocked-

ETU -blocked-

ETV Lubricant supply system

ETW -blocked-

ETX Fluid supply system for control and protection equipment

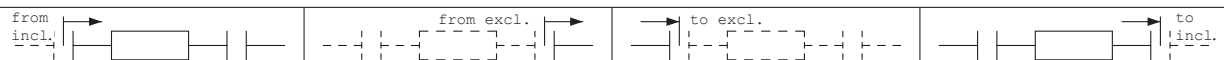
ETY Control and protection equipment

ETZ -blocked-

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EU Treatment and transport system for combustion, fuel treatment, fuel conversion, flue gas cleaning, gas generation residues**

EUA Treatment system for fuel treatment residues
from incl. inlet
to incl. outlet

EUB Treatment system for fuel conversion residues
from incl. inlet
to incl. outlet

EUC Treatment system for fuel combustion residues
from incl. inlet
to incl. outlet

EUD Treatment system for flue gas cleaning residues
from incl. inlet
to incl. outlet

EUE Treatment system for gas generation and treatment residues
from incl. inlet
to incl. outlet

EUF Treatment system for fuel treatment residues (only if *EUA* is not sufficient for identification)
from incl. inlet
to incl. outlet

EUG Treatment system for fuel treatment residues (only if *EUA* and *EUF* are not sufficient for identification)
from incl. inlet
to incl. outlet

EUH Treatment system for fuel conversion residues (only if *EUB* is not sufficient for identification)
from incl. inlet
to incl. outlet

EUJ Treatment system for fuel conversion residues (only if *EUB* and *EUH* are not sufficient for identification)
from incl. inlet
to incl. outlet

EUK Treatment system for fuel combustion residues (only if *EUC* is not sufficient for identification)
from incl. inlet
to incl. outlet

EUL Treatment system for fuel combustion residues (only if *EUC* and *EUK* are not sufficient for identification)
from incl. inlet
to incl. outlet

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL

EU Treatment and transport system for combustion, fuel treatment, fuel conversion, flue gas cleaning, gas generation residues

EUM Treatment system for flue gas cleaning residues (only if *EUD* is not sufficient for identification)
from incl. inlet
to incl. outlet

EUN Treatment system for flue gas cleaning residues (only if *EUD* and *EUM* are not sufficient for identification)
from incl. inlet
to incl. outlet

EUP Treatment system for gas generation and treatment residues (only if *EUE* is not sufficient for identification)
from incl. inlet
to incl. outlet

EUQ Treatment system for gas generation and treatment residues (only if *EUE* and *EUP* are not sufficient for identification)
from incl. inlet
to incl. outlet

EUR -blocked-

EUS -blocked-

EUT -blocked-

EUU -blocked-

EUV Lubricant supply system

EUW -blocked-

EUX Fluid supply system for control and protection equipment

EUY Control and protection equipment

EUZ -blocked-

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E

E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EV Lubricant supply system****EVA** Lubricant supply system (free for use)**EVB** Lubricant supply system (free for use)**EVC** Lubricant supply system (free for use)**EVD** Lubricant supply system (free for use)**EVE** Lubricant supply system (free for use)**EVF** Lubricant supply system (free for use)**EVG** Lubricant supply system (free for use)**EVH** Lubricant supply system (free for use)**EVJ** Lubricant supply system (free for use)**EVK** Lubricant supply system (free for use)**EVL** Lubricant supply system (free for use)**EVM** Lubricant supply system (free for use)**EVN** Lubricant supply system (free for use)**EVP** Lubricant supply system (free for use)**EVQ** Lubricant supply system (free for use)**EVR** Lubricant supply system (free for use)**EVS** Lubricant supply system (free for use)**EVT** Lubricant supply system (free for use)**EVU** Lubricant supply system (free for use)**EVV** -blocked-**EVW** -blocked-**EVX** -blocked-**EVY** -blocked-**EVZ** -blocked-I
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E	CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL				
C	EW	Sealing fluid supply system/decompacting medium supply system			
C	EWA	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWB	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWK	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWL	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWE	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWF	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWG	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWH	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWJ	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWK	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWL	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWM	Sealing fluid supply system/decompacting medium supply system (available for use)			
C	EWN	Sealing fluid supply system/decompacting medium supply system (available for use)			
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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL

C	EWP	Sealing fluid supply system/decompacting medium supply system (available for use)
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C	EWQ	Sealing fluid supply system/decompacting medium supply system (available for use)
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C	EWR	Sealing fluid supply system/decompacting medium supply system (available for use)
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C	EWS	Sealing fluid supply system/decompacting medium supply system (available for use)
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C	EWT	Sealing fluid supply system/decompacting medium supply system (available for use)
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C	EWU	Sealing fluid supply system/decompacting medium supply system (available for use)
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EWV -blocked-

EWW -blocked-

EWX -blocked-

EWY -blocked-

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EX Fluid supply system for control and protection equipment****EXA** Fluid supply system for control and protection equipment
(free for use)**EXB** Fluid supply system for control and protection equipment
(free for use)**EXC** Fluid supply system for control and protection equipment
(free for use)**EXD** Fluid supply system for control and protection equipment
(free for use)**EXE** Fluid supply system for control and protection equipment
(free for use)**EXF** Fluid supply system for control and protection equipment
(free for use)**EXG** Fluid supply system for control and protection equipment
(free for use)**EXH** Fluid supply system for control and protection equipment
(free for use)**EXJ** Fluid supply system for control and protection equipment
(free for use)**EXK** Fluid supply system for control and protection equipment
(free for use)**EXL** Fluid supply system for control and protection equipment
(free for use)**EXM** Fluid supply system for control and protection equipment
(free for use)**EXN** Fluid supply system for control and protection equipment
(free for use)**EXP** Fluid supply system for control and protection equipment
(free for use)**EXQ** Fluid supply system for control and protection equipment
(free for use)**EXR** Fluid supply system for control and protection equipment
(free for use)**EXS** Fluid supply system for control and protection equipment
(free for use)**EXT** Fluid supply system for control and protection equipment
(free for use)**EXU** Fluid supply system for control and protection equipment
(free for use)

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL

EX Fluid supply system for control and protection equipment

EXV -blocked-





EXW -blocked-

EXX -blocked-

EXY -blocked-

EXZ -blocked-

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL**EY Control and protection equipment**

EYA	Control and protection equipment (free for use)
EYB	Control and protection equipment (free for use)
EYC	Control and protection equipment (free for use)
EYD	Control and protection equipment (free for use)
EYE	Control and protection equipment (free for use)
EYF	Control and protection equipment (free for use)
EYG	Control and protection equipment (free for use)
EYH	Control and protection equipment (free for use)
EYJ	Control and protection equipment (free for use)
EYK	Control and protection equipment (free for use)
EYL	Control and protection equipment (free for use)
EYM	Control and protection equipment (free for use)
EYN	Control and protection equipment (free for use)
EYP	Control and protection equipment (free for use)
EYQ	Control and protection equipment (free for use)
EYR	Control and protection equipment (free for use)
EYS	Control and protection equipment (free for use)
EYT	Control and protection equipment (free for use)
EYU	Control and protection equipment (free for use)
EYV	-blocked-
EYW	-blocked-
EYX	-blocked-
EYY	-blocked-
EYZ	-blocked-

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E CONVENTIONAL FUEL SUPPLY AND RESIDUES DISPOSAL

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F HANDLING OF NUCLEAR EQUIPMENT

FA	Storage of fuel assemblies (also includes breeder and reflector assemblies) and other radioactive components
FB	Handling of fuel assemblies (also includes breeder and reflector assemblies) and other reactor core internals
FC	Refueling and transport equipment for fuel assemblies (also includes breeder and reflector assemblies) and other reactorcore internals
FD	-blocked-
FE	-blocked-
FF	-blocked-
FG	-blocked-
FH	-blocked-
FJ	Erection and in-service inspection equipment
FK	Decontamination equipment (excluding cleaning equipment for fuel assemblies store *FAM* and fuel assemblies *FBC*)
FL	-blocked-
FM	-blocked-
FN	-blocked-
FP	-blocked-
FQ	-blocked-
FR	-blocked-
FS	-blocked-
FT	-blocked-
FU	-blocked-
FV	Lubricant supply system
FW	Sealing fluid supply system
FX	Fluid supply system for control and protection equipment
FY	Control and protection equipment
FZ	-blocked-

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F HANDLING OF NUCLEAR EQUIPMENT**FA Storage of fuel assemblies (also includes breeder and reflector assemblies) and other radioactive components****FAA** New fuel assemblies store

Task: to accommodate fuel assemblies and other radioactive components, associated tools for storage and, where applicable, manipulation
 Scope: lining and support structure, leakage monitoring equipment and internals

FAB Irradiated fuel assemblies store (fuel pool)

Task: to accommodate fuel assemblies and other radioactive components, associated tools for storage and, where applicable, manipulation
 Scope: lining and support structure, leakage monitoring equipment and internals

FAC Irradiated breeder assemblies store (not internal store)

Task: to accommodate breeder assemblies and the associated tools for storage and, where applicable, manipulation
 Scope: lining and support structure, leakage monitoring equipment and internals

FAD Additional fuel assemblies store**FAE** Reactor well equipment

Scope: lining and support structure, leakage monitoring equipment and internals

FAF Setdown area equipment

Task: temporary storage of reactor internals
 Scope: lining and support structure, leakage monitoring equipment and internals

FAG -blocked-**FAH** Reusable activated components store**FAJ** -blocked-**FAK** Fuel assemblies store cooling system

Task: to remove heat from the fuel assemblies store

FAL Fuel assemblies store coolant cleaning system

Task: to remove contaminants from the fuel assemblies store coolant

FAM Fuel assemblies store cleaning system

Task: to remove contaminants from the fuel assemblies store

FAN Emergency fuel assemblies store cooling system

Task: to remove heat from the fuel assemblies store in emergencies

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F HANDLING OF NUCLEAR EQUIPMENT

FA Storage of fuel assemblies (also includes breeder and reflector assemblies) and other radioactive components

FAP -blocked-

FAQ -blocked-

FAR Dedicated blanket gas system for fuel assemblies store
Task: to protect fuel assemblies against oxidation

FAS -blocked-

FAT Heating, cooling, flushing distribution system
(also evacuation)

FAU -blocked-

FAV Lubricant supply system

FAW Sealing fluid supply system

FAX Fluid supply system for control and protection equipment

FAY Control and protection equipment

FAZ -blocked-

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F HANDLING OF NUCLEAR EQUIPMENT**FB Handling of fuel assemblies (also includes breeder and reflector assemblies) and other reactor core internals****FBA** Fuel assemblies and other reactor core internals testing equipment

Task: to establish the condition of reactor core internals

FBB Fuel assemblies and other reactor core internals repair equipment

Task: to repair reactor core internals

FBC Fuel assemblies and other reactor core internals cleaning equipmentTask: to clean reactor core internals
(for decontamination equipment see *FK*)**FBD** Size reduction equipment for fuel assemblies and other reactor core internals, excl. components classified under *J***FBE** -blocked-**FBF** -blocked-**FBG** -blocked-**FBH** -blocked-**FBJ** -blocked-**FBK** -blocked-**FBL** -blocked-**FBM** -blocked-**FBN** -blocked-**FBP** -blocked-**FBQ** -blocked-**FBR** -blocked-**FBS** -blocked-**FBT** Heating, cooling, flushing distribution system
(also evacuation)**FBU** -blocked-**FBV** Lubricant supply system**FBW** Sealing fluid supply system**FBX** Fluid supply system for control and protection equipment**FBY** Control and protection equipment**FBZ** -blocked-I
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F HANDLING OF NUCLEAR EQUIPMENT

FC Refueling and transport equipment for fuel assemblies (also includes breeder and reflector assemblies) and other reactorcore internals

FCA Charge and discharge equipment

Task: to insert fuel absorber assemblies and similar components into and to remove same from the reactor core with the aid of a carrier fluid

FCB Refueling equipment at reactor

Task: to exchange and reshuffle fuel assemblies and other reactor core internals

FCC Reshuffling equipment for reactor core internals (only if separate from *FCA* and *FCB*)

Task: to reshuffle fuel assemblies and other reactor core internals

FCD Refueling equipment in store for fuel assemblies and other reactor core internals

Task: to manipulate fuel assemblies and other reactor core internals within the store

FCE -blocked-

FCF Fuel transfer equipment

Task: to enable transfer between compartments subject to different operating conditions;
only for fuel assemblies and other reactor core internals

FCG -blocked-

FCH -blocked-

FCJ Transport equipment

Task: to transfer fuel assemblies and other reactor core internals between different stores

Scope: equipment for the transport of fuel assemblies and other reactor core internals between different stores

FCK -blocked-

FCL Pressurizing and cooling system for fuel assemblies transport equipment

FCM -blocked-

FCN -blocked-

FCP -blocked-

FCQ -blocked-





FCR -blocked-

FCS -blocked-

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- F** **HANDLING OF NUCLEAR EQUIPMENT**
- FC** Refueling and transport equipment for fuel assemblies (also includes breeder and reflector assemblies) and other reactorcore internals
- FCT** Heating, cooling, flushing distribution system (also evacuation)
- FCU** -blocked-
- FCV** Lubricant supply system
- FCW** Sealing fluid supply system
- FCX** Fluid supply system for control and protection equipment
- FCY** Control and protection equipment
- FCZ** -blocked-

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F HANDLING OF NUCLEAR EQUIPMENT

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F HANDLING OF NUCLEAR EQUIPMENT**FJ Erection and in-service inspection equipment****FJA** Tools and erection equipment for the reactor vessel and closure head**FJB** Tools and erection equipment for reactor vessel internals**FJC** In-service inspection equipment for the reactor vessel and closure head**FJD** -blocked-**FJE** Tools and erection equipment for reactor coolant system components**FJF** In-service inspection equipment for reactor coolant system components**FJG** -blocked-**FJH** -blocked-**FJJ** -blocked-**FJK** -blocked-**FJL** -blocked-**FJM** Equipment for reactor containment**FJN** Handling equipment for sodium-wetted parts**FJP** -blocked-**FJQ** Hot cell equipment**FJR** -blocked-**FJS** -blocked-**FJT** -blocked-**FJU** -blocked-**FJV** -blocked-**FJW** -blocked-**FJX** -blocked-**FJY** -blocked-**FJZ** -blocked-I
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F HANDLING OF NUCLEAR EQUIPMENT**FK** Decontamination equipment (excluding cleaning equipment for fuel assemblies store *FAM* and fuel assemblies *FBC*)**FKA** Decontamination equipment
(free for use e.g. building specific)**FKB** Decontamination equipment
(free for use e.g. building specific)**FKC** Decontamination equipment
(free for use e.g. building specific)**FKD** Decontamination equipment
(free for use e.g. building specific)**FKE** Decontamination equipment
(free for use e.g. building specific)**FKF** Decontamination equipment
(free for use e.g. building specific)**FKG** Decontamination equipment
(free for use e.g. building specific)**FKH** Decontamination equipment
(free for use e.g. building specific)**FKJ** Decontamination equipment
(free for use e.g. building specific)**FKK** Decontamination equipment
(free for use e.g. building specific)**FKL** -blocked-**FKM** -blocked-**FKN** Mobile decontamination equipment**FKP** -blocked-**FKQ** -blocked-**FKR** -blocked-**FKS** -blocked-**FKT** Heating, cooling, flushing distribution system
(also evacuation)**FKU** -blocked-**FKV** Lubricant supply system**FKW** Sealing fluid supply system**FKX** Fluid supply system for control and protection equipment**FKY** Control and protection equipment**FKZ** -blocked-

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



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F HANDLING OF NUCLEAR EQUIPMENT**FV Lubricant supply system****FVA** Lubricant supply system (free for use)**FVB** Lubricant supply system (free for use)**FVC** Lubricant supply system (free for use)**FVD** Lubricant supply system (free for use)**FVE** Lubricant supply system (free for use)**FVF** Lubricant supply system (free for use)**FVG** Lubricant supply system (free for use)**FVH** Lubricant supply system (free for use)**FVJ** Lubricant supply system (free for use)**FVK** Lubricant supply system (free for use)**FVL** Lubricant supply system (free for use)**FVM** Lubricant supply system (free for use)**FVN** Lubricant supply system (free for use)**FVP** Lubricant supply system (free for use)**FVQ** Lubricant supply system (free for use)**FVR** Lubricant supply system (free for use)**FVS** Lubricant supply system (free for use)**FVT** Lubricant supply system (free for use)**FVU** Lubricant supply system (free for use)**FVV** -blocked-**FVW** -blocked-**FVX** -blocked-**FVY** -blocked-**FVZ** -blocked-I
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F HANDLING OF NUCLEAR EQUIPMENT**FW Sealing fluid supply system****FWA** Sealing fluid supply system (free for use)**FWB** Sealing fluid supply system (free for use)**FWC** Sealing fluid supply system (free for use)**FWD** Sealing fluid supply system (free for use)**FWE** Sealing fluid supply system (free for use)**FWF** Sealing fluid supply system (free for use)**FWG** Sealing fluid supply system (free for use)**FWH** Sealing fluid supply system (free for use)**FWJ** Sealing fluid supply system (free for use)**FWK** Sealing fluid supply system (free for use)**FWL** Sealing fluid supply system (free for use)**FWM** Sealing fluid supply system (free for use)**FWN** Sealing fluid supply system (free for use)**FWP** Sealing fluid supply system (free for use)**FWQ** Sealing fluid supply system (free for use)**FWR** Sealing fluid supply system (free for use)**FWS** Sealing fluid supply system (free for use)**FWT** Sealing fluid supply system (free for use)**FWU** Sealing fluid supply system (free for use)**FWV** -blocked-**FWW** -blocked-**FWX** -blocked-**FWY** -blocked-**FWZ** -blocked-I
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F HANDLING OF NUCLEAR EQUIPMENT**FX Fluid supply system for control and protection equipment****FXA** Fluid supply system for control and protection equipment (free for use)**FXB** Fluid supply system for control and protection equipment (free for use)**FXC** Fluid supply system for control and protection equipment (free for use)**FXD** Fluid supply system for control and protection equipment (free for use)**FXE** Fluid supply system for control and protection equipment (free for use)**FXF** Fluid supply system for control and protection equipment (free for use)**FXG** Fluid supply system for control and protection equipment (free for use)**FXH** Fluid supply system for control and protection equipment (free for use)**FXJ** Fluid supply system for control and protection equipment (free for use)**FXK** Fluid supply system for control and protection equipment (free for use)**FXL** Fluid supply system for control and protection equipment (free for use)**FXM** Fluid supply system for control and protection equipment (free for use)**FXN** Fluid supply system for control and protection equipment (free for use)**FXP** Fluid supply system for control and protection equipment (free for use)**FXQ** Fluid supply system for control and protection equipment (free for use)**FXR** Fluid supply system for control and protection equipment (free for use)**FXS** Fluid supply system for control and protection equipment (free for use)**FXT** Fluid supply system for control and protection equipment (free for use)**FXU** Fluid supply system for control and protection equipment (free for use)

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F **HANDLING OF NUCLEAR EQUIPMENT**

FX **Fluid supply system for control and protection equipment**

FXV -blocked-





FXW -blocked-

FXX -blocked-

FXY -blocked-

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F HANDLING OF NUCLEAR EQUIPMENT**FY Control and protection equipment****FYA** Control and protection equipment (free for use)**FYB** Control and protection equipment (free for use)**FYC** Control and protection equipment (free for use)**FYD** Control and protection equipment (free for use)**FYE** Control and protection equipment (free for use)**FYF** Control and protection equipment (free for use)**FYG** Control and protection equipment (free for use)**FYH** Control and protection equipment (free for use)**FYJ** Control and protection equipment (free for use)**FYK** Control and protection equipment (free for use)**FYL** Control and protection equipment (free for use)**FYM** Control and protection equipment (free for use)**FYN** Control and protection equipment (free for use)**FYP** Control and protection equipment (free for use)**FYQ** Control and protection equipment (free for use)**FYR** Control and protection equipment (free for use)**FYS** Control and protection equipment (free for use)**FYT** Control and protection equipment (free for use)**FYU** Control and protection equipment (free for use)**FYV** -blocked-**FYW** -blocked-**FYX** -blocked-**FYY** -blocked-**FYZ** -blocked-I
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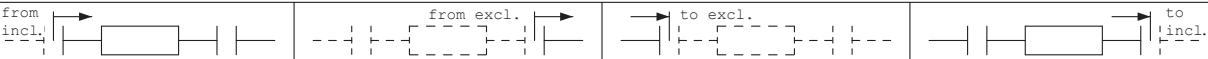
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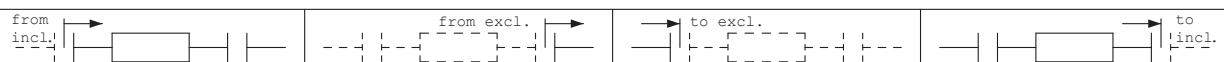
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G WATER SUPPLY AND DISPOSAL

GA	Raw water supply
GB	Treatment system (carbonate hardness removal) incl. cooling tower make-up water treatment system
GC	Treatment system (demineralization)
GD	Treatment system (others)
GE	-blocked-
GF	-blocked-
GG	-blocked-
GH	Distribution systems (not drinking water)
GJ	-blocked-
GK	Drinking water supply
GL	-blocked-
GM	Process drainage system
GN	Process drains treatment system
GP	-blocked-
GQ	Domestic waste water collection and drainage systems
GR	Domestic waste water treatment system
GS	-blocked-
GT	Water recovery from waste water
GU	Rainwater collection and drainage systems incl. treatment system
GV	Lubricant supply system
GW	Sealing fluid supply system
GX	Fluid supply system for control and protection equipment
GY	Control and protection equipment
GZ	-blocked-

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G WATER SUPPLY AND DISPOSAL**GA Raw water supply**

GAA Extraction, mechanical cleaning
from incl. intake
to incl. mechanical cleaning system outlet

GAB -blocked-

GAC Piping and channel system
from excl. intake or
from excl. outlet of other system
to excl. inlet to other system

GAD Storage system
from incl. storage system inlet
to incl. storage system outlet, incl. intake and outfall

GAE -blocked-

GAF Pump system
from incl. pump system suction nozzle
to incl. pump system discharge nozzle

GAG -blocked-

GAH -blocked-

GAJ -blocked-

GAK -blocked-

GAL -blocked-

GAM -blocked-

GAN -blocked-

GAP -blocked-

GAQ -blocked-

GAR -blocked-

GAS -blocked-

GAT -blocked-

GAU -blocked-



GAV Lubricant supply system

GAW -blocked-

GAX Fluid supply system for control and protection equipment

GAY Control and protection equipment

GAZ -blocked-

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G WATER SUPPLY AND DISPOSAL

GB Treatment system (carbonate hardness removal) incl. cooling tower make-up water treatment system

GBA -blocked-

GBB Filtering, mechanical cleaning system
from incl. separation equipment inlet
to incl. separation equipment outlet

GBC Aeration, gas injection system
from excl. atmosphere or
from incl. gas supply

GBD Precipitation system (e.g. for carbonate hardness removal)
from incl. precipitation equipment inlet
to incl. precipitation equipment outlet

GBE Acid proportioning system (e.g. for carbonate hardness removal)
from incl. acid proportioning equipment
from excl. branch off chemicals supply system
to excl. inlet to other system

GBF Ion exchange, reverse osmosis system (e.g. for carbonate hardness removal)
from incl. ion exchanger inlet or
from incl. isolating valve of chemicals supply system or
auxiliary fluid supply system upstream of ion exchanger

GBG Evaporation system (e.g. for carbonate hardness removal)
from incl. feedwater inlet
to incl. steam outlet and
from incl. heating steam inlet
to incl. condensate outlet

C GBH Deaeration
from incl. deaerator or tank inlet
to incl. tank outlet incl. warm-up equipment of vapour condenser

GBJ Preheating, cooling system
from incl. preheater or cooler inlet
to incl. preheater or cooler outlet

GBK Piping system, temporary storage system, pump system for main fluid
Piping system:
from excl. intake or
from excl. outlet of other system
to excl. inlet to other system
to incl. fluid treatment system outlet
Temporary storage system:
from incl. temporary storage system inlet
to incl. temporary storage

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G WATER SUPPLY AND DISPOSAL**GB** Treatment system (carbonate hardness removal) incl. cooling tower make-up water treatment system**GBL** Storage system outside fluid treatment system (if not part of another system)
from incl. inlet storage system
to excl. outlet storage system incl. intake and outfall**GBM** -blocked-**GBN** Chemicals supply system
from incl. intake or
from incl. storage tank
to excl. discharge into other system**GBP** Regeneration, flushing equipment
from incl. system inlet
to excl. inlet to other system
from excl. chemicals or auxiliary fluid supply system and
flushing air supply system
to incl. regenerating, flushing equipment**GBQ** Injection system for main fluid (for hardness stabilisation)
from incl. injection equipment
from excl. branch off chemicals supply system
to excl. inlet to other system**GBR** Flushing water and residues removal system incl. neutralization
from excl. outlet of respective system
to excl. discharge into disposal system**GBS** Sludge thickening system
from excl. outlet of respective system
to excl. discharge into other system**GBT** Heating, cooling and flushing fluid distribution system
from incl. heating, cooling, flushing fluid generation equipment or
from excl. branch off heating, cooling, flushing fluid supply system
to excl. user and
from excl. user**GBU** -blocked-**GBV** Lubricant supply system**GBW** -blocked-**GBX** Fluid supply system for control and protection equipment**GBY** Control and protection equipment**GBZ** -blocked-

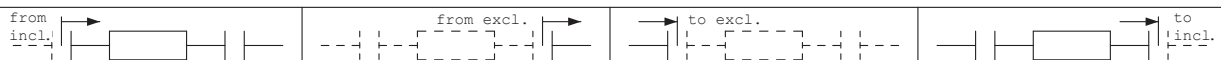
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G WATER SUPPLY AND DISPOSAL**GC Treatment system (demineralization)****GCA** -blocked-**GCB** Filtering, mechanical cleaning system
from incl. separation equipment inlet
to incl. separation equipment outlet**GCC** Aeration, gas injection system
from excl. atmosphere or
from incl. gas supply**GCD** Precipitation system (e.g. for carbonate hardness removal)
from incl. precipitation equipment inlet
to incl. precipitation equipment outlet**GCE** Acid proportioning system (e.g. for carbonate hardness removal)
from incl. acid proportioning equipment or
from excl. branch off chemicals supply system
to excl. inlet to other system**GCF** Ion exchange, reverse osmosis system (e.g. for demineralization)
from incl. ion exchanger inlet
from incl. isolating valve of chemicals supply system or
auxiliary fluid supply system upstream of ion exchanger**GCG** Evaporation system (e.g. for demineralization)
from incl. feedwater inlet
to incl. steam outlet and
from incl. heating steam inlet
to incl. condensate outlet**C GCH** Deaeration
from incl. deaerator or tank inlet
to incl. tank outlet incl. warm-up equipment of vapour condenser**GCJ** Preheating, cooling system
from incl. preheater or cooler inlet
to incl. preheater or cooler outlet**GCK** Piping system, temporary storage system, pump system for main fluid
Piping system:
from excl. intake or
from excl. outlet of other system
to excl. inlet to other system
to incl. fluid treatment system outlet
Temporary storage system:
from incl. temporary storage system inlet
to incl. temporary storage

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G WATER SUPPLY AND DISPOSAL**GC Treatment system (demineralization)**

GCL Storage system outside fluid treatment system (if not part of another system)
 from incl. inlet storage system
 to incl. outlet storage system incl. intake and outfall

GCM -blocked-

GCN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

GCP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system
 and flushing air supply system
 to incl. regenerating, flushing equipment

GCQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

GCR Flushing water and residues removal system incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into disposal system

GCS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into other system

GCT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling and flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

GCU -blocked-

GCV Lubricant supply system

GCW -blocked-

GCX Fluid supply system for control and protection equipment

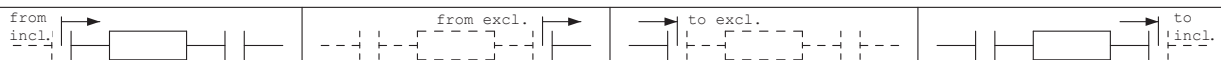
GCY Control and protection equipment

GCZ -blocked-

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G WATER SUPPLY AND DISPOSAL**GD Treatment system (others)****GDA** -blocked-**GDB** Filtering, mechanical cleaning system
from incl. separation equipment inlet
to incl. separation equipment outlet**GDC** Aeration, gas injection system
from excl. atmosphere or
from incl. gas supply**GDD** Precipitation system (e.g. for carbonate hardness removal)
from incl. precipitation equipment inlet
to incl. precipitation equipment outlet**GDE** Acid proportioning system (e.g. for carbonate hardness removal)
from incl. acid proportioning equipment or
from excl. branch off chemicals supply system
to excl. inlet to other system**GDF** Ion exchange, reverse osmosis system (e.g. for demineralization)
from incl. ion exchanger inlet or
from incl. isolating valve of chemicals supply system or
auxiliary fluid supply system upstream of ion exchanger**GDG** Evaporation system (e.g. for demineralization)
from incl. feedwater inlet
to incl. steam outlet and
from incl. heating steam inlet
to incl. condensate outlet**C GDH** Deaeration
from incl. deaerator or tank inlet
to incl. tank outlet incl. warm-up equipment of vapour condenser**GDJ** Preheating, cooling system
from incl. preheater or cooler inlet
to incl. preheater or cooler outlet**GDK** Piping system, temporary storage system, pump system for main fluid
Piping system:
from excl. intake or
from excl. outlet of other system
to excl. inlet to other system
to incl. fluid treatment system outlet
Temporary storage system:
from incl. temporary storage system inlet
to incl. temporary storageVGB Technical Group
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G WATER SUPPLY AND DISPOSAL**GD Treatment system (others)**

GDL Storage system outside fluid treatment system (if not part of another system)
 from incl. inlet storage system
 to incl. outlet storage system incl. intake and outfall

GDM -blocked-

GDN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

GDP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system
 and flushing air supply system
 to incl. regenerating, flushing equipment

GDQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

GDR Flushing water and residues removal system incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into disposal system

GDS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into other system

GDT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling, flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

GDU -blocked-

GDV Lubricant supply system





GDW -blocked-

GDX Fluid supply system for control and protection equipment

GDY Control and protection equipment

GDZ -blocked-

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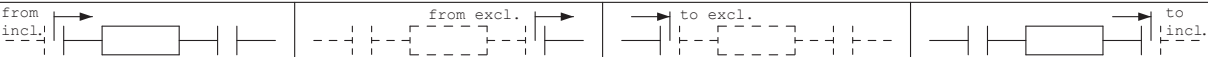
G WATER SUPPLY AND DISPOSAL

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G WATER SUPPLY AND DISPOSAL**GH Distribution systems (not drinking water)****GHA** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHB** Distribution systems after treatment (carbonate hardness
removal)
to excl. inlet to other system**GHC** Distribution systems after treatment (demineralization)
to excl. inlet to other system**GHD** Distribution systems after treatment (others)
to excl. inlet to other system**GHE** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHF** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHG** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHH** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHJ** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHK** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHL** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHM** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHN** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHP** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHQ** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHR** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHS** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHT** Distribution systems (not drinking water)
(free for use for other kinds of water)**GHU** Distribution systems (not drinking water)
(free for use for other kinds of water)

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E	G WATER SUPPLY AND DISPOSAL						
	GH Distribution systems (not drinking water)						
	GHV -blocked-						
	GHW Seal fluid supply system						
	GHX Fluid supply system for control and protection equipment						
	GHY Control and protection equipment						
	GHZ -blocked-						
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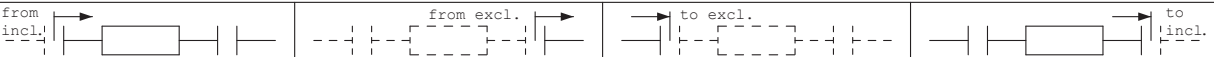
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G WATER SUPPLY AND DISPOSAL**GK Drinking water supply****GKA** Receiving point**GKB** Storage, forwarding, distribution system**GKC** Drinking water supply (free for use e.g. building-specific)**GKD** Drinking water supply (free for use e.g. building-specific)**GKE** Drinking water supply (free for use e.g. building-specific)**GKF** Drinking water supply (free for use e.g. building-specific)**GKG** Drinking water supply (free for use e.g. building-specific)**GKH** Drinking water supply (free for use e.g. building-specific)**GKJ** Drinking water supply (free for use e.g. building-specific)**GKK** Drinking water supply (free for use e.g. building-specific)**GKL** Drinking water supply (free for use e.g. building-specific)**GKM** Drinking water supply (free for use e.g. building-specific)**GKN** Drinking water supply (free for use e.g. building-specific)**GKP** Drinking water supply (free for use e.g. building-specific)**GKQ** Drinking water supply (free for use e.g. building-specific)**GKR** Drinking water supply (free for use e.g. building-specific)**GKS** Drinking water supply (free for use e.g. building-specific)**GKT** Drinking water supply (free for use e.g. building-specific)**GKU** Drinking water supply (free for use e.g. building-specific)**GKV** -blocked-**GKW** -blocked-**GKX** Fluid supply system for control and protection equipment**GKY** Control and protection equipment**GKZ** -blocked-I
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G WATER SUPPLY AND DISPOSAL**GM Process drainage system****GMA** Process drainage system (free for use e.g. building-specific)**GMB** Process drainage system (free for use e.g. building-specific)**GMC** Process drainage system (free for use e.g. building-specific)**GMD** Process drainage system (free for use e.g. building-specific)**GME** Process drainage system (free for use e.g. building-specific)**GMF** Process drainage system (free for use e.g. building-specific)**GMG** Process drainage system (free for use e.g. building-specific)**GMH** Process drainage system (free for use e.g. building-specific)**GMJ** Process drainage system (free for use e.g. building-specific)**GMK** Process drainage system (free for use e.g. building-specific)**GML** Process drainage system (free for use e.g. building-specific)**GMM** Process drainage system (free for use e.g. building-specific)**GMN** Process drainage system (free for use e.g. building-specific)**GMP** Process drainage system (free for use e.g. building-specific)**GMQ** Process drainage system (free for use e.g. building-specific)**GMR** Process drainage system (free for use e.g. building-specific)**GMS** Process drainage system (free for use e.g. building-specific)**GMT** Process drainage system (free for use e.g. building-specific)**GMU** Process drainage system (free for use e.g. building-specific)

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	G WATER SUPPLY AND DISPOSAL						
	GM Process drainage system						
	GMV -blocked-						
	GMW -blocked-						
	GMX Fluid supply system for control and protection equipment						
	GMY Control and protection equipment						
	GMZ -blocked-						
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G WATER SUPPLY AND DISPOSAL**GN Process drains treatment system****GNA** -blocked-**GNB** Filtering, mechanical cleaning system
from incl. separation equipment inlet
to incl. separation equipment outlet**GNC** Aeration, gas injection system
from excl. atmosphere or
from incl. gas supply**GND** Precipitation system (e.g. for carbonate hardness removal)
from incl. precipitation equipment inlet
to incl. precipitation equipment outlet**GNE** Acid proportioning system (e.g. for carbonate hardness removal)
from incl. acid proportioning equipment or
from excl. branch off chemicals supply system
to excl. inlet to other system**GNF** Ion exchange system (e.g. for demineralization)
from incl. ion exchanger inlet
from incl. isolating valve of chemicals supply system or
auxiliary fluid supply system upstream of ion exchanger**GNG** Evaporation system (e.g. for demineralization)
from incl. feedwater inlet
to incl. steam outlet and
from incl. heating steam inlet
to incl. condensate outlet**D GNH** Deaeration
from incl. deaerator or tank inlet
to incl. tank outlet incl. warm-up equipment of vapour condenser**GNJ** Preheating, cooling system
from incl. preheater or cooler inlet
to incl. preheater or cooler outlet**GNK** Piping system, temporary storage system, pump system for main fluid
Piping system:
from excl. intake or
from excl. outlet of other system
to excl. inlet to other system
to incl. fluid treatment system outlet
Temporary storage system:
from incl. temporary storage system inlet
to incl. temporary storage s

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G WATER SUPPLY AND DISPOSAL**GN Process drains treatment system**

GNL Storage system outside fluid treatment system (if not part of another system)
 from incl. inlet storage system
 to incl. outlet storage system incl. intake and outfall

GNM -blocked-

GNN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

GNP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system and
 flushing air supply system
 to incl. regenerating, flushing equipment

GNQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

GNR Flushing water and residues removal system incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into disposal system

GNS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into other system

GNT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling, flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

GNU -blocked-




GNV Lubricant supply system

GNW -blocked-

GNX Fluid supply system for control and protection equipment

GNY Control and protection equipment

GNZ -blocked-







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G WATER SUPPLY AND DISPOSAL

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G WATER SUPPLY AND DISPOSAL**GQ Domestic waste water collection and drainage systems****GQA** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQB** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQC** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQD** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQE** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQF** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQG** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQH** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQJ** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQK** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQL** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQM** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQN** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQP** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQQ** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQR** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQS** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQT** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)**GQU** Domestic waste water collection and drainage systems
(free for use e.g. building-specific)

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- G WATER SUPPLY AND DISPOSAL
- GQ Domestic waste water collection and drainage systems
- GQV -blocked-
- GQW -blocked-
- GQX Fluid supply system for control and protection equipment
- GQY Control and protection equipment
- GQZ -blocked-

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G WATER SUPPLY AND DISPOSAL**GR Domestic waste water treatment system****GRA** -blocked-**GRB** Filtering, mechanical cleaning system
from incl. separation equipment inlet
to incl. separation equipment outlet**GRC** Aeration, gas injection system
from excl. atmosphere or
from incl. gas supply**GRD** Precipitation system (e.g. for carbonate hardness removal)
from incl. precipitation equipment inlet
to incl. precipitation equipment outlet**GRE** Acid proportioning system (e.g. for carbonate hardness removal)
from incl. acid proportioning equipment or
from excl. branch off chemicals supply system
to excl. inlet to other system**GRF** Ion exchange system (e.g. for demineralization)
from incl. ion exchanger inlet or
from incl. isolating valve of chemicals supply system or
auxiliary fluid supply system upstream of ion exchanger**GRG** Evaporation system (e.g. for demineralization)
from incl. feedwater inlet
to incl. steam outlet and
from incl. heating steam inlet
to incl. condensate outlet**C GRH** Deaeration
from incl. deaerator or tank inlet
to incl. tank outlet incl. warm-up equipment of vapour condenser**GRJ** Preheating, cooling system
from incl. preheater or cooler inlet
to incl. preheater or cooler outlet**GRK** Piping system, temporary storage system, pump system for main fluid
Piping system:
from excl. intake or
from excl. outlet of other system
to excl. inlet to other system
to incl. fluid treatment system outlet
Temporary storage system:
from incl. temporary storage system inlet
to incl. temporary storage s**I** VGB Technical Group**N** Reference Designation and Plant Documentation

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G WATER SUPPLY AND DISPOSAL**GR Domestic waste water treatment system**

GRL Storage system outside fluid treatment system (if not part of another system)
 from incl. inlet storage system
 to incl. outlet storage system incl. intake and outfall

GRM -blocked-

GRN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

GRP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system and
 flushing air supply system
 to incl. regenerating, flushing equipment

GRQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply
 system
 to excl. inlet to other system

GRR Flushing water and residues removal system incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into disposal system

GRS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into other system

GRT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling, flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

GRU -blocked-

GRV Lubricant supply system

GRW -blocked-

GRX Fluid supply system for control and protection equipment

GRY Control and protection equipment

GRZ -blocked-

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G WATER SUPPLY AND DISPOSAL**GT Water recovery from waste water****GTA** Water recovery from waste water (free for use)**GTB** Water recovery from waste water (free for use)**GTC** Water recovery from waste water (free for use)**GTD** Water recovery from waste water (free for use)**GTE** Water recovery from waste water (free for use)**GTF** Water recovery from waste water (free for use)**GTG** Water recovery from waste water (free for use)**GTH** Water recovery from waste water (free for use)**GTJ** Water recovery from waste water (free for use)**GTK** Water recovery from waste water (free for use)**GTL** Water recovery from waste water (free for use)**GTM** Water recovery from waste water (free for use)**GTN** Water recovery from waste water (free for use)**GTP** Water recovery from waste water (free for use)**GTQ** Water recovery from waste water (free for use)**GTR** Water recovery from waste water (free for use)**GTS** Water recovery from waste water (free for use)**GTT** Water recovery from waste water (free for use)**GTU** Water recovery from waste water (free for use)**GTV** -blocked-**GTW** -blocked-**GTX** Fluid supply system for control and protection equipment**GTY** Control and protection equipment**GTZ** -blocked-I
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G WATER SUPPLY AND DISPOSAL**GU Rainwater collection and drainage systems incl. treatment system****GUA** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUB** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUC** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUD** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUE** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUF** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUG** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUH** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUJ** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUK** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUL** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUM** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUN** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUP** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUQ** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUR** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUS** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUT** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)**GUU** Rainwater collection and drainage systems incl. treatment system (free for use e.g. building-specific)

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- G WATER SUPPLY AND DISPOSAL**
- GU Rainwater collection and drainage systems incl. treatment system**
- GUV -blocked-**
- GUW -blocked-**
- GUX Fluid supply system for control and protection equipment**
- GUY Control and protection equipment**
- GUZ -blocked-**

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G WATER SUPPLY AND DISPOSAL**GV Lubricant supply system**

GVA	Lubricant supply system (free for use)
GVB	Lubricant supply system (free for use)
GVC	Lubricant supply system (free for use)
GVD	Lubricant supply system (free for use)
GVE	Lubricant supply system (free for use)
GVF	Lubricant supply system (free for use)
GVG	Lubricant supply system (free for use)
GVH	Lubricant supply system (free for use)
GVJ	Lubricant supply system (free for use)
GVK	Lubricant supply system (free for use)
GVL	Lubricant supply system (free for use)
GVM	Lubricant supply system (free for use)
GVN	Lubricant supply system (free for use)
GVP	Lubricant supply system (free for use)
GVQ	Lubricant supply system (free for use)
GVR	Lubricant supply system (free for use)
GVS	Lubricant supply system (free for use)
GVT	Lubricant supply system (free for use)
GVU	Lubricant supply system (free for use)
GVV	-blocked-
GVW	-blocked-
GVX	-blocked-
GVY	-blocked-
GVZ	-blocked-

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G WATER SUPPLY AND DISPOSAL**GW Sealing fluid supply system**

GWA	Sealing fluid supply system (free for use)
GWB	Sealing fluid supply system (free for use)
GWC	Sealing fluid supply system (free for use)
GWD	Sealing fluid supply system (free for use)
GWE	Sealing fluid supply system (free for use)
GWF	Sealing fluid supply system (free for use)
GWG	Sealing fluid supply system (free for use)
GWH	Sealing fluid supply system (free for use)
GWJ	Sealing fluid supply system (free for use)
GWK	Sealing fluid supply system (free for use)
GWL	Sealing fluid supply system (free for use)
GWM	Sealing fluid supply system (free for use)
GWN	Sealing fluid supply system (free for use)
GWP	Sealing fluid supply system (free for use)
GWQ	Sealing fluid supply system (free for use)
GWR	Sealing fluid supply system (free for use)
GWS	Sealing fluid supply system (free for use)
GWT	Sealing fluid supply system (free for use)
GWU	Sealing fluid supply system (free for use)
GWV	-blocked-
GWW	-blocked-
GWX	-blocked-
GWY	-blocked-
GWZ	-blocked-

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G WATER SUPPLY AND DISPOSAL**GX Fluid supply system for control and protection equipment**

GXA	Fluid supply system for control and protection equipment (free for use)
GXB	Fluid supply system for control and protection equipment (free for use)
GXC	Fluid supply system for control and protection equipment (free for use)
GXD	Fluid supply system for control and protection equipment (free for use)
GXE	Fluid supply system for control and protection equipment (free for use)
GXF	Fluid supply system for control and protection equipment (free for use)
GXG	Fluid supply system for control and protection equipment (free for use)
GXH	Fluid supply system for control and protection equipment (free for use)
GXJ	Fluid supply system for control and protection equipment (free for use)
GXK	Fluid supply system for control and protection equipment (free for use)
GXL	Fluid supply system for control and protection equipment (free for use)
GXM	Fluid supply system for control and protection equipment (free for use)
GXN	Fluid supply system for control and protection equipment (free for use)
GXP	Fluid supply system for control and protection equipment (free for use)
GXQ	Fluid supply system for control and protection equipment (free for use)
GXR	Fluid supply system for control and protection equipment (free for use)
GXS	Fluid supply system for control and protection equipment (free for use)
GXT	Fluid supply system for control and protection equipment (free for use)
GXU	Fluid supply system for control and protection equipment (free for use)

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G WATER SUPPLY AND DISPOSAL

GX Fluid supply system for control and protection equipment

GXV -blocked-








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GXX -blocked-

GXY -blocked-

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G WATER SUPPLY AND DISPOSAL**GY Control and protection equipment**

GYA	Control and protection equipment (free for use)
GYB	Control and protection equipment (free for use)
GYC	Control and protection equipment (free for use)
GYD	Control and protection equipment (free for use)
GYE	Control and protection equipment (free for use)
GYF	Control and protection equipment (free for use)
GYG	Control and protection equipment (free for use)
GYH	Control and protection equipment (free for use)
GYJ	Control and protection equipment (free for use)
GYK	Control and protection equipment (free for use)
GYL	Control and protection equipment (free for use)
GYM	Control and protection equipment (free for use)
GYN	Control and protection equipment (free for use)
GYP	Control and protection equipment (free for use)
GYQ	Control and protection equipment (free for use)
GYR	Control and protection equipment (free for use)
GY S	Control and protection equipment (free for use)
GYT	Control and protection equipment (free for use)
GYU	Control and protection equipment (free for use)
GYV	-blocked-
GYW	-blocked-
GYX	-blocked-
GY Y	-blocked-
GYZ	-blocked-

