

0.61/15537

SHT 1

BOARD:		50GW 380V HYDROGEN GENERATING PLANT BOARD WATERSTOFOONTWIKKELINGSAANLEGBORD																							
CIRCUIT NUMBER: (NOTE 2)		001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024
CIRCUIT (OR SUB-CIRCUIT) DESIGNATION:		DISTRIBUTION BD. DISTRIBUSIE BD.	RECTIFIER PANEL GELYKTRIGTERPANEEL			HYDROGEN GENERATING PLANT LIGHTING BOARD WATERSTOFOONTWIKKELINGS- SANTOESVERLICHTINGSBOORD	WATER COOLER PANEL WATERKOELERPANEEL	SOCKET OUTLETS KRAGPUNTE			MC B'S M S B'S				SUMP PUMP TROG POMP	1 FAN WAAIER	2 FAN WAAIER	3 FAN WAAIER	4 FAN WAAIER	5 FAN WAAIER	6 FAN WAAIER	40 HF 01 PLANS LIKE ALARM PANEEL LOCAL ALARM PANEEL	40 HF 01 PLANS LIKE ALARM PANEEL LOCAL ALARM PANEEL		
CURRENT RATINGS (AMPERES)		630																							
FAULT CURRENT: 12 kA FOR 1 SEC		630																							
BUSBAR BREAKER																									
ISOLATOR																									
FUSE SWITCH			400	250	100	100	100	100	100	100	100														
FUSES			350	200	100	63	40	63	100	100	100														
M.C.B. (NOTE 5)																									
CONTACTOR (NOTE 4)												32	32	16	20	6	6	6	6	6	6	16	16	6	6
CONTACTOR TYPE (NOTE 1.2)																									
No. OF PHASES (NOTE 1.1)		3+N	3+N	3+N	3+N	3+N	3+N	3+N	3+N	3+N	3+N	3	3	3	3	3	3	3	3	3	3	1+N	1+N	1+N	1+N
LOAD																									
POWER																									
FULL LOAD CURRENT																									
STARTING CURRENT																									
STARTING TIME																									
PROTECTION																									
QUANTITY																									
CIRCUIT TYPE (NOTE 3)																									
RATIO																									
BURDEN																									
ACCURACY CLASS																									
SATURATION FACTOR																									
INSTRUMENT																									
QUANTITY		3																							
CIRCUIT TYPE (NOTE 3)		IL1																							
RATIO		400/5																							
BURDEN		5																							
ACCURACY CLASS		1																							
AMMETER																									
QUANTITY		1																							
SELECTOR SWITCH		1																							
VOLTMETER																									
QUANTITY		1+1																							
SELECTOR SWITCH		1+1																							
CONNECTED (NOTE 1.4)		C+B																							
TRANSDUCER																									
CURRENT																									
VOLTAGE																									
REFERENCE DRAWINGS																									
SCHEMATIC DIAG. SHI. No.		SEE NOTE 10																							
CABLEING DIAG. SHI. No.		101																							
SKELETON DIAGRAM 0.61/																									
POWER CABLES																									
QUANTITY		2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORES PER CABLE		4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	4	2	2	2	2	2
CORE AREA mm ²		185	185	95	95	16	35	95	95	95	95	10	4	4	4	4	4	4	4	16	4	10	10	4	4
TYPE (NOTE 1.3)		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
CONTROL CABLES																									
QUANTITY																									
CORES PER CABLE																									
TYPE (NOTE 1.3)																									

NOTES:

1. ABBREVIATIONS

- 1.1 No. OF PHASES
N-NEUTRAL LINK

- 1.2 CONTACTOR TYPE
L- LATCHED
H- HELD-IN
R- REVERSING

- 1.3 CABLES
P- PAPER INSULATED
V- PVC INSULATED
M- MINERAL INSULATED

- 1.4 VOLTMETER CONNECTIONS
B- BUSBAR
C- CABLE

2. CIRCUIT NUMBERS TO BE PREFIXED
BY THE BOARD CODE LETTERS

3. FOR CONNECTION DETAILS OF CIRCUIT TYPES, SEE
SWITCHGEAR STANDARD CIRCUIT DIAGRAM: 0-61/10593 SHT'S 1-75

4. CONTACTOR CURRENT RANGE TO BE SUPPLIED BY CONTRACTOR
(ALSO APPLICABLE TO FUSE SWITCH)

5. SINGLE PHASE M.C.B.'S TO BE CONNECTED AS FOLLOWS:-

PHASE	SUB-CIRCUIT No.
RED	021, 023
WHITE	022, 024
BLUE	025, 026

6. FOR LOCATION SEE 0.61/

7. ALL CABLES TO BE BOTTOM ENTRY

8. LENGTH OF BOARD MUST NOT EXCEED 2,0 M

9. LABEL INSCRIPTION

- LANGUAGE PRECEDENCE:-AFRIKAANS.

10. IL-1 STANDARD CIRCUIT EXCLUDING FL, FL-X, DCF, RELAYS.

CONTRACT No.	OPT 11759
ITEM	B44
MANUFACTURER	ALLENWEST-GE

REV	DATE	BY	CHKD	0.61/
1	1981	WAG	WAG	
2	1981	WAG	WAG	
3	1981	WAG	WAG	
4	1981	WAG	WAG	
5	1981	WAG	WAG	
6	1981	WAG	WAG	
7	1981	WAG	WAG	
8	1981	WAG	WAG	
9	1981	WAG	WAG	
10	1981	WAG	WAG	
11	1981	WAG	WAG	
12	1981	WAG	WAG	
13	1981	WAG	WAG	
14	1981	WAG	WAG	
15	1981	WAG	WAG	
16	1981	WAG	WAG	
17	1981	WAG	WAG	
18	1981	WAG	WAG	
19	1981	WAG	WAG	
20	1981	WAG	WAG	
21	1981	WAG	WAG	
22	1981	WAG	WAG	
23	1981	WAG	WAG	
24	1981	WAG	WAG	
25	1981	WAG	WAG	
26	1981	WAG	WAG	
27	1981	WAG	WAG	
28	1981	WAG	WAG	
29	1981	WAG	WAG	
30	1981	WAG	WAG	

ESKOM • EVKOM
TUTUKA POWER STATION
380V HYDROGEN GEN PLANT BOARD
SWITCHGEAR SCHEDULE
SHEET 1
0.61/15537

MICROBOX