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G WATER SUPPLY AND DISPOSAL

GZ -blocked-

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	H	CONVENTIONAL HEAT GENERATION				
A	HA	Pressure system, feedwater and steam sections				
	HB	Support structure, enclosure, steam generator interior				
	HC	Fireside heat transfer surface cleaning equipment				
A	HD	Ash and slag removal, particulate removal				
E	HE	Oxydent production / -supply (air separation)				
	HF	Bunker, feeder and pulverizing system				
E	HG	CO2 Conditioning in flue gas				
	HH	Main firing system (electric-powered as well)				
	HJ	Ignition firing equipment (if separate)				
E	HK	CO2 separation in flue gas				
E	HL	Ducting system air				
	HM	Gas heating system (for closed cycle)				
	HN	Flue gas exhaust (without flue gas treatment)				
F	HP	Geothermal systems				
F	HQ	Solar thermal systems				
	HR	Chemical flue gas treatment system incl.residues removal, adsorptive process				
	HS	Chemical flue gas treatment system incl.residues removal, catalytic process				
	HT	Chemical flue gas treatment system incl.residues removal, absorptive process				
	HU	Flue gas reheating system				
	HV	Lubricant supply system				
	HW	Sealing fluid supply system				
	HX	Fluid supply system for control and protection equipment				
	HY	Control and protection equipment				
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	H	CONVENTIONAL HEAT GENERATION						
A	HA	Pressure system, feedwater and steam sections						
	HAA	LP part-flow feed heating system (flue-gas-heated) from incl. LP part-flow feed heating system inlet to incl. LP part-flow feed heating system outlet						
	HAB	HP part-flow feed heating system (flue-gas-heated) from incl. HP part-flow feed heating system inlet to incl. HP part-flow feed heating system outlet						
	HAC	Economizer system from incl. boiler inlet header to excl. evaporator inlet incl. control and auxiliary heat transfer surfaces						
B	HAD	Evaporator system from incl. evaporator system inlet to incl. evaporator system outlet and to incl. water/steam separator and water collecting vessel						
	HAE	-blocked-						
	HAF	-blocked-						
B	HAG	Circulation system from excl. water/steam separator and water collecting vessel to excl. inlet to heat transfer surface system (removal systems are classified under *L..*) or to excl. feedwater system						
	HAH	HP superheater system from excl. evaporator system outlet to incl. boiler outlet header						
	HAJ	Reheat system from incl. reheater inlet header to incl. reheater outlet header						
	HAK	Secondary reheat system from incl. second reheater inlet header to incl. second reheater outlet header						
	HAL	-blocked-						
	HAM	Triflux system from incl. triflux system inlet to incl. triflux system outlet						
	HAN	Pressure system drainage and venting systems from incl. collecting point or from excl. final drain/vent valve to excl. discharge into other system						
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A	H	CONVENTIONAL HEAT GENERATION					
	HA	Pressure system, feedwater and steam sections					
	HAP	-blocked-					
	HAQ	-blocked-					
	HAR	-blocked-					
	HAS	-blocked-					
	HAT	-blocked-					
	HAU	-blocked-					
	HAV	Lubricant supply system					
	HAW	Sealing fluid supply system					
	HAX	Fluid supply system for control and protection equipment					
	HAY	Control and protection equipment					
	HAZ	-blocked-					

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




H

	H	CONVENTIONAL HEAT GENERATION					
	HB	Support structure, enclosure, steam generator interior					
	HBA	Frame incl. foundations					
A	HBB	Enclosures					
	HBC	Brick linings incl. insulating brickwork					
	HBD	Platforms, stairways					
A	HBE	Pressure vessel (supercharged boiler)					
	HBF	-blocked-					
	HBG	-blocked-					
	HBH	-blocked-					
	HBJ	-blocked-					
	HBK	Steam generator interior from excl. furnace to excl. flue gas exhaust					
	HBL	-blocked-					
	HBM	-blocked-					
	HBN	-blocked-					
	HBP	-blocked-					
	HBQ	-blocked-					
	HBR	-blocked-					
	HBS	-blocked-					
	HBT	-blocked-					
	HBU	-blocked-					
	HBV	-blocked-					
	HBW	-blocked-					
	HBX	-blocked-					
	HBY	-blocked-					
	HBZ	-blocked-					

	H	CONVENTIONAL HEAT GENERATION					
	HC	Fireside heat transfer surface cleaning equipment					
	HCA	Air sootblowing system from excl. branch off supply system					
	HCB	Steam sootblowing system from excl. branch off supply system					
	HCC	Water sootblowing system from excl. branch off supply system					
	HCD	Flushing equipment from excl. branch off supply system					
	HCE	Rapping gear					
	HCF	Shot cleaning system					
B	HCG	Soundwave system					
	HCH	-blocked-					
	HCJ	-blocked-					
	HCK	-blocked-					
	HCL	-blocked-					
	HCM	-blocked-					
	HCN	-blocked-					
	HCP	-blocked-					
	HCQ	-blocked-					
	HCR	-blocked-					
	HCS	-blocked-					
	HCT	-blocked-					
	HCU	-blocked-					
	HCV	Lubricant supply system					
	HCW	Sealing fluid supply system					
	HCX	Fluid supply system for control and protection equipment					
	HCY	Control and protection equipment					
	HCZ	-blocked-					
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	H	CONVENTIONAL HEAT GENERATION					
A	HD	Ash and slag removal, particulate removal					
A	HDA	Furnace ash removal, furnace slag removal, bed ash removal from incl. removal equipment to excl. discharge into disposal system or to incl. pressure vessel outlet or to excl. ash return system					
A	HDB	Bed ash return system from excl. furnace outlet or from excl. bed ash removal outlet to excl. furnace inlet					
B	HDC	Ash return system incl. temporary storage from incl. removal equipment for heat recovery surfaces or from excl. *HDD*, *HDE*, *HDF* to excl. ash disposal system *ETG* or to excl. inlet to other system					
B	HDD	Mechanical dust handling and return system from excl. flue gas duct inlet to excl. flue gas duct outlet to excl. discharge to other system					
B	HDE	Electrostatic precipitator and return system from excl. flue gas duct inlet to excl. flue gas duct outlet to excl. discharge to other system					
A	HDF	Cyclone dust removal and return system from excl. flue gas duct inlet to excl. flue gas duct outlet to excl. discharge to other systems					
	HDG	-blocked-					
	HDH	-blocked-					
	HDJ	-blocked-					
	HDK	-blocked-					
	HDL	-blocked-					
	HDM	-blocked-					
	HDN	-blocked-					
	HDP	-blocked-					
	HDQ	-blocked-					
	HDR	-blocked-					
	HDS	-blocked-					
B	HDT	Fluid supply system for ash, slag and dust moistening from excl. intake to excl. user					
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	<div>H</div> <div>CONVENTIONAL HEAT GENERATION</div> <div>A HD Ash and slag removal, particulate removal</div> <div>B HDU Carrier air supply system from excl. branch off or from incl. compressor system to excl. inlet to carrier air system</div> <div>HDV Lubricant supply system</div> <div>HDW Sealing fluid supply system</div> <div>HDX Fluid supply system for control and protection equipment</div> <div>HDY Control and protection equipment</div> <div>HDZ -blocked-</div>						
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	H	CONVENTIONAL HEAT GENERATION				
E	HE	Oxydent production / -supply (air separation)				
E	HEA	Air intake, air supply from incl. ambient air to excl. inlet air compression and / or from incl. compressor casing and rotor gas turbine to excl. inlet cooling and cleaning				
E	HEB	Air compression from excl. air intake to excl. cooling and cleaning				
E	HEC	Cooling and cleaning inclusive regeneration from excl. air compression to excl. main heat exchanger				
E	HED	Main heat exchanger / cold production / condensation From excl. cooling to excl. rectification to excl. oxygen release to excl. nitrogen release to excl. residual gas release				
E	HEE	Rektifikation				
E	HEF	Chemical looping system from excl. air intake to excl. contiguous systems				
E	HEG	Membrane separate system from excl. air compression to excl. oxygen release				
E	HEJ	Oxygen-release inclusive storage from excl. main heat exchanger to excl. ducting system oxygen				
E	HEK	Nitrogen-release inclusive storage from excl. main heat exchanger to excl. ducting system nitrogen				
E	HEL	Argon-release inclusive storage from excl. main heat exchanger to excl. ducting system argon				
E	HEM	Residual gas-release from excl. main heat exchanger to incl. atmosphere				
E	HEN	-blocked-				
E	HEP	-blocked-				
E	HEQ	-blocked-				
E	HER	-blocked-				
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	<div>H<div>CONVENTIONAL HEAT GENERATION</div></div> <div>EHE<div>Oxydent production / -supply (air separation)</div></div> <div>EHES<div>-blocked-</div></div> <div>EHET<div>-blocked-</div></div> <div>EHEU<div>-blocked-</div></div> <div>EHEV<div>Lubricant system</div></div> <div>EHEW<div>Sealing medium system</div></div> <div>EHEX<div>Fluid supply system for control and protection systems</div></div> <div>EHEY<div>Control and protection system</div></div> <div>EHEZ<div>-blocked-</div></div>					
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H CONVENTIONAL HEAT GENERATION**HF Bunker, feeder and pulverizing system**

HFA Bunker for pulverizing system
from excl. receiving point
to incl. outlet

HFB Feeder system
from excl. bunker outlet
to excl. oversize reject shaft or pulverizing system

HFC Pulverizing system (incl. classifier)
from incl. pulverizing system inlet
to excl. pulverized coal line

HFD Flue gas return system
from excl. outlet of other system
to excl. pulverizing system

HFE Mill air system, carrier air system
from incl. air inlet or
from excl. branch off *HLA*
to excl. downcomer shaft or
to excl. pulverizing system or
to excl. flue gas recirculation system

HFF Vapour/exhaust gas system
from excl. separation equipment
to excl. other system

HFG Pulverized coal temporary storage bunker after central
pulverizing system (indirect firing)
from excl. pulverizing system outlet
to incl. temporary storage bunker outlet, incl. rotary
vane feeder

HFH -blocked-

HFJ -blocked-

HKF -blocked-

HFL -blocked-

HFM -blocked-

HFN -blocked-

HFP -blocked-


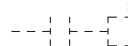
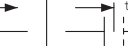
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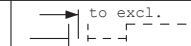
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HFS -blocked-

HFT -blocked-

HFU -blocked-

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	H CONVENTIONAL HEAT GENERATION							
	HF Bunker, feeder and pulverizing system							
	HFV Lubricant supply system							
	HFW Sealing fluid supply system							
	HFX Fluid supply system for control and protection equipment							
	HFY Control and protection equipment							
	HFZ -blocked-							
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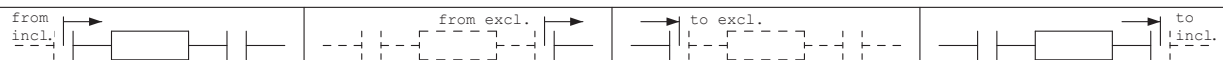
	H	CONVENTIONAL HEAT GENERATION					
E	HG	CO2 Conditioning in flue gas					
E	HGA	CO2 Precleaning from excl. chemical flue gas treatment to excl. CO2 raw gas condensation					
E	HGB	CO2 raw gas condensation from excl. CO2-precleaning to excl. CO2-raw gas cooling					
E	HGC	CO2 raw gas cooling and -cleaning incl. regeneration from excl. CO2 raw gas condensation to excl. main heat exchanger					
E	HGD	Main heat exchanger / cooling / liquidation from excl. CO2 raw gas cooling / cleaning to excl. rectification					
E	HGE	Rectification from excl. main heat exchanger to excl. CO2 buffer system					
E	HGF	Cooling for rectification					
E	HGG	-blocked-					
E	HGH	-blocked-					
E	HGJ	-blocked-					
E	HGK	-blocked-					
E	HGL	-blocked-					
E	HGM	-blocked-					
E	HGN	-blocked-					
E	HGP	-blocked-					
E	HGQ	-blocked-					
E	HGR	-blocked-					
E	HGS	-blocked-					
E	HGT	-blocked-					
E	HGU	CO2 tank / -buffer system					
E	HGV	Lubricant system					
E	HGW	Sealing fluid supply system					
E	HGX	Fluid supply system for control and protection systems					
E	HGY	Control and protection systems					
E	HGZ	-blocked-					
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H CONVENTIONAL HEAT GENERATION**HH Main firing system (electric-powered as well)**

- HHH** Main burners
from incl. respective fuel-side and air-side burner inlet
- HHB** Retarded combustion grate
from incl. retarded combustion grate inlet
to excl. inlet to other system
- HHC** Grate combustion system
from incl. fuel receiving point or
from incl. grate combustion inlet
to excl. inlet to other system
- HHD** Other burner equipment (e.g. vapour burner, flue dust burner)
from incl. inlet
to incl. outlet
- HHE** Pulverized coal bin, forwarding and distribution system
from excl. pulverizing system outlet or
from excl. pulverized coal bin outlet after central
pulverizing system (indirect feed) *HFG* or
from excl. outlet of other system
to excl. main burner equipment
- HHF** Oil temporary storage, pump and distribution system
from excl. branch off main supply line or
from incl. temporary storage tank
to excl. main burner equipment
- HHG** Gas pressure reduction, distribution system
from excl. branch off main supply line
to excl. main burner equipment
- HHH** Temporary storage, forwarding and distribution system for other fuels, fluid 1
- HHJ** Temporary storage, forwarding and distribution system for other fuels, fluid 2
- HHK** Temporary storage, forwarding and distribution system for other fuels, fluid 3
- HHL** Combustion air supply system
from incl. branch off ducting system (*HLA*)
to excl. user
- HHM** Atomizer medium supply system (steam)
from excl. branch off supply system
to excl. user
- HHN** Atomizer medium supply system (air)
from excl. branch off supply system
to excl. user

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H CONVENTIONAL HEAT GENERATION**HH Main firing system (electric-powered as well)**

HHP Coolant supply system (steam)
from excl. branch off supply system
to excl. user

HHQ Coolant supply system (air)
from excl. branch off supply system
to excl. user

HHR Purging medium supply system (steam)
from excl. branch off supply system
to excl. user

HHS Purging medium supply system (air)
from excl. branch off supply system
to excl. user

HHT Heating medium supply system (steam)
from excl. branch off supply system
to excl. user and
from excl. user
to excl. inlet to other system

HHU Heating medium supply system (hot water)
from excl. branch off supply system
to excl. user and
from excl. user
to excl. inlet to other system



HHV Lubricant supply system

HHW Sealing fluid supply system

HHX Fluid supply system for control and protection equipment

HHY Control and protection equipment

HHZ Electric heating system

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H CONVENTIONAL HEAT GENERATION**HJ Ignition firing equipment (if separate)****HJA** Ignition burners

from incl. resp. fuel-side and air-side burner inlet

HJB -blocked-**HJC** -blocked-**HJD** -blocked-**HJE** Pulverized coal bin, forwarding and distribution system

from excl. pulverizing system outlet or

from excl. pulverized coal temporary storage bunker outlet

(if central pulverizing system,* HFG*) or

from excl. outlet of other system

to excl. ignition burner equipment

HJF Oil temporary storage, pump and distribution system

from excl. branch off main supply line or

from incl. temporary storage tank

to excl. ignition burner equipment

HJG Gas pressure reduction, distribution system

from excl. branch off main supply line

to excl. ignition burner equipment

HJH -blocked-**HJJ** -blocked-**HJK** -blocked-**HJL** Combustion air supply system

from incl. branch off ducting system (*HLA*) or

from incl. air inlet, incl. fan

to excl. user

HJM Atomizer medium supply system (steam)

from excl. branch off supply system

to excl. user

HJN Atomizer medium supply system (air)

from excl. branch off supply system

to excl. user

HJP Cooling supply system (steam)

from excl. branch off supply system

to excl. user

HJQ Cooling supply system (air)

from excl. branch off supply system

to excl. user

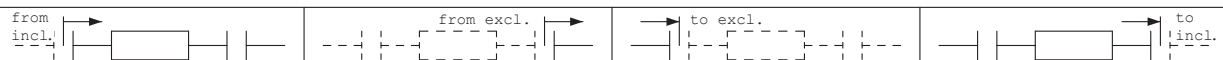
HJR Purging medium supply system (steam)

from excl. branch off supply system

to excl. user

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H CONVENTIONAL HEAT GENERATION**HJ Ignition firing equipment (if separate)**

HJS Purging medium supply system (air)
from excl. branch off supply system
to excl. user

HJT Heating medium supply system (steam)
from excl. branch off supply system
to excl. user and
from excl. user
to excl. inlet to other system

HJU Heating medium supply system (hot water)
from excl. branch off supply system
to excl. user and
from excl. user
to excl. inlet to other system



HJV Lubricant supply system









HJW Sealing fluid supply system

HJX Fluid supply system for control and protection equipment

HJY Control and protection equipment

HJZ -blocked-

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	H	CONVENTIONAL HEAT GENERATION					
E	HK	CO2 separation in flue gas					
E	HKA	Flue gas channel system with *HK*					
E	HKB	Flue gas ducting system					
E	HKC	Fan system for flue gas from excl. inlet fan system to excl. outlet fan system					
E	HKD	CO2 absorption from flue gas from incl. inlet flue gas inclusive water separation					
E	HKE	Flue gas pre-cleaning					
E	HKF	Solvent conditioning					
E	HKG	Rich/lean solvent system from incl. CO2 absorber to incl. inlet CO2 stripper, incl. rich/lean solvent heat exchange, resp. lean solvent from incl. CO2 stripper outlet to incl. CO2 absorber inlet					
F	HKH	CO2 desorption from solvent from incl. inlet solvent to incl. outlet solvent to incl. inlet CO2 conditioning (*HG*) from incl. inlet steam (*LBL*) to incl. outlet steam condensate (*LCK*)					
E	HKJ	Solvent make up including storage					
E	HKK	Solvent disposal					
E	HKL	-blocked-					
E	HKM	-blocked-					
E	HKN	-blocked-					
E	HKP	-blocked-					
E	HKQ	-blocked-					
E	HKR	-blocked-					
E	HKS	-blocked-					
E	HKT	-blocked-					
E	HKU	-blocked-					
E	HKV	Lubricant supply system					
E	HKW	Sealing fluid supply system					
E	HKX	Fluid supply system for control and protection systems					
E	HKY	Control and protection systems					
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	E HK CO2 separation in flue gas						
	E HKZ -blocked-						
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	H	CONVENTIONAL HEAT GENERATION					
E	HL	Ducting system air					
	HLA	Ducting system					
E	HLB	Forced draught fan system					
E	HLC	Air preheating (not flue-gas-heated)					
E	HLD	Air preheating system (flue-gas-heated)					
E	HLE	Ducting system oxygen					
E	HLF	Oxygen fan system					
E	HLG	Oxygen preheating (not flue gas heated)					
E	HLH	Oxygen preheating flue gas heated					
	HLJ	-blocked-					
	HLK	-blocked-					
	HLL	-blocked-					
	HLM	-blocked-					
	HLN	-blocked-					
	HLP	-blocked-					
	HLQ	-blocked-					
	HLR	-blocked-					
	HLS	-blocked-					
	HLT	-blocked-					
A	HLU	Air pressure relief system					
	HLV	Lubricant supply system					
	HLW	Sealing fluid supply system					
	HLX	Fluid supply system for control and protection equipment					
	HLY	Control and protection equipment					
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H CONVENTIONAL HEAT GENERATION**HM Gas heating system (for closed cycle)**

HMA Primary heater (primary convection section)
 from incl. cold gas inlet header or
 from excl. heat exchanger cold gas outlet
 to incl. primary heater outlet or
 to excl. mixing header inlet

HMB Radiation section
 from incl. mixing header inlet
 to incl. radiation section outlet or
 to excl. secondary heater inlet header

HMC Secondary heater (second convection section)
 from incl. inlet header
 to incl. hot gas outlet header

HMD Reheat system
 from incl. reheater inlet header
 to incl. reheater outlet header

HME -blocked-

HMF -blocked-

HMG -blocked-

HMH -blocked-

HMJ -blocked-

HMK -blocked-

HML -blocked-

HMM -blocked-

HMN -blocked-

HMP -blocked-

HMQ -blocked-

HMR -blocked-

HMS -blocked-

HMT -blocked-

HMU -blocked-

HMV Lubricant supply system

HMW Sealing fluid supply system

HMX Fluid supply system for control and protection equipment

HMY Control and protection equipment

HMZ -blocked-

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H CONVENTIONAL HEAT GENERATION**HN Flue gas exhaust (without flue gas treatment)**

HNA Ducting system
 from excl. boiler outlet or
 from excl. outlet of other system
 to excl. smoke stack, excl. air heater, flue gas dust
 handling system, induced-draught fan system,
 gas scrubber system, chemical flue gas
 treatment

HNB -blocked-

HNC Induced-draught fan system
 from incl. induced-draught fan system inlet
 to incl. induced-draught fan system outlet

HND -blocked-

HNE Smoke stack system (chimney)
 from incl. inlet

HNF Flue gas recirculation system
 from excl. branch off main flue gas exhaust system
 to excl. inlet to other system, incl. fan system

D HNG Flue gas heating utilisation system

HNH -blocked-

HNJ -blocked-

HNK -blocked-

HNL -blocked-

HNM -blocked-

HNN -blocked-

HNP -blocked-

HNQ -blocked-

HNR -blocked-

HNS -blocked-

HNT -blocked-

A HNU Flue gas pressure relief system
 Task: to relieve pressure in flue gas system

HNW Lubricant supply system

HNW Sealing fluid supply system

HNX Fluid supply system for control and protection equipment

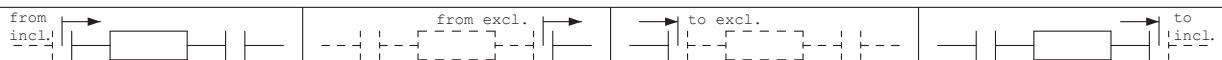
HNX Control and protection equipment

HNZ -blocked-

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



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A07/1993

	H	CONVENTIONAL HEAT GENERATION	
F	HP	Geothermal systems	
F	HPA	Extraction system from incl. inlet production well to excl. distribution system incl. pressurizing system	
F	HPB	Distribution system from incl. outlet extraction system to excl. heat exchanger or to excl. return system	
F	HPC	Return system from incl. outlet distribution system or from incl. outlet heat exchanger to incl. outlet injection well	
A	HPD	-blocked-	
A	HPE	-blocked-	
A	HPF	-blocked-	
A	HPG	-blocked-	
A	HPH	-blocked-	
A	HPJ	-blocked-	
A	HPK	-blocked-	
A	HPL	-blocked-	
A	HPM	-blocked-	
A	HPN	-blocked-	
A	HPP	-blocked-	
F	HPQ	- available for use -	
F	HPR	- available for use -	
F	HPS	- available for use -	
F	HPT	- available for use -	
F	HPU	- available for use -	
F	HPV	Lubricant supply system	
F	HPW	Sealing fluid supply system	
F	HPX	Fluid supply system for control and protection equipment	
F	HPY	Control and protection equipment	
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




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	H	CONVENTIONAL HEAT GENERATION						
F	HQ	Solar thermal systems						
F	HQA	Radiation reflexion						
F	HQB	System for reflector tracking						
F	HQC	Heat absorption						
F	HQD	Heat transfer medium system						
A	HQE	-blocked-						
A	HQF	-blocked-						
A	HQG	-blocked-						
A	HQH	-blocked-						
A	HQJ	-blocked-						
A	HQK	-blocked-						
A	HQL	-blocked-						
A	HQM	-blocked-						
A	HQN	-blocked-						
A	HQP	-blocked-						
F	HQQ	- available for use -						
F	HQR	- available for use -						
F	HQS	- available for use -						
F	HQT	- available for use -						
F	HQU	- available for use -						
F	HQV	Lubricant supply system						
F	HQW	Sealing fluid supply system						
F	HQX	Fluid supply system for control and protection equipment						
F	HQY	Control and protection equipment						
	HQZ	-blocked-						
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	H	CONVENTIONAL HEAT GENERATION						
	HR	Chemical flue gas treatment system incl.residues removal, adsorptive process						
B	HRA	Flue gas ducting system within *HR* from excl. *HNA* to excl. inlet to *HNA*						
B	HRB	Flue gas-side heat exchanger from incl. inlet to incl. outlet						
B	HRC	Flue gas fan system from incl. inlet to incl. outlet						
B	HRD	Adsorption system (reactor) from incl. inlet to incl. outlet						
B	HRE	Flue gas-side cleaning equipmet from excl. branch off supply system						
B	HRF	-blocked-						
B	HRG	-blocked-						
B	HRH	Residues separation from incl. inlet to incl. outlet						
B	HRJ	Fresh coke supply incl. storage from excl. receiving point to excl. fresh coke distribution system or to excl. fresh coke treatment						
B	HRK	Fresh coke treatment and distribution from excl. fresh coke supply to exc. reactor						
B	HRL	Water supply and disposal system						
B	HRM	Coke removal system from excl. reactor to excl. spent coke handling or to excl. spent coke treatment						
B	HRN	Spent coke handling incl. storage from excl. coke removal or from excl. spent coke treatment to incl. discharge						
B	HRP	Spent coke treatment and disposal from excl. spent coke handling to excl. spent coke handling or to incl. discharge						
B	HRQ	Dust extraction and disposal from incl. inlet to incl. discharge						
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B	H	CONVENTIONAL HEAT GENERATION		
	HR	Chemical flue gas treatment system incl.residues removal, adsorptive process		
	HRR	Inerting system from incl. storage to excl. inlet to other system		
	HRS	-blocked-		
	HRT	-blocked-		
	HRU	-blocked-		
	HRV	Lubricant supply system		
	HRW	Sealing fluid supply system		
	HRX	Fluid supply system for control and protection equipment		
	HRY	Control and protection equipment		
	HRZ	-blocked-		

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H CONVENTIONAL HEAT GENERATION**HS Chemical flue gas treatment system incl. residues removal, catalytic process**

HSA Flue gas ducting system within *HS*
 from excl. *HNA*
 to incl. evaporator system outlet and
 to excl. inlet to *HNA*

HSB Flue gas-side heat exchanger, gas heater (not *HU*)
 from incl. inlet
 to incl. outlet

HSC Flue gas fan system
 from incl. inlet
 to incl. outlet

HSD Reactor (reduction)
 from incl. inlet
 to incl. outlet

HSE Converter (oxidation)
 from incl. inlet
 to incl. outlet

HSF Flue gas-side cleaning equipment for reactor
 from excl. branch off supply system

HSG Reduction agent dilution system
 from excl. outlet of other system or
 from incl. supply system
 to excl. reduction agent treatment system

HSH (Residues) separator
 from incl. inlet
 to incl. outlet

HSJ Reduction agent supply system incl. storage

HSK Reduction agent treatment and distribution system
 from excl. reduction agent supply
 to incl. reduction agent injection incl. coolant inlet

HSL Water supply and disposal system

HSM Chemicals and additives supply system

HSN Drainage systems
 Task: water collecting, storage, return



HSP Flyash collecting (incl. filtering) and removal system
 from incl. separator/filter or
 from excl. flue gas ducting system
 to excl. inlet to disposal system


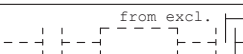
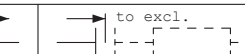
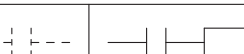
HSQ Sprinkler system incl. drainage
 from incl. inlet
 to excl. inlet to other system

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H CONVENTIONAL HEAT GENERATION**HS** Chemical flue gas treatment system incl. residues removal, catalytic process**HSR** Oxidizing agent treatment and distribution system
from excl. outlet converter
to excl. inlet converter**HSS** (Residues) forwarding, storage, loading system
from excl. outlet residues separator**HST** Flushing fluid system incl. supply
Task: flushing of reducing agent systems**HSU** Heating fluid system
from excl. heating fluid supply
to excl. evaporator inlet
from excl. evaporator outlet
to excl. inlet to other system**HSV** Lubricant supply system**HSW** Sealing fluid supply system**HSX** Fluid supply system for control and protection equipment**HSY** Control and protection equipment**HSZ** -blocked-

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	H	CONVENTIONAL HEAT GENERATION						
	HT	Chemical flue gas treatment system incl.residues removal, absorptive process						
	HTA	Flue gas ducting system within *HT* from excl. *HNA* to excl. inlet to *HNA*						
	HTB	Flue gas-side heat exchanger, gas heater (not *HU*) from incl. inlet to incl. outlet						
	HTC	Flue gas fan system from incl. inlet to incl. outlet						
	HTD	Flue gas scrubbing system from incl. flue gas inlet to incl. moisture separator outlet						
A	HTE	Flue gas cleaning and filtering system						
	HTF	Absorption cycle from incl. inlet to incl. outlet						
	HTG	Oxidation system incl. supply system to excl. user or scrubber						
B	HTH	Flue gas cooling system from incl. inlet flue gas cooler incl. heat dissipation system without second heat sink to incl. outlet flue gas cooler						
	HTJ	Absorbent supply system incl.storage system to excl. mashing (*HTK*)						
	HTK	Absorbent preparation and distribution system from incl. mashing, slaking to excl. user or scrubber						
R	HTL	Piping system for discharge of solids incl. water removal and return excl. thickening and solids dewatering systems						
	HTM	Thickening and solids dewatering system from incl. inlet to incl. outlet						
	HTN	Solids drying, compacting system						
	HTP	(Solids/ product) forwarding, storage, loading system						
	HTQ	Water supply and disposal system						
	HTR	-blocked-						
	HTS	Chemicals and additives supply system						
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- H** **CONVENTIONAL HEAT GENERATION**
- HT** **Chemical flue gas treatment system incl.residues removal, absorptive process**
- HTT** Drainage systems
Task: water collecting, storage, return
- HTU** -blocked-
- HTV** Lubricant supply system
- HTW** Sealing fluid supply system
- HTX** Fluid supply system for control and protection equipment
- HTY** Control and protection equipment
- HTZ** -blocked-

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H CONVENTIONAL HEAT GENERATION**HU Flue gas reheating system****HUA** Flue gas reheating system (free for use)**HUB** Flue gas reheating system (free for use)**HUC** Flue gas reheating system (free for use)**HUD** Flue gas reheating system (free for use)**HUE** Flue gas reheating system (free for use)**HUF** Flue gas reheating system (free for use)**HUG** Flue gas reheating system (free for use)**HUH** Flue gas reheating system (free for use)**HUJ** Flue gas reheating system (free for use)**HUK** Flue gas reheating system (free for use)**HUL** Flue gas reheating system (free for use)**HUM** Flue gas reheating system (free for use)**HUN** Flue gas reheating system (free for use)**HUP** Flue gas reheating system (free for use)**HUQ** Flue gas reheating system (free for use)**HUR** Flue gas reheating system (free for use)**HUS** Flue gas reheating system (free for use)**HUT** Flue gas reheating system (free for use)**HUU** Flue gas reheating system (free for use)**HUV** Lubricant supply system**HUW** Sealing fluid supply system**HUX** Fluid supply system for control and protection equipment**HUY** Control and protection equipment**HUZ** -blocked-I
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H CONVENTIONAL HEAT GENERATION**HV Lubricant supply system****HVA** Lubricant supply system (free for use)**HVB** Lubricant supply system (free for use)**HVC** Lubricant supply system (free for use)**HVD** Lubricant supply system (free for use)**HVE** Lubricant supply system (free for use)**HVF** Lubricant supply system (free for use)**HVG** Lubricant supply system (free for use)**HVH** Lubricant supply system (free for use)**HVJ** Lubricant supply system (free for use)**HVK** Lubricant supply system (free for use)**HVL** Lubricant supply system (free for use)**HVM** Lubricant supply system (free for use)**HVN** Lubricant supply system (free for use)**HVP** Lubricant supply system (free for use)**HVQ** Lubricant supply system (free for use)**HVR** Lubricant supply system (free for use)**HVS** Lubricant supply system (free for use)**HVT** Lubricant supply system (free for use)**HVU** Lubricant supply system (free for use)**HVV** -blocked-**HVW** -blocked-**HVX** -blocked-**HVY** -blocked-**HVZ** -blocked-I
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H CONVENTIONAL HEAT GENERATION**HW Sealing fluid supply system**

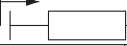
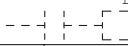
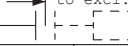
HWA	Sealing fluid supply system (free for use)
HWB	Sealing fluid supply system (free for use)
HWC	Sealing fluid supply system (free for use)
HWD	Sealing fluid supply system (free for use)
HWE	Sealing fluid supply system (free for use)
HWF	Sealing fluid supply system (free for use)
HWG	Sealing fluid supply system (free for use)
HWH	Sealing fluid supply system (free for use)
HWJ	Sealing fluid supply system (free for use)
HWK	Sealing fluid supply system (free for use)
HWL	Sealing fluid supply system (free for use)
HWM	Sealing fluid supply system (free for use)
HWN	Sealing fluid supply system (free for use)
HWP	Sealing fluid supply system (free for use)
HWQ	Sealing fluid supply system (free for use)
HWR	Sealing fluid supply system (free for use)
HWS	Sealing fluid supply system (free for use)
HWT	Sealing fluid supply system (free for use)
HWU	Sealing fluid supply system (free for use)
HWV	-blocked-
HWW	-blocked-
HWX	-blocked-
HWY	-blocked-
HWZ	-blocked-

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H CONVENTIONAL HEAT GENERATION**HX Fluid supply system for control and protection equipment****HXA** Fluid supply system for control and protection equipment
(free for use)**HXB** Fluid supply system for control and protection equipment
(free for use)**HXC** Fluid supply system for control and protection equipment
(free for use)**HXD** Fluid supply system for control and protection equipment
(free for use)**HXE** Fluid supply system for control and protection equipment
(free for use)**HXF** Fluid supply system for control and protection equipment
(free for use)**HXG** Fluid supply system for control and protection equipment
(free for use)**HXH** Fluid supply system for control and protection equipment
(free for use)**HXJ** Fluid supply system for control and protection equipment
(free for use)**HXK** Fluid supply system for control and protection equipment
(free for use)**HXL** Fluid supply system for control and protection equipment
(free for use)**HXM** Fluid supply system for control and protection equipment
(free for use)**HXN** Fluid supply system for control and protection equipment
(free for use)**HXP** Fluid supply system for control and protection equipment
(free for use)**HXQ** Fluid supply system for control and protection equipment
(free for use)**HXR** Fluid supply system for control and protection equipment
(free for use)**HXS** Fluid supply system for control and protection equipment
(free for use)**HXT** Fluid supply system for control and protection equipment
(free for use)**HXU** Fluid supply system for control and protection equipment
(free for use)

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	H CONVENTIONAL HEAT GENERATION						
	HX Fluid supply system for control and protection equipment						
	HXV -blocked-						
	HXW -blocked-						
	HXX -blocked-						
	HXY -blocked-						
	HXZ -blocked-						
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H CONVENTIONAL HEAT GENERATION**HY Control and protection equipment**

HYA Control and protection equipment (free for use)
HYB Control and protection equipment (free for use)
HYC Control and protection equipment (free for use)
HYD Control and protection equipment (free for use)
HYE Control and protection equipment (free for use)
HYF Control and protection equipment (free for use)
HYG Control and protection equipment (free for use)
HYH Control and protection equipment (free for use)
HYJ Control and protection equipment (free for use)
HYK Control and protection equipment (free for use)
HYL Control and protection equipment (free for use)
HYM Control and protection equipment (free for use)
HYN Control and protection equipment (free for use)
HYP Control and protection equipment (free for use)
HYQ Control and protection equipment (free for use)
HYR Control and protection equipment (free for use)
HYS Control and protection equipment (free for use)
HYT Control and protection equipment (free for use)
HYU Control and protection equipment (free for use)
HYV -blocked-
HYW -blocked-
HYX -blocked-
HY Y -blocked-
HYZ -blocked-

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J NUCLEAR HEAT GENERATION

JA	Reactor system
JB	Reactor vessel internals (Use *JB* only if *JAC* is not sufficient for identification)
JC	-blocked-
JD	Reactor control and shutdown equipment
JE	Reactor coolant system
JF	Moderator system
JG	Secondary coolant system (applicable only to three-cycle plants)
JH	-blocked-
JJ	-blocked-
JK	Reactor core with appurtenances
JL	-blocked-
JM	Containment and internals
JN	Residual heat removal systems for reactor coolant system
JP	-blocked-
JQ	-blocked-
JR	Reactor protection system
JS	Reactor control system
JT	Reactor operational, protective and status limitation system
JU	-blocked-
JV	Lubricant supply system
JW	Sealing fluid supply system
JX	Fluid supply system for control and protection equipment
JY	Control and protection equipment (other than *JR*, *JS*, *JT*)
JZ	-blocked-

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J

J NUCLEAR HEAT GENERATION**JA Reactor system****JAA** Reactor vessel

Scope: reactor pressure vessel including nozzles and parts welded directly to the vessel

JAB Reactor vessel closure head

(Use only if *JAA* is not sufficient for identification)

Scope: includes flanges, seals and bolts; for rotating plugs incl. drives

JAC Reactor vessel internals

(Code reactor vessel internals under *JB* if *JAC* not sufficient for identification)

JAD Reactor vessel liner

Limit: liner anchor;
for liners with attachment-welded piping:
to excl. liner cooling system

JAE Liner cooling system

Task: to remove heat from the liner
Limit: connection to liner cooling system or header thereof; otherwise incl. piping

JAF Reactor vessel prestressing equipment

Task: to maintain and monitor tension of prestressing cables of reactor pressure vessel

JAG Reactor internal insulation

Limit: associated fasteners, incl. closure head insulation

JAH Reactor external insulation



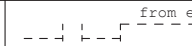

Limit: associated fasteners, incl. closure head insulation

JAJ Reactor vessel cooling system

(only if separate from liner cooling system)
Task: to remove heat from reactor vessel wall

JAK -blocked-**JAL** -blocked-**JAM** -blocked-**JAN** -blocked-**JAP** -blocked-**JAQ** -blocked-**JAR** -blocked-**JAS** -blocked-**JAT** Leak-off system and leakage detection system**JAU** -blocked-

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	JA Reactor system						
	JAV Lubricant supply system						
	JAW Sealing fluid supply system						
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	JAY Control and protection equipment						
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J

J NUCLEAR HEAT GENERATION

JB Reactor vessel internals
(Use *JB* only if *JAC* is not sufficient for identification)

JBA Reactor vessel internals (free for use)

JBB Reactor vessel internals (free for use)

JBC Reactor vessel internals (free for use)

JBD Reactor vessel internals (free for use)

JBE Reactor vessel internals (free for use)

JBF Reactor vessel internals (free for use)

JBG Reactor vessel internals (free for use)

JBH Reactor vessel internals (free for use)

JBJ Reactor vessel internals (free for use)

JBK Reactor vessel internals (free for use)

JBL Reactor vessel internals (free for use)

JBM Reactor vessel internals (free for use)

JBN Reactor vessel internals (free for use)

JBP Reactor vessel internals (free for use)

JBQ Reactor vessel internals (free for use)

JBR Reactor vessel internals (free for use)

JBS Reactor vessel internals (free for use)

JBT Reactor vessel internals (free for use)

JBU Reactor vessel internals (free for use)

JBV -blocked-

JBW -blocked-

JBX -blocked-





JBY -blocked-

JBZ -blocked-

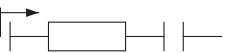
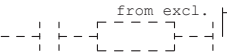
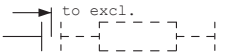
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J

J NUCLEAR HEAT GENERATION**JD Reactor control and shutdown equipment****JDA** Control rod drive mechanism

Task: to move control assemblies

Limit: coupling to control assembly; connectors to power supply

Scope: components that have to be removed when the reactor vessel is opened up.

Guide components welded onto the reactor ves

JDB -blocked-**JDC** Mechanical control equipment for coolant flow rate

Task: to control coolant flow rate during operation

JDD -blocked-**JDE** Solid neutron absorber shutdown system

Task: to render and maintain the reactor core subcritical

JDF -blocked-**JDG** -blocked-**JDH** Liquid neutron absorber shutdown system

Task: to render and maintain the reactor core subcritical

JDJ 2nd backup liquid neutron absorber shutdown system

Task: to render and maintain the reactor core subcritical during specific transients (e.g. *JDA*; *JDE*;

JDH;

JDM)

JDK Emergency shutdown system

Task: to render and maintain the reactor core subcritical in case of emergencies

JDL -blocked-**JDM** Gaseous neutron absorber shutdown system

Task: to render and maintain the reactor core subcritical

JDN -blocked-**JDP** Power supply for shutdown system**JDQ** -blocked-**JDR** -blocked-**JDS** -blocked-**JD T** Leak-off collecting system**JDU** -blocked-**JDV** Lubricant supply system**JDW** Sealing fluid supply systemI
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J **NUCLEAR HEAT GENERATION**

JD **Reactor control and shutdown equipment**

JDX Fluid supply system for control and protection equipment

JDY Control and protection equipment

JDZ -blocked-

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J NUCLEAR HEAT GENERATION**JE Reactor coolant system**

JEA Reactor coolant heat exchanger
(in dual-cycle plants: steam generation system)
Limit: on primary and secondary sides
from incl. inlet
to incl. outlet

JEB Reactor coolant circulation pump system
Limit: from incl. suction nozzle
to incl. discharge nozzle
If circulation pumps inside the reactor vessel:
to excl. connection flange on reactor vessel

JEC Reactor coolant piping system (not at direct-cycle plants)
Limit: from excl. reactor coolant heat exchanger
to excl. reactor coolant pumps
from excl. reactor coolant pump outlet
to excl. reactor pressure vessel
from excl. reactor pressure vessel
to excl. reactor coolant heat exchanger

JED -blocked-

JEE -blocked-

JEF Reactor coolant pressurizing system
Limit: In dual-cycle plants:
from excl. reactor coolant piping system
to incl. relief and safety valves

JEG Reactor coolant pressure relief system (at direct-cycle plants see *LBK*)
Task: to relieve impermissible pressures in the reactor coolant system
Limit: In dual-cycle plants:
from excl. relief and safety valves
to incl. relief tank and the associated recirculation cooling equipment
In direct-cycle plants:
from excl. reactor pressure vessel
to excl. pressure suppression system

JEH -blocked-

JEJ -blocked-

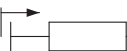
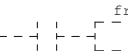
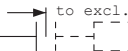
JEK -blocked-

JEL -blocked-

JEM -blocked-

JEN -blocked-

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	JE Reactor coolant system						
	JEP -blocked-						
	JEQ -blocked-						
	JER -blocked-						
	JES -blocked-						
	JET Reactor coolant leak-off system						
	JEU -blocked-						
	JEV Lubricant supply system						
	JEW Sealing fluid supply system						
	JEX Fluid supply system for control and protection equipment						
	JEY Control and protection equipment						
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J NUCLEAR HEAT GENERATION**JF Moderator system****JFA** Moderator heat exchanger

Limit: on primary and secondary sides
 from incl. inlet
 to incl. outlet

JFB Moderator circulation system

Limit: from incl. inlet nozzle
 to incl. outlet nozzle

JFC Moderator piping system

Limit: from excl. moderator heat exchanger
 to excl. moderator circulating system
 from excl. moderator circulating system
 to excl. moderator tank
 from incl. reactor pressure vessel
 to excl. moderator heat exchanger

JFD Moderator tank

Task: to surround the reactor core with moderator.
 If enclosed in the reactor pressure vessel:
 identification under reactor pressure vessel
 internals

JFE -blocked-**JFF** Moderator pressurizing system






Limit: from excl. moderator piping system
 to incl. relief and safety valves

JFG Moderator pressure relief system

Task: to relieve impermissible pressures in the moderator
 system
 Limit: from excl. relief and safety valves
 to incl. recirculation cooling system

JFH -blocked-**JFJ** -blocked-**JFK** -blocked-**JFL** -blocked-**JFM** -blocked-**JFN** -blocked-**JFP** -blocked-**JFQ** -blocked-**JFR** -blocked-**JFS** -blocked-

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	JF Moderator system						
	JFT Moderator leak-off system						
	JFU -blocked-						
	JFV Lubricant supply system						
	JFW Sealing fluid supply system						
	JFX Fluid supply system for control and protection equipment						
	JFY Control and protection equipment						
	JFZ -blocked-						
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J

J NUCLEAR HEAT GENERATION**JG Secondary coolant system (applicable only to three-cycle plants)**

JGA Secondary coolant heat exchanger (steam generation system)
 Limit: on primary and secondary sides
 from incl. inlet
 to incl. outlet

JGB Secondary coolant circulation system
 Limit: from incl. inlet nozzle
 to incl. outlet nozzle

JGC Secondary coolant piping system
 Limit: excl. circulation system and heat exchangers

JGD -blocked-

JGE -blocked-

JGF Secondary coolant pressurizing system
 Limit: from excl. secondary coolant piping system
 to incl. relief and safety valves

JGG Secondary coolant pressure relief system
 Task: to relief impermissible pressures in the secondary coolant system
 Limit: from excl. safety valve
 to incl. transfer point

JGH -blocked-

JGJ -blocked-

JGK -blocked-

JGL -blocked-

JGM -blocked-

JGN -blocked-

JGP -blocked-

JGQ -blocked-

JGR -blocked-

JGS -blocked-

JGT Secondary coolant leak-off system

JGU -blocked-

JGV Lubricant supply system

JGW Sealing fluid supply system

JGX Fluid supply system for control and protection equipment

JGY Control and protection equipment

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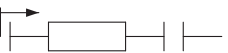
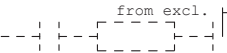
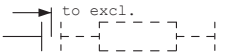
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J NUCLEAR HEAT GENERATION

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J NUCLEAR HEAT GENERATION**JK Reactor core with appurtenances**

JKA Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKB Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKC Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKD Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKE Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKF Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKG Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKH Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKJ Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKK Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKL Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKM Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKN Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

JKP Reactor core (free for use e.g. into assemblies/sections)
Task: energy conversion
Scope: components to be removed during refueling

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	JK	Reactor core with appurtenances		
	JKQ	Aeroball system Task: to measure the flux distribution in the core by means of mobile, activatable probes		
	JKR	-blocked-		
	JKS	In-core instrumentation system Task: to measure temperature and neutron flux in the core		
	JKT	Ex-core instrumentation system Task: to measure temperature and neutron flux outside the core		
	JKU	Failed fuel assemblies detection system Task: to detect leaks in fuel assemblies cladding tubes		
	JKV	-blocked-		
	JKW	-blocked-		
	JKX	-blocked-		
	JKY	-blocked-		
	JKZ	-blocked-		

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J NUCLEAR HEAT GENERATION

JL -blocked-

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J NUCLEAR HEAT GENERATION**JM Containment and internals****JMA** Containment

Task: to retain activity released from the reactor coolant system

JMB -blocked-**JMC** Annulus leak-off system

Task: controlled removal of leakages from the containment

JMD -blocked-**JME** Equipment airlock

Task: passage from compartments within the containment to the exterior whilst maintaining the various operating conditions

Limit: weld between airlock enclosure and containment

JMF Personnel airlock (motor-operated)

Task: passage from compartments within the containment to the exterior whilst maintaining the various operating conditions

Limit: weld between airlock enclosure and containment

JMG Emergency airlock (hand-operated)

Task: passage from compartments within the containment to the exterior whilst maintaining the various operating conditions

Limit: weld between airlock enclosure and containment

JMH Construction opening

Task: passage from compartments within the containment to the exterior

Limit: weld between construction opening and containment

JMJ Structural components inside containment (for point of installation coding only)**JMK** Piping penetration

(for point of installation coding only)

JML Cable penetration

(for point of installation coding only)

JMM Leakage monitoring and leak-off system

Task: detection and controlled removal of leakages through penetrations and other points

JMN Containment spray system

Task: to reduce pressure in containment

Limit: from incl. storage tank
to incl. nozzle outlet

JMP Pressure suppression system

Task: to limit pressure build-up in containment by condensation

Scope: suppression chamber incl. steam vent pipes, excl.

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- J** **NUCLEAR HEAT GENERATION**
- JM** **Containment and internals**
- JMP** Pressure suppression system
 parts in common with the containment
- JMQ** -blocked-
- JMR** -blocked-
- JMS** -blocked-
- JMT** Hydrogen reduction system
- JMU** Hydrogen monitoring system
 Task: to measure hydrogen concentration in the containment
 atmosphere
- JMV** Lubricant supply system
- JMW** Sealing fluid supply system
- JMX** Fluid supply system for control and protection equipment
- JMY** Control and protection equipment
- JMZ** Hydrogen mixing system
 Task: to mix containment atmosphere

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J NUCLEAR HEAT GENERATION**JN Residual heat removal systems for reactor coolant system****JNA** Residual heat removal system

Task: to remove residual heat from shutdown reactor core

JNB Emergency residual heat removal systemTask: to remove residual heat from shutdown reactor core
in case of emergencies**JNC** -blocked-**JND** HP safety injection system

(if separate from *JNA*)

Task: to compensate small and medium size loss of coolant

Limit: connection to reactor coolant system

JNE -blocked-**JNF** -blocked-**JNG** LP safety injection system (if separate from *JNA*), core flooding systemTask: to flood the reactor core in the event of large loss
of coolant

Limit: connection to reactor coolant system

JNH -blocked-**JNJ** -blocked-**JNK** Borated water storage systemTask: to provide borated water for residual heat removal
purposes**JNL** -blocked-**JNM** -blocked-**JNN** -blocked-**JNP** Function testing systemTask: function testing of residual heat removal system
during operation**JNQ** -blocked-**JNR** -blocked-**JNS** -blocked-**JNT** -blocked-**JNU** -blocked-**JNV** Lubricant supply system**JNW** Sealing fluid supply system**JNX** Fluid supply system for control and protection equipment**JNY** Control and protection equipment


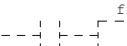

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J NUCLEAR HEAT GENERATION

JN Residual heat removal systems for reactor coolant system

JNZ -blocked-

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



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J NUCLEAR HEAT GENERATION

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J NUCLEAR HEAT GENERATION**JR Reactor protection system****JRA** Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRB Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRC Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRD Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRE Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRF Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRG Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRH Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRJ Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRK Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

JRL Reactor protection system (free for use)

Task: to detect and identify accident conditions and to actuate protective actions to contain and control accidents

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J NUCLEAR HEAT GENERATION**JR Reactor protection system****JRM** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRN** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRP** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRQ** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRR** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRS** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRT** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRU** Reactor protection system (free for use)Task: to detect and identify accident conditions and
to actuate protective actions to contain and
control accidents**JRV** -blocked-**JRW** -blocked-**JRX** -blocked-**JRY** -blocked-**JRZ** -blocked-

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J NUCLEAR HEAT GENERATION**JS Reactor control system**

JSA Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSB Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSC Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSD Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSE Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSF Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSG Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSH Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSJ Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSK Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSL Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSM Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSN Reactor control system (free for use)
Task: to control reactor state variables in normal operation

JSP Reactor control system (free for use)
Task: to control reactor state variables in normal operation

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J	NUCLEAR HEAT GENERATION
JS	Reactor control system
JSQ	Reactor control system (free for use) Task: to control reactor state variables in normal operation
JSR	Reactor control system (free for use) Task: to control reactor state variables in normal operation
JSS	Reactor control system (free for use) Task: to control reactor state variables in normal operation
JST	Reactor control system (free for use) Task: to control reactor state variables in normal operation
JSU	Reactor control system (free for use) Task: to control reactor state variablen in normal operation
JSV	-blocked-
JSW	-blocked-
JSX	-blocked-
JSY	-blocked-
JSZ	-blocked-

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J NUCLEAR HEAT GENERATION**JT Reactor operational, protective and status limitation system**

JTA	Reactor operational, protective and status limitation system(free for use)
JTB	Reactor operational, protective and status limitation system(free for use)
JTC	Reactor operational, protective and status limitation system(free for use)
JTD	Reactor operational, protective and status limitation system(free for use)
JTE	Reactor operational, protective and status limitation system(free for use)
JTF	Reactor operational, protective and status limitation system(free for use)
JTG	Reactor operational, protective and status limitation system(free for use)
JTH	Reactor operational, protective and status limitation system(free for use)
JTJ	Reactor operational, protective and status limitation system(free for use)
JTK	Reactor operational, protective and status limitation system(free for use)
JTL	Reactor operational, protective and status limitation system(free for use)
JTM	Reactor operational, protective and status limitation system(free for use)
JTN	Reactor operational, protective and status limitation system(free for use)
JTP	Reactor operational, protective and status limitation system(free for use)
JTQ	Reactor operational, protective and status limitation system(free for use)
JTR	Reactor operational, protective and status limitation system(free for use)
JTS	Reactor operational, protective and status limitation system(free for use)
JTT	Reactor operational, protective and status limitation system(free for use)
JTU	Reactor operational, protective and status limitation system(free for use)

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J NUCLEAR HEAT GENERATION

JT Reactor operational, protective and status limitation system

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JTW -blocked-

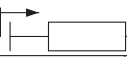
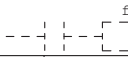
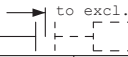
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JTY -blocked-

JTZ -blocked-

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J NUCLEAR HEAT GENERATION**JV Lubricant supply system****JVA** Lubricant supply system (free for use)**JVB** Lubricant supply system (free for use)**JVC** Lubricant supply system (free for use)**JVD** Lubricant supply system (free for use)**JVE** Lubricant supply system (free for use)**JVF** Lubricant supply system (free for use)**JVG** Lubricant supply system (free for use)**JVH** Lubricant supply system (free for use)**JVJ** Lubricant supply system (free for use)**JVK** Lubricant supply system (free for use)**JVL** Lubricant supply system (free for use)**JVM** Lubricant supply system (free for use)**JVN** Lubricant supply system (free for use)**JVP** Lubricant supply system (free for use)**JVQ** Lubricant supply system (free for use)**JVR** Lubricant supply system (free for use)**JVS** Lubricant supply system (free for use)**JVT** Lubricant supply system (free for use)**JVU** Lubricant supply system (free for use)**JVV** -blocked-**JVW** -blocked-**JVX** -blocked-**JVY** -blocked-**JVZ** -blocked-I
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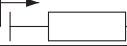
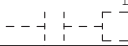
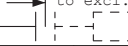
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J NUCLEAR HEAT GENERATION**JW Sealing fluid supply system**

JWA	Sealing fluid supply system (free for use)
JWB	Sealing fluid supply system (free for use)
JWC	Sealing fluid supply system (free for use)
JWD	Sealing fluid supply system (free for use)
JWE	Sealing fluid supply system (free for use)
JWF	Sealing fluid supply system (free for use)
JWG	Sealing fluid supply system (free for use)
JWH	Sealing fluid supply system (free for use)
JWJ	Sealing fluid supply system (free for use)
JWK	Sealing fluid supply system (free for use)
JWL	Sealing fluid supply system (free for use)
JWM	Sealing fluid supply system (free for use)
JWN	Sealing fluid supply system (free for use)
JWP	Sealing fluid supply system (free for use)
JWQ	Sealing fluid supply system (free for use)
JWR	Sealing fluid supply system (free for use)
JWS	Sealing fluid supply system (free for use)
JWT	Sealing fluid supply system (free for use)
JWU	Sealing fluid supply system (free for use)
JWV	-blocked-
JWW	-blocked-
JWX	-blocked-
JWY	-blocked-
JWZ	-blocked-

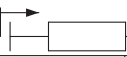
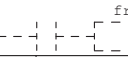
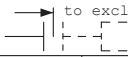
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J NUCLEAR HEAT GENERATION**JX Fluid supply system for control and protection equipment****JXA** Fluid supply system for control and protection equipment
(free for use)**JXB** Fluid supply system for control and protection equipment
(free for use)**JXC** Fluid supply system for control and protection equipment
(free for use)**JXD** Fluid supply system for control and protection equipment
(free for use)**JXE** Fluid supply system for control and protection equipment
(free for use)**JXF** Fluid supply system for control and protection equipment
(free for use)**JXG** Fluid supply system for control and protection equipment
(free for use)**JXH** Fluid supply system for control and protection equipment
(free for use)**JXJ** Fluid supply system for control and protection equipment
(free for use)**JXK** Fluid supply system for control and protection equipment
(free for use)**JXL** Fluid supply system for control and protection equipment
(free for use)**JXM** Fluid supply system for control and protection equipment
(free for use)**JXN** Fluid supply system for control and protection equipment
(free for use)**JXP** Fluid supply system for control and protection equipment
(free for use)**JXQ** Fluid supply system for control and protection equipment
(free for use)**JXR** Fluid supply system for control and protection equipment
(free for use)**JXS** Fluid supply system for control and protection equipment
(free for use)**JXT** Fluid supply system for control and protection equipment
(free for use)**JXU** Fluid supply system for control and protection equipment
(free for use)

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	JX Fluid supply system for control and protection equipment						
	JXV -blocked-						
	JXW -blocked-						
	JXX -blocked-						
	JXY -blocked-						
	JXZ -blocked-						
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J NUCLEAR HEAT GENERATION**JY Control and protection equipment
(other than *JR*, *JS*, *JT*)****JYA** -blocked-**JYB** -blocked-**JYC** -blocked-**JYD** -blocked-**JYE** -blocked-**JYF** Loose parts monitoring systemTask: to detect loose and circulating parts by
measurement of structure-borne noise**JYG** Vibration monitoring system

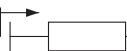
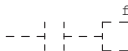
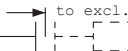
Task: to measure and monitor operational vibrations

JYH -blocked-**JYJ** -blocked-**JYK** -blocked-**JYL** Fatigue monitoring system for components as separate systemTask: to record and process operational data for the
purpose of fatigue monitoring**JYM** -blocked-**JYN** -blocked-**JYP** -blocked-**JYQ** -blocked-**JYR** -blocked-**JYS** -blocked-**JYT** -blocked-**JYU** -blocked-**JYV** -blocked-**JYW** -blocked-**JYX** -blocked-**JYY** -blocked-**JYZ** -blocked-I
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K REACTOR AUXILIARY SYSTEMS**KA** Component cooling systems**KB** Coolant treatment**KC** -blocked-**KD** -blocked-**KE** -blocked-**KF** -blocked-**KG** -blocked-**KH** Nuclear heat tracing systems (not electric)**KJ** Nuclear refrigerant systems**KK** -blocked-**KL** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas**KM** -blocked-**KN** -blocked-**KP** Radioactive waste processing**KQ** -blocked-**KR** Nuclear gas supply and disposal
(See *SE* for welding blanket gas systems)**KS** -blocked-**KT** Nuclear collecting and disposal systems
(also venting systems)**KU** Nuclear sampling systems**KV** Lubricant supply system**KW** Nuclear sealing and flushing fluid supply systems**KX** Fluid supply system for control and protection equipment**KY** Control and protection equipment**KZ** -blocked-I
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K REACTOR AUXILIARY SYSTEMS**KA Component cooling systems****KAA** Component cooling systems for safety-related cooling loads

Task: to absorb and remove waste heat in a separate cooling circuit to prevent transfer of radioactivity to other cooling circuits

Limit: from excl. heat exchanger and
to excl. heat exchanger in system to be cooled

KAB Component cooling systems for process-related cooling loads

Task: to absorb and remove waste heat in a separate cooling circuit to prevent transfer of radioactivity to other cooling circuits

Limit: from excl. heat exchanger and
to excl. heat exchanger in system to be cooled

KAC Component cooling systems for other cooling loads

Task: to absorb and remove waste heat in a separate cooling circuit to prevent transfer of radioactivity to other cooling circuits

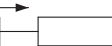
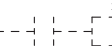

Limit: from excl. heat exchanger and
to excl. heat exchanger in system to be cooled

KAD Emergency component cooling system

Task: to absorb and remove waste heat in case of emergencies in a separate cooling circuit to prevent transfer of radioactivity to other cooling circuits

Limit: from excl. heat exchanger and
to excl. heat exchan

KAE -blocked-**KAF** -blocked-**KAG** -blocked-**KAH** -blocked-**KAJ** -blocked-**KAK** -blocked-**KAL** -blocked-**KAM** -blocked-**KAN** -blocked-**KAP** -blocked-**KAQ** -blocked-**KAR** -blocked-**KAS** -blocked-**KAT** -blocked-

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	K REACTOR AUXILIARY SYSTEMS						
	KA Component cooling systems						
	KAU -blocked-						
	KAV Lubricant supply system						
	KAW Sealing fluid supply system						
	KAX Fluid supply system for control and protection equipment						
	KAY Control and protection equipment						
	KAZ -blocked-						
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K REACTOR AUXILIARY SYSTEMS**KB Coolant treatment****KBA** Level and volume control system

Task: In reactor with set liquid level: to maintain liquid level
 In reactor without set liquid level: to compensate volume

KBB Coolant supply system

Task: to store and inject process-grade coolant
 Limit: from incl. storage tank
 to excl. fed system

KBC Boric acid and demineralized water control system

Limit: from incl. demineralized water tank and
 from incl. boric acid storage tank
 to excl. connection to fed system

KBD Chemical control system

Task: to condition coolant
 Limit: from incl. chemical mixing tank
 to excl. fed system

KBE Coolant purification system

Task: to limit coolant impurities in the coolant system

KBF Coolant treatment system (also evaporation)**KBG** Coolant degasification, drying system**KBH** Coolant purification regenerating system**KBJ** Tritium extraction system**KBK** Secondary coolant purification system (applicable only to three-cycle plants)**KBL** D2O/H2O purification system**KBM** D2O upgrading and distribution system**KBN** -blocked-**KBP** -blocked-**KBQ** -blocked-**KBR** -blocked-**KBS** -blocked-**KBT** -blocked-**KBU** -blocked-**KBV** Lubricant supply system**KBW** Sealing fluid supply system**KBX** Fluid supply system for control and protection equipment

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


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	KBY Control and protection equipment						
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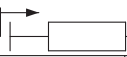
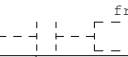
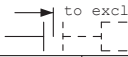
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

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


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K REACTOR AUXILIARY SYSTEMS**KH Nuclear heat tracing systems (not electric)**













































































































































































































































































































































































































KHA Heat tracing systems for reactor coolant system
Task: external heating to keep systems at operating temperature

KHB Heat tracing systems for secondary coolant system
Task: external heating to keep systems at operating temperature

KHC Heat tracing systems for other systems
Task: external heating to keep systems at operating temperature

KHD -blocked-**KHE** -blocked-**KHF** -blocked-**KHG** -blocked-**KHH** -blocked-**KHJ** -blocked-**KHK** -blocked-**KHL** -blocked-**KHM** -blocked-**KHN** -blocked-**KHP** -blocked-**KHQ** -blocked-**KHR** -blocked-**KHS** -blocked-**KHT** -blocked-**KHU** -blocked-**KHV** -blocked-**KHW** Sealing fluid supply system**KHX** Fluid supply system for control and protection equipment**KHY** Control and protection equipment**KHZ** -blocked-I
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K REACTOR AUXILIARY SYSTEMS**KJ Nuclear refrigerant systems**

KJA Low temperature system for coolant treatment
Task: to supply refrigerants below 0 °C for coolant treatment

KJB Low temperature system for gaseous radioactive waste processing
Task: to supply refrigerants below 0 °C for gaseous radioactive waste processing

KJC -blocked-

KJD -blocked-

KJE -blocked-

KJF -blocked-

KJG -blocked-

KJH -blocked-

KJJ -blocked-

KJK -blocked-

KJL Chilled water system for coolant treatment
Task: to supply water at about 0 °C for coolant treatment

KJM Chilled water system for gaseous radioactive waste processing
Task: to supply water at about 0 °C for gaseous radioactive waste processing

KJN Chilled water system for back-up coolers (free for use)
Task: to supply water at a lower temperature than that in the component cooling system

KJP Chilled water system for back-up coolers (free for use)

KJQ Chilled water system for back-up coolers (free for use)

KJR -blocked-

KJS -blocked-

KJT -blocked-

KJU -blocked-

KJV -blocked-

KJW Sealing fluid supply system

KJX Fluid supply system for control and protection equipment

KJY Control and protection equipment

KJZ -blocked-








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K REACTOR AUXILIARY SYSTEMS

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K REACTOR AUXILIARY SYSTEMS**KL Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas****KLA** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLB** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLC** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLD** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLE** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLF** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLG** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLH** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLJ** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLK** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLL** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLM** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLN** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLP** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLQ** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLR** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLS** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLТ** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)**KLU** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas (free for use)

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- K** **REACTOR AUXILIARY SYSTEMS**
- KL** Heating, ventilation, air-conditioning (HVAC) systems in controlled areas and exclusion areas
- KLV** Lubricant supply system
- KLW** Sealing fluid supply system
- KLX** Fluid supply system for control and protection equipment
- KLY** Control and protection equipment
- KLZ** -blocked-

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K REACTOR AUXILIARY SYSTEMS

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K REACTOR AUXILIARY SYSTEMS**KP Radioactive waste processing**

KPA	Solid radioactive waste processing system (free for use)
KPB	Solid radioactive waste processing system (free for use)
KPC	Solid radioactive waste processing system (free for use)
KPD	Solid radioactive waste processing system (free for use)
KPE	Solid radioactive waste storage system
KPF	Liquid radioactive waste processing system (free for use)
KPG	Liquid radioactive waste processing system (free for use)
KPH	Liquid radioactive waste processing system (free for use)
KPJ	Liquid radioactive waste processing system (free for use)
KPK	Liquid radioactive waste storage system
KPL	Gaseous radioactive waste processing system (free for use)
KPM	Gaseous radioactive waste processing system (free for use)
KPN	Gaseous radioactive waste processing system (free for use)
KPP	Gaseous radioactive waste processing system (free for use)
KPQ	Gaseous radioactive waste storage system
KPR	-blocked-
KPS	-blocked-
KPT	-blocked-
KPU	-blocked-
KPV	Lubricant supply system
KPW	Sealing fluid supply system
KPX	Fluid supply system for control and protection equipment
KPY	Control and protection equipment
KPZ	-blocked-

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K REACTOR AUXILIARY SYSTEMS**KR Nuclear gas supply and disposal**
(See *SE* for welding blanket gas systems)**KRA** Blanket gas supply (free for use)**KRB** Blanket gas supply (free for use)**KRC** Blanket gas supply (free for use)**KRD** -blocked-**KRE** -blocked-**KRF** -blocked-**KRG** -blocked-**KRH** -blocked-**KRJ** Inert gas supply (free for use)**KRK** Inert gas supply (free for use)**KRL** Inert gas supply (free for use)**KRM** -blocked-**KRN** -blocked-**KRP** Gas supply (free for use)**KRQ** Gas supply (free for use)**KRR** Gas supply (free for use)**KRS** -blocked-**KRT** -blocked-**KRU** -blocked-**KRV** Lubricant supply system**KRW** Sealing fluid supply system**KRX** Fluid supply system for control and protection equipment**KRY** Control and protection equipment**KRZ** -blocked-I
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K REACTOR AUXILIARY SYSTEMS**KT Nuclear collecting and disposal systems
(also venting systems)**

KT A Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KT B Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KT C Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KT D Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KT E Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KT F Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KT G Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

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K REACTOR AUXILIARY SYSTEMS**KT Nuclear collecting and disposal systems
(also venting systems)**

KTH Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KTJ Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KTK Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

CTL Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. chaeder
 to excl. radioactive waste processing or coolant treatment systems

KTM Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment system

KTN Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. chaeader
 to excl. radioactive waste processing or coolant treatment system

KTP Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

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K REACTOR AUXILIARY SYSTEMS**KT Nuclear collecting and disposal systems
(also venting systems)**

KTQ Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KTR Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KTS Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KTU Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. chaeder
 to excl. radioactive waste processing or coolant treatment systems

KTU Collecting systems for disposal (free for use e.g. system or building-specific)
 Task: controlled collection and disposal of fluids
 Limit: from incl. cheader
 to excl. radioactive waste processing or coolant treatment systems

KTV -blocked-

KTW -blocked-

CTX Fluid supply system for control and protection equipment

KTY Control and protection equipment

KTZ -blocked-

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K REACTOR AUXILIARY SYSTEMS**KU Nuclear sampling systems**

KUA Sampling systems (liquid) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUB Sampling systems (liquid) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUC Sampling systems (liquid) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUD Sampling systems (liquid) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUE Sampling systems (liquid) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUF Sampling systems (gaseous) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUG Sampling systems (gaseous) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUH Sampling systems (gaseous) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUJ Sampling systems (gaseous) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUK Sampling systems (gaseous) (free for use)
Task: to extract and supply samples of fluids for measurement purposes

KUL Fault sampling systems (free for use)
Task: to extract samples after reactor fault out of the reactor containment

KUM Fault sampling systems (free for use)
Task: to extract samples after reactor fault out of the reactor containment

KUN Fault sampling systems (free for use)
Task: to extract samples after reactor fault out of the reactor containment

KUP -blocked-

KUQ -blocked-

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K	REACTOR AUXILIARY SYSTEMS
KU	Nuclear sampling systems
KUR	-blocked-
KUS	-blocked-
KUT	-blocked-
KUU	-blocked-
KUV	-blocked-
KUW	-blocked-
KUX	Fluid supply system for control and protection equipment
KUY	Control and protection equipment
KUZ	-blocked-

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K REACTOR AUXILIARY SYSTEMS**KV Lubricant supply system**

KVA	Lubricant supply system (free for use)
KVB	Lubricant supply system (free for use)
KVC	Lubricant supply system (free for use)
KVD	Lubricant supply system (free for use)
KVE	Lubricant supply system (free for use)
KVF	Lubricant supply system (free for use)
KVG	Lubricant supply system (free for use)
KVH	Lubricant supply system (free for use)
KVJ	Lubricant supply system (free for use)
KVK	Lubricant supply system (free for use)
KVL	Lubricant supply system (free for use)
KVM	Lubricant supply system (free for use)
KVN	Lubricant supply system (free for use)
KVP	Lubricant supply system (free for use)
KVQ	Lubricant supply system (free for use)
KVR	Lubricant supply system (free for use)
KVS	Lubricant supply system (free for use)
KVT	Lubricant supply system (free for use)
KVU	Lubricant supply system (free for use)
KVV	-blocked-
KVW	-blocked-
KVX	-blocked-
KVY	-blocked-
KVZ	-blocked-

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K REACTOR AUXILIARY SYSTEMS**KW Nuclear sealing and flushing fluid supply systems**

KWA Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWB Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWC Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWD Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWE Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWF Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWG Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWH Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWJ Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWK Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWL Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

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K REACTOR AUXILIARY SYSTEMS**KW Nuclear sealing and flushing fluid supply systems**

KWM Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWN Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWP Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWQ Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWR Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWS Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWT Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system

KWU Nuclear sealing and flushing fluid supply systems
(free for use)

Task: to supply fluids for sealing and flushing

Limit: from incl. storage tank to excl. fed system




KWV -blocked-

KWW -blocked-

KWX Fluid supply system for control and protection equipment

KWY Control and protection equipment

KWZ -blocked-

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K REACTOR AUXILIARY SYSTEMS**KX Fluid supply system for control and protection equipment**

KXA	Fluid supply system for control and protection equipment (free for use)
KXB	Fluid supply system for control and protection equipment (free for use)
KXC	Fluid supply system for control and protection equipment (free for use)
KXD	Fluid supply system for control and protection equipment (free for use)
KXE	Fluid supply system for control and protection equipment (free for use)
KXF	Fluid supply system for control and protection equipment (free for use)
KXG	Fluid supply system for control and protection equipment (free for use)
KXH	Fluid supply system for control and protection equipment (free for use)
KXJ	Fluid supply system for control and protection equipment (free for use)
KXK	Fluid supply system for control and protection equipment (free for use)
KXL	Fluid supply system for control and protection equipment (free for use)
KXM	Fluid supply system for control and protection equipment (free for use)
KXN	Fluid supply system for control and protection equipment (free for use)
KXP	Fluid supply system for control and protection equipment (free for use)
KXQ	Fluid supply system for control and protection equipment (free for use)
KXR	Fluid supply system for control and protection equipment (free for use)
KXS	Fluid supply system for control and protection equipment (free for use)
KXT	Fluid supply system for control and protection equipment (free for use)
KXU	Fluid supply system for control and protection equipment (free for use)

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	K REACTOR AUXILIARY SYSTEMS					
	KX Fluid supply system for control and protection equipment					
	KXV -blocked-					
	KXW -blocked-					
	KXX -blocked-					
	KXY -blocked-					
	KXZ -blocked-					
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K REACTOR AUXILIARY SYSTEMS**KY Control and protection equipment****KYA** Control and protection equipment (free for use)**KYB** Control and protection equipment (free for use)**KYC** Control and protection equipment (free for use)**KYD** Control and protection equipment (free for use)**KYE** Control and protection equipment (free for use)**KYF** Control and protection equipment (free for use)**KYG** Control and protection equipment (free for use)**KYH** Control and protection equipment (free for use)**KYJ** Control and protection equipment (free for use)**KYK** Control and protection equipment (free for use)**KYL** Control and protection equipment (free for use)**KYM** Control and protection equipment (free for use)**KYN** Control and protection equipment (free for use)**KYP** Control and protection equipment (free for use)**KYQ** Control and protection equipment (free for use)**KYR** Control and protection equipment (free for use)**KYS** Control and protection equipment (free for use)**KYT** Control and protection equipment (free for use)**KYU** Control and protection equipment (free for use)**KYV** -blocked-**KYW** -blocked-**KYX** -blocked-**KYY** -blocked-**KYZ** -blocked-I
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


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	<div>LSTEAM, WATER, GAS CYCLES</div> <div>LAFeedwater system</div> <div>LBSteam system</div> <div>LCCondensate system</div> <div>LDCondensate polishing plant</div> <div>FLELow temperature rankine cycle (bottoming cycle)</div> <div>LFCommon installations for steam, water, gas cycles</div> <div>LG-blocked-</div> <div>LH-blocked-</div> <div>LJ-blocked-</div> <div>LKGas system (closed cycle)</div> <div>LLGas cleaning system (only for closed cycle)</div> <div>LM-blocked-</div> <div>LNWater impounding works for hydroelectric power plant</div> <div>FLPHead water system for hydroelectric power plant from excl. dam / weir</div> <div>F LQTail water system for hydroelectric power plant</div> <div>F LROsmosis pressure systems</div> <div>LSCommon installations for hydroelectric power plant</div> <div>LT-blocked-</div> <div>LU-blocked-</div> <div>LVLubricant supply system</div> <div>LWSealing fluid supply system for steam, water, gas cycles</div> <div>LXFluid supply system for control and protection equipment</div> <div>LYControl and protection equipment</div> <div>LZ-blocked-</div>
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L STEAM, WATER, GAS CYCLES**LA Feedwater system**

- LAA** Storage, deaeration (incl. feedwater tank)
from incl. deaerator or tank inlet
to incl. tank outlet incl. warm-up equipment and vapour condenser
- LAB** Feedwater piping system (excl. feedwater pump and feedwater heating system)
from excl. feedwater tank outlet
to excl. boiler inlet header or heat exchanger
- LAC** Feedwater pump system
from incl. pump system suction nozzle
to incl. pump system discharge nozzle
- LAD** HP feedwater heating system
from incl. respective feed heater inlet
to incl. respective feed heater outlet incl. desuperheater and cooler
- LAE** HP desuperheating spray system
from excl. branch off feedwater piping system
to excl. user
- LAF** IP desuperheating spray system
from excl. pump system discharge nozzle or
from excl. branch off other system
to excl. user
- LAG** -blocked-
- LAH** Start-up and shutdown piping system
from excl. outlet of or branch off feedwater system
to excl. feedwater piping system or other system
- LAJ** Start-up and shutdown pump system
from incl. pump system suction nozzle
to incl. pump system discharge nozzle
- LAK** -blocked-
- LAL** -blocked-
- LAM** -blocked-
- LAN** -blocked-
- LAP** -blocked-
- LAQ** -blocked-
- LAR** Emergency feedwater piping system incl. storage
(excl. emergency feedwater pump system)
from excl. branch off other system
to excl. feedwater piping system inlet
- LAS** Emergency feedwater pump system
from incl. pump system suction nozzle
to incl. pump system discharge nozzle

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


	L STEAM, WATER, GAS CYCLES							
	LA Feedwater system							
	LAT Back-up emergency feedwater system from excl. branch off other system to excl. feedwater piping system inlet							
	LAU -blocked-							
	LAV Lubricant supply system							
	LAW Sealing fluid supply system							
	LAX Fluid supply system for control and protection equipment							
	LAY Control and protection equipment							
	LAZ -blocked-							
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L

L	L	STEAM, WATER, GAS CYCLES					
	LB	Steam system					
	LBA	Main steam piping system from excl. boiler outlet or from excl. heat exchanger to excl. turbine main stop valve or HP reducing station or turbine bypass or other user (system)					
	LBB	Hot reheat piping system from excl. reheater or moisture separator/reheater outlet to excl. intercept valve or turbine inlet or turbine bypass or other user (system)					
	LBC	Cold reheat piping system from excl. turbine outlet or high pressure reducing station to excl. reheater inlet excl. moisture separator or user (system)					
	LBD	Extraction piping system from excl. branch off crossover line to excl. user (system)					
	LBE	Back-pressure piping system from excl. turbine outlet to excl. user (system)					
	B						
	LBF	Overpressure suppression and safety device incl. injection and hydraulic station for safety function from excl. inlet to incl. outlet					
	LBG	Auxiliary steam piping system from excl. receiving point from other system to excl. user (system)					
	LBH	Start-up steam system, shutdown steam system from excl. boiler outlet or from excl. branch off main steam line, incl. start-up condenser or from excl. outlet of other system to excl. inlet to other systems					
	LBJ	Moisture separator/reheater (MSR) from incl. inlet to incl. outlet					
	LBK	Main steam safety/relief system inside reactor containment for single-cycle plants Task: pressure limitation in main steam piping system *LBA* from excl. main steam piping system to excl. pressure suppression system					
	F						
	LBL	Process steam system for flue gas treatment from excl. receiving point from other system to excl. consumer					
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L STEAM, WATER, GAS CYCLES**LB Steam system****LBM** -blocked-**LBN** -blocked-**LBP** -blocked-**LBQ** Extraction steam piping system for HP feedwater heating
from excl. turbine outlet or branch off other system
to excl. feedwater heating system or user (system)**LBR** Piping system for branch or auxiliary turbine
from excl. branch off main turbine or
from excl. branch off other system or
from excl. branch or auxiliary turbine outlet
to excl. branch or auxiliary turbine isolating valve or
to excl. inlet to other system**LBS** Extraction steam piping system for LP feedwater heating
(main condensate)
from excl. turbine outlet or branch off other system
to excl. LP feedwater heating system or deaerator or
user (system)**LBT** Emergency condensing system
from excl. steam generator outlet or
from excl. branch off main steam piping system incl.
condenser
to excl. inlet to other system**LBU** Common dump line**LBV** Lubricant supply system**LBW** Sealing fluid supply system**LBX** Fluid supply system for control and protection equipment**LBZ** Control and protection equipment**LBZ** -blocked-

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L	L	STEAM, WATER, GAS CYCLES					
	LC	Condensate system					
	LCA	Main condensate piping system (excl. main condensate pump system, LP feedwater heating system, condensate polishing plant) from excl. condenser outlet to excl. deaerator inlet or to excl. feedwater pump system (in plants without feedwater tank)					
	LCB	Main condensate pump system from incl. pump system suction nozzle to incl. pump system discharge nozzle					
	LCC	Main condensate heating system from incl. heater inlet to incl. heater outlet incl. desuperheater and cooler					
	LCD	-blocked-					
	LCE	Condensate desuperheating spray system from excl. branch off main condensate piping system or from excl. branch off branch turbine condensate piping system to excl. user					
	LCF	Branch turbine condensate piping system from excl. condenser outlet to excl. inlet to other system, excl. branch turbine condensate pump system					
	LCG	Branch turbine condensate pump system from incl. pump system suction nozzle to incl. pump system discharge nozzle					
	LCH	HP heater drains system from excl. heater outlet to excl. inlet to other systems					
	LCJ	LP heater drains system from excl. heater outlet to excl. inlet to other systems					
	F LCK	Condensate system of process steam supply for flue gas treatment from excl. outlet (steam) consumer to excl. inlet to other system					
	LCL	Steam generator drains system from excl. branch off pressure system or from incl. start-up flash tank to excl. inlet to other systems					
	LCM	Clean drains system (collecting and return system) from incl. collecting tank or from excl. final drain valve or from excl. inlet from other collecting system					
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L STEAM, WATER, GAS CYCLES**LC Condensate system**

LCM Clean drains system (collecting and return system)
to excl. inlet to other systems

LCN Auxiliary steam condensate system (collecting and return system)
from excl. (steam) user
to excl. inlet to other systems

LCP Standby condensate system, incl. storage and pump system
from excl. branch off other system
to excl. inlet to other systems

LCQ Steam generator blowdown system
from excl. steam generator outlet
from incl. blowdown flash tank (caustic flash tank)
to excl. inlet to other systems

LCR Standby condensate distribution system
from excl. branch off other system
to excl. inlet to other systems

LCS Reheater drains system (moisture separator/reheater)
from excl. reheater
to excl. inlet to other systems

LCT Moisture separator drains system
(moisture separator/reheater)
from excl. moisture separator
to excl. inlet to other systems

LCU -blocked-

LCV Lubricant supply system

LCW Sealing and cooling drains system
from excl. branch off other system
to excl. user, incl. recirculation

LCX Fluid supply system for control and protection equipment

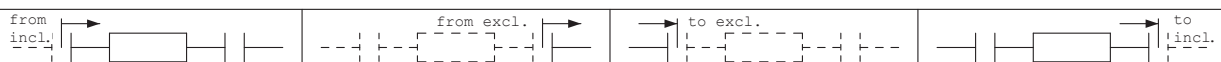
LCY Control and protection equipment

LCZ -blocked-

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L

L	L	STEAM, WATER, GAS CYCLES					
	LD	Condensate polishing plant					
	LDA	Fluid treatment extraction system (if not part of another system) from excl. fluid treatment system outlet to excl. inlet into other system					
	LDB	Filtering, mechanical cleaning from incl. separation equipment inlet to incl. separation equipment outlet					
	LDC	Aeration, gas injection system from excl. atmosphere or from incl. gas supply					
	LDD	Electromagnetic polishing system from incl. electromagnetic polishing system inlet to incl. electromagnetic polishing system outlet					
	LDE	Acid proportioning system (e.g.for carbonate hardness removal) from incl. acid proportioning equipment or from excl. branch off chemicals supply system to excl. inlet to other system					
	LDF	Ion exchange, reverse osmosis system (e.g.demineralization) from incl. ion exchanger inlet to incl. ion exchanger outlet					
	LDG	Evaporation system (e.g. demineralization) from incl. feedwater inlet to incl. steam outlet and from incl. heating steam inlet to incl. condensate outlet					
	C	LDH	Deaeration from incl. deaerator or tank inlet to incl. tank outlet, incl. warm-up equipment of vapour condenser				
LDJ		Preheating, cooling system from incl. preheater or cooler inlet to incl. preheater or cooler outlet					
LDK		Piping system, temporary storage system, pump system for main fluid Piping system: from excl. intake or from excl. outlet of other system to excl. inlet to other system to incl. fluid treatment system outlet Temporary storage system: from incl. temporary storage system inlet to incl. temporary storage sy					

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L STEAM, WATER, GAS CYCLES**LD Condensate polishing plant**

LDL Storage system outside fluid treatment system (if not part of another system)
 from incl. storage system inlet
 to incl. storage system outlet, incl. intake and outfall

LDM -blocked-

LDN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

LDP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system and
 flushing air supply system
 to incl. regeneration, flushing equipment

LDQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

LDR Flushing water and residues removal system incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into disposal system

LDS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into disposal system

LDT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling, flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

LDU -blocked-

LDV Lubricant supply system

LDW -blocked-

LDX Fluid supply system for control and protection equipment

LDY Control and protection equipment

LDZ -blocked-

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L

L	STEAM, WATER, GAS CYCLES
LE	Low temperature rankine cycle (bottoming cycle)
LEA	Working fluid system liquid phase from excl. condensation to incl. preheating to excl. evaporator or from excl. separator to excl. exhaust steam
LEB	Evaporating system working fluid from incl. inlet evaporator working fluid to incl. outlet evaporator working fluid
LEC	Working fluid system steam phase from excl. evaporator working fluid to excl. turbine
LED	Heat transfer medium cycle to excl. evaporating system working fluid from excl. evaporating system working fluid
LEQ	- available for use -
LER	- available for use -
LES	- available for use -
LET	- available for use -
LEU	- available for use -
LEV	Lubricant supply system
LEW	Sealing fluid supply system
LEX	Fluid supply system for control and protection equipment
LEY	Control and protection equipment

L STEAM, WATER, GAS CYCLES**LF Common installations for steam, water, gas cycles****LFA** -blocked-**LFB** -blocked-**LFC** Common drain and vent systems**LFD** -blocked-**LFE** -blocked-**LFF** -blocked-**LFG** Secondary-side steam generator tubesheet lancing system
from excl. primary coolant heat exchanger outlet
to excl. primary coolant heat exchanger inlet**LFH** -blocked-**LFJ** Steam generator layup system**LFK** -blocked-**LFL** -blocked-**LFM** -blocked-**LFN** Proportioning system for feedwater, condensate system,
incl.proportioning in boiler and turbine area**LFP** -blocked-**LFQ** -blocked-**LFR** -blocked-**LFS** -blocked-**LFT** -blocked-**LFU** -blocked-**LFV** -blocked-**LFW** -blocked-**LFX** -blocked-**LFY** -blocked-**LFZ** -blocked-I
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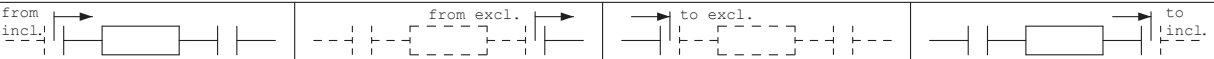
L STEAM, WATER, GAS CYCLES

LG -blocked-





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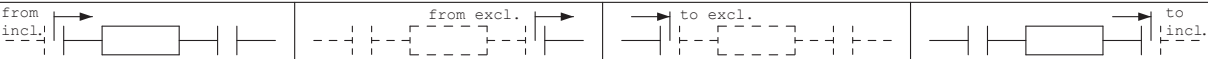
L STEAM, WATER, GAS CYCLES

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L STEAM, WATER, GAS CYCLES**LK Gas system (closed cycle)****LKA** Storage system

from excl. receiving point from gas supply system
to excl. piping system inlet

LKB Piping system

from excl. gas heater outlet
to excl. gas heater inlet, excl. turbine, compressor,
preheater, cooler

LKC Compressor system (if separate from gas turbine)

from incl. compressor inlet
to incl. compressor outlet

LKD Preheating system

from incl. preheater inlet
to incl. preheater outlet

LKE Precooling system

from incl. precooler inlet
to incl. precooler outlet




LKF Intercooling system

from incl. intercooler inlet
to incl. intercooler outlet

LKG Pressurizing system

from incl. pressurizing system inlet
to excl. discharge into piping systems

LKH -blocked-**LKJ** -blocked-**LKK** -blocked-**LKL** -blocked-**LKM** -blocked-**LKN** -blocked-**LKP** -blocked-**LKQ** -blocked-**LKR** -blocked-**LKS** -blocked-**LKT** -blocked-**LKU** -blocked-**LKV** Lubricant supply system**LKW** Sealing fluid supply system**LKX** Fluid supply system for control and protection equipment





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L **STEAM, WATER, GAS CYCLES**

LK **Gas system (closed cycle)**

LKY Control and protection equipment

LKZ -blocked-





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L STEAM, WATER, GAS CYCLES**LL Gas cleaning system (only for closed cycle)****LLA** Gas cleaning system (only for closed cycle) (free for use)**LLB** Gas cleaning system (only for closed cycle) (free for use)**LLC** Gas cleaning system (only for closed cycle) (free for use)**LLD** Gas cleaning system (only for closed cycle) (free for use)**LLE** Gas cleaning system (only for closed cycle) (free for use)**LLF** Gas cleaning system (only for closed cycle) (free for use)**LLG** Gas cleaning system (only for closed cycle) (free for use)**LLH** Gas cleaning system (only for closed cycle) (free for use)**LLJ** Gas cleaning system (only for closed cycle) (free for use)**LLK** Gas cleaning system (only for closed cycle) (free for use)**LLL** Gas cleaning system (only for closed cycle) (free for use)**LLM** Gas cleaning system (only for closed cycle) (free for use)**LLN** Gas cleaning system (only for closed cycle) (free for use)**LLP** Gas cleaning system (only for closed cycle) (free for use)**LLQ** Gas cleaning system (only for closed cycle) (free for use)**LLR** Gas cleaning system (only for closed cycle) (free for use)**LLS** Gas cleaning system (only for closed cycle) (free for use)**LLT** Gas cleaning system (only for closed cycle) (free for use)**LLU** Gas cleaning system (only for closed cycle) (free for use)**LLV** -blocked-**LLW** Sealing fluid supply system**LLX** Fluid supply system for control and protection equipment**LLY** Control and protection equipment**LLZ** -blocked-I
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



























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B E F	L	STEAM, WATER, GAS CYCLES					
	LN	Water impounding works for hydroelectric power plant					
	LNA	Head and tail race system, storage system from incl. water intake incl. transfer conduit and pump system to excl. dam (incl.measuring equipment) or to excl. headwater piping system or to excl. headrace system					
	LNB	Trash rack, trash/fish barrier to excl. inlet to other system					
	LNC	Dam, weir system Dam: from incl. foundation to incl. crest, incl. inspection and instrumentation equipment Weir system: from incl. inlet to incl. outlet to other system					
	LND	Spillway					
	LNE	Drainage system					
	LNF	Pump system Task: pumping of the water within the head and tail race system					
	LNG	Extraction system for external purpose					
	LNH	Brook flume from excl. dam / weir					
	LNJ	-blocked-					
	LNK	-blocked-					
	LNL	-blocked-					
	LNM	-blocked-					
	LNN	-blocked-					
	LNP	-blocked-					
	LNQ	-blocked-					
	LNR	-blocked-					
	LNS	-blocked-					
	LNT	-blocked-					
	LNU	-blocked-					
	LNV	Lubricant supply system					
	LNW	Sealing fluid supply system					
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	L STEAM, WATER, GAS CYCLES						
	LN Water impounding works for hydroelectric power plant						
	LNx Fluid supply system for control and protection equipment						
	LNy Control and protection equipment						
	LNz -blocked-						
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	L	STEAM, WATER, GAS CYCLES
F	LP	Head water system for hydroelectric power plant from excl. dam / weir
	LPA	Rake and rake cleaning system Task: Separate out and collect floating matter from headrace
	LPB	Isolating equipment from incl. isolating equipment inlet to incl. outlet to other system
	LPC	Piping and penstock system from incl. receiving point to incl. discharge into turbine system, incl. connecting piping for pump system
	LPD	-blocked-
	LPE	Surge tank
	LPF	-blocked-
E	LPG	Extraction system for external purpose
	LPH	-blocked-
	LPJ	-blocked-
	LPK	-blocked-
	LPL	-blocked-
	LPM	-blocked-
	LPN	-blocked-
	LPP	-blocked-
	LPQ	-blocked-
	LPR	-blocked-
	LPS	-blocked-
	LPT	-blocked-
	LPU	-blocked-
	LPV	Lubricant supply system
	LPW	Sealing fluid supply system
	LPX	Fluid supply system for control and protection equipment
	LPY	Control and protection equipment
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	L	STEAM, WATER, GAS CYCLES					
F	LQ	Tail water system for hydroelectric power plant					
R	LQA	Underwater piping and culvert system from excl. inlet main machine set *ME*, *MF*, *MG* to incl. outlet to other system					
	LQB	Surge tank					
	LQC	Isolating equipment from incl. isolating equipment inlet to incl. outlet to other system					
	LQD	-blocked-					
	LQE	Rake and rake cleaning system for pumped-storage operation Task: Separate out and collect floating matter from tailrace					
	LQF	-blocked-					
E	LQG	Extraction system for external purpose					
	LQH	-blocked-					
	LQJ	-blocked-					
	LQK	-blocked-					
	LQL	-blocked-					
	LQM	-blocked-					
	LQN	-blocked-					
	LQP	-blocked-					
	LQQ	-blocked-					
	LQR	-blocked-					
	LQS	-blocked-					
	LQT	-blocked-					
	LQU	-blocked-					
	LQV	Lubricant supply system					
	LQW	Sealing fluid supply system					
	LQX	Fluid supply system for control and protection equipment					
	LQY	Control and protection equipment					
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	L	STEAM, WATER, GAS CYCLES
F	LR	Osmosis pressure systems
F	LRA	Fresh water system
F	LRB	Pressurized water system
F	LRC	Membran system
	LRD	-blocked-
A	LRE	-blocked-
	LRF	-blocked-
	LRG	-blocked-
	LRH	-blocked-
	LRJ	-blocked-
	LRK	-blocked-
	LRL	-blocked-
	LRM	-blocked-
	LRN	-blocked-
	LRP	-blocked-
F	LRQ	- available for use -
F	LRR	- available for use -
F	LRS	- available for use -
F	LRT	- available for use -
F	LRU	- available for use -
F	LRV	Lubricant supply system
F	LRW	Sealing fluid supply system
F	LRX	Fluid supply system for control and protection equipment
F	LRZ	Control and protection equipment
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	Revision	F 052016	A07/1993				

L STEAM, WATER, GAS CYCLES**LS Common installations for hydroelectric power plant****LSA** Common installations for hydroelectric power plant
(free for use)**LSB** Common installations for hydroelectric power plant
(free for use)**LSC** Common installations for hydroelectric power plant
(free for use)**LSD** Common installations for hydroelectric power plant
(free for use)**LSE** Common installations for hydroelectric power plant
(free for use)**LSF** Common installations for hydroelectric power plant
(free for use)**LSG** Common installations for hydroelectric power plant
(free for use)**LSH** Common installations for hydroelectric power plant
(free for use)**LSJ** Common installations for hydroelectric power plant
(free for use)**LSK** Common installations for hydroelectric power plant
(free for use)**LSL** Drainage system**LSM** Common installations for hydroelectric power plant
(free for use)**LSN** Common installations for hydroelectric power plant
(free for use)**LSP** Common installations for hydroelectric power plant
(free for use)**LSQ** Common installations for hydroelectric power plant
(free for use)**LSR** Common installations for hydroelectric power plant
(free for use)**LSS** Common installations for hydroelectric power plant
(free for use)**LST** Common installations for hydroelectric power plant
(free for use)**LSU** Common installations for hydroelectric power plant
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L **STEAM, WATER, GAS CYCLES**

LS **Common installations for hydroelectric power plant**





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L STEAM, WATER, GAS CYCLES

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L STEAM, WATER, GAS CYCLES**LV Lubricant supply system****LVA** Lubricant supply system (free for use)**LVB** Lubricant supply system (free for use)**LVC** Lubricant supply system (free for use)**LVD** Lubricant supply system (free for use)**LVE** Lubricant supply system (free for use)**LVF** Lubricant supply system (free for use)**LVG** Lubricant supply system (free for use)**LVH** Lubricant supply system (free for use)**LVJ** Lubricant supply system (free for use)**LVK** Lubricant supply system (free for use)**LVL** Lubricant supply system (free for use)**LVM** Lubricant supply system (free for use)**LVN** Lubricant supply system (free for use)**LVP** Lubricant supply system (free for use)**LVQ** Lubricant supply system (free for use)**LVR** Lubricant supply system (free for use)**LVS** Lubricant supply system (free for use)**LVT** Lubricant supply system (free for use)**LVU** Lubricant supply system (free for use)**LVV** -blocked-**LVW** -blocked-**LVX** -blocked-**LVY** -blocked-**LVZ** -blocked-I
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L

L STEAM, WATER, GAS CYCLES**LW Sealing fluid supply system for steam, water, gas cycles****LWA** Sealing fluid supply system for steam, water, gas cycles**LWB** Sealing fluid supply system for steam, water, gas cycles**LWC** Sealing fluid supply system for steam, water, gas cycles**LWD** Sealing fluid supply system for steam, water, gas cycles**LWE** Sealing fluid supply system for steam, water, gas cycles**LWF** Sealing fluid supply system for steam, water, gas cycles**LWG** Sealing fluid supply system for steam, water, gas cycles**LWH** Sealing fluid supply system for steam, water, gas cycles**LWJ** Sealing fluid supply system for steam, water, gas cycles**LWK** Sealing fluid supply system for steam, water, gas cycles**LWL** Sealing fluid supply system for steam, water, gas cycles**LWM** Sealing fluid supply system for steam, water, gas cycles**LWN** Sealing fluid supply system for steam, water, gas cycles**LWP** Sealing fluid supply system for steam, water, gas cycles**LWQ** Sealing fluid supply system for steam, water, gas cycles**LWR** Sealing fluid supply system for steam, water, gas cycles**LWS** Sealing fluid supply system for steam, water, gas cycles**LWT** Sealing fluid supply system for steam, water, gas cycles**LWU** Sealing fluid supply system for steam, water, gas cycles**LWV** -blocked-**LWW** -blocked-**LWX** -blocked-**LWY** -blocked-**LWZ** -blocked-I
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L

L STEAM, WATER, GAS CYCLES**LX Fluid supply system for control and protection equipment****LXA** Fluid supply system for control and protection equipment
(free for use)**LXB** Fluid supply system for control and protection equipment
(free for use)**LXC** Fluid supply system for control and protection equipment
(free for use)**LXD** Fluid supply system for control and protection equipment
(free for use)**LXE** Fluid supply system for control and protection equipment
(free for use)**LXF** Fluid supply system for control and protection equipment
(free for use)**LXG** Fluid supply system for control and protection equipment
(free for use)**LXH** Fluid supply system for control and protection equipment
(free for use)**LXJ** Fluid supply system for control and protection equipment
(free for use)**LXK** Fluid supply system for control and protection equipment
(free for use)**LXL** Fluid supply system for control and protection equipment
(free for use)**LXM** Fluid supply system for control and protection equipment
(free for use)**LXN** Fluid supply system for control and protection equipment
(free for use)**LXP** Fluid supply system for control and protection equipment
(free for use)**LXQ** Fluid supply system for control and protection equipment
(free for use)**LXR** Fluid supply system for control and protection equipment
(free for use)**LXS** Fluid supply system for control and protection equipment
(free for use)**LXT** Fluid supply system for control and protection equipment
(free for use)**LXU** Fluid supply system for control and protection equipment
(free for use)

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L

I N D E X	<div>L STEAM, WATER, GAS CYCLES</div> <div>LY Control and protection equipment</div> <div>LYA Control and protection equipment (free for use)</div> <div>LYB Control and protection equipment (free for use)</div> <div>LYC Control and protection equipment (free for use)</div> <div>LYD Control and protection equipment (free for use)</div> <div>LYE Control and protection equipment (free for use)</div> <div>LYF Control and protection equipment (free for use)</div> <div>LYG Control and protection equipment (free for use)</div> <div>LYH Control and protection equipment (free for use)</div> <div>LYJ Control and protection equipment (free for use)</div> <div>LYK Control and protection equipment (free for use)</div> <div>LYL Control and protection equipment (free for use)</div> <div>LYM Control and protection equipment (free for use)</div> <div>LYN Control and protection equipment (free for use)</div> <div>LYP Control and protection equipment (free for use)</div> <div>LYQ Control and protection equipment (free for use)</div> <div>LYR Control and protection equipment (free for use)</div> <div>LYS Control and protection equipment (free for use)</div> <div>LYT Control and protection equipment (free for use)</div> <div>LYU Control and protection equipment (free for use)</div> <div>LYV -blocked-</div> <div>LYW -blocked-</div> <div>LYX -blocked-</div> <div>LYY -blocked-</div> <div>LYZ -blocked-</div>						
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D	M	MAIN MACHINE SETS				
	MA	Steam turbine plant				
	MB	Gas turbine plant				
	MC	-blocked-				
	MD	Wind turbine plant				
	ME	Hydraulic turbine plant				
	MF	Pumping turbine plant in pumped-storage power plants				
	MG	Pumped-storage plant				
	MH	Steam motor plant				
	MJ	Diesel engine plant				
	MK	Generator plant				
	ML	Electro-motive plant (incl. motor generator)				
	MM	Compressor plant				
	MN	-blocked-				
	MP	Common installations for main machine sets				
	MQ	-blocked-				
	MR	Gas engine plant				
	MS	-blocked-				
	MT	-blocked-				
	MU	-blocked-				
	MV	Lubricant supply system				
	MW	Sealing fluid supply system				
	MX	Fluid supply system for control and protection equipment				
	MY	Control and protection equipment				
	MZ	-blocked-				
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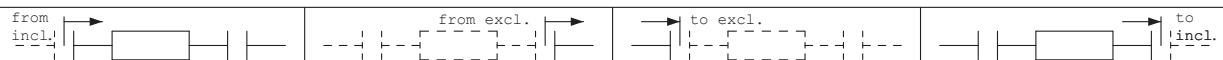
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M MAIN MACHINE SETS**MA Steam turbine plant**

- MAA** HP turbine
 from incl. steam admission (main stop valve) or combined main stop and control valve
 to incl. automatic/non-automatic extraction and exhaust nozzles and
 to incl. the interfaces with other turbine-internal systems
- MAB** IP turbine
 from incl. crossover line, incl. control element or intercept valve
 to incl. automatic/non-automatic extraction and exhaust nozzles and
 to incl. the interfaces with other turbine-internal systems
- MAC** LP turbine
 from incl. crossover line, incl. control element or intercept valve or steam inlet nozzle
 from incl. (in reheat system without intercept valves)
 to incl. automatic/non-automatic extraction and exhaust nozzles and
 to incl. the interfaces with other turbine-internal systems
- MAD** Bearings
- MAE** -blocked-
- MAF** -blocked-
- MAG** Condensing system
 from incl. condenser neck or inlet nozzle
 to incl. condenser outlet nozzle, incl. connected flash tanks, incl. instrumentation equipment associated with condenser
- MAH** Motive water system (if separate from *MAJ*)
 from excl. outlet of other system
 to excl. water-operated air ejector inlet
- MAJ** Air removal system
 from excl. condenser outlet
 to excl. inlet atmosphere
- MAK** Transmission gear between prime mover and driven machine, incl. turning gear
- MAL** Drain and vent systems
 from incl. collector point or
 from incl. final drain
 to excl. discharge into other system

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M MAIN MACHINE SETS**MA Steam turbine plant**

MAM Leak-off steam system
 from excl. branch off seal leak-off
 to excl. discharge into other system

MAN Turbine bypass station, incl. desuperheating spray system
 from incl. bypass valve and
 from incl. desuperheating spray valve
 to incl. steam inlet to condenser

MAP LP turbine bypass
 from excl. bypass valve and
 from excl. branch off steam system
 to excl. condenser

MAQ Vent system (if separate from *MAL*)
 from incl. venting point
 to excl. discharge into other system

MAR -blocked-

MAS -blocked-

MAT -blocked-

MAU -blocked-

MAV Lubricant supply system
 from incl. dedicated lubricant tank or common
 lubricant and control fluid tank or
 from excl. branch off lubricant supply system
 to excl. user and
 from excl. user

MAW Sealing, heating and cooling steam system
 from excl. branch
 to excl. casing nozzle of seal steam user and leak-off
 to excl. condenser or
 to incl. gland steam condenser or
 to excl. heating/cooling steam user

MAX Non-electric control and protection equipment, incl. fluid supply system

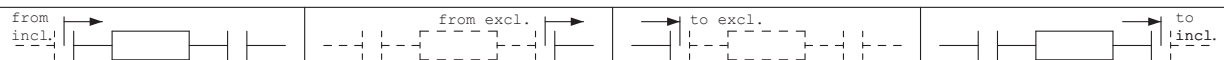
MAY Electrical control and protection equipment

MAZ -blocked-

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M

	M	MAIN MACHINE SETS				
	MB	Gas turbine plant				
	MBA	Turbine, compressor rotor with common casing from incl. compressor inlet to incl. compressor outlet from incl. turbine inlet to incl. turbine outlet, incl. exhaust gas diffuser				
	MBB	Turbine casing and rotor from incl. turbine inlet to incl. turbine outlet, incl. exhaust gas diffuser				
	MBC	Compressor casing and rotor from incl. compressor inlet to incl. compressor outlet				
	MBD	Bearings				
B	MBE	Coolant system for gas turbine plant from excl. branch off coolant to excl. user				
	MBF	-blocked-				
	MBG	-blocked-				
	MBH	Cooling and sealing gas system from incl. extraction point to excl. user and from excl. user, incl. leak-off to incl. inlet to other system				
	MBJ	Start-up unit				
	MBK	Transmission gear between prime mover and driven machine, incl. turning gear, barring gear				
D	MBL	Intake air, cold gas system incl. intake air preheating from excl. atmosphere to excl. combustion chamber or to excl. compressor inlet or				
	MBM	Combustion chamber (gas heating, combustion) from incl. cold gas, fuel inlet to incl. hot gas outlet				
	MBN	Fuel supply system (liquid) from excl. branch off main supply line or from incl. temporary (day) tank to excl. combustion chamber or to excl. motive gas generating unit, incl. fuel return system				
	MBP	Fuel supply system (gaseous) from excl. branch off main supply line to excl. combustion chamber or to excl. motive gas generating unit				
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M MAIN MACHINE SETS**MB Gas turbine plant**

MBQ Ignition fuel supply system (if separate)
 from excl. branch off main supply line or
 from incl. storage tank
 to excl. combustion chamber or
 to excl. motive gas generating unit

MBR Exhaust gas system (open cycle)
 from excl. combustion chamber or
 from excl. exhaust gas diffuser
 to excl. discharge into atmosphere, excl. turbine or
 to excl. inlet to other system (e.g. combustion air system)

MBS Storage system
 to excl. connection to main system and
 from excl. connection to main system

MBT Motive gas generator unit, incl. combustion chamber
 from incl. air/fuel inlet
 to incl. motive gas outlet of motive gas generating unit

MBU Additive system
 from incl. supply
 to incl. injection

MBV Lubricant supply system
 from incl. dedicated lubricant tank or common lubricant and control fluid tank or
 from excl. branch off control fluid supply system
 to excl. user and
 from excl. user

MBW Sealing oil supply system
 from incl. dedicated seal oil tank or
 from excl. seal oil pump suction line
 to excl. user and
 from excl. user

MBX Non-electric control and protection equipment, incl. fluid supply system

MBY Electrical control and protection equipment

MBZ Lubricant and control fluid treatment system

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

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M MAIN MACHINE SETS

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	M	MAIN MACHINE SETS					
	ME	Hydraulic turbine plant					
A	MEA	Turbine (casing, shaft, runner, draft tube etc.) from excl. turbine inlet or from excl. isolating valve to incl. turbine outlet or to excl. isolating valve					
A	MEB	Isolating valve Task: to isolate headwater from turbine *MEA* and/or to control headwater flow to turbine *MEA*					
	MEC	-blocked-					
	MED	Bearings					
	MEE	-blocked-					
	MEF	-blocked-					
	MEG	Stabilizing air system from incl. air compressor to incl. outlet to turbine					
	MEH	-blocked-					
	MEJ	-blocked-					
	MEK	Transmission gear between prime mover and driven machine					
	MEL	Water depression air supply system from incl. air compressor to incl. outlet to turbine					
	MEM	-blocked-					
	MEN	-blocked-					
	MEP	-blocked-					
	MEQ	-blocked-					
	MER	-blocked-					
	MES	Shaft gland cooling water system					
	MET	-blocked-					
	MEU	-blocked-					
	MEV	Lubricant supply system from incl. lubricant tank to excl. user and from excl. user					
	MEW	Sealing water supply system from incl. sealing water supply main isolating valve to excl. casing nozzle of sealing water user					
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	M MAIN MACHINE SETS						
	ME Hydraulic turbine plant						
	MEX Non-electric control and protection equipment, incl. fluid supply system						
	MEY Electrical control and protection equipment						
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







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B	M	MAIN MACHINE SETS
	MF	Pumping turbine plant in pumped-storage power plants
B	MFA	Pumping turbine, pump and turbine as integral unit Task: An integral unit that at different times fulfils the task of a prime mover (turbine) resp. a driven machine (pump) from excl. connection to pumping turbine or from excl. isolating valve to incl. connection
	MFB	Isolating valve Task: to isolate water from pumping turbine *MFA* and/or to control water flow to pumping turbine *MFA*
A	MFC	-blocked-
	MFD	Bearings
	MFE	-blocked-
	MFF	-blocked-
	MFG	Stabilizing air system from incl. air compressor to incl. inlet to turbine
	MFH	-blocked-
	MFJ	-blocked-
	MFK	Transmission gear between motor generator set and pumping turbine
B	MFL	Water depression air supply system from incl. air compressor to incl. inlet to pumping turbine
	MFM	Start-up unit
	MFN	-blocked-
	MFP	-blocked-
	MFQ	-blocked-
	MFR	-blocked-
	MFS	Shaft gland cooling water system
	MFT	-blocked-
	MFU	-blocked-
	MFV	Lubricant supply system from incl. lubricant tank to excl. user and from excl. user
	MFW	Sealing water supply system from incl. sealing water supply main isolating valve to excl. casing nozzle of sealing water user
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	M MAIN MACHINE SETS						
	MF Pumping turbine plant in pumped-storage power plants						
	MFX	Non-electric control and protection equipment, incl. fluid supply system					
	MFY	Electrical control and protection equipment					
	MFZ	-blocked-					
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	M	MAIN MACHINE SETS							
	MG	Pumped-storage plant							
	MGA	Storage pump (casing, shaft, runner etc.) from excl. storage pump inlet or from excl. isolating valve to incl. storage pump outlet or to excl. isolating valve							
A	MGB	Isolating valve Task: to isolate water for storage pump *MGA* and/or to control water for storage pump *MGA*							
	MGC	-blocked-							
	MGD	Bearings							
	MGE	-blocked-							
	MGF	-blocked-							
C	MGG	Stabilizing air system							
	MGH	-blocked-							
	MGJ	-blocked-							
B	MGK	Transmission gear between motor generator set and storage pump							
	MGL	Water depression air supply system from incl. air compressor to incl. inlet to storage pump							
	MGM	Start-up unit							
	MGN	-blocked-							
	MGP	-blocked-							
	MGQ	-blocked-							
	MGR	locked							
	MGS	Shaft gland cooling water system							
	MGT	-blocked-							
	MGU	-blocked-							
	MGV	Lubricant supply system from incl. lubricant tank to excl. user and from excl. user							
	MGW	Sealing water supply system from incl. sealing water supply main isolating valve to excl. casing nozzle of sealing water user							
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	M MAIN MACHINE SETS						
	MG Pumped-storage plant						
	MGX	Non-electric control and protection equipment, incl. fluid supply system					
	MGY	Electrical control and protection equipment					
	MGZ	-blocked-					
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M	MAIN MACHINE SETS					
D	MH	Steam motor plant				
D	MHA	High pressure steam motor from incl. steam inlet device, emergency stop valve resp. combined emergency stop valve/control valve to incl. extraction nozzle and exhaust flange and to incl. the boundaries of other motor internal systems				
D	MHB	Intermediate pressure steam motor from incl. cross-over pipe inclusive control element or from incl. intercept device to incl. extraction nozzle and exhaust flange to excl. the boundaries of other motor internal systems				
D	MHC	Low pressure steam motor from incl. cross-over pipe inclusive control element or from incl. intercept device or steam inlet nozzle (without intercept device in case of reheater) to incl. extraction nozzle and exhaust flange to excl. the boundaries of other motor internal systems				
D	MHD	Bearing				
D	MHE	-blocked-				
D	MHF	-blocked-				
D	MHG	Condensing system from incl. condenser neck pipe resp. condenser inlet nozzle to incl. condenser outlet nozzle inclusive connected expansion vessel and the related measuring equipment				
D	MHH	-blocked-				
D	MHJ	-blocked-				
D	MHK	Transmission gear				
D	MHL	Drain and vent system from incl. collecting point or from incl. last drainage point to excl. feeding into other systems				
D	MHM	Steam exhaust system from excl. branch exhaust at seals to excl. feeding into other system				
D	MHN	Bypass station inclusive injection from excl. bypass apparatus and from excl. branch condensate desuperheating spray system to excl. steam insertion into the condenser				
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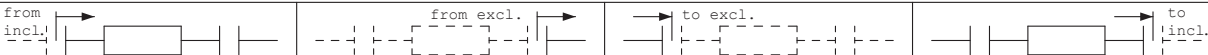
M MAIN MACHINE SETS**MJ Diesel engine plant**

- MJA** Engine
 from incl. fuel injection nozzle inlet or
 from incl. air intake nozzles or
 from incl. cooling water inlet nozzles
 to incl. exhaust nozzle outlet or
 to incl. cooling water nozzle outlet, incl. engine-
 internal systems
- MJB** Turbocharger, blower
 from incl. turbocharger or blower inlet
 to incl. turbocharger or blower outlet
- MJC** -blocked-
- MJD** -blocked-
- MJE** -blocked-
- MJF** -blocked-
- MJG** Liquid cooling system
 from excl. engine cooling water nozzle outlet or
 from incl. turbocharger air cooling system inlet
 to excl. engine cooling water nozzle inlet or
 to incl. turbocharger air cooler outlet
- MJH** Air intercooling system
 from incl. intercooler inlet
 to incl. intercooler outlet
 to excl. outlet to other cooling systems
- MJJ** -blocked-
- MJK** Transmission gear between prime mover and driven machine
- MJL** -blocked-
- MJM** -blocked-
- MJN** Fuel systems
 from incl. temporary (day) tank or
 from excl. branch off piping system
 to excl. fuel injection nozzle inlet
- MJP** Start-up unit (incl. flywheel)
- MJQ** Air intake system
 from excl. atmosphere
 to excl. turbocharger or
 to excl. engine air intake nozzles
- MJR** Exhaust gas system
 from excl. engine exhaust nozzle outlet
 to excl. discharge into atmosphere
- MJS** -blocked-

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I N D E X	M MAIN MACHINE SETS					
	MJ Diesel engine plant					
	MJT -blocked-					
	MJU -blocked-					
	MJV Lubricant supply system from incl. dedicated lubricant tank or common lubricant and control fluid tank or from excl. branch off control fluid supply system to excl. user from excl. user					
	MJW Sealing fluid supply system					
	MJX Fluid supply system for control and protection equipment					
	MJY Control and protection equipment					
	MJZ -blocked-					
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	M	MAIN MACHINE SETS					
	MK	Generator plant					
	MKA	Generator, complete, incl. stator, rotor and all integral cooling equipment to incl. generator bushing					
A	MKB	Generator exciter set, including set with electrical braking system (use only if *MKC* is not sufficient for identification)					
A	MKC	Generator exciter set, including set with electrical braking system					
	MKD	Bearings					
	MKE	-blocked-					
	MKF	Stator/rotor liquid cooling system, incl. coolant supply system (Note: for cooling oil see *MKU*) Task: dissipate heat produced by stator/rotor to coolant from excl. stator/rotor outlet to excl. stator/rotor inlet					
B	MKG	Stator/rotor hydrogen (H2) cooling system, incl. coolant supply system Task: dissipate heat produced by stator/rotor to hydrogen coolant from excl. stator/rotor outlet to excl. stator/rotor inlet					
B	MKH	Stator/rotor nitrogen (N2)/carbon dioxide (CO2) cooling system, incl. coolant supply system Task: dissipate heat produced by stator/rotor to nitrogen / carbon dioxide coolant from excl. stator/rotor outlet to excl. stator/rotor inlet					
B	MKJ	Stator/rotor air cooling system, incl. coolant supply system Task: dissipate heat produced by stator/rotor to air coolant from excl. stator/rotor outlet to excl. stator/rotor inlet					
	MKK	-blocked-					
	MKL	-blocked-					
	MKM	-blocked-					
	MKN	-blocked-					
	MKP	-blocked-					
	MKQ	Exhaust gas system (if separate from *MKG* and *MKH*)					
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M MAIN MACHINE SETS**MK Generator plant****MKR** -blocked-**MKS** -blocked-**MKT** -blocked-**MKU** Stator/rotor cooling oil cooling system, incl. coolant supply system

(Note: for other liquid cooling see *MFK*)

Task: dissipate heat produced by stator/rotor to coolant

from excl. stator/rotor outlet

to excl. stator/rotor inlet

MKV Lubricant supply system (if separate system for generator)**MKW** Sealing fluid supply system

(Sealing oil system, incl. supply and treatment)

from excl. branch off sealing oil supply system

to excl. stator inlet and

from excl. stator outlet

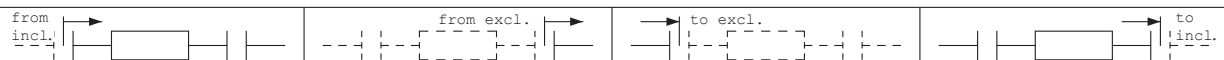
to excl. inlet to other system or in closed systems

from excl. stator outlet

to excl. stator inlet

MKX Fluid supply system for control and protection equipment**MKY** Control and protection equipment**MKZ** -blocked-**M**VGB Technical Group
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M MAIN MACHINE SETS**ML Electro-motive plant (incl. motor generator)**

MLA Motor frame, motor generator frame, incl. stator, rotor and all integral cooling equipment to incl. motor or generator bushing

MLB -blocked-

MLC Exciter set

MLD Bearings

MLE -blocked-

MLF Stator/rotor liquid cooling system, incl. coolant supply system

(Note: fro cooling oil see *MLU*)

Task: dissipate heat produced by stator/rotor to coolant

from excl. stator/rotor outlet

to excl. stator/rotor inlet

MLG Stator/rotor gas cooling system, incl. coolant supply system (Note: for nitrogen cooling see *MLH*)

Task: dissipate heat produced by stator/rotor to coolant

from excl. stator/rotor outlet

to excl. stator/rotor inlet

MLH Stator/rotor nitrogen cooling system, incl. coolant supply system

(Note: for other gas cooling see *MLG*)

Task: dissipate heat produced by stator/rotor to coolant

from excl. stator/rotor outlet

to excl. stator/rotor inlet

MLJ -blocked-

MLK -blocked-

MLL -blocked-

MLM -blocked-

MLN -blocked-

MLP -blocked-

MLQ Exhaust gas system (if separate from *MLG* and *MLH*)

MLR -blocked-

MLS -blocked-

MLT -blocked-

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M MAIN MACHINE SETS**ML Electro-motive plant (incl. motor generator)**

MLU Stator/rotor cooling oil cooling system, incl. coolant supply system
 (Note: for other liquid cooling see *MLF)
 Task: dissipate heat produced by stator/rotor to coolant
 from excl. stator/rotor outlet
 to excl. stator/rotor inlet

MLV Lubricant supply system (if separate system for electro-motive units)


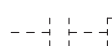
MLW Sealing fluid supply system
 (Sealing oil system, incl. supply and treatment)
 from excl. branch off sealing oil supply system
 to excl. stator inlet or
 from excl. stator outlet
 to excl. inlet to other system or in closed systems
 from excl. stator outlet
 to excl. stator inlet

MLX Fluid supply system for control and protection equipment

MLY Control and protection equipment

MLZ -blocked-

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M MAIN MACHINE SETS**MM Compressor plant**

MMA Compressor incl. internal systems
from incl. air, cooling fluid inlet
to incl. air, cooling fluid outlet

MMB -blocked-

MMC Air intake piping system
from excl. atmosphere
to excl. compressor inlet

MMD Bearings

MME Intercooling system

MMF Aftercooling system

MMG Final cooling system

MMH Discharge piping system
from excl. compressor outlet
to excl. inlet to other system

MMJ -blocked-

MMK -blocked-

MML -blocked-

MMM -blocked-

MMN -blocked-

MMP -blocked-

MMQ -blocked-

MMR -blocked-

MMS -blocked-

MMT -blocked-

MMU -blocked-

MMV Lubricant supply system

MMW Sealing fluid supply system

MMX Fluid supply system for control and protection equipment


MMY Control and protection equipment

MMZ -blocked-






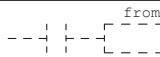



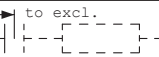






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R	M	MAIN MACHINE SETS					
	MP	Common installations for main machine sets					
	MPA	Foundation					
	MPB	Sheathing					
	MPC	-blocked-					
	MPD	-blocked-					
	MPE	-blocked-					
	MPF	-blocked-					
	MPG	Frame, support structure					
	MPH	-blocked-					
	MPJ	-blocked-					
	MPK	-blocked-					
	MPL	-blocked-					
	MPM	-blocked-					
	MPN	-blocked-					
	MPP	-blocked-					
	MPQ	-blocked-					
	MPR	Forced cooling system					
	MPS	Drying and layup system					
	MPT	-blocked-					
	MPU	-blocked-					
	MPV	-blocked-					
	MPW	-blocked-					
	MPX	-blocked-					
	MPY	-blocked-					
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M MAIN MACHINE SETS**MR Gas engine plant****MRA** Gas engine plant (free for use)**MRB** Gas engine plant (free for use)**MRC** Gas engine plant (free for use)**MRD** Gas engine plant (free for use)**MRE** Gas engine plant (free for use)**MRF** Gas engine plant (free for use)**MRG** Gas engine plant (free for use)**MRH** Gas engine plant (free for use)**MRJ** Gas engine plant (free for use)**MRK** Gas engine plant (free for use)**MRL** Gas engine plant (free for use)**MRM** Gas engine plant (free for use)**MRN** Gas engine plant (free for use)**MRP** Gas engine plant (free for use)**MRQ** Gas engine plant (free for use)**MRR** Gas engine plant (free for use)**MRS** Gas engine plant (free for use)**MRT** Gas engine plant (free for use)**MRU** Gas engine plant (free for use)**MRV** Lubricant supply system**MRW** Sealing fluid supply system**MRX** Fluid supply system for control and protection equipment**MRY** Control and protection equipment**MRZ** -blocked-I
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M MAIN MACHINE SETS**MV Lubricant supply system**

MVA	Lubricant supply system (free for use)
MVB	Lubricant supply system (free for use)
MVC	Lubricant supply system (free for use)
MVD	Lubricant supply system (free for use)
MVE	Lubricant supply system (free for use)
MVF	Lubricant supply system (free for use)
MVG	Lubricant supply system (free for use)
MVH	Lubricant supply system (free for use)
MVJ	Lubricant supply system (free for use)
MVK	Lubricant supply system (free for use)
MVL	Lubricant supply system (free for use)
MVM	Lubricant supply system (free for use)
MVN	Lubricant supply system (free for use)
MVP	Lubricant supply system (free for use)
MVQ	Lubricant supply system (free for use)
MVR	Lubricant supply system (free for use)
MVS	Lubricant supply system (free for use)
MVT	Lubricant supply system (free for use)
MVU	Lubricant supply system (free for use)
MVV	-blocked-
MVW	-blocked-
MX	-blocked-
MVY	-blocked-
MVZ	-blocked-

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M MAIN MACHINE SETS**MW Sealing fluid supply system**

MWA	Sealing fluid supply system (free for use)
MWB	Sealing fluid supply system (free for use)
MWC	Sealing fluid supply system (free for use)
MWD	Sealing fluid supply system (free for use)
MWE	Sealing fluid supply system (free for use)
MWF	Sealing fluid supply system (free for use)
MWG	Sealing fluid supply system (free for use)
MWH	Sealing fluid supply system (free for use)
MWJ	Sealing fluid supply system (free for use)
MWK	Sealing fluid supply system (free for use)
MWL	Sealing fluid supply system (free for use)
MWM	Sealing fluid supply system (free for use)
MWN	Sealing fluid supply system (free for use)
MWP	Sealing fluid supply system (free for use)
MWQ	Sealing fluid supply system (free for use)
MWR	Sealing fluid supply system (free for use)
MWS	Sealing fluid supply system (free for use)
MWT	Sealing fluid supply system (free for use)
MWU	Sealing fluid supply system (free for use)
MWV	-blocked-
MWW	-blocked-
MWX	-blocked-
MWY	-blocked-
MWZ	-blocked-

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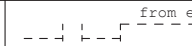

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M MAIN MACHINE SETS**MX Fluid supply system for control and protection equipment**

MXA	Fluid supply system for control and protection equipment (free for use)
MXB	Fluid supply system for control and protection equipment (free for use)
MXC	Fluid supply system for control and protection equipment (free for use)
MXD	Fluid supply system for control and protection equipment (free for use)
MXE	Fluid supply system for control and protection equipment (free for use)
MXF	Fluid supply system for control and protection equipment (free for use)
MXG	Fluid supply system for control and protection equipment (free for use)
MXH	Fluid supply system for control and protection equipment (free for use)
MXJ	Fluid supply system for control and protection equipment (free for use)
MXK	Fluid supply system for control and protection equipment (free for use)
MXL	Fluid supply system for control and protection equipment (free for use)
MXM	Fluid supply system for control and protection equipment (free for use)
MXN	Fluid supply system for control and protection equipment (free for use)
MXP	Fluid supply system for control and protection equipment (free for use)
MXQ	Fluid supply system for control and protection equipment (free for use)
MXR	Fluid supply system for control and protection equipment (free for use)
MXS	Fluid supply system for control and protection equipment (free for use)
MXT	Fluid supply system for control and protection equipment (free for use)
MXU	Fluid supply system for control and protection equipment (free for use)

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	MX Fluid supply system for control and protection equipment						
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	MXW	-blocked-					
	MXX	-blocked-					
	MXY	-blocked-					
MXZ	-blocked-						
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M MAIN MACHINE SETS**MY Control and protection equipment**

MYA	Control and protection equipment (free for use)
MYB	Control and protection equipment (free for use)
MYC	Control and protection equipment (free for use)
MYD	Control and protection equipment (free for use)
MYE	Control and protection equipment (free for use)
MYF	Control and protection equipment (free for use)
MYG	Control and protection equipment (free for use)
MYH	Control and protection equipment (free for use)
MYJ	Control and protection equipment (free for use)
MYK	Control and protection equipment (free for use)
MYL	Control and protection equipment (free for use)
MYM	Control and protection equipment (free for use)
MYN	Control and protection equipment (free for use)
MYP	Control and protection equipment (free for use)
MYQ	Control and protection equipment (free for use)
MYR	Control and protection equipment (free for use)
MYS	Control and protection equipment (free for use)
MYT	Control and protection equipment (free for use)
MYU	Control and protection equipment (free for use)
MYV	-blocked-
MYW	-blocked-
MYX	-blocked-
MYY	-blocked-
MYZ	-blocked-

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C	N	Process energy/fluid supply for external users				
	NA	Process steam system (incl. condensate return)				
	NB	-blocked-				
	NC	-blocked-				
	ND	Process hot water system				
	NE	Process chilled water system				
	NF	-blocked-				
	NG	Process air system				
	NH	-blocked-				
	NJ	-blocked-				
	NK	Process gas system				
	NL	-blocked-				
	NM	-blocked-				
	NN	-blocked-				
	NP	-blocked-				
	NQ	-blocked-				
	NR	-blocked-				
	NS	-blocked-				
	NT	-blocked-				
	NU	-blocked-				
	NV	-blocked-				
	NW	-blocked-				
	NX	-blocked-				
	NY	-blocked-				
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C	N	Process energy/fluid supply for external users				
	NA	Process steam system (incl. condensate return)				
	NAA	Piping system (steam)				
	NAB	Piping system (condensate)				
	NAC	-blocked-				
	NAD	Process heat transmission system from incl. heat exchanger inlet to incl. heat exchanger outlet				
	NAE	Piping system (steam) *NAE* to *NAJ* only to be used if *NAA* is not sufficient for identification) (free for use e.g. to pressure level)				
	NAF	Piping system (steam) *NAE* to *NAJ* only to be used if *NAA* is not sufficient for identification (free for use e.g. to pressure level)				
	NAG	Piping system (steam) *NAE* to *NAJ* only to be used if *NAA* is not sufficient for identification (free for use e.g. to pressure level)				
	NAH	Piping system (steam) *NAE* to *NAJ* only to be used if *NAA* is not sufficient for identification (free for use e.g. to pressure level)				
	NAJ	Piping system (steam) *NAE* to *NAJ* only to be used if *NAA* is not sufficient for identification (free for use e.g. to pressure level)				
	NAK	Piping system (condensate) *NAK* to *NAM* only to be used if *NAB* is not sufficient for identification (free for use e.g. according to process)				
	NAL	Piping system (condensate) *NAK* to *NAM* only to be used if *NAB* is not sufficient for identification (free for use e.g. according to process)				
	NAM	Piping system (condensate) *NAK* to *NAM* only to be used if *NAB* is not sufficient for identification (free for use e.g. according to process)				
	NAN	-blocked-				
	NAP	-blocked-				
	NAQ	-blocked-				
	NAR	-blocked-				
	NAS	-blocked-				
	NAT	-blocked-				
	NAU	-blocked-				
	NAV	-blocked-				

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C	N	Process energy/fluid supply for external users					
	NA	Process steam system (incl. condensate return)					
	NAW	-blocked-					
	NAX	Fluid supply system for control and protection equipment					
	NAY	Control and protection equipment					
	NAZ	-blocked-					
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


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C	N	Process energy/fluid supply for external users						
	ND	Process hot water system						
	NDA	Piping system (forward)						
	NDB	Piping system (return)						
	NDC	Process hot water pump system						
	NDD	Process heat transfer from incl. heat exchanger inlet to incl. heat exchanger outlet						
	NDE	Hot water storage system from incl. tank inlet to incl. tank outlet						
	NDF	Distribution systems (free for use e.g. for temperature levels)						
	NDG	Distribution systems (free for use e.g. for temperature levels)						
	NDH	Distribution systems (free for use e.g. for temperature levels)						
	NDJ	Distribution systems (free for use e.g. for temperature levels)						
	NDK	Pressurizing system						
	NDL	-blocked-						
	NDM	-blocked-						
	NDN	-blocked-						
	NDP	-blocked-						
	NDQ	-blocked-						
	NDR	-blocked-						
	NDS	-blocked-						
	NDT	-blocked-						
	NDU	-blocked-						
	NDV	Lubricant supply system						
	NDW	-blocked-						
	NDX	Fluid supply system for control and protection equipment						
	NDY	Control and protection equipment						
	NDZ	-blocked-						
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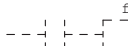
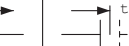
C	N	Process energy/fluid supply for external users
C	NE	Process chilled water system
C	NEA	Piping system (forward)
C	NEB	Piping system (return)
C	NEC	Process chilled water pump system
C	NED	- blocked -
C	NEE	Process chilled water storage system from incl. tank inlet to incl. tank outlet
C	NEF	Distribution system (available for use)
C	NEG	Distribution system (available for use)
C	NEH	Distribution system (available for use)
C	NEJ	Distribution system (available for use)
C	NEK	Pressurizing system
C	NEL	- blocked -
C	NEM	- blocked -
C	NEN	- blocked -
C	NEP	- blocked -
C	NEQ	- blocked -
C	NER	- blocked -
C	NES	- blocked -
C	NET	- blocked -
C	NEU	- blocked -
C	NEV	Lubricant supply system
C	NEW	- blocked -
C	NEX	Fluid supply system for control and protection equipment
C	NEY	Control and protection equipment
C	NEZ	- blocked -
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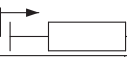
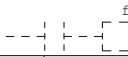

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C	N	Process energy/fluid supply for external users						
	NG	Process air system						
	NGA	-blocked-						
	NGB	Piping system						
	NGC	Forwarding system						
	NGD	-blocked-						
	NGE	-blocked-						
	NGF	-blocked-						
	NGG	-blocked-						
	NGH	-blocked-						
	NGJ	-blocked-						
	NGK	-blocked-						
	NGL	-blocked-						
	NGM	-blocked-						
	NGN	-blocked-						
	NGP	-blocked-						
	NGQ	-blocked-						
	NGR	-blocked-						
	NGS	-blocked-						
	NGT	-blocked-						
	NGU	-blocked-						
	NGV	-blocked-						
	NGW	Sealing fluid supply system						
	NGX	Fluid supply system for control and protection equipment						
	NGY	Control and protection equipment						
	NGZ	-blocked-						
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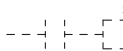


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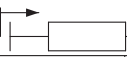
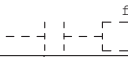
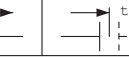
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C N NJ	Process energy/fluid supply for external users					
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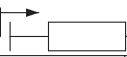
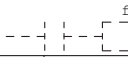
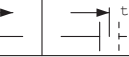
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	NK Process gas system						
	NKA -blocked-						
	NKB Piping system						
	NKC -blocked-						
	NKD -blocked-						
	NKE -blocked-						
	NKF -blocked-						
	NKG -blocked-						
	NKH -blocked-						
	NKJ -blocked-						
	NKK -blocked-						
	NKL -blocked-						
	NKM -blocked-						
	NKN -blocked-						
	NKP -blocked-						
	NKQ -blocked-						
	NKR -blocked-						
	NKS -blocked-						
	NKT -blocked-						
	NKU -blocked-						
	NKV -blocked-						
	NKW Sealing fluid supply system						
	NKX Fluid supply system for control and protection equipment						
	NKY Control and protection equipment						
	NKZ -blocked-						
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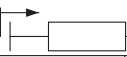
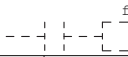
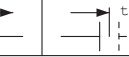
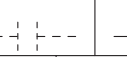
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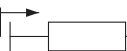
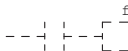
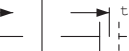
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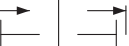

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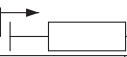
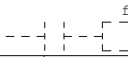
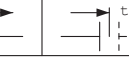
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C N NS	Process energy/fluid supply for external users					
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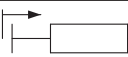

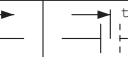
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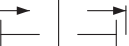

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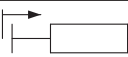

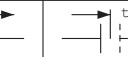
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	<div>P</div> <div>COOLING WATER SYSTEMS</div>
	<div>PA</div> Circulating (main cooling) water system
	<div>PB</div> Circulating (main cooling) water treatment system
	<div>PC</div> Service (secondary cooling) water system, conventional area
	<div>PD</div> Service (secondary cooling) water treatment system, conventional area
	<div>PE</div> Service (secondary cooling) water system for secured area
	<div>PF</div> Service (secondary cooling) water treatment system for secured area
	<div>PG</div> Closed cooling water system for conventional area
	<div>PH</div> Closed cooling water treatment system for conventional area
	<div>PJ</div> Closed cooling water system for secured area
	<div>PK</div> Closed cooling water treatment system for secured area
	<div>PL</div> -blocked-
	<div>PM</div> Closed cooling water system for transformers (if separate closed cooling water system)
F	<div>PN</div> Secondary cooling water system for flue gas exhaust and treatment including oxidant production / supply
F	<div>PP</div> Closed cooling water system for flue gas exhaust and treatment including gas fractionating
	<div>PQ</div> -blocked-
	<div>PR</div> -blocked-
	<div>PS</div> Cooling tower blowdown system (if separate from *PAB*)
	<div>PT</div> -blocked-
	<div>PU</div> Common equipment for cooling water systems
	<div>PV</div> Lubricant supply system
	<div>PW</div> Sealing fluid supply system
	<div>PX</div> Fluid supply system for control and protection equipment
	<div>PY</div> Control and protection equipment
	<div>PZ</div> -blocked-
I N D E X	<div>VGB Technical Group</div> <div>Reference Designation and Plant Documentation</div> <div>Page P1</div> <div><div><div>from incl.</div><div>→</div><div>□</div><div>—</div><div>—</div></div><div><div>from excl.</div><div>→</div><div>□</div><div>—</div><div>—</div></div><div><div>to excl.</div><div>→</div><div>□</div><div>—</div><div>—</div></div><div><div>to incl.</div><div>→</div><div>□</div><div>—</div><div>—</div></div></div> <div>Revision</div> <div>F 052016</div> <div></div> <div></div> <div></div> <div></div>

P

P COOLING WATER SYSTEMS**PA Circulating (main cooling) water system**

PAA Extraction, mechanical cleaning for direct cooling
from incl. intake system
to incl. mechanical cleaning system outlet

PAB Circulating (main cooling) water piping and culvert system
from excl. outlet of circulating (main cooling) water
extraction system (excl. any user)
to incl. outfall in direct cooling system or
from excl. cooling tower outlet
to excl. cooling tower inlet in recirculation cooling

PAC Circulating (main cooling) water pump system
from incl. pump system suction nozzle
to incl. pump system discharge nozzle

PAD Recirculating cooling system, outfall cooling system
from incl. hot water riser
to incl. basin outlet

PAE Cooling tower pump system (if separate)

PAF -blocked-

PAG -blocked-

PAH Condenser cleaning system, incl. all appurtenances

PAJ -blocked-

PAK -blocked-

PAL -blocked-

PAM -blocked-

PAN -blocked-

PAP -blocked-

PAQ -blocked-

PAR Make-up water piping system
from excl. intake
to excl. inlet to other system

PAS Make-up water pump system
from incl. pump system suction nozzle
to incl. pump system discharge nozzle




PAT -blocked-





PAU -blocked-

PAV Lubricant supply system

PAW -blocked-

PAX Fluid supply system for control and protection equipment

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	<p>P COOLING WATER SYSTEMS</p> <p>PA Circulating (main cooling) water system</p> <p>PAY Control and protection equipment</p> <p>PAZ -blocked-</p>						
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P

P COOLING WATER SYSTEMS**PB Circulating (main cooling) water treatment system**

PBA Discharge from fluid treatment system (if not part of another system)
 from excl. fluid treatment system outlet
 to excl. inlet to other system

PBB Filtering, mechanical cleaning system
 from incl. separation equipment inlet
 to incl. separation equipment outlet

PBC Aeration, gas injection system
 from excl. atmosphere or
 from incl. gas supply

PBD Precipitation system (e.g. for carbonate hardness removal)
 from incl. precipitation equipment inlet
 to incl. precipitation equipment outlet

PBE Acid proportioning system (e.g. for carbonate hardness removal)
 from incl. acid dosing equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

PBF Ion exchange system (e.g. for demineralization)
 from incl. ion exchanger inlet and
 from incl. isolating valve of chemicals supply system or
 auxiliary fluid supply system upstream of ion exchanger

PBG Evaporation system (e.g. for demineralisation)
 from incl. feedwater inlet
 to incl. steam outlet and
 from incl. heating steam inlet
 to incl. condensate outlet

PBH Deaeration
 from incl. deaerator or tank inlet
 to incl. tank outlet incl. warm-up equipment of vapour condenser

PBJ Preheating, cooling system
 from incl. preheater or cooler inlet
 to incl. preheater or cooler outlet

PBK Piping system, temporary storage system, pump system for main fluid
 Piping system:
 from excl. intake or
 from excl. outlet of other system
 to excl. inlet to other system
 to incl. fluid treatment system outlet
 Temporary storage system:
 from incl. temporary storage system inlet
 to incl. temporary storage

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P COOLING WATER SYSTEMS**PB Circulating (main cooling) water treatment system**

PBL Storage system outside fluid treatment system (if not part of another system)
 from incl. storage system inlet
 to incl. storage system outlet incl. intake and outfall

PBM -blocked-

PBN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

PBP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system and
 flushing air supply system
 to incl. regenerating, flushing equipment

PBQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

PBR Flushing water and residues removal system, incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into other system

PBS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into other system

PBT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling, flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

PBU -blocked-




PBV Lubricant supply system

PBW -blocked-

PBX Fluid supply system for control and protection equipment

PBY Control and protection equipment

PBZ -blocked-

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P COOLING WATER SYSTEMS**PC Service (secondary cooling) water system, conventional area**

PCA Extraction, mechanical cleaning for direct cooling
 from incl. intake system
 to incl. mechanical cleaning system outlet

PCB Piping and culvert system
 from excl. outlet of service (secondary cooling)
 extraction system or
 from excl. branch off circulating water system
 to excl. inlet to other system, excl. respective user
 and
 from excl. make-up water treatment and distri

PCC Pump system
 from incl. pump system suction nozzle
 to incl. pump system discharge nozzle

PCD Recirculation cooling system, outfall cooling system
 from incl. hot water riser
 to incl. basin outlet

PCE -blocked-

PCF -blocked-

PCG -blocked-

PCH Heat exchanger cleaning system

PCJ -blocked-

PCK -blocked-

PCL -blocked-

PCM Service (secondary cooling) water system for generator,
 motor generator cooling
 from excl. branch off *PCB*
 to excl. generator cooler and
 from excl. generator cooler
 to excl. inlet to *PCB* or other systems

PCN -blocked-

PCP -blocked-

PCQ -blocked-

PCR -blocked-

PCS -blocked-

PCT -blocked-

PCU -blocked-

PCV Lubricant supply system

PCW -blocked-

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	P COOLING WATER SYSTEMS										
	PC Service (secondary cooling) water system, conventional area										
	PCX Fluid supply system for control and protection equipment										
	PCY Control and protection equipment										
	PCZ -blocked-										
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Revision											

P

P COOLING WATER SYSTEMS**PD Service (secondary cooling) water treatment system, conventional area**

PDA Discharge from fluid treatment system (if not part of another system)
 from excl. fluid treatment system outlet
 to excl. inlet to other system

PDB Filtering, mechanical cleaning system
 from incl. separation equipment inlet
 to incl. separation equipment outlet

PDC Aeration, gas injection system
 from excl. atmosphere or
 from incl. gas supply

PDD Precipitation system (e.g. for carbonate hardness removal)
 from incl. precipitation equipment inlet
 to incl. precipitation equipment outlet

PDE Acid proportioning system (e.g. for carbonate hardness removal)
 from incl. acid proportioning equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

PDF Ion exchange system (e.g. for demineralization)
 from incl. ion exchanger inlet and
 to incl. isolating valve of chemicals supply system or
 auxiliary fluid supply system upstream of ion exchanger

PDG Evaporation system (e.g. for demineralization)
 from incl. feedwater inlet
 to incl. steam outlet and
 from incl. heating steam inlet
 to incl. condensate outlet

C PDH Deaeration
 from incl. deaerator or tank inlet
 to incl. tank outlet incl. warm-up equipment of vapour condenser

PDJ Preheating, cooling system
 from incl. preheater or cooler inlet
 to incl. preheater or cooler outlet

PDK Piping system, temporary storage system, pump system for main fluid
 Piping system:
 from excl. intake or
 from excl. outlet of other system
 to excl. inlet to other system
 to incl. fluid treatment system outlet
 Temporary storage system:
 from incl. temporary storage system inlet

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P	COOLING WATER SYSTEMS				
	PD	Service (secondary cooling) water treatment system, conventional area			
	PDK	Piping system, temporary storage system, pump system for main fluid to incl. temporary storage			
	PDL	Storage system outside fluid treatment system (if not part of another system) from incl. storage system inlet to incl. storage system outlet incl. intake and outfall			
	PDM	-blocked-			
	PDN	Chemicals supply system from incl. intake or from incl. storage tank to excl. discharge into other system			
	PDP	Regeneration, flushing equipment from incl. system inlet to excl. inlet to other system from excl. chemicals or auxiliary fluid supply system and flushing air supply system to incl. regenerating, flushing equipment			
	PDQ	Injection system for main fluid from incl. injection equipment or from excl. branch off chemicals supply system to excl. inlet to other system			
	PDR	Flushing water and residues removal system, incl. neutralization from excl. outlet of respective system to excl. discharge into disposal system			
	PDS	Sludge thickening system from excl. outlet of respective system to excl. discharge into other system			
	PDT	Heating, cooling and flushing fluid distribution system from incl. heating, cooling, flushing fluid generation equipment or from excl. branch off heating, cooling, flushing fluid supply system to excl. user and from excl. user			
	PDU	-blocked-			
	PDV	Lubricant supply system			
	PDW	-blocked-			
	PDX	Fluid supply system for control and protection equipment			

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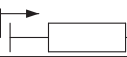


P COOLING WATER SYSTEMS

PD Service (secondary cooling) water treatment system,
conventional area

PDY Control and protection equipment

PDZ -blocked-

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P COOLING WATER SYSTEMS**PE Service (secondary cooling) water system for secured area**

PEA Extraction, mechanical cleaning for direct cooling
 from incl. intake works
 to incl. mechanical cleaning system outlet

PEB Piping and culvert system
 from excl. outlet of service (secondary cooling) water
 extraction system or
 from excl. cooling tower outlet with surge pond and return
 to excl. inlet to other system, excl. respective user and
 from excl. make-up water treatment

PEC Pump system
 from incl. pump system suction nozzle
 to incl. pump system discharge nozzle

PED Recirculation cooling system, outfall cooling system
 from incl. hot water riser
 to incl. basin outlet

PEE -blocked-

PEF -blocked-

PEG -blocked-

PEH Secured component cooler cleaning system

PEJ -blocked-

PEK -blocked-

PEL -blocked-

PEM -blocked-

PEN -blocked-

PEP -blocked-

PEQ -blocked-

PER -blocked-

PES -blocked-

PET -blocked-

PEU -blocked-





PEV Lubricant supply system

PEW -blocked-

PEX Fluid supply system for control and protection equipment

PEY Control and protection equipment

PEZ -blocked-

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P	COOLING WATER SYSTEMS							
	PF	Service (secondary cooling) water treatment system for secured area						
	PFA	Discharge from fluid treatment system (if not part of another system) from excl. fluid treatment system outlet to excl. inlet to other system						
	PFB	Filtering, mechanical cleaning system from incl. separation equipment inlet to incl. separation equipment outlet						
	PFC	Aeration, gas injection system from excl. atmosphere or from incl. gas supply						
	PDF	Precipitation system (e.g. for carbonate hardness removal) from incl. precipitation equipment inlet to incl. precipitation equipment outlet						
	PFE	Acid proportioning system (e.g. for carbonate hardness removal) from incl. acid dosing equipment or from excl. branch off chemicals supply system to excl. inlet to other system						
	PFF	Ion exchange system (e.g. for demineralization) from incl. ion exchanger inlet and to incl. isolating valve of chemicals supply system or auxiliary fluid supply system upstream of ion exchanger						
	PFG	Evaporation system (e.g. for demineralization) from incl. feedwater inlet to incl. steam outlet and from incl. heating steam inlet to incl. condensate outlet						
	C	PFH	Deaeration from incl. deaerator or tank inlet to incl. tank outlet incl. warm-up equipment of vapour condenser					
PFJ		Preheating, cooling system from incl. preheater or cooler inlet to incl. preheater or cooler outlet						
PFK		Piping system, temporary storage system, pump system for main fluid Piping system: from excl. intake or from excl. outlet of other system to excl. inlet to other system to incl. fluid treatment system outlet Temporary storage system: from incl. temporary storage system inlet						
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P COOLING WATER SYSTEMS**PF** Service (secondary cooling) water treatment system for secured area**PFK** Piping system, temporary storage system, pump system for main fluid
to incl. temporary storage**PFL** Storage system outside fluid treatment system (if not part of another system)
from incl. storage system inlet
to incl. storage system outlet incl. intake and outfall**PFM** -blocked-**PFN** Chemicals supply system
from incl. intake or
from incl. storage tank
to excl. discharge into other system**PFPP** Regeneration, flushing equipment
from incl. system inlet
to excl. inlet to other system
from excl. chemicals or auxiliary fluid supply system and flushing air supply system
to incl. regenerating, flushing equipment**PFQ** Injection system for main fluid
from incl. injection equipment or
from excl. branch off chemicals supply system
to excl. inlet to other system**PFR** Flushing water and residues removal system, incl. neutralization
from excl. outlet of respective system
to excl. discharge into disposal system**PFS** Sludge thickening system
from excl. outlet of respective system
to excl. discharge into other system**PFT** Heating, cooling and flushing fluid distribution system
from incl. heating, cooling, flushing fluid generation equipment or
from excl. branch off heating, cooling, flushing fluid supply system
to excl. user and
from excl. user**PFU** -blocked-**PFV** Lubricant supply system**PFW** -blocked-**PFX** Fluid supply system for control and protection equipmentI
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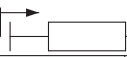
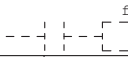
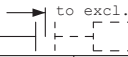
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	P COOLING WATER SYSTEMS						
	PF Service (secondary cooling) water treatment system for secured area						
	PFY Control and protection equipment						
	PFZ -blocked-						
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P

P COOLING WATER SYSTEMS**PG Closed cooling water system for conventional area****PGA** Closed cooling water system for conventional area
(free for use)**PGB** Closed cooling water system for conventional area
(free for use)**PGC** Closed cooling water system for conventional area
(free for use)**PGD** Closed cooling water system for conventional area
(free for use)**PGE** Closed cooling water system for conventional area
(free for use)**PGF** Closed cooling water system for conventional area
(free for use)**PGG** Closed cooling water system for conventional area
(free for use)**PGH** Closed cooling water system for conventional area
(free for use)**PGJ** Closed cooling water system for conventional area
(free for use)**PGK** Closed cooling water system for conventional area
(free for use)**PGL** Closed cooling water system for conventional area
(free for use)**PGM** Closed cooling water system for conventional area
(free for use)**PGN** Closed cooling water system for conventional area
(free for use)**PGP** Closed cooling water system for conventional area
(free for use)**PGQ** Closed cooling water system for conventional area
(free for use)**PGR** Closed cooling water system for conventional area
(free for use)**PGS** Closed cooling water system for conventional area
(free for use)**PGT** Closed cooling water system for conventional area
(free for use)**PGU** Closed cooling water system for conventional area
(free for use)

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	P COOLING WATER SYSTEMS					
	PG Closed cooling water system for conventional area					
	PGV Lubricant supply system					
	PGW -blocked-					
	PGX Fluid supply system for control and protection equipment					
	PGY Control and protection equipment					
	PGZ -blocked-					
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P COOLING WATER SYSTEMS**PH Closed cooling water treatment system for conventional area**

PHA Discharge from fluid treatment system (if not part of another system)
 from excl. fluid treatment system outlet
 to excl. inlet to other system

PHB Filtering, mechanical cleaning system
 from incl. separation equipment inlet
 to incl. separation equipment outlet

PHC Aeration, gas injection system
 from excl. atmosphere or
 from incl. gas supply

PHD Precipitation system (e.g. for carbonate hardness removal)
 from incl. precipitation equipment inlet
 to incl. precipitation equipment outlet

PHE Acid proportioning system (e.g. for carbonate hardness removal)
 from incl. acid proportioning equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

PHF Ion exchange system (e.g. for demineralization)
 from incl. ion exchanger inlet and
 to incl. isolating valve of chemicals supply system or
 auxiliary fluid supply system upstream of ion exchanger

PHG Evaporation system (e.g. for demineralization)
 from incl. feedwater inlet
 to incl. steam outlet and
 from incl. heating steam inlet
 to incl. condensate outlet

PHH Deaeration
 from incl. deaerator or tank inlet
 to incl. tank outlet, incl. warm-up equipment of vapour condenser

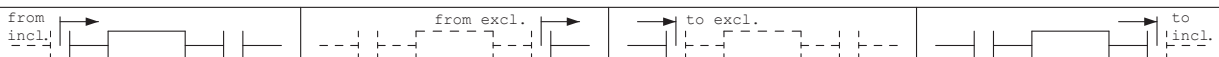
PHJ Preheating, cooling system
 from incl. preheater or cooler inlet
 to incl. preheater or cooler outlet

PHK Piping system, temporary storage system, pump system for main fluid
 Piping system:
 from excl. intake or
 from excl. outlet of other system
 to excl. inlet to other system
 to incl. fluid treatment system outlet
 Temporary storage system:
 from incl. temporary storage system inlet
 to incl. temporary storage

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P COOLING WATER SYSTEMS**PH Closed cooling water treatment system for conventional area**

PHL Storage system outside fluid treatment system (if not part of another system)
 from incl. storage system inlet
 to incl. storage system outlet, incl. intake and outfall

PHM -blocked-

PHN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

PHP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system and
 flushing air supply system
 to incl. regenerating, flushing equipment

PHQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

PHR Flushing water and residues removal system, incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into disposal system

PHS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into other system

PHT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling, flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

PHU -blocked-

PHV Lubricant supply system

PHW -blocked-

PHX Fluid supply system for control and protection equipment

PHY Control and protection equipment

PHZ -blocked-

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P COOLING WATER SYSTEMS**PJ Closed cooling water system for secured area****PJA** Closed cooling water system for secured area (free for use)**PJB** Closed cooling water system for secured area (free for use)**PJC** Closed cooling water system for secured area (free for use)**PJD** Closed cooling water system for secured area (free for use)**PJE** Closed cooling water system for secured area (free for use)**PJF** Closed cooling water system for secured area (free for use)**PJG** Closed cooling water system for secured area (free for use)**PJH** Closed cooling water system for secured area (free for use)**PJJ** Closed cooling water system for secured area (free for use)**PJK** Closed cooling water system for secured area (free for use)**PJL** Closed cooling water system for secured area (free for use)**PJM** Closed cooling water system for secured area (free for use)**PJN** Closed cooling water system for secured area (free for use)**PJP** Closed cooling water system for secured area (free for use)**PJQ** Closed cooling water system for secured area (free for use)**PJR** Closed cooling water system for secured area (free for use)**PJS** Closed cooling water system for secured area (free for use)**PJT** Closed cooling water system for secured area (free for use)**PJU** Closed cooling water system for secured area (free for use)**PJV** Lubricant supply system**PJW** -blocked-**PJX** Fluid supply system for control and protection equipment**PJY** Control and protection equipment**PJZ** -blocked-I
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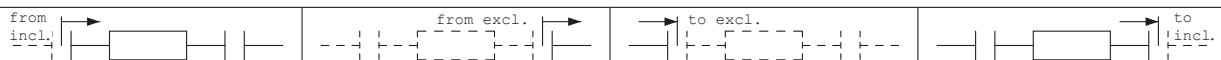
P COOLING WATER SYSTEMS**PK Closed cooling water treatment system for secured area**

- PKA** Discharge from fluid treatment system (if not part of another system)
from excl. fluid treatment system outlet
to excl. inlet to other system
- PKB** Filtering, mechanical cleaning system
from incl. separation equipment inlet
to incl. separation equipment outlet
- PKC** Aeration, gas injection system
from excl. atmosphere or
from incl. gas supply
- PKD** Precipitation system (e.g. for carbonate hardness removal)
from incl. precipitation equipment inlet
to incl. precipitation equipment outlet
- PKE** Acid proportioning system (e.g. for carbonate hardness removal)
from incl. acid proportioning equipment or
from excl. branch off chemicals supply system
to excl. inlet to other system
- PKF** Ion exchange system (e.g. for demineralization)
from incl. ion exchanger inlet and
to incl. isolating valve of chemicals supply system or auxiliary fluid supply system upstream of ion exchanger
- PKG** Evaporation system (e.g. for demineralization)
from incl. feedwater inlet
to incl. steam outlet and
from incl. heating steam inlet
to incl. condensate outlet
- PKH** Deaeration
from incl. deaerator or tank inlet
to incl. tank outlet, incl. warm-up equipment of vapour condenser
- PKJ** Preheating, cooling system
from incl. preheater or cooler inlet
to incl. preheater or cooler outlet
- PKK** Piping system, temporary storage system, pump system for main fluid
Piping system:
from excl. intake or
from excl. outlet of other system
to excl. inlet to other system
to incl. fluid treatment system outlet
Temporary storage system:
from incl. temporary storage system inlet
to incl. temporary storage

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P COOLING WATER SYSTEMS**PK Closed cooling water treatment system for secured area**

PKL Storage system outside fluid treatment system (if not part of another system)
 from incl. storage system inlet
 to incl. storage system outlet, incl. intake and outfall

PKM -blocked-

PKN Chemicals supply system
 from incl. intake or
 from incl. storage tank
 to excl. discharge into other system

PKP Regeneration, flushing equipment
 from incl. system inlet
 to excl. inlet to other system
 from excl. chemicals or auxiliary fluid supply system and
 flushing air supply system
 to incl. regenerating, flushing equipment

PKQ Injection system for main fluid
 from incl. injection equipment or
 from excl. branch off chemicals supply system
 to excl. inlet to other system

PKR Flushing water and residues removal system, incl. neutralization
 from excl. outlet of respective system
 to excl. discharge into disposal system

PKS Sludge thickening system
 from excl. outlet of respective system
 to excl. discharge into other system

PKT Heating, cooling and flushing fluid distribution system
 from incl. heating, cooling, flushing fluid generation equipment or
 from excl. branch off heating, cooling, flushing fluid supply system
 to excl. user and
 from excl. user

PKU -blocked-

PKV Lubricant supply system

PKW -blocked-

PKX Fluid supply system for control and protection equipment

PKY Control and protection equipment




PKZ -blocked-

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P COOLING WATER SYSTEMS






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I N D E X	P COOLING WATER SYSTEMS					
	PM Closed cooling water system for transformers (if separate closed cooling water system)					
	PMA Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMB Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMC Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMD Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PME Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMF Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMG Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMH Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMJ Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMK Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PML Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMM Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMN Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMP Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMQ Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMR Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMS Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMT Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
	PMU Closed cooling water system for transformers (if separate closed cooling water system) (free for use)					
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- P** **COOLING WATER SYSTEMS**
- PM** Closed cooling water system for transformers
 (if separate closed cooling water system)
- PMV** Lubricant supply system
- PMW** -blocked-
- PMX** Fluid supply system for control and protection equipment
- PMY** Control and protection equipment
- PMZ** -blocked-

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P	COOLING WATER SYSTEMS		
F	PN	Secondary cooling water system for flue gas exhaust and treatment including oxidant production / supply	
F	PNA	Extraction (including mechanical cleaning and retention of particles)	
F	PNB	Piping and duct system from excl. cooling water extraction to incl. circulation cooling or from excl. cooling tower outlet to excl. cooling tower inlet in case of recirculation cooling or from excl. branch main cooling water system forward to incl. inlet main cooling water system return	
F	PNC	Conveying system	
F	PND	Open-circuit (re)cooling system with cooling tower from incl. hot water riser to incl. basin outlet	
F	PNH	Cleaning system for heat exchanger	
F	PNQ	- available for use -	
F	PNR	- available for use -	
F	PNS	- available for use -	
F	PNT	- available for use -	
F	PNU	- available for use -	
F	PNV	Lubricant supply system	
F	PNX	Fluid supply system for control and protection equipment	
F	PNY	Control and protection equipment	

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	P	COOLING WATER SYSTEMS		
F	PP	Closed cooling water system for flue gas exhaust and treatment including gas fractionating		
F	PPA	Piping system (forward)		
F	PPB	Piping system (return)		
F	PPC	Conveying system		
F	PPD	Closed cooling incl. drainage, venting secondary and closed cooling water side		
F	PPE	Pressurizing system, including drainage and venting		
F	PPQ	- available for use -		
F	PPR	- available for use -		
F	PPS	- available for use -		
F	PPT	- available for use -		
F	PPU	- available for use -		
F	PPV	Lubricant supply system		
F	PPX	Fluid supply system for control and protection equipment		
F	PPY	Control and protection equipment		
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P	COOLING WATER SYSTEMS					
PS	Cooling tower blowdown system (if separate from *PAB*)					
PSA	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSB	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSC	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSD	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSE	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSF	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSG	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSH	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSJ	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSK	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSL	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSM	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSN	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSP	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSQ	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSR	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSS	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PST	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
PSU	Cooling tower blowdown system (if separate from *PAB*) (free for use)					
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- P** **COOLING WATER SYSTEMS**
- PS** Cooling tower blowdown system (if separate from *PAB*)
- PSV** Lubricant supply system
- PSW** -blocked-
- PSX** Fluid supply system for control and protection equipment
- PSY** Control and protection equipment
- PSZ** -blocked-








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	P	COOLING WATER SYSTEMS
	PU	Common equipment for cooling water systems
	PUA	Common equipment for cooling water systems (free for use)
	PUB	Common equipment for cooling water systems (free for use)
	PUC	Common equipment for cooling water systems (free for use)
	PUD	Common equipment for cooling water systems (free for use)
	PUE	Common equipment for cooling water systems (free for use)
	PUF	Common equipment for cooling water systems (free for use)
	PUG	Common equipment for cooling water systems (free for use)
	PUH	Common equipment for cooling water systems (free for use)
	PUJ	Common equipment for cooling water systems (free for use)
C	PUK	Neutralization from incl. neutralization medium receiving to excl. inlet to respective system to be neutralized
	PUL	Common equipment for cooling water systems (free for use)
	PUM	Common equipment for cooling water systems (free for use)
C	PUN	Proportioning system from incl. proportioning medium receiving to excl. inlet to respective system to be treated
	PUP	Common equipment for cooling water systems (free for use)
	PUQ	Common equipment for cooling water systems (free for use)
	PUR	Common equipment for cooling water systems (free for use)
	PUS	Common equipment for cooling water systems (free for use)
	PUT	Common equipment for cooling water systems (free for use)
	PUU	Common equipment for cooling water systems (free for use)
	PUV	-blocked-
	PUW	-blocked-
	PUX	-blocked-
	PUY	-blocked-
	PUZ	-blocked-

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P COOLING WATER SYSTEMS**PV Lubricant supply system****PVA** Lubricant supply system (free for use)**PVB** Lubricant supply system (free for use)**PVC** Lubricant supply system (free for use)**PVD** Lubricant supply system (free for use)**PVE** Lubricant supply system (free for use)**PVF** Lubricant supply system (free for use)**PVG** Lubricant supply system (free for use)**PVH** Lubricant supply system (free for use)**PVJ** Lubricant supply system (free for use)**PVK** Lubricant supply system (free for use)**PVL** Lubricant supply system (free for use)**PVM** Lubricant supply system (free for use)**PVN** Lubricant supply system (free for use)**PVP** Lubricant supply system (free for use)**PVQ** Lubricant supply system (free for use)**PVR** Lubricant supply system (free for use)**PVS** Lubricant supply system (free for use)**PVT** Lubricant supply system (free for use)**PVU** Lubricant supply system (free for use)**PVV** -blocked-**PVW** -blocked-**PVX** -blocked-**PVY** -blocked-**PVZ** -blocked-I
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
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P COOLING WATER SYSTEMS**PW Sealing fluid supply system****PWA** Sealing fluid supply system (free for use)**PWB** Sealing fluid supply system (free for use)**PWC** Sealing fluid supply system (free for use)**PWD** Sealing fluid supply system (free for use)**PWE** Sealing fluid supply system (free for use)**PWF** Sealing fluid supply system (free for use)**PWG** Sealing fluid supply system (free for use)**PWH** Sealing fluid supply system (free for use)**PWJ** Sealing fluid supply system (free for use)**PWK** Sealing fluid supply system (free for use)**PWL** Sealing fluid supply system (free for use)**PWM** Sealing fluid supply system (free for use)**PWN** Sealing fluid supply system (free for use)**PWP** Sealing fluid supply system (free for use)**PWQ** Sealing fluid supply system (free for use)**PWR** Sealing fluid supply system (free for use)**PWS** Sealing fluid supply system (free for use)**PWT** Sealing fluid supply system (free for use)**PWU** Sealing fluid supply system (free for use)**PWV** -blocked-**PWW** -blocked-**PWX** -blocked-**PWY** -blocked-**PWZ** -blocked-I
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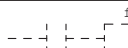
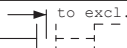
P

P COOLING WATER SYSTEMS**PX Fluid supply system for control and protection equipment****PXA** Fluid supply system for control and protection equipment
(free for use)**PXB** Fluid supply system for control and protection equipment
(free for use)**PXC** Fluid supply system for control and protection equipment
(free for use)**PXD** Fluid supply system for control and protection equipment
(free for use)**PXE** Fluid supply system for control and protection equipment
(free for use)**PXF** Fluid supply system for control and protection equipment
(free for use)**PXG** Fluid supply system for control and protection equipment
(free for use)**PXH** Fluid supply system for control and protection equipment
(free for use)**PXJ** Fluid supply system for control and protection equipment
(free for use)**PXK** Fluid supply system for control and protection equipment
(free for use)**PXL** Fluid supply system for control and protection equipment
(free for use)**PXM** Fluid supply system for control and protection equipment
(free for use)**PXN** Fluid supply system for control and protection equipment
(free for use)**PXP** Fluid supply system for control and protection equipment
(free for use)**PXQ** Fluid supply system for control and protection equipment
(free for use)**PXR** Fluid supply system for control and protection equipment
(free for use)**PXS** Fluid supply system for control and protection equipment
(free for use)**PXT** Fluid supply system for control and protection equipment
(free for use)**PXU** Fluid supply system for control and protection equipment
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



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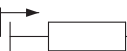
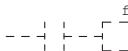
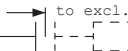
	P COOLING WATER SYSTEMS						
	PX Fluid supply system for control and protection equipment						
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	PXW	-blocked-					
	PXX	-blocked-					
	PXY	-blocked-					
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P COOLING WATER SYSTEMS**PY Control and protection equipment**

PYA Control and protection equipment (free for use)
PYB Control and protection equipment (free for use)
PYC Control and protection equipment (free for use)
PYD Control and protection equipment (free for use)
PYE Control and protection equipment (free for use)
PYF Control and protection equipment (free for use)
PYG Control and protection equipment (free for use)
PYH Control and protection equipment (free for use)
PYJ Control and protection equipment (free for use)
PYK Control and protection equipment (free for use)
PYL Control and protection equipment (free for use)
PYM Control and protection equipment (free for use)
PYN Control and protection equipment (free for use)
PYP Control and protection equipment (free for use)
PYQ Control and protection equipment (free for use)
PYR Control and protection equipment (free for use)
PYS Control and protection equipment (free for use)
PYT Control and protection equipment (free for use)
PYU Control and protection equipment (free for use)
PYV -blocked-
PYW -blocked-
PYX -blocked-
PYY -blocked-
PYZ -blocked-

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Q AUXILIARY SYSTEMS**QA** -blocked-**QB** -blocked-**QC** Central chemicals supply**QD** -blocked-**QE** General compressed air and carrier air supply**QF** General control air supply**QG** Central gas supply for closed gas cycles (as working fluid)**QH** Auxiliary steam generating system**QJ** Central gas supply, also inert gas
See *SE* for welding blanket gas supply systems. See *MK*,
ML, *XK*, *XL* for central gas supply systems for main
and heavy machinery**QK** Chilled water systems for conventional area**QL** Feedwater, steam, condensate cycle of auxiliary steam
generating and distribution system**QM** Air humidifying system**QN** -blocked-**QP** -blocked-**QQ** -blocked-**QR** -blocked-**QS** Central oil supply and disposal system
(for systems assignable to more than one Fl-function)**QT** -blocked-**QU** Sampling systems for conventional area**QV** -blocked-**QW** -blocked-**QX** -blocked-**QY** -blocked-**QZ** -blocked-I
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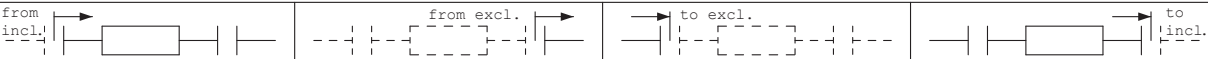
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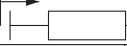
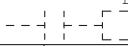
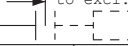
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Q AUXILIARY SYSTEMS**QC Central chemicals supply****QCA** Central chemicals supply (free for use e.g. building specific)**QCB** Central chemicals supply (free for use e.g. building specific)**QCC** Central chemicals supply (free for use e.g. building specific)**QCD** Central chemicals supply (free for use e.g. building specific)**QCE** Central chemicals supply (free for use e.g. building specific)**QCF** Central chemicals supply (free for use e.g. building specific)**QCG** Central chemicals supply (free for use e.g. building specific)**QCH** Central chemicals supply (free for use e.g. building specific)**QCJ** Central chemicals supply (free for use e.g. building specific)**QCK** Central chemicals supply (free for use e.g. building specific)**QCL** Central chemicals supply (free for use e.g. building specific)**QCM** Central chemicals supply (free for use e.g. building specific)**QCN** Central chemicals supply (free for use e.g. building specific)**QCP** Central chemicals supply (free for use e.g. building specific)**QCQ** Central chemicals supply (free for use e.g. building specific)**QCR** Central chemicals supply (free for use e.g. building specific)**QCS** Central chemicals supply (free for use e.g. building specific)**QCT** Central chemicals supply (free for use e.g. building specific)**QCU** Central chemicals supply (free for use e.g. building specific)

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	Q AUXILIARY SYSTEMS						
	QC Central chemicals supply						
	QCV Lubricant supply system						
	QCW -blocked-						
	QCX Fluid supply system for control and protection equipment						
	QCY Control and protection equipment						
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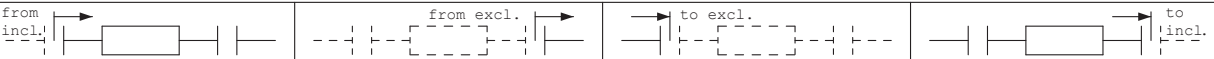
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Q AUXILIARY SYSTEMS**QE General compressed air and carrier air supply****QEA** Central compressed air and carrier air generation system**QEB** Central compressed air and carrier air distribution system**QEC** General compressed air and carrier air supply (free for use)**QED** General compressed air and carrier air supply (free for use)**QEE** General compressed air and carrier air supply (free for use)**QEF** General compressed air and carrier air supply (free for use)**QEG** General compressed air and carrier air supply (free for use)**QEH** General compressed air and carrier air supply (free for use)**QEJ** General compressed air and carrier air supply (free for use)**QEK** General compressed air and carrier air supply (free for use)**QEL** General compressed air and carrier air supply (free for use)**QEM** General compressed air and carrier air supply (free for use)**QEN** General compressed air and carrier air supply (free for use)**QEP** General compressed air and carrier air supply (free for use)**QEQ** General compressed air and carrier air supply (free for use)**QER** General compressed air and carrier air supply (free for use)**QES** General compressed air and carrier air supply (free for use)**QET** General compressed air and carrier air supply (free for use)**QEU** General compressed air and carrier air supply (free for use)**QEV** Lubricant supply system**QEW** Sealing fluid supply system**QEX** Fluid supply system for control and protection equipment**QEY** Control and protection equipment**QEZ** -blocked-**Q**





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Q AUXILIARY SYSTEMS**QF General control air supply****QFA** Central control air generation system**QFB** Central control air distribution system**QFC** General control air supply (free for use)**QFD** General control air supply (free for use)**QFE** General control air supply (free for use)**QFF** General control air supply (free for use)**QFG** General control air supply (free for use)**QFH** General control air supply (free for use)**QFJ** General control air supply (free for use)**QFK** General control air supply (free for use)**QFL** General control air supply (free for use)**QFM** General control air supply (free for use)**QFN** General control air supply (free for use)**QFP** General control air supply (free for use)**QFQ** General control air supply (free for use)**QFR** General control air supply (free for use)**QFS** General control air supply (free for use)**QFT** General control air supply (free for use)**QFU** General control air supply (free for use)**QFV** Lubricant supply system**QFW** Sealing fluid supply system**QFX** Fluid supply system for control and protection equipment**QFY** Control and protection equipment**QFZ** -blocked-**Q**

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Q AUXILIARY SYSTEMS**QG Central gas supply for closed gas cycles (as working fluid)****QGA** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGB** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGC** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGD** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGE** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGF** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGG** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGH** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGJ** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGK** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGL** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGM** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGN** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGP** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGQ** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGR** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGS** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGT** Central gas supply for closed gas cycles (as working fluid)
(free for use)**QGU** Central gas supply for closed gas cycles (as working fluid)
(free for use)

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	Q AUXILIARY SYSTEMS						
	QG Central gas supply for closed gas cycles (as working fluid)						
	QGV Lubricant supply system						
	QGW Sealing fluid supply system						
	QGX Fluid supply system for control and protection equipment						
	QGY Control and protection equipment						
	QGZ -blocked-						
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Q AUXILIARY SYSTEMS**QH Auxiliary steam generating system****QHA** Pressure system**QHB** Support structure, enclosure, steam generator interior**QHC** Fireside heat transfer surface cleaning equipment**QHD** Ash and slag removal**QHE** Blowdown system, flash drain system**QHF** Bunker, feeder and pulverizing system**QHG** Boiler water circulation system (also for electrode steam boiler)**QHH** Main firing system (also for electric heating)**QHJ** Ignition firing equipment (if separate)**QHK** -blocked-**QHL** Combustion air system (primary air, secondary air)**QHM** Gas heating system (for closed cycle)**QHN** Flue gas exhaust (without flue gas treatment)**QHP** Mechanical dust handling system**QHQ** Electrostatic precipitator**QHR** Chemical flue gas treatment system incl. residues removal adsorptive process**QHS** Chemical flue gas treatment system incl. residues removal catalytic process**QHT** Chemical flue gas treatment system incl. residues removal absorptive process**QHU** Flue gas reheating system**QHV** Lubricant supply system**QHW** -blocked-**QHX** Fluid supply system for control and protection equipment**QHY** Control and protection equipment**QHZ** -blocked-I
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Q AUXILIARY SYSTEMS

QJ Central gas supply, also inert gas
See *SE* for welding blanket gas supply systems. See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery

QJA Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJB Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJC Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJD Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJE Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJF Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJG Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJH Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

QJJ Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)

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Q AUXILIARY SYSTEMS

- QJ** Central gas supply, also inert gas
See *SE* for welding blanket gas supply systems. See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery
- QJK** Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)
- QJL** Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)
- QJM** Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)
- QJN** Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)
- QJP** Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)
- QJQ** Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)
- QJR** Central gas supply, also inert gas
(See *SE* for welding blanket gas supply systems) (See *MK*, *ML*, *XK*, *XL* for central gas supply systems for main and heavy machinery) (free for use)
- QJS** -blocked-
- QJT** -blocked-
- QJU** -blocked-
- QJV** Lubricant supply system
- QJW** Sealing fluid supply system
- QJX** Fluid supply system for control and protection equipment
- QJY** Control and protection equipment
- QJZ** -blocked-





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Q AUXILIARY SYSTEMS**QK Chilled water systems for conventional area****QKA** Chilled water systems for conventional area
(free for use e.g. building specific)**QKB** Chilled water systems for conventional area
(free for use e.g. building specific)**QKC** Chilled water systems for conventional area
(free for use e.g. building specific)**QKD** Chilled water systems for conventional area (free for use e.g. building specific) Add to Key-PART during review**QKE** Chilled water systems for conventional area
(free for use e.g. building specific)**QKF** Chilled water systems for conventional area
(free for use e.g. building specific)**QKG** Chilled water systems for conventional area
(free for use e.g. building specific)**QKH** Chilled water systems for conventional area
(free for use e.g. building specific)**QKJ** Chilled water systems for conventional area
(free for use e.g. building specific)**QKK** Chilled water systems for conventional area
(free for use e.g. building specific)**QKL** Chilled water systems for conventional area
(free for use e.g. building specific)**QKM** Chilled water systems for conventional area
(free for use e.g. building specific)**QKN** Chilled water systems for conventional area
(free for use e.g. building specific)**QKP** Chilled water systems for conventional area
(free for use e.g. building specific)**QKQ** Chilled water systems for conventional area
(free for use e.g. building specific)**QKR** Chilled water systems for conventional area
(free for use e.g. building specific)**QKS** Chilled water systems for conventional area
(free for use e.g. building specific)**QKT** Chilled water systems for conventional area
(free for use e.g. building specific)**QKU** Chilled water systems for conventional area
(free for use e.g. building specific)**Q**





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- Q **AUXILIARY SYSTEMS**
- QK **Chilled water systems for conventional area**
- QKV Lubricant supply system
- QKW -blocked-
- QKX Fluid supply system for control and protection equipment
- QKY Control and protection equipment
- QKZ -blocked-

Q











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Q AUXILIARY SYSTEMS**QL Feedwater, steam, condensate cycle of auxiliary steam generating and distribution system****QLA** Feedwater system**QLB** Steam system**QLC** Condensate system**QLD** Condensate polishing plant**QLE** -blocked-**QLF** Common equipment for auxiliary steam generation and distribution systems**QLG** -blocked-**QLH** -blocked-**QLJ** -blocked-**QLK** -blocked-**QLL** -blocked-**QLM** -blocked-**QLN** -blocked-**QLP** -blocked-**QLQ** -blocked-**QLR** -blocked-**QLS** -blocked-**QLT** -blocked-**QLU** -blocked-**QLV** Lubricant supply system**QLW** -blocked-**QLX** Fluid supply system for control and protection equipment**QLY** Control and protection equipment**QLZ** -blocked-

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Q AUXILIARY SYSTEMS**QM Air humidifying system****QMA** Air humidifying system (free for use e.g. building specific)**QMB** Air humidifying system (free for use e.g. building specific)**QMC** Air humidifying system (free for use e.g. building specific)**QMD** Air humidifying system (free for use e.g. building specific)**QME** Air humidifying system (free for use e.g. building specific)**QMF** Air humidifying system (free for use e.g. building specific)**QMG** Air humidifying system (free for use e.g. building specific)**QMH** Air humidifying system (free for use e.g. building specific)**QMJ** Air humidifying system (free for use e.g. building specific)**QMK** Air humidifying system (free for use e.g. building specific)**QML** Air humidifying system (free for use e.g. building specific)**QMM** Air humidifying system (free for use e.g. building specific)**QMN** Air humidifying system (free for use e.g. building specific)**QMP** Air humidifying system (free for use e.g. building specific)**QMQ** Air humidifying system (free for use e.g. building specific)**QMR** Air humidifying system (free for use e.g. building specific)**QMS** Air humidifying system (free for use e.g. building specific)**QMT** Air humidifying system (free for use e.g. building specific)**QMU** Air humidifying system (free for use e.g. building specific)**QMV** Lubricant supply system**QMW** -blocked-**QMX** Fluid supply system for control and protection equipment**QMY** Control and protection equipment**QMZ** -blocked-I
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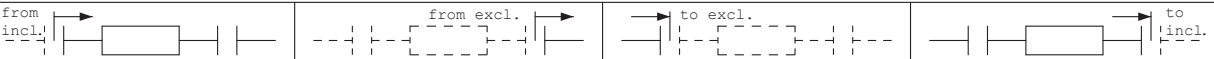
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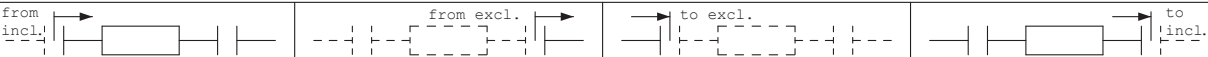
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Q

Q AUXILIARY SYSTEMS

QS Central oil supply and disposal system
(for systems assignable to more than one F1-function)

QSA Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSB Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSC Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSD Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSE Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSF Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSG Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSH Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSJ Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSK Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSL Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSM Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSN Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

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Q AUXILIARY SYSTEMS

QS Central oil supply and disposal system
(for systems assignable to more than one F1-function)

QSP Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSQ Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSR Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSS Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QST Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSU Central oil supply and disposal system
(for systems assignable to more than one F1-function)
(free for use)

QSV Lubricant supply system







QSW -blocked-

QSX Fluid supply system for control and protection equipment

QSY Control and protection equipment

QSZ -blocked-

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Q AUXILIARY SYSTEMS**QU Sampling systems for conventional area**

QUA	Sampling systems for conventional area (free for use)
QUB	Sampling systems for conventional area (free for use)
QUC	Sampling systems for conventional area (free for use)
QUD	Sampling systems for conventional area (free for use)
QUE	Sampling systems for conventional area (free for use)
QUF	Sampling systems for conventional area (free for use)
QUG	Sampling systems for conventional area (free for use)
QUH	Sampling systems for conventional area (free for use)
QUJ	Sampling systems for conventional area (free for use)
QUK	Sampling systems for conventional area (free for use)
QUL	Sampling systems for conventional area (free for use)
QUM	Sampling systems for conventional area (free for use)
QUN	Sampling systems for conventional area (free for use)
QUP	Sampling systems for conventional area (free for use)
QUQ	Sampling systems for conventional area (free for use)
QUR	Sampling systems for conventional area (free for use)
QUS	Sampling systems for conventional area (free for use)
QUT	Sampling systems for conventional area (free for use)
QUU	Sampling systems for conventional area (free for use)
QUV	-blocked-
QUW	-blocked-
QUX	Fluid supply system for control and protection equipment
QUY	Control and protection equipment
QUZ	-blocked-





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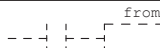
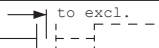
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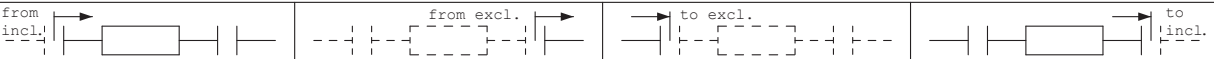
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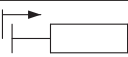
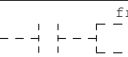
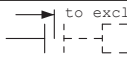

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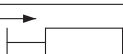

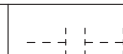


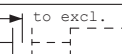

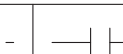

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	<div>R</div> <div>GAS GENERATION AND TREATMENT</div>
E	<div>RA</div> <div>Gas generation (gasification, fermentation)</div>
	<div>RB</div> <div>Support structure</div>
	<div>RC</div> <div>Feedstock systems</div>
	<div>RD</div> <div>Discharge systems for gasification residues</div>
	<div>RE</div> <div>Gasifying agent generation and distribution</div>
	<div>RF</div> <div>-blocked-</div>
	<div>RG</div> <div>Main gas cooling systems (if not *RA*)</div>
	<div>RH</div> <div>Main gas piping systems, storage, compression, expansion</div>
	<div>RJ</div> <div>Main gas precipitator</div>
	<div>RK</div> <div>Main gas clean-up (not *RJ*) including regeneration</div>
	<div>RL</div> <div>Acid gas, including treatment systems</div>
	<div>RM</div> <div>Gas recycle, storage and compression systems</div>
	<div>RN</div> <div>Collection, storage and recycle systems for gas condensate</div>
	<div>RP</div> <div>Inert gas, including recovery systems</div>
	<div>RQ</div> <div>-blocked-</div>
	<div>RR</div> <div>-blocked-</div>
	<div>RS</div> <div>Supply and removal systems for water, steam and condensate</div>
	<div>RT</div> <div>Waste water collection and drainage systems</div>
	<div>RU</div> <div>Waste water treatment systems</div>
	<div>RV</div> <div>Lubricant supply systems</div>
	<div>RW</div> <div>Sealing fluid supply systems</div>
	<div>RX</div> <div>Fluid supply systems for control and protection equipment</div>
	<div>RY</div> <div>Control and protection equipment</div>
	<div>RZ</div> <div>Injection and proportioning systems</div>

R

	R	GAS GENERATION AND TREATMENT					
E	RA	Gas generation (gasification, fermentation)					
E	RAA	Gas generator (gasifier, fermenter) from incl. fuel, ignition fuel and fluxing agent inlet or from excl. burner and nozzle system to excl. removal system or to excl. solids separator and recycle system or to excl. gas generator quench gas section or to incl. main gas outle					
	RAB	Gas generator interior					
	RAC	Gas generator internals					
	RAD	Lining and refractory brickwork					
	RAE	Cooling system from incl. gas generator cooling system inlet to incl. gas generator cooling system outlet					
	RAF	Solids separator and recycle system from excl. gas generator outlet to excl. gas generator inlet to incl. main gas outlet					
	RAG	Gas generator quench gas section from incl. quench gas section inlet to incl. quench gas section outlet					
	RAH	Main burner system from excl. feedstock system or from excl. gasifying agent generation and distribution system to excl. gas generator interior					
	RAJ	Pilot burner system from excl. pilot burner fuel storage and distribution system or from excl. gasifying agent generation and distribution system to excl. gas generator interior					
	RAK	Gas generator ignition and standby burner system incl. combustion air system from excl. ignition fuel storage and distribution system or from incl. combustion air inlet to excl. gas generator interior					
	RAL	Ignition and standby hot gas generation and feed system incl. combustion air system from excl. ignition fuel storage and distribution system or from incl. combustion air inlet to excl. gas generator interior					
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	RB Support structure						
	RBA Frame including foundations						
	RBB Enclosures, insulations						
	RBC -blocked-						
	RBD Platforms and stairways						
	RBE Support structure (free for use as process demands)						
	RBF Support structure (free for use as process demands)						
	RBG -blocked-						
	RBH -blocked-						
	RBJ -blocked-						
	RBK -blocked-						
	RBL -blocked-						
	RBM -blocked-						
	RBN -blocked-						
	RBP -blocked-						
	RBQ -blocked-						
	RBR -blocked-						
	RBS -blocked-						
	RBT -blocked-						
	RBU -blocked-						
	RBV -blocked-						
	RBW -blocked-						
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R GAS GENERATION AND TREATMENT**RC Feedstock systems**

- RCA** Fuel storage bunker, hopper (atmospheric pressure)
from excl. receiving point
to excl. distribution and transport system (atmospheric pressure)
- RCB** Distribution and transport system (atmospheric pressure)
from excl. fuel storage bunker, hopper outlet
to excl. pulverizing and mixing system (slurry) or
to excl. air lock system, slurry pump system
- RCC** Pulverizing and mixing system (slurry)
from excl. distribution and transport system (atmospheric pressure)
to excl. airlock system, slurry pump system
- RCD** -blocked-
- RCE** Airlock system, slurry pump system
from excl. distribution and transport system (atmospheric pressure) or
from excl. pulverizing and mixing system (slurry)
to excl. fuel hopper (pressurized)
- RCF** Fuel storage bunker, container (pressurized)
from excl. airlock system, slurry pump system
to excl. distribution and transport system (pressurized)
- RCG** Distribution and transport system (pressurized)
from excl. fuel hopper (pressurized)
to excl. gas generator or
to excl. main burner system
- RCH** -blocked-
- RCJ** Ignition fuel storage and distribution system
from excl. ignition fuel supply system
to excl. gas generator or
to excl. gas generator ignition and standby burner system or
to excl. ignition and standby hot gas generation and feed system or
to excl. feedstock
- RCK** Pilot burner fuel storage and distribution system
from excl. fuel supply system
to excl. pilot burner system
- RCL** Proportioning system for other feedstock
from excl. supply system
to excl. gas generator or
to excl. feedstock system
- RCM** Proportioning system for fluxing agents
from excl. supply system
to excl. gas generator or

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R	GAS GENERATION AND TREATMENT
RC	Feedstock systems
RCM	Proportioning system for fluxing agents to excl. feed system for fluxing agents
RCN	-blocked-
RCP	-blocked-
RCQ	-blocked-
RCR	-blocked-
RCS	Filter cleaning system from excl. branch off supply system
RCT	-blocked-
RCU	-blocked-
RCV	Lubricant supply system
RCW	Sealing fluid supply system
RCX	Fluid supply system for control and protection equipment
RCY	Control and protection equipment
RCZ	-blocked-

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R GAS GENERATION AND TREATMENT**RD Discharge systems for gasification residues**

RDA Collection, transport and treatment system (pressurized)
(system 1)
from excl. receiving point
to excl. gas generator or
to excl. pressure relief system

RDB Pressure relief system (system 1)
from excl. collection, transport and treatment system
(pressurized)
to excl. collection, transport and treatment system
(atmospheric pressure)

RDC Collection, transport and treatment system (atmospheric
pressure) (system 1)
from excl. pressure relief system
to excl. transport and treatment system for fuel
conversion residues or
to excl. feedstock system

RDD -blocked-

RDE Collection, transport and treatment system (pressurized)
(system 2)
from excl. receiving point
to excl. gas generator or
to excl. pressure relief system




RDF Pressure relief system (system 2)
from excl. collection, transport and treatment
system
(pressurized)
to excl. collection, transport and treatment system
(atmospheric pressure)

RDG Collection, transport and treatment system (atmospheric
pressure) (system 2)
from excl. pressure relief system
to excl. transport and treatment system for fuel
conversion residues or
to excl. feedstock system

RDH -blocked-

RDJ Collection, transport and treatment system (pressurized)
(system 3)
from excl. receiving point
to excl. gas generator or
to excl. pressure relief system

RDK Pressure relief system (system 3)
from excl. collection, transport and treatment system
(pressurized)
to excl. collection, transport and treatment system
(atmospheric pressure)

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R GAS GENERATION AND TREATMENT**RD Discharge systems for gasification residues**

RDL Collection, transport and treatment system (atmospheric pressure) (system 3)
 from excl. pressure relief system
 to excl. transport and treatment system for fuel conversion residues or
 to excl. feedstock system

RDM -blocked-

RDN Collection, transport and treatment system (pressurized) (system 4)
 from excl. receiving point
 to excl. gas generator or
 to excl. pressure relief system

RDP Pressure relief system (system 4)
 from excl. collection, transport and treatment system (pressurized)
 to excl. collection, transport and treatment system (atmospheric pressure)

RDQ Collection, transport and treatment system (atmospheric pressure) (system 4)
 from excl. pressure relief system
 to excl. transport and treatment system for fuel conversion residues or
 to excl. feedstock system

RDR -blocked-

RDS Filter cleaning system
 from excl. branch off supply system

RDT -blocked-

RDU -blocked-




RDV Lubricant supply system

RDW Sealing fluid supply system

RDX Fluid supply system for control and protection equipment

RDY Control and protection equipment

RDZ -blocked-

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R GAS GENERATION AND TREATMENT**RE Gasifying agent generation and distribution**

REA Air (gasifying agent) compression and supercompression system
 from excl. atmosphere or
 from excl. compressor casing outlet of gas turbine
 to excl. compressed air distribution system or
 to excl. gasifying agent heater

REB Gasifying agent heater (other than *RGC*)
 from incl. preheater inlet
 to incl. preheater outlet or
 to incl. preheater outlet incl. desuperheater




REC Compressed air distribution system (incl. oxygen-enriched air)
 from excl. air (gasifying agent) compression and supercompression system outlet or
 from excl. oxygen piping system (pressurized) or
 from excl. other system
 to excl. other system or
 to excl. main burner system or
 to excl. pilot burner system or
 to excl. separate gasifying agent injection system

RED -blocked-

REE Air compression and supercompression system upstream of air separation plant
 from excl. atmosphere or
 from excl. compressor casing outlet of gas turbine
 to incl. air compression and supercompression system outlet upstream of air separation plant

REF Air separation plant
 from excl. air (gasifying agent) compression and supercompression system outlet upstream of air separation plant
 to excl. oxygen piping system (pressurized) or
 to excl. oxygen compression and supercompression system or
 to excl. liquid oxygen discharge system or
 to excl. discharge system for other gases (inert gases) from air separation plant or
 to excl. liquid nitrogen discharge system or
 to excl. inert gas, including recovery system or
 to excl. nitrogen piping system (*RPG*)

REG Oxygen compression and supercompression system
 from incl. oxygen compression and supercompression system inlet
 to incl. oxygen compression and supercompression system outlet

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R GAS GENERATION AND TREATMENT**RE Gasifying agent generation and distribution**

REH Oxygen piping system (pressurized)
 from excl. air separation plant or
 from excl. oxygen compression and supercompression system
 or
 from excl. other system
 to excl. other system or
 to excl. main burner system or
 to excl. pilot burner system or
 to excl. separate gasifying agent injection system

REJ Liquid oxygen outlet system
 from excl. air separation plant
 to excl. oxygen piping system (pressurized) or
 to excl. other system

REK Discharge system for other gases from air separation plant
 (inert gases)
 from excl. air separation plant
 to incl. dispatch facility or
 to excl. other system

REL Liquid nitrogen discharge system
 from excl. air separation plant
 to excl. inert gas, including recovery system or
 to excl. other system or
 to incl. dispatch facility

REM -blocked-

REN -blocked-

REP External oxygen supply system
 from excl. receiving point
 to excl. oxygen compression and supercompression system
 or
 to excl. oxygen piping system (pressurized)

REQ -blocked-




RER Gasifying steam system
 from excl. water/steam system or
 from excl. other system
 to excl. main burner system or
 to excl. pilot burner system or
 to excl. separate gasifying agent injection system

RES -blocked-

RET -blocked-

REU -blocked-

REV Lubricant supply system





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	<div><div>R</div><div>GAS GENERATION AND TREATMENT</div><div>RE</div><div>Gasifying agent generation and distribution</div><div>REW</div><div>Sealing fluid supply system</div><div>REX</div><div>Fluid supply system for control and protection equipment</div><div>REY</div><div>Control and protection equipment</div><div>REZ</div><div>-blocked-</div></div>						
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R GAS GENERATION AND TREATMENT

RF -blocked-

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R GAS GENERATION AND TREATMENT**RG Main gas cooling systems (if not *RA*)**

RGA Indirect heat transfer to water/steam cycle
 from incl. main gas inlet or
 from incl. water/steam inlet
 to incl. main gas outlet or
 to incl. water/steam outlet or
 to incl. gas condensate outlet

RGB Indirect heat transfer to gas
 from incl. main gas inlet or
 from incl. gas recycle system inlet or
 from incl. inert gas inlet
 to incl. main gas outlet or
 to incl. gas recycle system outlet or
 to incl. inert gas outlet or
 to incl. gas condensate outlet

RGC Indirect heat transfer to gasifying agent
 from incl. main gas inlet or
 from incl. gasifying agent inlet
 to incl. main gas outlet or
 to incl. gasifying agent outlet or
 to incl. gas condensate outlet

RGD Indirect heat transfer to combustion air
 from incl. main gas inlet or
 from incl. combustion air inlet
 to incl. main gas outlet or
 to incl. combustion air outlet or
 to incl. gas condensate outlet

RGE Indirect heat transfer to cooling water
 from incl. main gas inlet or
 from incl. cooling water inlet
 to incl. main gas outlet or
 to incl. cooling water outlet or
 to incl. gas condensate outlet

RGF -blocked-

RGG -blocked-

RGH -blocked-

RGJ Direct heat transfer (quench) to gas
 from incl. main gas inlet or
 from incl. coolant inlet
 from excl. coolant supply line
 to incl. main gas outlet


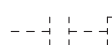
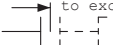

RGK Direct heat transfer (quench, saturation) to steam

RGL Direct heat transfer (quench, saturation) to water

R





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Revision

- R** **GAS GENERATION AND TREATMENT**
- RG** **Main gas cooling systems (if not *RA*)**
- RGM** Direct heat transfer (quench) to other fluids
- RGN** -blocked-
- RGP** -blocked-
- RGQ** -blocked-
- RGR** -blocked-
- RGS** Filter cleaning system
 from excl. branch off supply system
- RGT** -blocked-
- RGU** -blocked-
- RGV** Lubricant supply system
- RGW** Sealing fluid supply system
- RGX** Fluid supply system for control and protection equipment
- RGY** Control and protection equipment
- RGZ** Injection and proportioning system

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R GAS GENERATION AND TREATMENT**RH Main gas piping systems, storage, compression, expansion**

- RHA** Main gas piping system
 from excl. other system
 to excl. other system
- RHB** -blocked-
- RHC** -blocked-
- RHD** -blocked-
- RHE** Humidification system
 from excl. main gas piping system or
 from excl. water/steam cycle or
 from excl. collection, storage and recycle system for gas condensate
 to excl. main gas piping system or
 to excl. water/steam cycle or
 to excl. collection, storage and recycle system for gas condensate
- RHF** Conditioning system 1
 from excl. branch off supply system or
 from incl. unloading facility
- RHG** Conditioning system 2
 from excl. branch off supply system or
 from incl. unloading facility
- RHH** -blocked-
- RHJ** -blocked-
- RHK** Gas storage system
 from excl. main gas piping system or
 from excl. gas compression system
 to excl. main gas piping system or
 to excl. gas pressure reducing system
- RHL** -blocked-
- RHM** Gas compression system
 from excl. main gas piping system
 to excl. main gas piping system or
 to excl. gas storage system or
 to excl. gas recycle system
- RHN** Gas pressure reducing system
 from excl. main gas piping system or
 from excl. gas storage system
 to excl. main gas piping system or
 to excl. other system

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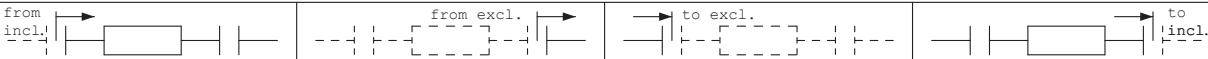


Revision

R

- R GAS GENERATION AND TREATMENT**
- RH Main gas piping systems, storage, compression, expansion**
- RHP** Flare system 1
from excl. main gas piping system
to incl. flare system outlet
- RHQ** Flare system 2
from excl. main gas piping system
to incl. flare system outlet
- RHR** -blocked-
- RHS** Filter cleaning system
from excl. branch off supply system
- RHT** -blocked-
- RHU** -blocked-
- RHV** Lubricant supply system
- RHW** Sealing fluid supply system
- RHX** Fluid supply system for control and protection equipment
- RHY** Control and protection equipment
- RHZ** Injection and proportioning system

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R

R GAS GENERATION AND TREATMENT**RJ Main gas precipitator**

RJA Cartridge filter system
 from incl. cartridge filter inlet
 from excl. filter cleaning system
 to incl. cartridge filter outlet
 to excl. gasification residues removal system

RJB Cyclone filter system
 from incl. cyclone filter inlet
 from excl. filter cleaning system
 to incl. cyclone filter outlet
 to excl. gasification residues removal system

RJC Bag filter system
 from incl. bag filter inlet
 from excl. filter cleaning system
 to incl. bag filter outlet
 to excl. gasification residues removal system

RJD Packed-bed filter system
 from incl. packed-bed filter inlet
 from excl. filter cleaning system
 to incl. packed-bed filter outlet
 to excl. gasification residues removal system

RJE Electrostatic precipitator system
 from incl. electrostatic precipitator inlet
 from excl. filter cleaning system
 to incl. electrostatic precipitator outlet
 to excl. gasification residues removal system

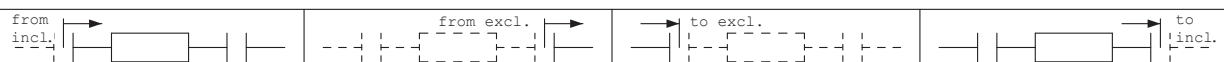
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RJS Filter cleaning system
 from excl. branch off supply system

RJT -blocked-

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




Revision

R

- R **GAS GENERATION AND TREATMENT**
- RJ **Main gas precipitator**
- RJU -blocked-
- RJV Lubricant supply system
- RJW Sealing fluid supply system
- RJX Fluid supply system for control and protection equipment
- RJY Control and protection equipment
- RJZ -blocked-

R

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R GAS GENERATION AND TREATMENT**RK Main gas clean-up (not *RJ*) including regeneration**

RKA Scrubber system
from incl. inlet
to incl. outlet

RKB Conversion system including hydrolysis
from incl. inlet
to incl. outlet

RKC Gas purification system
from incl. inlet
to incl. outlet

RKD -blocked-

RKE -blocked-

RKF -blocked-

RKG Scrubber regeneration system 1
from incl. inlet
to incl. outlet

RKH Scrubber regeneration system 2
from incl. inlet
to incl. outlet

RKJ Scrubber regeneration system 3
from incl. inlet
to incl. outlet

RKK -blocked-

RKL Regeneration system 1 for purification system
from incl. inlet
to incl. outlet

RKM Regeneration system 2 for purification system
from incl. inlet
to incl. outlet

RKN Regeneration system 3 for purification system
from incl. inlet
to incl. outlet

RKP -blocked-

RKQ Refrigeration system
from incl. inlet
to incl. outlet

RKR -blocked-


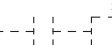
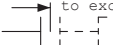
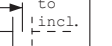
RKS -blocked-

RKT -blocked-

RKU -blocked-

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


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R

- R** **GAS GENERATION AND TREATMENT**
- RK** **Main gas clean-up (not *RJ*) including regeneration**
- RKV** Lubricant supply system
- RKW** Sealing fluid supply system
- RKX** Fluid supply system for control and protection equipment
- RKY** Control and protection equipment
- RKZ** Injection and proportioning system

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R GAS GENERATION AND TREATMENT**RL Acid gas, including treatment systems**

RLA Thermal treatment (Claus process)
from incl. inlet
to incl. outlet

RLB Catalytic treatment (Claus process)
from incl. inlet
to incl. outlet

RLC -blocked-

RLD -blocked-

RL E Absorber, wet oxidation system
from incl. inlet
to incl. outlet

RLF -blocked-

RLG -blocked-

RLH Thermal treatment (tail gas)
from incl. inlet
to incl. outlet

RLJ Catalytic treatment (tail gas)
from incl. inlet
to incl. outlet

RLK Absorption treatment (tail gas)
from incl. inlet
to incl. outlet

RLL -blocked-

RLM -blocked-

RLN Sulphur treatment system
from incl. inlet
to incl. outlet

RLP Sulphur forwarding and storage system
from incl. inlet
to incl. outlet

RLQ -blocked-

RLR Sulphuric acid system
from incl. inlet
to incl. outlet

RLS Sulphuric acid storage system
from incl. inlet
to incl. outlet





RLT -blocked-

RLU -blocked-

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- R** **GAS GENERATION AND TREATMENT**
- RL** **Acid gas, including treatment systems**
- RLV** -blocked-
- RLW** Sealing fluid supply system
- RLX** Fluid supply system for control and protection equipment
- RLY** Control and protection equipment
- RLZ** Injection and proportioning system

R

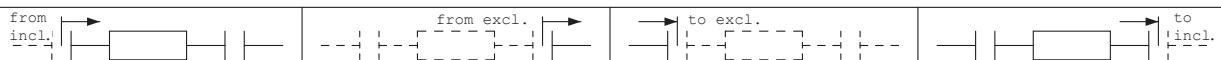
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R GAS GENERATION AND TREATMENT**RM Gas recycle, storage and compression systems**

- RMA** Quench gas piping system
 from excl. main gas piping system or
 from excl. branch off other system
 to excl. direct heat transfer (quench) to gas or
 to excl. gas generator quench gas section
- RMB** Piping system for expanded gas (not from airlock system)
 from excl. pressure reducing valve
 to excl. other system (excl. quench gas compressor)
- RMC** Acid gas piping system
 from excl. regeneration system
 to excl. acid gas, incl. treatment system
- RMD** Fluidizing gas piping system
 from excl. main gas piping system
 to excl. fluidizing air injection system or
 to excl. load system (excl. fluidizing gas compressor)
- RME** Airlock gas piping system (not inert gas)
 from excl. branch off other system
 to excl. airlocks (excl. airlock gas compressor)
- RMF** Other gas piping system
 from excl. branch off other system
 to excl. other system
- RMG** -blocked-
- RMH** Storage system 1
 from excl. store inlet
 to excl. other gas piping system
- RMJ** Storage system 2
 from excl. store inlet
 to excl. other gas piping system
- RMK** -blocked-
- RML** -blocked-
- RMM** Quench gas compressor system
 from incl. compressor system inlet
 to incl. compressor system outlet
- RMN** Expanded gas compressor system
 from incl. compressor system inlet
 to incl. compressor system outlet
- RMP** Acid gas compressor system
 from incl. compressor system inlet
 to incl. compressor system outlet
- RMQ** Fluidizing gas compressor system
 from incl. compressor system inlet
 to incl. compressor system outlet

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R

- R** **GAS GENERATION AND TREATMENT**
- RM** **Gas recycle, storage and compression systems**
- RMR** Airlock gas compressor system (not inert gas)
from incl. compressor system inlet
to incl. compressor system outlet
- RMS** Compressor system for other gases
from incl. compressor system inlet
to incl. compressor system outlet
- RMT** -blocked-
- RMU** -blocked-
- RMV** Lubricant supply system
- RMW** Sealing fluid supply system
- RMX** Fluid supply system for control and protection equipment
- RMY** Control and protection equipment
- RMZ** Injection and proportioning system

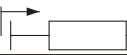
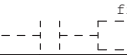
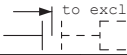
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R GAS GENERATION AND TREATMENT**RN Collection, storage and recycle systems for gas condensate****RNA** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNB** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNC** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RND** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNE** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNF** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNG** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNH** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNJ** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNK** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNL** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNM** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNN** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNP** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNQ** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNR** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNS** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNT** Collection, storage and recycle systems for gas condensate (free for use, process specific)**RNU** Collection, storage and recycle systems for gas condensate (free for use, process specific)

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- R** **GAS GENERATION AND TREATMENT**
- RN** **Collection, storage and recycle systems for gas condensate**
- RNV** Lubricant supply system
- RNW** Sealing fluid supply system
- RNX** Fluid supply system for control and protection equipment
- RNY** Control and protection equipment
- RNZ** -blocked-

R

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R GAS GENERATION AND TREATMENT**RP Inert gas, including recovery systems**

RPA Inert gas generation by air fractionation
 from excl. atmosphere
 to incl. inert gas distribution system inlet

RPB Inert gas generation by molecular sieving
 from excl. atmosphere
 to incl. inert gas distribution system inlet

RPC Inert gas generation by combustion
 from excl. atmosphere
 to incl. inert gas distribution system inlet

RPD -blocked-

RPE -blocked-

RPF -blocked-

RPG Nitrogen piping system for addition ahead of burner gas turbine
 from excl. air separation plant outlet or
 from excl. compressor outlet
 to excl. compressor inlet or
 to excl. combustion chamber inlet

RPH Supercompression of nitrogen from *RPG*
 from incl. compressor inlet
 to incl. compressor outlet

RPJ Inert gas distribution system including storage system (free for use, process specific)
 from excl. inert gas generator outlet or
 from excl. air separation plant *REF* outlet or
 from excl. compressor outlet
 to excl. compressor inlet or
 to excl. inert gas load system inlet

RPK Inert gas distribution system including storage system (free for use, process specific)
 from excl. inert gas generator outlet or
 from excl. air separation plant *REF* outlet or
 from excl. compressor outlet
 to excl. compressor inlet or
 to excl. inert gas load system inlet

RPL Inert gas distribution system including storage system (free for use, process specific)
 from excl. inert gas generator outlet or
 from excl. air separation plant *REF* outlet or
 from excl. compressor outlet
 to excl. compressor inlet or
 to excl. inert gas load system inlet

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R GAS GENERATION AND TREATMENT**RP Inert gas, including recovery systems**

RPM Inert gas distribution system including storage system
(free for use, process specific)
from excl. inert gas generator outlet or
from excl. air separation plant *REF* outlet or
from excl. compressor outlet
to excl. compressor inlet or
to excl. inert gas load system inlet

RPN Inert gas distribution system including storage system
(free for use, process specific)
from excl. inert gas generator outlet or
from excl. air separation plant *REF* outlet or
from excl. compressor outlet
to excl. compressor inlet or
to excl. inert gas load system inlet

RPP Inert gas compressor system (free for use, process specific)
from incl. compressor inlet
to incl. compressor outlet

RPQ Inert gas compressor system (free for use, process specific)
from incl. compressor inlet
to incl. compressor outlet

RPR Inert gas compressor system (free for use, process specific)
from incl. compressor inlet
to incl. compressor outlet

RPS Inert gas compressor system (free for use, process specific)
from incl. compressor inlet
to incl. compressor outlet

RPT -blocked-

RPU -blocked-

RPV -blocked-





RPW Sealing fluid supply system

RPX Fluid supply system for control and protection equipment

RPY Control and protection equipment

RPZ -blocked-

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R GAS GENERATION AND TREATMENT

RR -blocked-

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R GAS GENERATION AND TREATMENT**RS Supply and removal systems for water, steam and condensate**

RSA Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer
 to excl. discharge into other system

RSB Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer
 to excl. discharge into other system

RSC Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer
 to excl. discharge into other system

RSD Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer
 to excl. discharge into other system

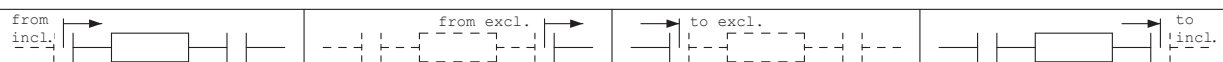
RSE Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer
 to excl. discharge into other system

RSF Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer

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R GAS GENERATION AND TREATMENT**RS Supply and removal systems for water, steam and condensate**

RSF Supply and removal systems for water, steam and condensate (free for use, process specific)
to excl. discharge into other system

RSG Supply and removal systems for water, steam and condensate (free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system




RSH Supply and removal systems for water, steam and condensate (free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSJ Supply and removal systems for water, steam and condensate (free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSK Supply and removal systems for water, steam and condensate (free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSL Supply and removal systems for water, steam and condensate (free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSM Supply and removal systems for water, steam and condensate (free for use, process specific)
The following applies to supply systems:
from excl. branch off other system

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R GAS GENERATION AND TREATMENT**RS Supply and removal systems for water, steam and condensate**

RSM Supply and removal systems for water, steam and condensate
(free for use, process specific)
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSN Supply and removal systems for water, steam and condensate
(free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSP Supply and removal systems for water, steam and condensate
(free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSQ Supply and removal systems for water, steam and condensate
(free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

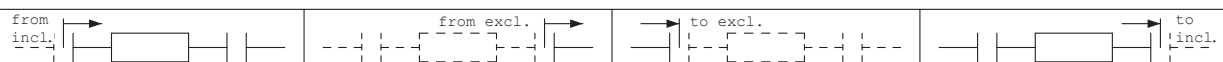
RSR Supply and removal systems for water, steam and condensate
(free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

RSS Supply and removal systems for water, steam and condensate
(free for use, process specific)
The following applies to supply systems:
from excl. branch off other system
to excl. user
The following applies to removal systems:
from excl. producer
to excl. discharge into other system

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R GAS GENERATION AND TREATMENT**RS Supply and removal systems for water, steam and condensate**

RST Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer
 to excl. discharge into other system

RSU Supply and removal systems for water, steam and condensate (free for use, process specific)
 The following applies to supply systems:
 from excl. branch off other system
 to excl. user
 The following applies to removal systems:
 from excl. producer
 to excl. discharge into other system

RSV Lubricant supply system

RSW Sealing fluid supply system

RSX Fluid supply system for control and protection equipment

RSY Control and protection equipment

RSZ Injection and proportioning system

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R GAS GENERATION AND TREATMENT**RT Waste water collection and drainage systems**

RTA Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTB Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTC Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTD Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTE Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTF Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTG Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTH Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTJ Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTK Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTL Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

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R GAS GENERATION AND TREATMENT**RT Waste water collection and drainage systems**

RTM Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTN Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTP Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTQ Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTR Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTS Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTT Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTU Waste water collection and drainage systems
(free for use, process specific)
from excl. producer
to excl. discharge into other system

RTV Lubricant supply system

RTW Sealing fluid supply system

RTX Fluid supply system for control and protection equipment

RTY Control and protection equipment

RTZ Injection and proportioning system

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R GAS GENERATION AND TREATMENT**RU Waste water treatment systems**

RUA Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUB Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUC Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUD Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUE Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUF Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUG Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUH -blocked-

RUJ Processing material systems (free for use, process specific)
from incl. receiving point
to excl. discharge

RUK Processing material systems (free for use, process specific)
from incl. receiving point
to excl. discharge


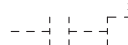
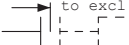

RUL Processing material systems (free for use, process specific)
from incl. receiving point
to excl. discharge

RUM Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

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R GAS GENERATION AND TREATMENT**RU Waste water treatment systems**

RUN Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUP Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUQ Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUR Waste water treatment systems
(free for use, process specific)
from excl. inlet
to incl. outlet

RUS Residues treatment and removal systems
(free for use, process specific)
from excl. receiving point
to excl. discharge

RUT Residues treatment and removal systems
(free for use, process specific)
from excl. receiving point
to excl. discharge

RUU Residues treatment and removal systems
(free for use, process specific)
from excl. receiving point
to excl. discharge




RUV Lubricant supply system

RUW Sealing fluid supply system

RUX Fluid supply system for control and protection equipment

RUZ Control and protection equipment

RUZ Injection and proportioning system

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R GAS GENERATION AND TREATMENT**RV Lubricant supply systems****RVA** Lubricant supply systems (free for use)**RVB** Lubricant supply systems (free for use)**RVC** Lubricant supply systems (free for use)**RVD** Lubricant supply systems (free for use)**RVE** Lubricant supply systems (free for use)**RVF** Lubricant supply systems (free for use)**RVG** Lubricant supply systems (free for use)**RVH** Lubricant supply systems (free for use)**RVJ** Lubricant supply systems (free for use)**RVK** Lubricant supply systems (free for use)**RVL** Lubricant supply systems (free for use)**RVM** Lubricant supply systems (free for use)**RVN** Lubricant supply systems (free for use)**RVP** Lubricant supply systems (free for use)**RVQ** Lubricant supply systems (free for use)**RVR** Lubricant supply systems (free for use)**RVS** Lubricant supply systems (free for use)**RVT** Lubricant supply systems (free for use)**RVU** Lubricant supply systems (free for use)**RVV** -blocked-**RVW** -blocked-**RVX** -blocked-**RVY** -blocked-**RVZ** -blocked-**R**

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R GAS GENERATION AND TREATMENT**RW Sealing fluid supply systems****RWA** Sealing fluid supply systems (free for use)**RWB** Sealing fluid supply systems (free for use)**RWC** Sealing fluid supply systems (free for use)**RWD** Sealing fluid supply systems (free for use)**RWE** Sealing fluid supply systems (free for use)**RWF** Sealing fluid supply systems (free for use)**RWG** Sealing fluid supply systems (free for use)**RWH** Sealing fluid supply systems (free for use)**RWJ** Sealing fluid supply systems (free for use)**RWK** Sealing fluid supply systems (free for use)**RWL** Sealing fluid supply systems (free for use)**RWM** Sealing fluid supply systems (free for use)**RWN** Sealing fluid supply systems (free for use)**RWP** Sealing fluid supply systems (free for use)**RWQ** Sealing fluid supply systems (free for use)**RWR** Sealing fluid supply systems (free for use)**RWS** Sealing fluid supply systems (free for use)**RWT** Sealing fluid supply systems (free for use)**RWU** Sealing fluid supply systems (free for use)**RWV** -blocked-**RWW** -blocked-**RWX** -blocked-**RWY** -blocked-**RWZ** -blocked-I
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R GAS GENERATION AND TREATMENT**RX Fluid supply systems for control and protection equipment****RXA** Fluid supply systems for control and protection equipment (free for use)**RXB** Fluid supply systems for control and protection equipment (free for use)**RXC** Fluid supply systems for control and protection equipment (free for use)**RXD** Fluid supply systems for control and protection equipment (free for use)**RXE** Fluid supply systems for control and protection equipment (free for use)**RXF** Fluid supply systems for control and protection equipment (free for use)**RXG** Fluid supply systems for control and protection equipment (free for use)**RXH** Fluid supply systems for control and protection equipment (free for use)**RXJ** Fluid supply systems for control and protection equipment (free for use)**RXK** Fluid supply systems for control and protection equipment (free for use)**RXL** Fluid supply systems for control and protection equipment (free for use)**RXM** Fluid supply systems for control and protection equipment (free for use)**RXN** Fluid supply systems for control and protection equipment (free for use)**RXP** Fluid supply systems for control and protection equipment (free for use)**RXQ** Fluid supply systems for control and protection equipment (free for use)**RXR** Fluid supply systems for control and protection equipment (free for use)**RXS** Fluid supply systems for control and protection equipment (free for use)**RXT** Fluid supply systems for control and protection equipment (free for use)**RXU** Fluid supply systems for control and protection equipment (free for use)**R**

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R GAS GENERATION AND TREATMENT

RX Fluid supply systems for control and protection equipment

RXV -blocked-

RXW -blocked-

RXX -blocked-

RXY -blocked-

RXZ -blocked-

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R GAS GENERATION AND TREATMENT**RZ Injection and proportioning systems**

RZA	Injection and proportioning systems (free for use)
RZB	Injection and proportioning systems (free for use)
RZC	Injection and proportioning systems (free for use)
RZD	Injection and proportioning systems (free for use)
RZE	Injection and proportioning systems (free for use)
RZF	Injection and proportioning systems (free for use)
RZG	Injection and proportioning systems (free for use)
RZH	Injection and proportioning systems (free for use)
RZJ	Injection and proportioning systems (free for use)
RZK	Injection and proportioning systems (free for use)
RZL	Injection and proportioning systems (free for use)
RZM	Injection and proportioning systems (free for use)
RZN	Injection and proportioning systems (free for use)
RZP	Injection and proportioning systems (free for use)
RZQ	Injection and proportioning systems (free for use)
RZR	Injection and proportioning systems (free for use)
RZS	Injection and proportioning systems (free for use)
RZT	Injection and proportioning systems (free for use)
RZU	Injection and proportioning systems (free for use)
RZV	-blocked-
RZW	-blocked-
RZX	-blocked-
RZY	-blocked-
RZZ	-blocked-

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	S	ANCILLARY SYSTEMS					
	SA	Heating, ventilation, air-conditioning (HVAC) systems for conventional area					
	SB	Space heating systems					
	SC	Stationary compressed air supplies					
C	SD	Cleaning system (decontamination equipment see *FK*)					
	SE	Stationary welding gas systems					
	SF	Heating and fuel gas systems					
	SG	Stationary fire protection systems					
A	SH	Waterway facilities					
	SJ	-blocked-					
	SK	-blocked-					
	SL	-blocked-					
	SM	Cranes, stationary hoists and conveying appliances					
	SN	Elevators					
	SP	Railway installations					
	SQ	Road installations					
	SR	Workshop, stores, laboratory equipment and staff amenities inside controlled area					
	SS	-blocked-					
	ST	Workshop, stores, laboratory equipment and staff amenities outside controlled area					
	SU	-blocked-					
	SV	-blocked-					
	SW	-blocked-					
	SX	-blocked-					
	SY	-blocked-					
	SZ	-blocked-					
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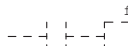
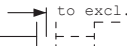
S ANCILLARY SYSTEMS**SA Heating, ventilation, air-conditioning (HVAC) systems for conventional area****SAA** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAB** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAC** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAD** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAE** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAF** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAG** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAH** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAJ** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAK** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAL** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAM** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAN** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAP** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAQ** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAR** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAS** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAT** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)**SAU** Heating, ventilation, air-conditioning (HVAC) systems for conventional area (free for use e.g. building specific)

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	S ANCILLARY SYSTEMS					
	SA Heating, ventilation, air-conditioning (HVAC) systems for conventional area					
	SAV Lubricant supply system					
	SAW -blocked-					
	SAX Fluid supply system for control and protection equipment					
	SAY Control and protection equipment					
	SAZ -blocked-					
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S ANCILLARY SYSTEMS**SB Space heating systems**

SBA	Space heating systems (free for use e.g. building specific)
SBB	Space heating systems (free for use e.g. building specific)
SBC	Space heating systems (free for use e.g. building specific)
SBD	Space heating systems (free for use e.g. building specific)
SBE	Space heating systems (free for use e.g. building specific)
SBF	Space heating systems (free for use e.g. building specific)
SBG	Space heating systems (free for use e.g. building specific)
SBH	Space heating systems (free for use e.g. building specific)
SBJ	Space heating systems (free for use e.g. building specific)
SBK	Space heating systems (free for use e.g. building specific)
SBL	Space heating systems (free for use e.g. building specific)
SBM	Space heating systems (free for use e.g. building specific)
SBN	Space heating systems (free for use e.g. building specific)
SBP	Space heating systems (free for use e.g. building specific)
SBQ	Space heating systems (free for use e.g. building specific)
SBR	Space heating systems (free for use e.g. building specific)
SBS	Space heating systems (free for use e.g. building specific)
SBT	Space heating systems (free for use e.g. building specific)
SBU	Space heating systems (free for use e.g. building specific)
SBV	-blocked-
SBW	-blocked-
SBX	Fluid supply system for control and protection equipment
SBY	Control and protection equipment
SBZ	-blocked-

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S ANCILLARY SYSTEMS**SC Stationary compressed air supplies****SCA** Compressed air generation system**SCB** Compressed air distribution system**SCC** Stationary compressed air supplies (free for use)**SCD** Stationary compressed air supplies (free for use)**SCE** Stationary compressed air supplies (free for use)**SCF** Stationary compressed air supplies (free for use)**SCG** Stationary compressed air supplies (free for use)**SCH** Stationary compressed air supplies (free for use)**SCJ** Stationary compressed air supplies (free for use)**SCK** Stationary compressed air supplies (free for use)**SCL** Stationary compressed air supplies (free for use)**SCM** Stationary compressed air supplies (free for use)**SCN** Stationary compressed air supplies (free for use)**SCP** Stationary compressed air supplies (free for use)**SCQ** Stationary compressed air supplies (free for use)**SCR** Stationary compressed air supplies (free for use)**SCS** Stationary compressed air supplies (free for use)**SCT** Stationary compressed air supplies (free for use)**SCU** Stationary compressed air supplies (free for use)**SCV** Lubricant supply system**SCW** -blocked-**SCX** Fluid supply system for control and protection equipment**SCY** Control and protection equipment**SCZ** -blocked-I
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	S	ANCILLARY SYSTEMS
C	SD	Cleaning system (decontamination equipment see *FK*)
C	SDA	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDB	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDC	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDD	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDE	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDF	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDG	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDH	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDJ	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDK	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDL	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDM	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDN	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDP	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDQ	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDR	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDS	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDT	Cleaning system (decontamination equipment see *FK*) (available for use)
C	SDU	Cleaning system (decontamination equipment see *FK*) (available for use)
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C	S	ANCILLARY SYSTEMS				
	SD	Cleaning system (decontamination equipment see *FK*)				
	SDV	-blocked-				
	SDW	-blocked-				
	SDX	Fluid supply for controla and protection equipment				
	SDY	Control and protection equipment				
	SDZ	-blocked-				
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	Revision		C10/2003			

S ANCILLARY SYSTEMS**SE Stationary welding gas systems**

SEA Stationary welding gas systems (free for use)
SEB Stationary welding gas systems (free for use)
SEC Stationary welding gas systems (free for use)
SED Stationary welding gas systems (free for use)
SEE Stationary welding gas systems (free for use)
SEF Stationary welding gas systems (free for use)
SEG Stationary welding gas systems (free for use)
SEH Stationary welding gas systems (free for use)
SEJ Stationary welding gas systems (free for use)
SEK Stationary welding gas systems (free for use)
SEL Stationary welding gas systems (free for use)
SEM Stationary welding gas systems (free for use)
SEN Stationary welding gas systems (free for use)
SEP Stationary welding gas systems (free for use)
SEQ Stationary welding gas systems (free for use)
SER Stationary welding gas systems (free for use)
SES Stationary welding gas systems (free for use)
SET Stationary welding gas systems (free for use)
SEU Stationary welding gas systems (free for use)
SEV -blocked-
SEW -blocked-
SEX -blocked-
SEY -blocked-
SEZ -blocked-

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S ANCILLARY SYSTEMS**SF Heating and fuel gas systems****SFA** Heating and fuel gas systems (free for use)**SFB** Heating and fuel gas systems (free for use)**SFC** Heating and fuel gas systems (free for use)**SFD** Heating and fuel gas systems (free for use)**SFE** Heating and fuel gas systems (free for use)**SFF** Heating and fuel gas systems (free for use)**SFG** Heating and fuel gas systems (free for use)**SFH** Heating and fuel gas systems (free for use)**SFJ** Heating and fuel gas systems (free for use)**SFK** Heating and fuel gas systems (free for use)**SFL** Heating and fuel gas systems (free for use)**SFM** Heating and fuel gas systems (free for use)**SFN** Heating and fuel gas systems (free for use)**SFP** Heating and fuel gas systems (free for use)**SFQ** Heating and fuel gas systems (free for use)**SFR** Heating and fuel gas systems (free for use)**SFS** Heating and fuel gas systems (free for use)**SFT** Heating and fuel gas systems (free for use)**SFU** Heating and fuel gas systems (free for use)**SFV** -blocked-**SFW** -blocked-**SFX** -blocked-**SFY** Control and protection equipment**SFZ** -blocked-I
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	S	ANCILLARY SYSTEMS
	SG	Stationary fire protection systems
	SGA	Fire water system, conventional area
	SGB	Fire water system, nuclear area (if separate system)
	SGC	Spray deluge systems, conventional area
	SGD	Spray deluge systems, nuclear area (if separate system)
	SGE	Sprinkler systems
	SGF	Foam fire-fighting systems
	SGG	Tank roof, tank shell cooling systems
F	SGH	Mechanical self-extinguishing system for liquids
	SGJ	CO2 fire-fighting systems
	SGK	Halon fire-fighting systems
	SGL	Powder fire-fighting systems
F	SGM	Fire extinguishing system with other extinguishing agents
	SGN	-blocked-
	SGP	-blocked-
	SGQ	-blocked-
	SGR	-blocked-
	SGS	-blocked-
	SGT	-blocked-
	SGU	-blocked-
	SGV	Lubricant supply system
	SGW	-blocked-
	SGX	Fluid supply system for control and protection equipment
	SGY	Control and protection equipment
	SGZ	-blocked-

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	Revision	F 052016				

	S	ANCILLARY SYSTEMS					
A	SH	Waterway facilities					
A	SHA	Intake system (upper pound) to excl. lock chamber gate (upstream)					
A	SHB	Lock chamber incl. chamber filling and emptying system					
A	SHC	Lock chamber gate (upstream)					
A	SHD	Lock chamber gate (intermediate)					
A	SHE	Lock chamber gate (downstream)					
A	SHF	Discharge system (lower pound) from excl. lock chamber gate (downstream)					
A	SHG	-blocked-					
A	SHH	-blocked-					
A	SHJ	Anti-icing system					
A	SHK	Ship impact system					
A	SHL	Leakage drain system					
A	SHM	Draining system					
A	SHN	-blocked-					
A	SHP	-blocked-					
A	SHQ	-blocked-					
A	SHR	-blocked-					
B	SHS	Minimum water system					
A	SHT	Fish ladder					
A	SHU	Raft canal					
A	SHV	Lubricant supply system					
A	SHW	Sealing fluid supply system					
A	SHX	Fluid supply system for control and protection equipment					
A	SHY	Control and protection equipment					
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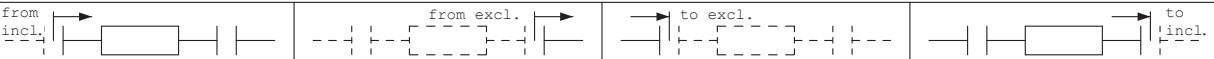
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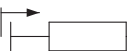
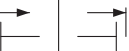

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



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

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S ANCILLARY SYSTEMS**SM Cranes, stationary hoists and conveying appliances****SMA** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMB** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMC** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMD** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SME** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMF** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMG** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMH** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMJ** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMK** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SML** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMM** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMN** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMP** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMQ** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMR** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMS** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMT** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)**SMU** Cranes, stationary hoists and conveying appliances
(free for use e.g. building specific)

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- S** **ANCILLARY SYSTEMS**
- SM** **Cranes, stationary hoists and conveying appliances**
- SMV** -blocked-
- SMW** -blocked-
- SMX** Fluid supply system for control and protection equipment
- SMY** Control and protection equipment
- SMZ** -blocked-

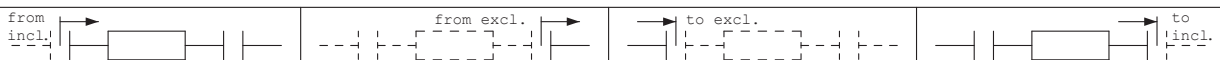
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S ANCILLARY SYSTEMS**SN Elevators**

SNA	Elevators (free for use e.g. building specific)
SNB	Elevators (free for use e.g. building specific)
SNC	Elevators (free for use e.g. building specific)
SND	Elevators (free for use e.g. building specific)
SNE	Elevators (free for use e.g. building specific)
SNF	Elevators (free for use e.g. building specific)
SNG	Elevators (free for use e.g. building specific)
SNH	Elevators (free for use e.g. building specific)
SNJ	Elevators (free for use e.g. building specific)
SNK	Elevators (free for use e.g. building specific)
SNL	Elevators (free for use e.g. building specific)
SNM	Elevators (free for use e.g. building specific)
SNN	Elevators (free for use e.g. building specific)
SNP	Elevators (free for use e.g. building specific)
SNQ	Elevators (free for use e.g. building specific)
SNR	Elevators (free for use e.g. building specific)
SNS	Elevators (free for use e.g. building specific)
SNT	Elevators (free for use e.g. building specific)
SNU	Elevators (free for use e.g. building specific)
SNV	-blocked-
SNW	-blocked-
SNX	-blocked-
SNY	Control and protection equipment
SNZ	-blocked-

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S ANCILLARY SYSTEMS**SP Railway installations****SPA** Railway installations (free for use)**SPB** Railway installations (free for use)**SPC** Railway installations (free for use)**SPD** Railway installations (free for use)**SPE** Railway installations (free for use)**SPF** Railway installations (free for use)**SPG** Railway installations (free for use)**SPH** Railway installations (free for use)**SPJ** Railway installations (free for use)**SPK** Railway installations (free for use)**SPL** Railway installations (free for use)**SPM** Railway installations (free for use)**SPN** Railway installations (free for use)**SPP** Railway installations (free for use)**SPQ** Railway installations (free for use)**SPR** Railway installations (free for use)**SPS** Railway installations (free for use)**SPT** Railway installations (free for use)**SPU** Railway installations (free for use)**SPV** -blocked-**SPW** -blocked-**SPX** -blocked-**SPY** Control and protection equipment**SPZ** -blocked-I
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S ANCILLARY SYSTEMS**SQ Road installations**

SQA	Road installations (free for use)
SQB	Road installations (free for use)
SQC	Road installations (free for use)
SQD	Road installations (free for use)
SQE	Road installations (free for use)
SQF	Road installations (free for use)
SQG	Road installations (free for use)
SQH	Road installations (free for use)
SQJ	Road installations (free for use)
SQK	Road installations (free for use)
SQL	Road installations (free for use)
SQM	Road installations (free for use)
SQN	Road installations (free for use)
SQP	Road installations (free for use)
SQQ	Road installations (free for use)
SQR	Road installations (free for use)
SQS	Road installations (free for use)
SQT	Road installations (free for use)
SQU	Road installations (free for use)
SQV	-blocked-
SQW	-blocked-
SQX	-blocked-
SQY	Control and protection equipment
SQZ	-blocked-

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S	ANCILLARY SYSTEMS
SR	Workshop, stores, laboratory equipment and staff amenities inside controlled area
SRA	Hot workshop equipment
SRB	-blocked-
SRC	Maintenance areas in controlled area
SRD	-blocked-
SRE	-blocked-
SRF	-blocked-
SRG	Hot laboratory equipment
SRH	Health physics laboratory equipment
SRJ	-blocked-
SRK	-blocked-
SRL	-blocked-
SRM	-blocked-
SRN	-blocked-
SRP	Staff amenities in controlled area
SRQ	-blocked-
SRR	-blocked-
SRS	-blocked-
SRT	-blocked-
SRU	-blocked-
SRV	-blocked-
SRW	-blocked-
SRX	-blocked-
SRY	Control and protection equipment
SRZ	-blocked-

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S ANCILLARY SYSTEMS**ST Workshop, stores, laboratory equipment and staff amenities
outside controlled area****STA** Workshop equipment outside controlled area**STB** -blocked-**STC** Maintenance areas outside controlled area**STD** -blocked-**STE** Stores and filling station equipment**STF** -blocked-**STG** Laboratory equipment**STH** -blocked-**STJ** -blocked-**STK** -blocked-**STL** -blocked-**STM** -blocked-**STN** -blocked-**STP** Staff amenities**STQ** -blocked-**STR** -blocked-**STS** -blocked-**STT** -blocked-**STU** -blocked-**STV** -blocked-**STW** -blocked-**STX** -blocked-**STY** Control and protection equipment**STZ** -blocked-

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


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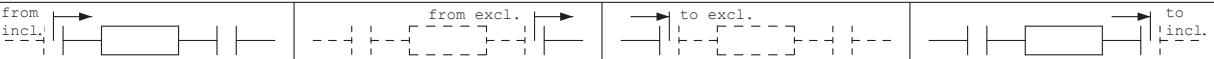
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E	U	Civil structures					
	UA	Structures for grid and distribution systems No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UB	Structures for power transmission and auxiliary power supply No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UC	Structures for instrumentation and control No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UD	-blocked-					
	UE	Structures for conventional fuel supply and residues disposal No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UF	Structures for the handling of nuclear equipment No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UG	Structures for water supply and disposal No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UH	Structures for conventional heat generation No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UJ	Structures for nuclear heat generation No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UK	Structures for reactor auxiliary systems No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UL	Structures for steam-, water-, gas-cycles No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UM	Structures for main machine sets No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UN	Structures for process energy supply No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UP	Structures for circulating (cooling) water systems (e.g. circulating water intake) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
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E	U	Civil structures					
	UQ	Structures for circulating (cooling) water systems (e.g. circulating water pumps and outfall) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UR	Structures for circulating (cooling) water systems (e.g. recirculation cooling) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	US	Area / Building					
	UT	Structures for auxiliary systems No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UU	Shaft structures No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	F	UV	Structures for chemical flue gas treatment incl. residues removal				
	UW	-blocked-					
	UX	Structures for external systems (power plant-specific) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UY	General service structures These F3 subdivisions are binding.					
	UZ	Structures for transport, traffic, fencing, gardens and other purposes These F3 subdivisions are binding.					
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E	U	Civil structures					
	UA	Structures for grid and distribution systems No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UAA	Switchyard structure					
F	UAB	Grid systems switchgear building / area					
	UAC	Grid systems control building					
	UAD	Structures for grid and distribution systems (free for use)					
	UAE	Structure for pneumatic control system					
	UAF	Structures for grid and distribution systems (free for use)					
	UAG	Structure for transformers					
	UAH	Structure for supports and equipment					
	UAJ	Structure for grid and distribution systems (free for use)					
	UAK	Structure for grid and distribution systems (free for use)					
	UAL	Structure for grid and distribution systems (free for use)					
	UAM	Structure for grid and distribution systems (free for use)					
	UAN	Structure for grid and distribution systems (free for use)					
	UAP	Structure for grid and distribution systems (free for use)					
	UAQ	Structure for grid and distribution systems (free for use)					
	UAR	Structure for grid and distribution systems (free for use)					
	UAS	Structure for grid and distribution systems (free for use)					
	UAT	Structure for grid and distribution systems (free for use)					
	UAU	Structure for grid and distribution systems (free for use)					
	UAV	Structure for grid and distribution systems (free for use)					
	UAW	Structure for grid and distribution systems (free for use)					
	UAX	Special structure (plant-specific)					
	UAY	Bridge structure					
	UAZ	Ducting structure					

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D	from incl.		from excl.		to excl.		
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X	Revision	F 052016	E08/2009				

E	U	Civil structures							
	UB	Structures for power transmission and auxiliary power supply No binding stipulation of F3 subdivision. Those given herein are simply recommendations.							
	UBA	Switchgear building							
	UBB	Structure for power transmission and auxiliary power supply (free for use)							
	UBC	Structure for offsite system transformers							
	UBD	Structure for low-voltage auxiliary power transformers							
	UBE	Structure for medium-voltage auxiliary power transformers							
	UBF	Structure for generator transformers							
	UBG	Structure for start-up transformers							
	UBH	Structure for oil collecting pits							
	UBJ	Structure for transformer tracks							
	UBK	Transformer assembly building							
	UBL	Structure for busbars							
	UBM	Structure for transformer cooling systems							
	UBN	Structure for emergency power generating sets (without central water chiller)							
	UBP	Emergency power generating and central water chiller building							
	UBQ	Structure for emergency power generator fuel supply system							
	UBR	Structure for power transmission and auxiliary power supply (free for use)							
	UBS	Structure for power transmission and auxiliary power supply (free for use)							
	UBT	Structure for power transmission and auxiliary power supply (free for use)							
	UBU	Structure for power transmission and auxiliary power supply (free for use)							
	UBV	Structure for power transmission and auxiliary power supply (free for use)							
	UBW	Structure for power transmission and auxiliary power supply (free for use)							
	UBX	Special structure (plant-specific)							
	UBY	Bridge structure							
	UBZ	Ducting structure							
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		Revision	E10/2008						

E	U Civil structures						
	<p>UC Structures for instrumentation and control No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UCA Unit control room building</p> <p>UCB Control station building</p> <p>UCC Structure for instrumentation and control (free for use)</p> <p>UCD Structure for instrumentation and control (free for use)</p> <p>UCE Structure for instrumentation and control (free for use)</p> <p>UCF Structure for instrumentation and control (free for use)</p> <p>UCG Structure for instrumentation and control (free for use)</p> <p>UCH Structure for instrumentation and control (free for use)</p> <p>UCJ Structure for instrumentation and control (free for use)</p> <p>UCK Structure for instrumentation and control (free for use)</p> <p>UCL Structure for measuring equipment</p> <p>UCM Structure for instrumentation and control (free for use)</p> <p>UCN Structure for instrumentation and control (free for use)</p> <p>UCP Cooling water monitoring structure</p> <p>UCQ Structure for instrumentation and control (free for use)</p> <p>UCR Structure for instrumentation and control (free for use)</p> <p>UCS Structure for instrumentation and control (free for use)</p> <p>UCT Structure for instrumentation and control (free for use)</p> <p>UCU Structure for instrumentation and control (free for use)</p> <p>UCV Structure for instrumentation and control (free for use)</p> <p>UCW Structure for instrumentation and control (free for use)</p> <p>UCX Special structure (plant-specific)</p> <p>UCY Bridge structure</p> <p>UCZ Ducting structure</p>						
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E I N D E X	U Civil structures					
	UD -blocked-					

E	U Civil structures						
	<p>UE Structures for conventional fuel supply and residues disposal No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UEA Structure for unloading of solid fuels</p> <p>UEB Structure for storage of solid fuels</p> <p>UEC Structure for conventional fuel supply and residues disposal (free for use)</p> <p>UED Structure for transport of solid fuels</p> <p>UEE Structure for treatment of solid fuels</p> <p>UEF Structure for transfer (e.g. junction tower)</p> <p>UEG Structure for conversion of solid fuels</p> <p>UEH Structure for unloading and reception of liquid fuels</p> <p>UEJ Structure for storage of liquid fuels</p> <p>UEK Structure for conventional fuel supply and residues disposal (free for use)</p> <p>UEL Structure for forwarding of liquid fuels (e.g. pump house)</p> <p>UEM Structure for treatment and handling of liquid fuels</p> <p>UEN Structure for transfer, conversion, storage of gaseous fuels</p> <p>UEP Structure for conventional fuel supply and residues disposal (free for use)</p> <p>UEQ Structure for conventional fuel supply and residues disposal (free for use)</p> <p>UER Structure for forwarding of gaseous fuels</p> <p>UES Structure for conventional fuel supply and residues disposal (free for use)</p> <p>UET Structure for ash storage</p> <p>UEU Structure for ash transport</p> <p>UEV Structure for ash settling pond</p> <p>UEW Structure for combustion residues handling</p> <p>UEX Special structure (plant-specific)</p> <p>UEY Bridge structure</p> <p>UEZ Ducting structure</p>						
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E	U	Civil structures					
	UF	Structures for the handling of nuclear equipment No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UFA	Fuel pool building					
	UFB	Fuel handling building					
	UFC	Fuel storage building					
	UFD	Structure for the handling of nuclear equipment (free for use)					
	UFE	Structure for the handling of nuclear equipment (free for use)					
	UFF	Structure for the handling of nuclear equipment (free for use)					
	UFG	Structure for the handling of nuclear equipment (free for use)					
	UFH	Structure for the handling of nuclear equipment (free for use)					
	UFJ	Structure for hot cell					
	UFK	Structure for the handling of nuclear equipment (free for use)					
	UFL	Structure for the handling of nuclear equipment (free for use)					
	UFM	Structure for the handling of nuclear equipment (free for use)					
	UFN	Structure for the handling of nuclear equipment (free for use)					
	UFP	Structure for the handling of nuclear equipment (free for use)					
	UFQ	Structure for the handling of nuclear equipment (free for use)					
	UFR	Structure for the handling of nuclear equipment (free for use)					
	UFS	Structure for the handling of nuclear equipment (free for use)					
	UFT	Structure for the handling of nuclear equipment (free for use)					
	UFU	Structure for the handling of nuclear equipment (free for use)					
	UFV	Structure for the handling of nuclear equipment (free for use)					
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E	U	Civil structures						
	UF	Structures for the handling of nuclear equipment No binding stipulation of F3 subdivision. Those given herein are simply recommendations.						
	UFW	Structure for the handling of nuclear equipment (free for use)						
	UFX	Special structure (plant-specific)						
	UFY	Bridge structure						
	UFZ	Ducting structure						
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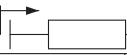
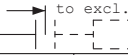
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E	U	Civil structures					
	UG	Structures for water supply and disposal No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UGA	Structure for raw water supply					
	UGB	Structure for water supply and disposal (free for use)					
	UGC	Structure for water supply and disposal (free for use)					
	UGD	Structure for demineralization system					
	UGE	Structure for neutralization system					
	UGF	Structure for fire water supply					
	UGG	Structure for drinking water supply					
	UGH	Structure for rainwater					
	UGJ	Structure for water supply and disposal (free for use)					
	UGK	Flocculant mixing chamber					
	UGL	Flocculator structure, flocculator					
	UGM	Structure for water supply and disposal (free for use)					
	UGN	Treated water basin					
	UGP	Sludge thickener					
	UGQ	Sludge dewatering building					
	UGR	Sludge storage structure					
	UGS	Structure for water supply and disposal (free for use)					
	UGT	Structure for water supply and disposal (free for use)					
	UGU	Structure for effluent disposal					
	UGV	Structure for sewerage plant					
	UGW	Structure for water supply and disposal (free for use)					
	UGX	Special structure (plant-specific)					
	UGY	Bridge structure					
	UGZ	Ducting structure					
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E	U Civil structures						
	<p>UH Structures for conventional heat generation No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UHA Steam generator enclosure, steam generator building (boiler house)</p> <p>UHB Structure for conventional heat generation (free for use)</p> <p>UHC Structure for conventional heat generation (free for use)</p> <p>UHD Structure for conventional heat generation (free for use)</p> <p>UHE Structure for conventional heat generation (free for use)</p> <p>UHF Bunker bay</p> <p>UHG Structure for conventional heat generation (free for use)</p> <p>UHH Structure for conventional heat generation (free for use)</p> <p>UHJ Structure for conventional heat generation (free for use)</p> <p>UHK Structure for conventional heat generation (free for use)</p> <p>UHL Structure for boiler compressed air supply</p> <p>UHM Structure for conventional heat generation (free for use)</p> <p>UHN Smoke stack, incl. structure for flue gas circulation (e.g. for induced draft fan)</p> <p>UHP Structure for conventional heat generation (free for use)</p> <p>UHQ Structure for flue gas filtering system</p> <p>UHR Structure for conventional heat generation (free for use)</p> <p>UHS Structure for conventional heat generation (free for use)</p> <p>UHT Structure for conventional heat generation (free for use)</p> <p>UHU Structure for flue gas reheating system</p> <p>UHV Structure for combustion air circulation (e.g. for forced draft fan)</p> <p>UHW Boiler blowdown structure</p> <p>UHX Special structure (plant-specific)</p> <p>UHY Bridge structure</p> <p>UHZ Ducting structure</p>						
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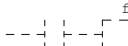
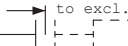
E	U	Civil structures
	UJ	Structures for nuclear heat generation No binding stipulation of F3 subdivision. Those given herein are simply recommendations.
	UJA	Reactor building, containment interior
	UJB	Reactor building annulus
	UJC	Heat exchanger building
	UJD	Steam generator building
	UJE	Main steam and feedwater valve compartment
	UJF	Equipment air lock enclosure
	UJG	Gantry (reactor building)
	UJH	Structure for nuclear heat generation (free for use)
	UJJ	Structure for nuclear heat generation (free for use)
	UJK	Structure for nuclear heat generation (free for use)
	UJL	Structure for nuclear heat generation (free for use)
	UJM	Structure for nuclear heat generation (free for use)
	UJN	Structure for nuclear heat generation (free for use)
	UJP	Structure for nuclear heat generation (free for use)
	UJQ	Structure for nuclear heat generation (free for use)
	UJR	Structure for nuclear heat generation (free for use)
	UJS	Structure for nuclear heat generation (free for use)
	UJT	Structure for nuclear heat generation (free for use)
	UJU	Structure for nuclear heat generation (free for use)
	UJV	Structure for nuclear heat generation (free for use)
	UJW	Structure for nuclear heat generation (free for use)
	UJX	Special structure (plant-specific)
	UJY	Bridge structure
	UJZ	Ducting structure

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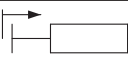


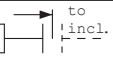
E	U Civil structures						
	<p>UK Structures for reactor auxiliary systems No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UKA Reactor auxiliary building</p> <p>UKB Reactor ancillary systems building</p> <p>UKC Nuclear services building</p> <p>UKD Emergency standby structure</p> <p>UKE Structure for reactor auxiliary systems (free for use)</p> <p>UKF Structure for reactor auxiliary systems (free for use)</p> <p>UKG Structure for reactor auxiliary systems (free for use)</p> <p>UKH Structure for air exhaust (vent stack)</p> <p>UKJ Tritium extraction system building</p> <p>UKK Structure for reactor auxiliary systems (free for use)</p> <p>UKL Structure for reactor auxiliary systems (free for use)</p> <p>UKM Structure for reactor auxiliary systems (free for use)</p> <p>UKN Structure for reactor auxiliary systems (free for use)</p> <p>UKP Structure for reactor auxiliary systems (free for use)</p> <p>UKQ Structure for reactor auxiliary systems (free for use)</p> <p>UKR Structure for reactor auxiliary systems (free for use)</p> <p>UKS Radioactive waste processing building</p> <p>UKT Structure for radioactive waste storage</p> <p>UKU Structure for reactor auxiliary systems (free for use)</p> <p>UKV Structure for reactor auxiliary systems (free for use)</p> <p>UKW Structure for reactor auxiliary systems (free for use)</p> <p>UKX Special structure (plant-specific)</p> <p>UKY Bridge structure</p> <p>UKZ Ducting structure</p>						
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E	U	Civil structures
	UL	Structures for steam-, water-, gas-cycles No binding stipulation of F3 subdivision. Those given herein are simply recommendations.
	ULA	Feedwater pump house
	ULB	Emergency feed building
	ULC	Structure for condensate system
	ULD	Structure for condensate polishing plant
	ULE	Structure for emergency supply systems
	ULF	Structure for steam-, water-, gas-cycles (free for use)
	ULG	Structure for steam-, water-, gas-cycles (free for use)
	ULH	Structure for steam-, water-, gas-cycles (free for use)
	ULJ	Structure for steam-, water-, gas-cycles (free for use)
	ULK	Structure for steam-, water-, gas-cycles (free for use)
	ULL	Structure for steam-, water-, gas-cycles (free for use)
	ULM	Structure for steam-, water-, gas-cycles (free for use)
	ULN	Structure for hydroelectric power plant water impounding works
	ULP	Structure for hydroelectric power plant intake systems
	ULQ	Structure for hydroelectric power plant tail-race systems
A	ULR	Structure for steam-, water-, gas-cycles (free for use)
	ULS	Structure for steam-, water-, gas-cycles (free for use)
	ULT	Structure for steam-, water-, gas-cycles (free for use)
	ULU	Structure for steam-, water-, gas-cycles (free for use)
	ULV	Structure for steam-, water-, gas-cycles (free for use)
	ULW	Structure for steam-, water-, gas-cycles (free for use)
	ULX	Special structure (plant-specific)
	ULY	Bridge structure
	ULZ	Ducting structure














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X	Revision	E08/2009	A07/1993				

E	U Civil structures						
	<p>UM Structures for main machine sets No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UMA Steam turbine building</p> <p>UMB Gas turbine building</p> <p>UMC Structure for main machine sets (free for use)</p> <p>UMD Structure for main machine sets (free for use)</p> <p>UME Hydraulic turbine building</p> <p>UMF Structure for main machine sets (free for use)</p> <p>UMG Pumped storage turbine building</p> <p>UMH Structure for main machine sets (free for use)</p> <p>UMJ Diesel engine building</p> <p>UMK Structure for main machine sets (free for use)</p> <p>UML Structure for main machine sets (free for use)</p> <p>UMM Compressor system building</p> <p>UMN Structure for main machine sets (free for use)</p> <p>UMP Structure for main machine sets (free for use)</p> <p>UMQ Structure for main machine sets (free for use)</p> <p>UMR Gas engine plant building</p> <p>UMS Structure for main machine sets (free for use)</p> <p>UMT Structure for main machine sets (free for use)</p> <p>UMU Structure for main machine sets (free for use)</p> <p>UMV Structure for main machine sets (free for use)</p> <p>UMW Structure for main machine sets (free for use)</p> <p>UMX Special structure (plant-specific)</p> <p>UMY Bridge structure</p> <p>UMZ Ducting structure</p>						
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E	U Civil structures						
	<p>UN Structures for process energy supply No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UNA Structure for process energy supply (free for use)</p> <p>UNB Structure for process energy supply (free for use)</p> <p>UNC Structure for process energy supply (free for use)</p> <p>UND Structure for process energy supply (free for use)</p> <p>UNE Structure for process energy supply (free for use)</p> <p>UNF Structure for process energy supply (free for use)</p> <p>UNG Structure for process energy supply (free for use)</p> <p>UNH Structure for process energy supply (free for use)</p> <p>UNJ Structure for process energy supply (free for use)</p> <p>UNK Structure for process energy supply (free for use)</p> <p>UNL Structure for process energy supply (free for use)</p> <p>UNM Structure for process energy supply (free for use)</p> <p>UNN Structure for process energy supply (free for use)</p> <p>UNP Structure for process energy supply (free for use)</p> <p>UNQ Structure for process energy supply (free for use)</p> <p>UNR Structure for process energy supply (free for use)</p> <p>UNS Structure for process energy supply (free for use)</p> <p>UNT Structure for process energy supply (free for use)</p> <p>UNU Structure for process energy supply (free for use)</p> <p>UNV Structure for process energy supply (free for use)</p> <p>UNW Structure for process energy supply (free for use)</p> <p>UNX Special structure (plant-specific)</p> <p>UNY Bridge structure</p> <p>UNZ Ducting structure</p>						
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E	U	Civil structures						
	UP	Structures for circulating (cooling) water systems (e.g. circulating water intake) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.						
	UPA	Circulating (cooling) water intake culvert						
	UPB	Service (secondary cooling) water intake culvert						
	UPC	Circulating (cooling) water intake structure						
	UPD	Service (secondary cooling) water intake structure						
R	UPE	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
R	UPF	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
R	UPG	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
	UPH	Circulating (cooling) water treatment structure						
	UPJ	Service (secondary cooling) water treatment structure						
R	UPK	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
R	UPL	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
R	UPM	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
	UPN	Circulating (cooling) water inlet culvert						
	UPP	Service (secondary cooling) water inlet culvert						
	UPQ	Biocide treatment building						
R	UPR	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
	UPS	Debris trough						
	UPT	Screen wash water cleaning structure						
R	UPU	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)						
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E	U	Civil structures				
	UP	Structures for circulating (cooling) water systems (e.g. circulating water intake) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.				
	R	UPV	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)			
	R	UPW	Structures for circulating (cooling) water systems (e.g. circulating water intake) (free for use)			
		UPX	Special structure (plant-specific)			
		UPY	Bridge structure			
		UPZ	Ducting structure			
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E	U Civil structures						
	<p>UQ Structures for circulating (cooling) water systems (e.g. circulating water pumps and outfall) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UQA Circulating (cooling) water pump building</p> <p>UQB Service (secondary cooling) water pump building</p> <p>UQC Structure for circulating (cooling) water systems (e.g. circulating water pumps and outfall) (free for use)</p> <p>UQD Structure for circulating (cooling) water systems (e.g. circulating water pumps and outfall) (free for use)</p> <p>UQE Structure for circulating (cooling) water systems (e.g. circulating water pumps and outfall) (free for use)</p> <p>UQF Structures for circulating (cooling) water systems (e.g. circulating water pumps and outfall) (free for use)</p> <p>UQG Circulating (cooling) water overflow structure, surge tank</p> <p>UQH Screen wash water discharge culvert</p> <p>UQJ Circulating (cooling) water seal pit, incl. circulating (cooling) water aeration structure</p> <p>UQK Circulating (cooling) water venting structure</p> <p>UQL Service (secondary cooling) water surge pond</p> <p>UQM Service (secondary cooling) water collecting pond</p> <p>UQN Circulating (cooling) water outfall culvert</p> <p>UQP Service (secondary cooling) water outfall culvert</p> <p>UQQ Circulating (cooling) water outfall structure</p> <p>UQR Service (secondary cooling) water outfall structure</p> <p>UQS Circulating (cooling) water discharge culvert</p> <p>UQT Service (secondary cooling) water discharge culvert</p> <p>UQU Circulating (cooling) water spillway structure, incl. circulating (cooling) water aeration structure</p> <p>UQV Structure for artificial circulating (cooling) water aeration</p> <p>UQW Routing structure for circulating (cooling) water discharge</p> <p>UQX Special structure (plant-specific)</p> <p>UQY Bridge structure</p> <p>UQZ Ducting structure</p>						
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E	U Civil structures						
	<p>UR Structures for circulating (cooling) water systems (e.g. recirculation cooling) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>URA Cooling tower structure (circulating/main cooling water)</p> <p>URB Cooling tower structure (service/secondary cooling water)</p> <p>URC Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URD Cooling tower pump building (circulating/main cooling water)</p> <p>URE Cooling tower pump building (service/secondary cooling water)</p> <p>URF Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URG Cooling tower connecting structure</p> <p>URH Cooling tower outlet structure</p> <p>URJ Cooling tower outfall culvert</p> <p>URK Cooling tower return structure</p> <p>URL Cooling tower return culvert</p> <p>URM Circulating (cooling) water distribution building</p> <p>URN Cooling tower bypass structure</p> <p>URP Cooling tower blowdown structure</p> <p>URQ Cooling tower blowdown culvert</p> <p>URR Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URS Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URT Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URU Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URV Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URW Structure for circulating (cooling) water systems (e.g. recirculation cooling) (free for use)</p> <p>URX Special structure (plant-specific)</p> <p>URY Bridge structure</p> <p>URZ Ducting structure</p>						
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E	U	Civil structures					
E	US	Area / Building					
	USA	Structure for heating, ventilation, air-conditioning (HVAC) systems					
	USB	Structure for space heating systems					
	USC	Structure for stationary compressed air supply system					
	USD	Structure for ancillary systems (free for use)					
	USE	Structure for ancillary systems (free for use)					
	USF	Structure for ancillary systems (free for use)					
	USG	Fire pump house					
A	USH	Structure for waterway facilities					
	USJ	Structure for ancillary systems (free for use)					
	USK	Structure for ancillary systems (free for use)					
	USL	Structure for ancillary systems (free for use)					
	USM	Structure for ancillary systems (free for use)					
	USN	Structure for ancillary systems (free for use)					
	USP	Structure for ancillary systems (free for use)					
	USQ	Structure for ancillary systems (free for use)					
	USR	Structure for ancillary systems (free for use)					
	USS	Structure for ancillary systems (free for use)					
	UST	Workshop					
	USU	Storage building					
	USV	Laboratory building					
	USW	Structure for ancillary systems (free for use)					
	USX	Special structure (plant-specific)					
	USY	Bridge structure					
	USZ	Ducting structure					
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E	U Civil structures						
	<p>UT Structures for auxiliary systems No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UTA Supply systems building</p> <p>UTB Central water chiller building, conventional area</p> <p>UTC Central water chiller building, nuclear area</p> <p>UTD Structure for auxiliary systems (free for use)</p> <p>UTE Structure for auxiliary systems (free for use)</p> <p>UTF Compressed air system building</p> <p>UTG Central gas supply systems building (no fuel supply)</p> <p>UTH Auxiliary steam generator building</p> <p>UTJ Smoke stack</p> <p>UTK Structure for auxiliary systems (free for use)</p> <p>UTL Structure for auxiliary systems (free for use)</p> <p>UTM Structure for auxiliary systems (free for use)</p> <p>UTN Structure for auxiliary systems (free for use)</p> <p>UTP Structure for auxiliary systems (free for use)</p> <p>UTQ Structure for auxiliary systems (free for use)</p> <p>UTR Structure for auxiliary systems (free for use)</p> <p>UTS Chemical storage tank pit</p> <p>UTT Structure for auxiliary systems (free for use)</p> <p>UTU Structure for auxiliary systems (free for use)</p> <p>UTV Structure for auxiliary systems (free for use)</p> <p>UTW Structure for auxiliary systems (free for use)</p> <p>UTX Special structure (plant-specific)</p> <p>UTY Bridge structure</p> <p>UTZ Ducting structure</p>						
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E	U	Civil structures					
	UU	Shaft structures No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UUA	Shaft structures (free for use)					
	UUB	Shaft structures (free for use)					
	UUC	Shaft structures (free for use)					
	UUD	Shaft structures (free for use)					
	UUE	Shaft structures (free for use)					
	UUF	Shaft structures (free for use)					
	UUG	Shaft structures (free for use)					
	UUH	Shaft structures (free for use)					
	UUJ	Shaft structures (free for use)					
	UUK	Shaft structures (free for use)					
	UUL	Shaft structures (free for use)					
	UUM	Shaft structures (free for use)					
	UUN	Shaft structures (free for use)					
	UUP	Shaft structures (free for use)					
	UUQ	Shaft structures (free for use)					
	UUR	Shaft structures (free for use)					
	UUS	Shaft structures (free for use)					
	UUT	Shaft structures (free for use)					
	UUU	Shaft structures (free for use)					
	UUV	Shaft structures (free for use)					
	UUV	Shaft structures (free for use)					
	UUX	Shaft structures (free for use)					
	UUY	Shaft structures (free for use)					
	UUZ	Shaft structures (free for use)					
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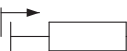
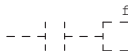
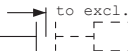
E	U	Civil structures
F	UV	Structures for chemical flue gas treatment incl. residues removal
	UVA	Structure for flue gas-side heat exchanger
	UVB	Structure for flue gas fan system
	UVC	Structure for flue gas scrubber, reactor
	UVD	Structure for adsorbent/absorbent circuit
	UVE	Structure for reagent supply, incl. preparation/treatment, storage, forwarding
	UVF	Structure for thickening and solids dewatering, solids drying and compacting system
	UVG	Structure for chemical flue gas treatment
	UVH	Structure for (solids/product) forwarding, storage, loading
	UVJ	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVK	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVL	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVM	Structure for catalyst handling and storage
	UVN	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVP	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVQ	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVR	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVS	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVT	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVU	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVV	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVW	Structure for chemical flue gas treatment incl. residues removal (for *HR*, *HS*, *HT*) (free for use)
	UVX	Special structure (plant-specific)

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E	U	Civil structures					
	UX	Structures for external systems (power plant-specific) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.					
	UXA	Structures for seawater desalination plant					
	UXB	Structures for external systems (power plant-specific) (free for use)					
	UXC	Structures for external systems (power plant-specific) (free for use)					
	UXD	Structures for external systems (power plant-specific) (free for use)					
	UXE	Structures for external systems (power plant-specific) (free for use)					
	UXF	Structures for external systems (power plant-specific) (free for use)					
	UXG	Structures for external systems (power plant-specific) (free for use)					
	UXH	Structures for external systems (power plant-specific) (free for use)					
	UXJ	Structures for external systems (power plant-specific) (free for use)					
	UXK	Structures for external systems (power plant-specific) (free for use)					
	UXL	Structures for external systems (power plant-specific) (free for use)					
	UXM	Structures for external systems (power plant-specific) (free for use)					
	UXN	Structures for external systems (power plant-specific) (free for use)					
	UXP	Structures for external systems (power plant-specific) (free for use)					
	UXQ	Structures for external systems (power plant-specific) (free for use)					
	UXR	Structures for external systems (power plant-specific) (free for use)					
	UXS	Structures for external systems (power plant-specific) (free for use)					
	UXT	Structures for external systems (power plant-specific) (free for use)					
	UXU	Structures for external systems (power plant-specific) (free for use)					
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E I N D E X	<div>E U Civil structures</div> <div>UX Structures for external systems (power plant-specific) No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</div> <div>UXV Structures for external systems (power plant-specific) (free for use)</div> <div>UXW Structures for external systems (power plant-specific) (free for use)</div> <div>UXX Special structure (plant-specific)</div> <div>UXY Bridge structure</div> <div>UXZ Ducting structure</div>						
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E U	Civil structures						
	UY General service structures These F3 subdivisions are binding.						
	UYA Office and staff amenities building						
	UYB Staff amenities building						
	UYC Administration building						
	UYD Canteen						
	UYE Gate house						
	UYF Security gate house						
	UYG Information center						
	UYH Training facilities						
	UYJ Medical center						
	UYK -blocked-						
	UYL -blocked-						
	UYM -blocked-						
	UYN Railway engine shed						
	UYP Fire station						
	UYQ Garage						
	UYR Automobile workshop						
	UYS Filling station						
	UYT -blocked-						
	UYU -blocked-						
	UYV -blocked-						
	UYW -blocked-						
	UYX Special structure (plant-specific)						
	UYZ Bridge structure						
	UYZ Ducting structure						
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E	U Civil structures						
	UZ Structures for transport, traffic, fencing, gardens and other purposes These F3 subdivisions are binding.						
	UZA Works roadways, paths, incl. associated structures						
	UZB -blocked-						
	UZC Yards						
	UZD Parking areas, incl. associated structures						
	UZE Railway structures						
	UZF Lifting gear structures						
	UZG -blocked-						
	UZH -blocked-						
	UZJ Fencing and gates						
	UZK Gardens, incl. structures						
	UZL Noise abatement structures						
	UZM Protective structures against external impact						
	UZN Structure for flood protection						
	UZP Structure for bank/shoreline stabilization						
	UZQ Structure for river regulation						
	UZR Jetty, quay						
	UZS Breakwaters						
	UZT Outdoor area, plots of land and land rights						
	UZU Site security structure						
	UZV -blocked-						
	UZW Residential buildings, residential area						
	UZX Special structure (plant-specific)						
	UZY Bridge structure						
	UZZ Ducting structure						
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W RENEWABLE ENERGY PLANTS

WA	Solar systems (free for use for coordinates)
WB	Solar systems (free for use for coordinates)
WC	Solar systems (free for use for coordinates)
WD	Solar systems (free for use for coordinates)
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WP	Solar systems (free for use for coordinates)
WQ	Solar systems (free for use for coordinates)
WR	Solar systems (free for use for coordinates)
WS	Solar systems (free for use for coordinates)
WT	Solar heating systems
WU	-blocked-
WV	Lubricant supply system
WW	Sealing fluid supply system
WX	Fluid supply system for control and protection equipment
WY	Control and protection equipment
WZ	-blocked-

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W RENEWABLE ENERGY PLANTS**WJ Solar systems (free for use for coordinates)****WJA** Solar systems (free for use for coordinates)**WJB** Solar systems (free for use for coordinates)**WJC** Solar systems (free for use for coordinates)**WJD** Solar systems (free for use for coordinates)**WJE** Solar systems (free for use for coordinates)**WJF** Solar systems (free for use for coordinates)**WJG** Solar systems (free for use for coordinates)**WJH** Solar systems (free for use for coordinates)**WJJ** Solar systems (free for use for coordinates)**WJK** Solar systems (free for use for coordinates)**WJL** Solar systems (free for use for coordinates)**WJM** Solar systems (free for use for coordinates)**WJN** Solar systems (free for use for coordinates)**WJP** Solar systems (free for use for coordinates)**WJQ** Solar systems (free for use for coordinates)**WJR** Solar systems (free for use for coordinates)**WJS** Solar systems (free for use for coordinates)**WJT** Solar systems (free for use for coordinates)**WJU** Solar systems (free for use for coordinates)**WJV** Solar systems (free for use for coordinates)**WJW** Solar systems (free for use for coordinates)**WJX** Solar systems (free for use for coordinates)**WJY** Solar systems (free for use for coordinates)**WJZ** Solar systems (free for use for coordinates)I
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W RENEWABLE ENERGY PLANTS**WQ Solar systems (free for use for coordinates)**

WQA Solar systems (free for use for coordinates)

WQB Solar systems (free for use for coordinates)

WQC Solar systems (free for use for coordinates)

WQD Solar systems (free for use for coordinates)

WQE Solar systems (free for use for coordinates)

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WQW Solar systems (free for use for coordinates)

WQX Solar systems (free for use for coordinates)

WQY Solar systems (free for use for coordinates)

WQZ Solar systems (free for use for coordinates)

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W RENEWABLE ENERGY PLANTS**WR Solar systems (free for use for coordinates)****WRA** Solar systems (free for use for coordinates)**WRB** Solar systems (free for use for coordinates)**WRC** Solar systems (free for use for coordinates)**WRD** Solar systems (free for use for coordinates)**WRE** Solar systems (free for use for coordinates)**WRF** Solar systems (free for use for coordinates)**WRG** Solar systems (free for use for coordinates)**WRH** Solar systems (free for use for coordinates)**WRJ** Solar systems (free for use for coordinates)**WRK** Solar systems (free for use for coordinates)**WRL** Solar systems (free for use for coordinates)**WRM** Solar systems (free for use for coordinates)**WRN** Solar systems (free for use for coordinates)**WRP** Solar systems (free for use for coordinates)**WRQ** Solar systems (free for use for coordinates)**WRR** Solar systems (free for use for coordinates)**WRS** Solar systems (free for use for coordinates)**WRT** Solar systems (free for use for coordinates)**WRU** Solar systems (free for use for coordinates)**WRV** Solar systems (free for use for coordinates)**WRW** Solar systems (free for use for coordinates)**WRX** Solar systems (free for use for coordinates)**WRY** Solar systems (free for use for coordinates)**WRZ** Solar systems (free for use for coordinates)I
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W RENEWABLE ENERGY PLANTS**WS Solar systems (free for use for coordinates)****WSA** Solar systems (free for use for coordinates)**WSB** Solar systems (free for use for coordinates)**WSC** Solar systems (free for use for coordinates)**WSD** Solar systems (free for use for coordinates)**WSE** Solar systems (free for use for coordinates)**WSF** Solar systems (free for use for coordinates)**WSG** Solar systems (free for use for coordinates)**WSH** Solar systems (free for use for coordinates)**WSJ** Solar systems (free for use for coordinates)**WSK** Solar systems (free for use for coordinates)**WSL** Solar systems (free for use for coordinates)**WSM** Solar systems (free for use for coordinates)**WSN** Solar systems (free for use for coordinates)**WSP** Solar systems (free for use for coordinates)**WSQ** Solar systems (free for use for coordinates)**WSR** Solar systems (free for use for coordinates)**WSS** Solar systems (free for use for coordinates)**WST** Solar systems (free for use for coordinates)**WSU** Solar systems (free for use for coordinates)**WSV** Solar systems (free for use for coordinates)**WSW** Solar systems (free for use for coordinates)**WSX** Solar systems (free for use for coordinates)**WSY** Solar systems (free for use for coordinates)**WSZ** Solar systems (free for use for coordinates)

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W RENEWABLE ENERGY PLANTS**WT Solar heating systems**

WTA	Solar heating systems (free for use)
WTB	Solar heating systems (free for use)
WTC	Solar heating systems (free for use)
WTD	Solar heating systems (free for use)
WTE	Solar heating systems (free for use)
WTF	Solar heating systems (free for use)
WTG	Solar heating systems (free for use)
WTH	Solar heating systems (free for use)
WTJ	Solar heating systems (free for use)
WTK	Solar heating systems (free for use)
WTL	Solar heating systems (free for use)
WTM	Solar heating systems (free for use)
WTN	Solar heating systems (free for use)
WTP	Solar heating systems (free for use)
WTQ	Solar heating systems (free for use)
WTR	Solar heating systems (free for use)
WTS	Solar heating systems (free for use)
WTT	Solar heating systems (free for use)
WTU	Solar heating systems (free for use)
WTV	-blocked-
WTW	-blocked-
WTX	Fluid supply system for control and protection equipment
WTY	Control and protection equipment
WTZ	-blocked-

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W RENEWABLE ENERGY PLANTS**WV Lubricant supply system****WVA** Lubricant supply system (free for use)**WVB** Lubricant supply system (free for use)**WVC** Lubricant supply system (free for use)**WVD** Lubricant supply system (free for use)**WVE** Lubricant supply system (free for use)**WVF** Lubricant supply system (free for use)**WVG** Lubricant supply system (free for use)**WVH** Lubricant supply system (free for use)**WVJ** Lubricant supply system (free for use)**WVK** Lubricant supply system (free for use)**WVL** Lubricant supply system (free for use)**WVM** Lubricant supply system (free for use)**WVN** Lubricant supply system (free for use)**WVP** Lubricant supply system (free for use)**WVQ** Lubricant supply system (free for use)**WVR** Lubricant supply system (free for use)**WVS** Lubricant supply system (free for use)**WVT** Lubricant supply system (free for use)**WVU** Lubricant supply system (free for use)**WVV** -blocked-**WVW** -blocked-**WVX** -blocked-**WVY** -blocked-**WVZ** -blocked-I
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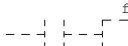
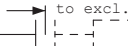
Revision

W

W RENEWABLE ENERGY PLANTS**WW Sealing fluid supply system****WWA** Sealing fluid supply system (free for use)**WWB** Sealing fluid supply system (free for use)**WWC** Sealing fluid supply system (free for use)**WWD** Sealing fluid supply system (free for use)**WWE** Sealing fluid supply system (free for use)**WWF** Sealing fluid supply system (free for use)**WWG** Sealing fluid supply system (free for use)**WWH** Sealing fluid supply system (free for use)**WWJ** Sealing fluid supply system (free for use)**WWK** Sealing fluid supply system (free for use)**WWL** Sealing fluid supply system (free for use)**WWM** Sealing fluid supply system (free for use)**WWN** Sealing fluid supply system (free for use)**WWP** Sealing fluid supply system (free for use)**WWQ** Sealing fluid supply system (free for use)**WWR** Sealing fluid supply system (free for use)**WWS** Sealing fluid supply system (free for use)**WWT** Sealing fluid supply system (free for use)**WWU** Sealing fluid supply system (free for use)**WWV** -blocked-**WWW** -blocked-**WWX** -blocked-**WWY** -blocked-**WWZ** -blocked-

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W RENEWABLE ENERGY PLANTS**WX Fluid supply system for control and protection equipment****WXA** Fluid supply system for control and protection equipment (free for use)**WXB** Fluid supply system for control and protection equipment (free for use)**WXC** Fluid supply system for control and protection equipment (free for use)**WXD** Fluid supply system for control and protection equipment (free for use)**WXE** Fluid supply system for control and protection equipment (free for use)**WXF** Fluid supply system for control and protection equipment (free for use)**WXG** Fluid supply system for control and protection equipment (free for use)**WXH** Fluid supply system for control and protection equipment (free for use)**WXJ** Fluid supply system for control and protection equipment (free for use)**WXK** Fluid supply system for control and protection equipment (free for use)**WXL** Fluid supply system for control and protection equipment (free for use)**WXM** Fluid supply system for control and protection equipment (free for use)**WXN** Fluid supply system for control and protection equipment (free for use)**WXP** Fluid supply system for control and protection equipment (free for use)**WXQ** Fluid supply system for control and protection equipment (free for use)**WXR** Fluid supply system for control and protection equipment (free for use)**WXS** Fluid supply system for control and protection equipment (free for use)**WXT** Fluid supply system for control and protection equipment (free for use)**WXU** Fluid supply system for control and protection equipment (free for use)

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W RENEWABLE ENERGY PLANTS

WX Fluid supply system for control and protection equipment

WXV -blocked-

WXW -blocked-

WXX -blocked-


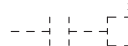

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W RENEWABLE ENERGY PLANTS**WY Control and protection equipment**

WYA	Control and protection equipment (free for use)
WYB	Control and protection equipment (free for use)
WYC	Control and protection equipment (free for use)
WYD	Control and protection equipment (free for use)
WYE	Control and protection equipment (free for use)
WYF	Control and protection equipment (free for use)
WYG	Control and protection equipment (free for use)
WYH	Control and protection equipment (free for use)
WYJ	Control and protection equipment (free for use)
WYK	Control and protection equipment (free for use)
WYL	Control and protection equipment (free for use)
WYM	Control and protection equipment (free for use)
WYN	Control and protection equipment (free for use)
WYP	Control and protection equipment (free for use)
WYQ	Control and protection equipment (free for use)
WYR	Control and protection equipment (free for use)
WYS	Control and protection equipment (free for use)
WYT	Control and protection equipment (free for use)
WYU	Control and protection equipment (free for use)
WYV	-blocked-
WYW	-blocked-
WYX	-blocked-
WYY	-blocked-
WYZ	-blocked-

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






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X Revision

B	X	HEAVY MACHINERY (NOT MAIN MACHINE SETS)					
	XA	Steam turbine plant					
	XB	Gas turbine plant					
	XC	-blocked-					
	XD	-blocked-					
	XE	Hydraulic turbine plant					
	XF	-blocked-					
	XG	Pumped-storage plant					
	XH	-blocked-					
	XJ	Diesel engine plant					
	XK	Generator plant					
	XL	Electro-motive plant (incl. motor generator)					
	XM	-blocked-					
	XN	-blocked-					
	XP	Common installations for heavy machinery					
	XQ	-blocked-					
	XR	Gas engine plant					
	XS	-blocked-					
	XT	-blocked-					
	XU	-blocked-					
	XV	Lubricant supply system					
	XW	Sealing fluid supply system					
	XX	Fluid supply system for control and protection equipment					
	XY	Control and protection equipment					
	XZ	-blocked-					
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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XA Steam turbine plant**

- XAA** HP turbine
 from incl. steam admission (main stop valve) or combined main stop and control valve
 to incl. automatic/non-automatic extraction and exhaust nozzles and
 to incl. the interfaces with other turbine internal
- XAB** IP turbine
 from incl. crossover line, incl. control element or
 from incl. intercept valve
 to incl. automatic/non-automatic extraction and exhaust nozzles and
 to incl. the interfaces with other turbine internal systems
- XAC** LP turbine
 from incl. crossover line, incl. control element or
 from incl. intercept valve or steam inlet nozzle (in reheat system without intercept valves)
 to incl. automatic/non-automatic extraction and exhaust nozzles and
 to incl.
- XAD** Bearings
- XAE** -blocked-
- XAF** -blocked-
- XAG** Condensing system
 from incl. condenser neck or inlet nozzle
 to incl. condenser outlet nozzle, incl. connected flash tanks, incl. instrumentation equipment associated with condenser
- XAH** Motive water system (if separate from *XAJ*)
 from excl. outlet of other system
 to excl. water-operated air ejector inlet
- XAJ** Air removal system
 from excl. condenser outlet
 to excl. atmosphere
- XAK** Transmission gear between prime mover and driven machine, incl. turning gear
- XAL** Drain and vent systems
 from incl. collector point or
 from incl. final drain
 to excl. discharge into other system
- XAM** Leak-off steam system
 from excl. branch from seal leak-off
 to excl. discharge into other system

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X

X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XA Steam turbine plant**

XAN Turbine bypass station, incl. desuperheating spray system
 from incl. bypass valve and
 from incl. desuperheating spray valve
 to incl. steam inlet to condenser

XAP LP turbine bypass
 from excl. bypass valve and
 from excl. branch off steam system
 to excl. condenser

XAQ Vent system (if separate from *XAL*)
 from incl. venting point
 to excl. discharge into other system

XAR -blocked-

XAS -blocked-

XAT -blocked-

XAU -blocked-

XAV Lubricant supply system
 from incl. dedicated lubricant tank or common lubricant and
 control fluid tank or
 from excl. branch off lubricant fluid supply system
 to excl. user and
 from excl. user

XAW Sealing, heating and cooling steam system
 from excl. branch
 to excl. casing nozzle of steam user and leak-off
 to excl. condenser or
 to incl. gland steam condenser or
 to excl. heating/cooling steam user

XAX Non-electric control and protection equipment, incl. fluid supply system

XAY Electrical control and protection equipment

XAZ -blocked-

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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XB Gas turbine plant**

XBA Turbine, compressor rotor with common casing
 from incl. compressor inlet
 to incl. compressor outlet
 from incl. turbine inlet
 to incl. turbine outlet, incl. exhaust gas diffuser

XBB Turbine casing and rotor
 from incl. turbine inlet
 to incl. turbine outlet, incl. exhaust gas diffuser

XBC Compressor casing and rotor
 from incl. compressor inlet
 to incl. compressor outlet

XBD Bearings

XBE -blocked-

XBF -blocked-

XBG -blocked-

XBH Cooling and sealing gas system
 from incl. extraction point
 to excl. user and
 from excl. user, incl. leak-off
 to incl. inlet to other system

XBJ Start-up unit

XBK Transmission gear between prime mover and driven machine,
 incl. turning gear, barring gear

XBL Intake air, cold gas system (open cycle)
 from excl. atmosphere
 to excl. combustion chamber or
 to excl. compressor inlet or
 to incl. exhaust gas heat exchanger, excl. compressor

XBM Combustion chamber (gas heating, combustion)
 from incl. cold gas, fuel inlet
 to incl. hot gas outlet


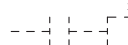
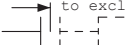
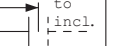
XBN Fuel supply system (liquid)
 from excl. branch off main supply line or
 from incl. temporary (day) tank
 to excl. combustion chamber or
 to excl. motive gas generating unit, incl. fuel return
 system

XBP Fuel supply system (gaseous)
 from excl. branch off main supply line
 to excl. combustion chamber or
 to excl. motive gas generating unit

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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XB Gas turbine plant**

XBQ Ignition fuel supply system (if separate)
 from excl. branch off main supply line or
 from incl. storage tank
 to excl. combustion chamber or
 to excl. motive gas generating unit

XBR Exhaust gas system (open cycle)
 from excl. combustion chamber or
 from excl. exhaust gas diffuser
 to excl. discharge into atmosphere, excl. turbine, or
 to excl. inlet to other system (e.g. combustion air system)

XBS Storage system
 to excl. connection to main system and
 from excl. connection to main system

GBT Motive gas generator unit, incl. combustion chamber
 from incl. air/fuel inlet
 to incl. motive gas outlet of motive gas generating unit

XBU Additive system
 from incl. supply
 to incl. injection

XBV Lubricant supply system
 from incl. dedicated lubricant tank or common lubricant and
 control fluid tank or
 from excl. branch off control fluid supply system
 to excl. user and
 from excl. user

XBW Seal oil supply
 from incl. dedicated sealing oil tank or
 from excl. sealing oil pump suction line
 to excl. user and
 from excl. user

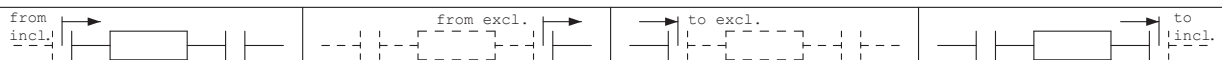
GBX Non-electric control and protection equipment, incl. fluid supply system

GBY Electrical control and protection equipment

GBZ Lubricant and control fluid treatment system

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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)

XC -blocked-

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A	X	HEAVY MACHINERY (NOT MAIN MACHINE SETS)
	XE	Hydraulic turbine plant
A	XEA	Turbine (casing, shaft, runner, draft tube etc.) from excl. turbine inlet or from excl. isolating valve to incl. turbine outlet or to excl. isolating valve
	XEB	Isolating valve Task: to isolate headwater from turbine *XEA* and/or to control headwater flow to turbine *XEA*
	XEC	-blocked-
	XED	Bearings
	XEE	-blocked-
	XEF	-blocked-
	XEG	Stabilizing air system from incl. air compressor to incl. outlet to turbine
	XEH	-blocked-
	XEJ	-blocked-
	XEK	Transmission gear between prime mover and driven machine
	XEL	Water depression air supply system from incl. air compressor to incl. outlet to turbine
	XEM	-blocked-
	XEN	-blocked-
	XEP	-blocked-
	XEQ	-blocked-
	XER	-blocked-
	XES	Shaft gland cooling water system
	XET	-blocked-
	XEU	-blocked-
	XEV	Lubricant supply system from incl. lubricant tank to excl. user and from excl. user
	XEW	Sealing water supply system from incl. sealing water supply main isolating valve to excl. casing nozzle of sealing water user
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<div><div>X</div><div>HEAVY MACHINERY (NOT MAIN MACHINE SETS)</div></div> <div><div>XE</div><div>Hydraulic turbine plant</div></div> <div><div>XEX</div><div>Non-electric control and protection equipment, incl. fluid supply</div></div> <div><div>XEY</div><div>Electrical control and protection equipment</div></div> <div><div>XEZ</div><div>-blocked-</div></div>							
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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)

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	X	HEAVY MACHINERY (NOT MAIN MACHINE SETS)				
B	XG	Pumped-storage plant				
B	XGA	Storage pump (casing, shaft, runner etc.) from excl. storage pump inlet or from excl. isolating valve to incl. storage pump outlet or to excl. isolating valve				
B	XGB	Isolating valve Task: to isolate water for storage pump *XGA* and/or to control water for storage pump *XGA*				
R	XGC	-blocked-				
B	XGD	Bearings				
R	XGE	-blocked-				
R	XGF	-blocked-				
R	XGG	-blocked-				
R	XGH	-blocked-				
R	XGJ	-blocked-				
B	XGK	Transmission gear between motor generator set and storage pump				
B	XGL	Water depression air supply system from incl. air compressor to incl. inlet to storage pump				
B	XGM	Start-up unit				
R	XGN	-blocked-				
R	XGP	-blocked-				
R	XGQ	-blocked-				
R	XGR	-blocked-				
B	XGS	Shaft gland cooling water system				
R	XGT	-blocked-				
R	XGU	-blocked-				
B	XGV	Lubricant supply system from incl. lubricant tank to excl. user and from excl. user				
B	XGW	Sealing water supply system from incl. sealing water supply main isolating valve to excl. casing nozzle of sealing water user				
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X B B R	X	HEAVY MACHINERY (NOT MAIN MACHINE SETS)
	XG	Pumped-storage plant
	XGX	Non-electric control and protection equipment, incl. fluid supply system
	XGY	Electrical control and protection equipment
	XGZ	-blocked-

I N D E X	<div>X HEAVY MACHINERY (NOT MAIN MACHINE SETS)</div> <div>XH -blocked-</div>						
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X

X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XJ Diesel engine plant****XJA Engine**

from incl. fuel injection nozzle inlet or
 from incl. air intake nozzles or
 from incl. cooling water inlet nozzles
 to incl. exhaust nozzle outlet or
 to incl. cooling water nozzle outlet, incl. engine-
 internal systems

XJB Turbocharger, blower

from incl. turbocharger or blower inlet
 to incl. turbocharger or blower outlet

XJC -blocked-**XJD -blocked-****XJE -blocked-****XJF -blocked-****XJG Liquid cooling system**

from excl. engine cooling water nozzle outlet or
 from incl. turbocharger air cooling system inlet
 to excl. engine cooling water nozzle inlet or
 to incl. turbocharger air cooler outlet

XJH Air intercooling system

from incl. intercooler inlet
 to incl. intercooler outlet
 to excl. outlet to other cooling systems

XJJ -blocked-**XJK Transmission gear between prime mover and driven machine****XJL -blocked-****XJM -blocked-****XJN Fuel systems**

from incl. temporary (day) tank or
 from excl. branch off piping system
 to excl. fuel injection nozzle inlet

XJP Start-up unit, (incl. flywheel)**XJQ Air intake system**

from excl. atmosphere
 to excl. turbocharger or
 to excl. engine air intake nozzles

XJR Exhaust gas system


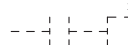
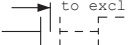

from excl. engine exhaust nozzle outlet
 to excl. discharge to atmosphere

XJS -blocked-

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I N D E X	X HEAVY MACHINERY (NOT MAIN MACHINE SETS)						
	XJ Diesel engine plant						
	XJT -blocked-						
	XJU -blocked-						
	XJV Lubricant supply system from incl. dedicated lubricant tank or common lubricant and control fluid tank or from excl. branch off control fluid supply system to excl. user from excl. user						
	XJW Sealing fluid supply system						
	XJX Fluid supply system for control and protection equipment						
	XJY Control and protection equipment						
	XJZ -blocked-						
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	X	HEAVY MACHINERY (NOT MAIN MACHINE SETS)				
	XK	Generator plant				
	XKA	Generator, complete, incl. stator, rotor and all integral cooling equipment to incl. generator bushing				
A	XKB	Generator exciter set, including set with electrical braking system (use only if *XKC* is not sufficient for identification)				
A	XKC	Generator exciter set, including set with electrical braking system				
	XKD	Bearings				
	XKE	-blocked-				
	XKF	Stator/rotor liquid cooling system, incl. coolant supply system (Note: for cooling oil see *XKU*) Task: dissipate heat produced by stator/rotor to coolant from excl. stator/rotor outlet to excl. stator/rotor inlet				
B	XKG	Stator/rotor hydrogen (H2) cooling system, incl. coolant supply system Task: dissipate heat produced by stator/rotor to hydrogen coolant from excl. stator/rotor outlet to excl. stator/rotor inlet				
B	XKH	Stator/rotor nitrogen (N2)/carbon dioxide (CO2) cooling system, incl. coolant supply system Task: dissipate heat produced by stator/rotor to nitrogen / carbon dioxide coolant from excl. stator/rotor outlet to excl. stator/rotor inlet				
B	XKJ	Stator/rotor air cooling system, incl. coolant supply system Task: dissipate heat produced by stator/rotor to air coolant from excl. stator/rotor outlet to excl. stator/rotor inlet				
	XKK	-blocked-				
	XKL	-blocked-				
	XKM	-blocked-				
	XKN	-blocked-				
	XKP	-blocked-				
	XKQ	Exhaust gas system (if separate from *XKG* and *XKH*)				
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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XK Generator plant****XKR** -blocked-**XKS** -blocked-**XKT** -blocked-**XKU** Stator/rotor cooling oil cooling system, incl. coolant supply system

(Note: for other liquid cooling see *XKF*)

Task: dissipate heat produced by stator/rotor to coolant

from excl. stator/rotor outlet

to excl. stator/rotor inlet

XKV Lubricant supply system (if separate system for generator)**XKW** Sealing fluid supply system

(Sealing oil system, incl. supply and treatment)

from excl. branch off sealing oil supply system

to excl. stator inlet and

from excl. stator outlet

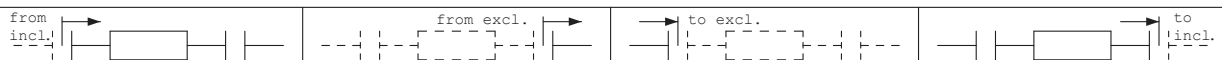
to excl. inlet to other system or in closed systems

from excl. stator outlet

to excl. stator inlet

XXX Fluid supply system for control and protection equipment**XXY** Control and protection equipment**XXZ** -blocked-I
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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XL Electro-motive plant (incl. motor generator)**

XLA Motor frame, motor generator frame, incl. stator, rotor and all integral cooling equipment to incl. motor or generator bushing

XLB -blocked-

XLC Exciter set

XLD Bearings

XLE -blocked-

XLF Stator/rotor liquid cooling system, incl. coolant supply system
(Note: for cooling oil see *XLU)
Task: dissipate heat produced by stator/rotor to coolant from excl. stator/rotor outlet to excl. stator/rotor inlet

XLG Stator/rotor gas cooling system, incl. coolant supply system (Note: for nitrogen cooling see *XLH*)
Task: dissipate heat produced by stator/rotor to coolant from excl. stator/rotor outlet to excl. stator/rotor inlet

XLH Stator/rotor nitrogen cooling system, incl. coolant supply system
(Note: for other gas cooling see *XLG*)
Task: dissipate heat produced by stator/rotor to coolant from excl. stator/rotor outlet to excl. stator/rotor inlet

XLJ -blocked-

XLK -blocked-

XLL -blocked-

XLM -blocked-

XLN -blocked-

XLQ -blocked-

XLQ Exhaust gas system (if separate from *XLG* and *XLH*)

XLR -blocked-

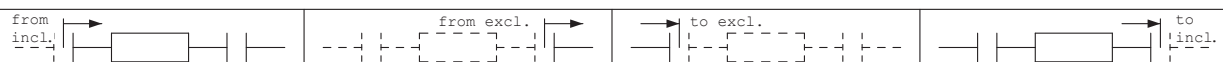
XLS -blocked-

XLT -blocked-

XLU Stator/rotor cooling oil cooling system, incl. coolant supply system
(Note: for other liquid cooling see *XLF*)
Task: dissipate heat produced by stator/rotor to coolant from excl. stator/rotor outlet to excl. stator/rotor inlet

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
- X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**
- XL Electro-motive plant (incl. motor generator)**
- XLV** Lubricant supply system (if separate system for electro-motive units)
- XLW** Sealing fluid supply system
(Sealing oil system, incl. supply and treatment)
from excl. branch off sealing oil supply system
to excl. stator inlet and
from excl. stator outlet
to excl. inlet to other system or in closed systems
from excl. stator outlet
to excl. stator inlet
- XLX** Fluid supply system for control and protection equipment
- XLV** Control and protection equipment
- XLZ** -blocked-





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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)

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X

X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XR Gas engine plant****XRA** Gas engine plant (free for use)**XRБ** Gas engine plant (free for use)**XRC** Gas engine plant (free for use)**XRД** Gas engine plant (free for use)**XRE** Gas engine plant (free for use)**XRF** Gas engine plant (free for use)**XRG** Gas engine plant (free for use)**XRH** Gas engine plant (free for use)**XRJ** Gas engine plant (free for use)**XRK** Gas engine plant (free for use)**XRL** Gas engine plant (free for use)**XRM** Gas engine plant (free for use)**XRN** Gas engine plant (free for use)**XRP** Gas engine plant (free for use)**XRQ** Gas engine plant (free for use)**XRR** Gas engine plant (free for use)**XRS** Gas engine plant (free for use)**XRT** Gas engine plant (free for use)**XRU** Gas engine plant (free for use)**XRV** Lubricant supply system**XRW** Sealing fluid supply system**XRX** Fluid supply system for control and protection equipment**XRY** Control and protection equipment**XRZ** -blocked-VGB Technical Group
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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)

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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XV Lubricant supply system****XVA** Lubricant supply system (free for use)**XVB** Lubricant supply system (free for use)**XVC** Lubricant supply system (free for use)**XVD** Lubricant supply system (free for use)**XVE** Lubricant supply system (free for use)**XVF** Lubricant supply system (free for use)**XVG** Lubricant supply system (free for use)**XVH** Lubricant supply system (free for use)**XVJ** Lubricant supply system (free for use)**XVK** Lubricant supply system (free for use)**XVL** Lubricant supply system (free for use)**XVM** Lubricant supply system (free for use)**XVN** Lubricant supply system (free for use)**XVP** Lubricant supply system (free for use)**XVQ** Lubricant supply system (free for use)**XVR** Lubricant supply system (free for use)**XVS** Lubricant supply system (free for use)**XVT** Lubricant supply system (free for use)**XVU** Lubricant supply system (free for use)**XVV** -blocked-**XVW** -blocked-**XVX** -blocked-**XVY** -blocked-**XVZ** -blocked-

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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XW Sealing fluid supply system****XWA** Sealing fluid supply system (free for use)**XWB** Sealing fluid supply system (free for use)**XWC** Sealing fluid supply system (free for use)**XWD** Sealing fluid supply system (free for use)**XWE** Sealing fluid supply system (free for use)**XWF** Sealing fluid supply system (free for use)**XWG** Sealing fluid supply system (free for use)**XWH** Sealing fluid supply system (free for use)**XWJ** Sealing fluid supply system (free for use)**XWK** Sealing fluid supply system (free for use)**XWL** Sealing fluid supply system (free for use)**XWM** Sealing fluid supply system (free for use)**XWN** Sealing fluid supply system (free for use)**XWP** Sealing fluid supply system (free for use)**XWQ** Sealing fluid supply system (free for use)**XWR** Sealing fluid supply system (free for use)**XWS** Sealing fluid supply system (free for use)**XWT** Sealing fluid supply system (free for use)**XWU** Sealing fluid supply system (free for use)**XWV** -blocked-**XWW** -blocked-**XWX** -blocked-**XWY** -blocked-**XWZ** -blocked-I
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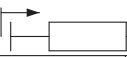
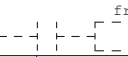
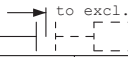
X

X	HEAVY MACHINERY (NOT MAIN MACHINE SETS)
XX	Fluid supply system for control and protection equipment
XXA	Fluid supply system for control and protection equipment (free for use)
XXB	Fluid supply system for control and protection equipment (free for use)
XXC	Fluid supply system for control and protection equipment (free for use)
XXD	Fluid supply system for control and protection equipment (free for use)
XXE	Fluid supply system for control and protection equipment (free for use)
XXF	Fluid supply system for control and protection equipment (free for use)
XXG	Fluid supply system for control and protection equipment (free for use)
XXH	Fluid supply system for control and protection equipment (free for use)
XXJ	Fluid supply system for control and protection equipment (free for use)
XXK	Fluid supply system for control and protection equipment (free for use)
XXL	Fluid supply system for control and protection equipment (free for use)
XXM	Fluid supply system for control and protection equipment (free for use)
XXN	Fluid supply system for control and protection equipment (free for use)
XXP	Fluid supply system for control and protection equipment (free for use)
XXQ	Fluid supply system for control and protection equipment (free for use)
XXR	Fluid supply system for control and protection equipment (free for use)
XXS	Fluid supply system for control and protection equipment (free for use)
XXT	Fluid supply system for control and protection equipment (free for use)
XXU	Fluid supply system for control and protection equipment (free for use)

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


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X HEAVY MACHINERY (NOT MAIN MACHINE SETS)**XY Control and protection equipment****XYA** Control and protection equipment (free for use)**XYB** Control and protection equipment (free for use)**XYC** Control and protection equipment (free for use)**XYD** Control and protection equipment (free for use)**XYE** Control and protection equipment (free for use)**XYF** Control and protection equipment (free for use)**XYG** Control and protection equipment (free for use)**XYH** Control and protection equipment (free for use)**XYJ** Control and protection equipment (free for use)**XYK** Control and protection equipment (free for use)**XYL** Control and protection equipment (free for use)**XYM** Control and protection equipment (free for use)**XYN** Control and protection equipment (free for use)**XYP** Control and protection equipment (free for use)**XYQ** Control and protection equipment (free for use)**XYR** Control and protection equipment (free for use)**XYS** Control and protection equipment (free for use)**XYT** Control and protection equipment (free for use)**XYU** Control and protection equipment (free for use)**XYV** -blocked-**XYW** -blocked-**XYX** -blocked-**XY Y** -blocked-**XYZ** -blocked-





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




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ZC Workshop and office equipment (free for use)







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
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
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	Equipment Unit Key - Main Groups						
	A	Mechanical equipment					
	B	Mechanical equipment					
	C	Direct measuring circuits (Data character A2 following DIN 19227, part 1, September 1973 edition, table 1, initial letter)					
	D	Closed loop control circuits (Data character A2 following DIN 19227, part 1, September 1973 edition, table 1, initial letter)					
	E	Analog and binary signal conditioning					
	F	Indirect measuring circuits (Data character A2 following DIN 19227, part 1, September 1973 edition, table 1, initial letter)					
C	G	Electrical, Instrumentation and Control equipment					
	H	Subassemblies of main and heavy machinery (only to be used in conjunction with *M* = Main machine sets and *X* = Heavy machinery)					
	J	Nuclear assemblies					
	K	-blocked-					
	L	-blocked-					
	M	-blocked-					
	N	-blocked-					
	P	-blocked-					
	Q	-blocked-					
	R	-blocked-					
	S	-blocked-					
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	U	Civil equipment					
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A

A Mechanical equipment

AA	Valves, dampers, etc., incl. actuators, also manual; rupturedisk equipment
AB	Isolating elements, air locks
AC	Heat exchangers, heat transfer surfaces
AD	-blocked-
AE	Turning, driving, lifting and slewing gear (also manipulators)
AF	Continuous conveyors, feeders (escalators)
AG	Generator units
AH	Heating, cooling and air conditioning units
AJ	Size reduction equipment, only as part of process
AK	Compacting and packaging equipment, only as part of process
AL	-blocked-
AM	Mixers, agitators
AN	Compressor units, fans
AP	Pump units
AQ	-blocked-
AR	-blocked-
AS	Adjusting and tensioning equipment for non-electrical variables (to be applied only, if the actuator forms itself a constructive unit with another equipment unit)
AT	Cleaning, drying, filtering and separating equipment, excl. *BT*
AU	Braking, gearbox, coupling equipment, non-electrical converters
AV	Combustion equipment
AW	Stationary tooling, treatment equipment
AX	Test and monitoring equipment for plant maintenance
AY	-blocked-
AZ	-blocked-

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B Mechanical equipment**BA** -blocked-**BB** Storage equipment (tanks)**BC** -blocked-**BD** -blocked-**BE** Shafts (for erection and maintenance only)**BF** Foundations**BG** -blocked-**BH** -blocked-**BJ** -blocked-**BK** -blocked-**BL** -blocked-**BM** -blocked-**BN** Jet pumps, ejectors, injectors**BP** Flow restrictors, limiters, orifices (not metering orifices)**BQ** Hangers, supports, racks, piping penetrations**BR** Piping, ductwork, chutes**BS** Silencers**BT** Flue gas catalytic converter modules**BU** Insulation, sheathing**BV** -blocked-**BW** -blocked-**BX** -blocked-**BY** -blocked-**BZ** -blocked-I
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C

C	Direct measuring circuits (Data character A2 following DIN 19227, part 1, September 1973 edition, table 1, initial letter)
CA	-blocked-
CB	-blocked-
CC	-blocked-
CD	Density
CE	Electrical variables (e.g. current, voltage, power, electr. frequency)
CF	Flow, rate
CG	Distance, length, position, direction of rotation
CH	Manual input as manually operated sensor (e.g. fire detector)
CJ	-blocked-
CK	Time
CL	Level (also for dividing line)
CM	Moisture, humidity
CN	-blocked-
CP	Pressure
CQ	Quality variables (analysis, material properties), other than *CD*, *CM*, *CV*
CR	Radiation variables
CS	Velocity, speed, frequency (mechanical), acceleration
CT	Temperature
CU	Combined and other variables
CV	Viscosity
CW	Weight, mass
CX	Neutron flux
CY	Vibration, expansion
CZ	-blocked-

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D	Closed loop control circuits (Data character A2 following DIN 19227, part 1, September 1973 edition, table 1, initial letter)
DA	-blocked-
DB	-blocked-
DC	-blocked-
DD	Density
DE	Electrical variables (e.g. current, voltage, power, electr. frequency)
DF	Flow, rate
DG	Distance, length, position, direction of rotation
DH	-blocked-
DJ	-blocked-
DK	Time
DL	Level (also for dividing line)
DM	Moisture, humidity
DN	-blocked-
DP	Pressure
DQ	Quality variables (analysis, material properties), other than *DD*, *DM*, *DV*
DR	Radiation variables
DS	Velocity, speed, frequency (mechanical), acceleration
DT	Temperature
DU	Combined and other variables
DV	Viscosity
DW	Weight, mass
DX	Neutron flux
DY	Vibration, expansion
DZ	-blocked-

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E

E Analog and binary signal conditioning

EA	Open loop control (free for use)
EB	Open loop control (free for use)
EC	Open loop control (free for use)
ED	Open loop control (free for use)
EE	Open loop control (free for use)
EF	-blocked-
EG	Alarm, annunciation (free for use)
EH	Alarm, annunciation (free for use)
EJ	Alarm, annunciation (free for use)
EK	Alarm, annunciation (free for use)
EL	-blocked-
EM	Process computer (free for use)
EN	Process computer (free for use)
EP	Process computer (free for use)
EQ	Process computer (free for use)
ER	Reactor protection
ES	-blocked-
ET	-blocked-
EU	Combined analog and binary signal conditioning
EV	-blocked-
EW	Protection (free for use)
EX	Protection (free for use)
EY	Protection (free for use)
EZ	Protection (free for use)

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	F Indirect measuring circuits (Data character A2 following DIN 19227, part 1, September 1973 edition, table 1, initial letter)					
	FA -blocked-					
	FB -blocked-					
	FC -blocked-					
	FD Density					
	FE Electrical variables (e.g. electr. efficiency, power)					
	FF Flow, rate					
	FG Distance, length, position, direction of rotation					
	FH -blocked-					
	FJ -blocked-					
	FK Time					
	FL Level (also for dividing line)					
	FM Moisture, humidity					
	FN -blocked-					
	FP Pressure					
	FQ Quality variables (analysis, material properties), other than *FD*, *FM*, *FV*					
	FR Radiation variables					
	FS Velocity, speed, frequency (mechanical), acceleration					
	FT Temperature					
	FU Combined and other variables					
	FV Viscosity					
	FW Weight, mass					
	FX Neutron flux					
	FY Vibration, expansion					
	FZ -blocked-					
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C	G	Electrical, Instrumentation and Control equipment						
	GA	Junction boxes and cable/bus bar penetrations (free for use)						
	GB	Junction boxes and cable/bus bar penetrations (free for use)						
	GC	Junction boxes and cable/bus bar penetrations (free for use)						
	GD	Junction boxes and cable/bus bar penetrations (free for use)						
	GE	Junction boxes and cable/bus bar penetrations (free for use)						
	GF	Junction boxes and cable/bus bar penetrations (free for use)						
	GG	Junction boxes and cable/bus bar penetrations (free for use)						
	GH	Electrical and instrumentation and control installation units identified as per process system (e.g. cubicles, boxes)						
	C	GJ	Processing and storage equipment for automation systems					
		GK	Information display and operator control equipment for process computers and automation systems					
	D	GL	Limiting equipment (i.g. short circuit current limiting reactor)					
		GM	Junction boxes for light-current systems of national telecommunication services					
	C	GN	Network equipment					
		GP	Subdistribution/junction boxes for lighting					
		GQ	Subdistribution/junction boxes for power sockets					
		GR	DC generating equipment, batteries					
		GS	Switchgear equipment if not identified under process equipment					
		GT	Transformer equipment					
		GU	Converter equipment					
		GV	Structure-related earthing and lightning protection equipment, surge arrestors					
		GW	Cabinet power supply equipment					
		GX	Actuating equipment for electrical variables					
		GY	Junction boxes for light-current systems (not of national telecommunication services)					
		GZ	Hangers, supports and racks for electrical and instrumentation and control equipment					
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H

H Subassemblies of main and heavy machinery
 (only to be used in conjunction with *M* = Main machine sets
 and *X* = Heavy machinery)

HA Machine stationary assembly

HB Machine rotating assembly

HC -blocked-

HD Bearing assembly

HE -blocked-

HF -blocked-

HG -blocked-

HH -blocked-

HJ -blocked-

HK -blocked-

HL -blocked-

HM -blocked-

HN -blocked-

HP -blocked-

HQ -blocked-

HR -blocked-

HS -blocked-

HT -blocked-

HU -blocked-

HV -blocked-

HW -blocked-

HX -blocked-

HY -blocked-

HZ -blocked-

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J Nuclear assemblies**JA** Absorber assemblies**JB** Fuel assemblies
(also includes block-type, cluster-type and spherical fuel elements)**JC** Breeder assemblies**JD** Flow restrictors (assemblies)**JE** Burnable absorber assemblies**JF** Reflector assemblies**JG** Plenum assemblies**JH** -blocked-**JJ** -blocked-**JK** -blocked-**JL** -blocked-**JM** Moderator assemblies**JN** Neutron sources**JP** -blocked-**JQ** -blocked-**JR** -blocked-**JS** Shielding equipment**JT** -blocked-**JU** -blocked-**JV** -blocked-**JW** -blocked-**JX** -blocked-**JY** -blocked-**JZ** Special assembliesI
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	U	Civil equipment					
F	UA	Open spaces					
F	UB	Traffic routes, e.g. road, places					
F	UC	Supporting equipment for civil objects, e.g. bridges					
F	UD	Shaft, duct					
F	UE	Isolating element, safety-related e.g. fire door					
F	UF	Isolating element, non-safety-related e.g. door					
F	UG	Supporting equipment, e.g. ceilings, wall					
F	UH	Non supporting equipment, e.g. ceilings, wall					
	UJ	-blocked-					
	UK	-blocked-					
	UL	-blocked-					
	UM	-blocked-					
	UN	-blocked-					
	UP	-blocked-					
	UQ	-blocked-					
	UR	-blocked-					
F	US	Housing, e.g. room, corridor, lobby, stairway					
	UT	-blocked-					
	UU	-blocked-					
	UV	-blocked-					
	UW	-blocked-					
	UX	-blocked-					
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	E	-blocked-						
	F	-blocked-						
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	H	-blocked-						
	J	-blocked-						
	K	Mechanical components						
	L	-blocked-						
	M	Mechanical components						
	F	N	Civil structures					
		P	-blocked-					
		Q	Instrumentation and control components (non-electrical)					
R		-blocked-						
S		-blocked-						
T		-blocked-						
U		-blocked-						
V		-blocked-						
W		-blocked-						
X		Signal origins (Subgroups are established as appropriate to the type of instrumentation and control system and are therefore subject to agreement between the parties to the project.)						
Y		Signal applications (Subgroups are established as appropriate to the type of instrumentation and control system and are therefore subject to agreement between the parties to the project.)						
Z		Gated signals (Subgroups are established as appropriate to the type of instrumentation and control system and are therefore subject to agreement between the parties to the project.)						
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F	- Electrical components -A Assemblies and subassemblies -B Transducers for non-electrical to electrical variables and vice-versa -C Capacitors -D Binary elements, delay devices, memory devices -E Special components -F Protective devices -G Generators, power supplies -H Signalling devices -K Relays, contactors -L Inductors -M Motors -N Amplifiers, controllers -P Measuring instruments, testing equipment -Q Power switchgear -R Resistors -S Switches, selectors -T Transformers -U Modulators, convertors from electrical to other electrical variables -V Tubes, semiconductors -W Transmission paths, waveguides, aerials -X Terminals, plugs, sockets -Y Electrical positioners, e.g. solenoids (not motors) -Z Terminations, balancing equipment, filters, limiters, cable terminations					
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K

F	K	Mechanical components					
	KA	Gate valves, globe valves, dampers, cocks, rupture disks, orifices					
	KB	Dam boards					
	KC	Heat exchangers, coolers					
	KD	Vessels/tanks, pools, surge tanks (fluid systems)					
	KE	Turning, driving, lifting and slewing gear					
	KF	Continuous conveyors, feeders					
	KG	-blocked-					
	KH	-blocked-					
	KJ	Size reduction machines					
	KK	Compacting, packaging machines					
	KL	-blocked-					
	KM	Mixers, agitators					
	KN	Compressors, blowers, fans					
	KP	Pumps					
	KQ	-blocked-					
	KR	-blocked-					
	KS	Silencers					
	KT	Cleaning machines, dryers, separators, filters					
	KU	Insulations, sheathings, inhousings					
	KV	Burners, grates					
	KW	Stationary tooling and treatment machines for maintenance					
	KX	-blocked-					
	KY	-blocked-					
	KZ	-blocked-					
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M

	M	Mechanical components					
	MA	-blocked-					
	MB	Brakes					
	MC	-blocked-					
	MD	-blocked-					
	ME	-blocked-					
	MF	Foundations					
	MG	Gearboxes					
	MH	-blocked-					
	MJ	-blocked-					
	MK	Clutches, couplings					
	ML	-blocked-					
	MM	Engines, not electrical					
F	MN	Jet pumps, ejectors, injectors					
D	MP	Permanent connection (if MQ is not enough)					
F	MQ	Indissoluble connections, e.g. weld seams, adhesive seams					
	MR	Piping components, ductwork components					
	MS	Positioners, not electrical					
	MT	Turbines					
	MU	Transmission gear, non electrical, converters and boosters other than couplings and gearboxes					
F	MV	Hangers equipment, supports, racks, piping penetrations					
	MW	-blocked-					
	MX	-blocked-					
	MY	-blocked-					
	MZ	-blocked-					
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F	N	Civil structures
F	NA	-blocked-
F	NB	Traffic elements e.g. crash barriers, rails
F	NC	Supporting equipment for civil objects, e.g. buttress, railings
F	ND	Shafts, ductings
F	NE	Isolating elements, safty-related e.g. door leafs, frames
F	NF	Isolating elements, non safty-related e.g. door leafs, frames
F	NG	Civil supporting equipment, e.g. beams, steel beams
F	NH	Civil non supporting equipment, e.g. separator plates, dry constructions
F	NJ	-blocked-
F	NK	-blocked-
F	NM	-blocked-
F	NN	-blocked-
F	NP	-blocked-
F	NQ	-blocked-
F	NR	-blocked-
F	NS	-blocked-
F	NT	-blocked-
F	NU	-blocked-
F	NV	-blocked-
F	NW	-blocked-
F	NX	-blocked-
F	NY	-blocked-
F	NZ	-blocked-
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P -blocked-

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F	Q	Instrumentation and control components (non-electrical)					
	QA	-blocked-					
	QB	Sensors if not structurally integral with *QP*, metering orifices					
	QC	-blocked-					
	QD	-blocked-					
	QE	-blocked-					
	QF	-blocked-					
	QG	-blocked-					
	QH	Signalling devices					
	QJ	-blocked-					
	QK	-blocked-					
	QL	-blocked-					
	QM	-blocked-					
	QN	Controllers, flybolt governor					
	QP	Measuring instruments, testing equipment					
	QQ	-blocked-					
	QR	Instrument piping					
	QS	Condensation chambers (datum reservoir) in measuring circuits					
	QT	Thermowells and pockets for protection of sensors					
	QU	Converters e.g. pressure					
	QV	-blocked-					
	QW	-blocked-					
	QX	-blocked-					
	QY	-blocked-					
	QZ	-blocked-					
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R -blocked-

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W

X **Signal origins** (Subgroups are established as appropriate to the type of instrumentation and control system and are therefore subject to agreement between the parties to the project.)

XA Signal origins (free for use)

XB Signal origins (free for use)

XC Signal origins (free for use)

XD Signal origins (free for use)

XE Signal origins (free for use)

XF Signal origins (free for use)

XG Signal origins (free for use)

XH Signal origins (free for use)

XJ Signal origins (free for use)

XK Signal origins (free for use)

XL Signal origins (free for use)

XM Signal origins (free for use)

XN Signal origins (free for use)

XP Signal origins (free for use)

XQ Signal origins (free for use)

XR Signal origins (free for use)

XS Signal origins (free for use)

XT Signal origins (free for use)

XU Signal origins (free for use)

XV Signal origins (free for use)

XW Signal origins (free for use)

XX Signal origins (free for use)

XY Signal origins (free for use)

XZ Signal origins (free for use)

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	Y Signal applications (Subgroups are established as appropriate to the type of instrumentation and control system and are therefore subject to agreement between the parties to the project.)					
	YA Signal applications (free for use)					
	YB Signal applications (free for use)					
	YC Signal applications (free for use)					
	YD Signal applications (free for use)					
	YE Signal applications (free for use)					
	YF Signal applications (free for use)					
	YG Signal applications (free for use)					
	YH Signal applications (free for use)					
	YJ Signal applications (free for use)					
	YK Signal applications (free for use)					
	YL Signal applications (free for use)					
	YM Signal applications (free for use)					
	YN Signal applications (free for use)					
	YP Signal applications (free for use)					
	YQ Signal applications (free for use)					
	YR Signal applications (free for use)					
	YS Signal applications (free for use)					
	YT Signal applications (free for use)					
	YU Signal applications (free for use)					
	YV Signal applications (free for use)					
	YW Signal applications (free for use)					
	YX Signal applications (free for use)					
	YY Signal applications (free for use)					
	YZ Signal applications (free for use)					
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Z Gated signals (Subgroups are established as appropriate to the type of instrumentation and control system and are therefore subject to agreement between the parties to the project.)

ZA Gated signals (free for use)

ZB Gated signals (free for use)

ZC Gated signals (free for use)

ZD Gated signals (free for use)

ZE Gated signals (free for use)

ZF Gated signals (free for use)

ZG Gated signals (free for use)

ZH Gated signals (free for use)

ZJ Gated signals (free for use)

ZK Gated signals (free for use)

ZL Gated signals (free for use)

ZM Gated signals (free for use)

ZN Gated signals (free for use)

ZP Gated signals (free for use)

ZQ Gated signals (free for use)

ZR Gated signals (free for use)

ZS Gated signals (free for use)

ZT Gated signals (free for use)

ZU Gated signals (free for use)

ZV Gated signals (free for use)

ZW Gated signals (free for use)

ZX Gated signals (free for use)

ZY Gated signals (free for use)

ZZ Gated signals (free for use)

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Amendment to the

VGB-Standard

KKS Identification System

for Power Stations

Guideline for Application and Key Part

Amendment: 2019-11

VGB-S-811-01-2018-01-EN

Publisher:
VGB PowerTech e.V.

Publishing house:
VGB PowerTech Service GmbH
Verlag technisch-wissenschaftlicher Schriften
Deilbachtal 173, 45257 Essen, Germany

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Fax: +49 201 8128-302
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ISBN 978-3-86875-043-3 (Print)
ISBN 978-3-86875-045-7 (eBook)

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	B POWER TRANSMISSION AND AUXILIARY POWER SUPPLY						
	BA Power transmission						
R	BAA	Generator leads from excl. generator bushings, incl. current and voltage transformers, cooling and ventilation systems to excl. generator transformer low side bushings or to excl. auxiliary power transformer high side bushings					
	BAB	Foundation cabinets					
	BAC	Generator circuit breaker, also commutating pole circuit breaker, incl. cooling system					
	BAD	-blocked-					
G	BAE	Converter					
	BAF	-blocked-					
	BAG	-blocked-					
	BAH	-blocked-					
	BAJ	-blocked-					
	BAK	-blocked-					
	BAL	-blocked-					
	BAM	-blocked-					
	BAN	-blocked-					
	BAP	-blocked-					
	BAQ	-blocked-					
	BAR	-blocked-					
G	BAS	Compensation					
	BAT	Generator transformers, including cooling system					
E	BAU	Earthing and lightning protection system					
	BAV	-blocked-					
E	BAW	-blocked-					
	BAX	Fluid supply system for control and protection equipment					
	BAY	Control and protection equipment					
	BAZ	-blocked-					
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Revision	G11/2019	E10/2008					

H	CONVENTIONAL HEAT GENERATION						
G	HP	Heat transfer system (Geothermal systems, Heat pump system)					
G	HPA	Geothermal extraction system from incl. inlet production well to excl. distribution system including pressurizing system					
G	HPB	Geothermal distribution system from incl. outlet extraction system to excl. heat exchanger or to excl. return system					
G	HPC	Geothermal return system from incl. outlet distribution system or from incl. outlet heat exchanger to incl. outlet injection well					
G	HPD	Low pressure side of the heat pump system from incl. the outlet of the last circuit expansion valve to incl. compressor inlet					
G	HPE	High pressure side of the heat pump system from incl. inlet compressor to incl. the last circuit expansion valve					
A	HPF	-blocked-					
A	HPG	-blocked-					
A	HPH	-blocked-					
A	HPJ	-blocked-					
A	HPK	-blocked-					
A	HPL	-blocked-					
A	HPM	-blocked-					
A	HPN	-blocked-					
A	HPP	-blocked-					
F	HPQ	- available for use -					
F	HPR	- available for use -					
F	HPS	- available for use -					
F	HPT	- available for use -					
F	HPU	- available for use -					
F	HPV	Lubricant supply system					
F	HPW	Sealing fluid supply system					
F	HPX	Fluid supply system for control and protection equipment					
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E	incl.		excl.		incl.		
X	Revision	G11/2019	F06/2016	A 071993			

	H	CONVENTIONAL HEAT GENERATION					
G	HP	Heat transfer system (Geothermal systems, Heat pump system)					
F	HPY	Control and protection equipment					
	HPZ	-blocked-					

M MAIN MACHINE SETS**G MR Gas engine and Compustion engine system**G **MRA** Engine systemG **MRB** Gas engine plant and Compustion engine system (free for use)G **MRC** Gas engine plant and Compustion engine system (free for use)G **MRD** Gas engine plant and Compustion engine system (free for use)G **MRE** Cooling SystemG **MRF** Heat exctraction systemG **MRG** Exhaust gas systemG **MRH** Combustion air systemG **MRJ** Ventilation systemG **MRK** Power transmission systemG **MRL** Gas engine plant and Compustion engine system (free for use)G **MRM** Gas engine plant and Compustion engine system (free for use)G **MRN** Fuel systemG **MRP** Compressed air systemG **MRQ** Gas engine plant and Compustion engine system (free for use)G **MRR** Gas engine plant and Compustion engine system (free for use)G **MRS** Gas engine plant and Compustion engine system (free for use)G **MRT** Gas engine plant and Compustion engine system (free for use)G **MRU** Support structural systemG **MRV** Lubricant supply system**MRW** Sealing fluid supply system**MRX** Fluid supply system for control and protection equipment**MRY** Control and protection equipment**MRZ** -blocked-VGB Working Panel
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R GAS GENERATION AND TREATMENT**RJ Main gas precipitator**

RJA Cartridge filter system
 from incl. cartridge filter inlet
 from excl. filter cleaning system
 to incl. cartridge filter outlet
 to excl. gasification residues removal system

RJB Cyclone filter system
 from incl. cyclone filter inlet
 from excl. filter cleaning system
 to incl. cyclone filter outlet
 to excl. gasification residues removal system

RJC Bag filter system
 from incl. bag filter inlet
 from excl. filter cleaning system
 to incl. bag filter outlet
 to excl. gasification residues removal system

RJD Packed-bed filter system
 from incl. packed-bed filter inlet
 from excl. filter cleaning system
 to incl. packed-bed filter outlet
 to excl. gasification residues removal system

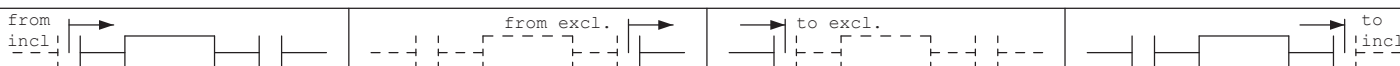
RJE Electrostatic precipitator system
 from incl. electrostatic precipitator inlet
 from excl. filter cleaning system
 to incl. electrostatic precipitator outlet
 to excl. gasification residues removal system

G RJF Venturi - washer system
 from incl. Entry of raw gas
 from incl. Washing water enters the droplet separator
 to incl. Raw gas escapes from the droplet separator
 to incl. Washing water containing dust escapes from the droplet separator

RJG -blocked-**RJH** -blocked-**RJJ** -blocked-**RJK** -blocked-**RJL** -blocked-**RJM** -blocked-**RJN** -blocked-**RJP** -blocked-

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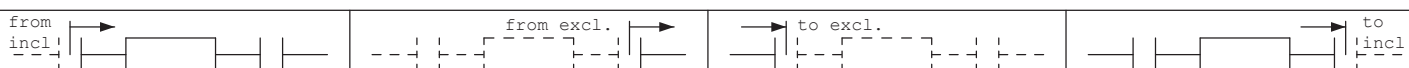


Revision

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R GAS GENERATION AND TREATMENT**RJ Main gas precipitator****RJQ** -blocked-**RJR** -blocked-**RJS** Filter cleaning system
from excl. branch off supply system**RJT** -blocked-**RJU** -blocked-**RJV** Lubricant supply system**RJW** Sealing fluid supply system**RJX** Fluid supply system for control and protection equipment**RJY** Control and protection equipment**RJZ** -blocked-I
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Revision

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E	U Civil structures						
	<p>UM Structures for main machine sets No binding stipulation of F3 subdivision. Those given herein are simply recommendations.</p> <p>UMA Steam turbine building</p> <p>UMB Gas turbine building</p> <p>UMC Structure for main machine sets (free for use)</p> <p>UMD Structure for main machine sets (free for use)</p> <p>UME Hydraulic turbine building</p> <p>UMF Structure for main machine sets (free for use)</p> <p>UMG Pumped storage turbine building</p> <p>UMH Structure for main machine sets (free for use)</p> <p>UMJ Diesel engine building</p> <p>UMK Structure for main machine sets (free for use)</p> <p>UML Structure for main machine sets (free for use)</p> <p>UMM Compressor system building</p> <p>UMN Structure for main machine sets (free for use)</p> <p>UMP Structure for main machine sets (free for use)</p> <p>UMQ Structure for main machine sets (free for use)</p>						
G	<p>UMR Gas engine and Combustion engine plant building</p> <p>UMS Structure for main machine sets (free for use)</p> <p>UMT Structure for main machine sets (free for use)</p> <p>UMU Structure for main machine sets (free for use)</p> <p>UMV Structure for main machine sets (free for use)</p> <p>UMW Structure for main machine sets (free for use)</p> <p>UMX Special structure (plant-specific)</p> <p>UMY Bridge structure</p> <p>UMZ Ducting structure</p>						
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