

DATE: 06/09/2019

REPLY TO: _____

Compile By : K Hoffmann

Signature : _____



Verify By : _____

Signature : _____

DEAR SIR/MADAM

PROJECT NUMBER: 2.KMDM Gerus (Nampower)

SERIAL NUMBER: ET 9495 / A

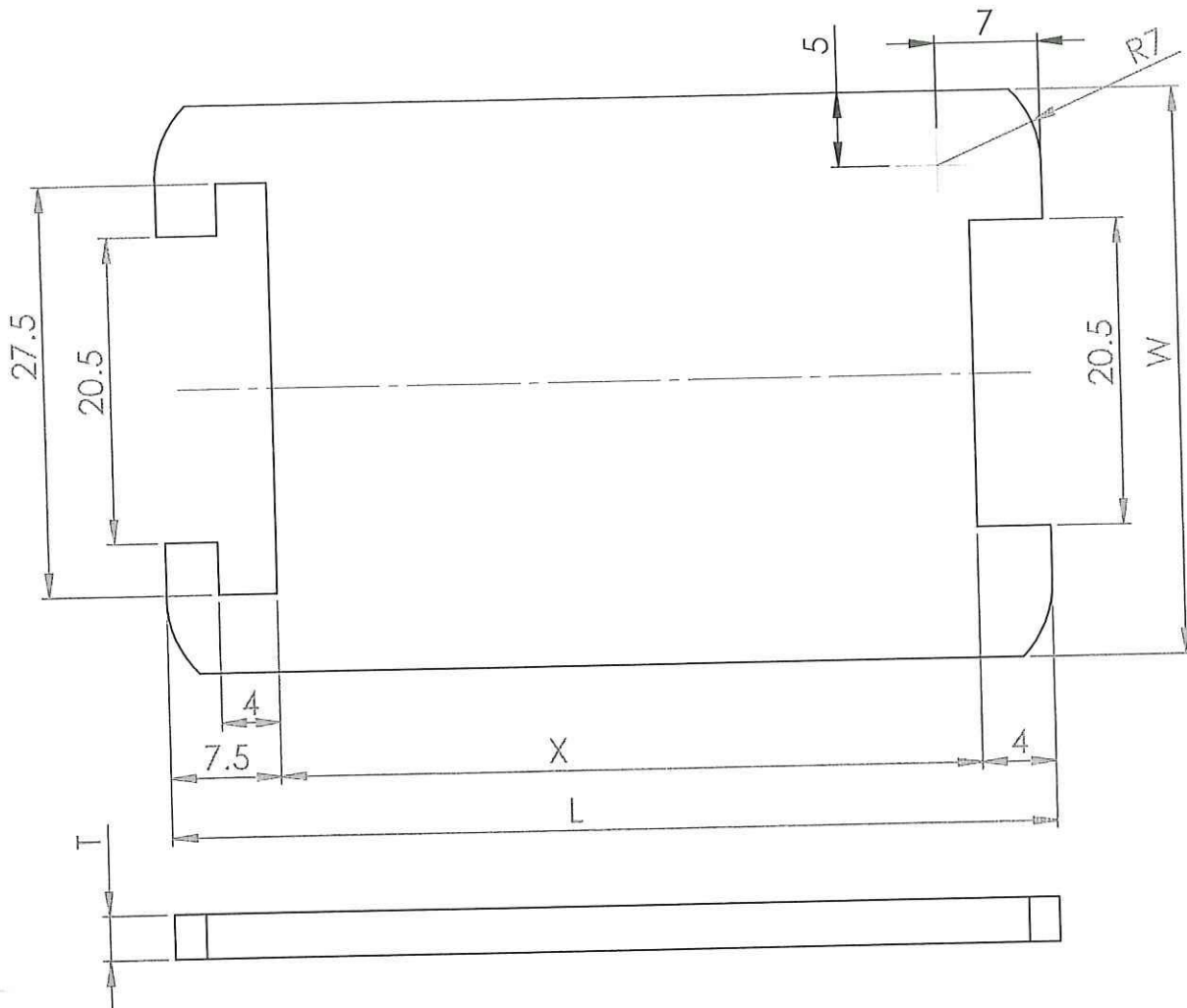
HEREWITH, PLEASE FIND THE WINDING MATERIAL QUOTE REQUEST LIST

TRANSFORMER WINDING MATERIAL QUOTE REQUEST LIST			
QUANTITY PER PHASE	QUANTITY PER TRANSFORMER	UNIT	DESCRIPTION B / Winding 2.KMDM Gerus (Nampower)
1	3	→	<u>Pre stabilized Cylinder</u> T = 5 x ID 1253 x OD 1263 x L 2650 Tolerance 5mm over on circumference NO MINUS TOLERANCE Overlap to be 150mm / Use casein glue on joint /s.
32	96	→	<u>T.Stick</u> T = 8 x 26.50 x 2650
4262 REV 4	12786	→	<u>Clacks</u> 3 mm Calibrated as per drawing T = 3 x 45 x 110 (121.50) T = 3 x 45 x 112 (123.50) Drawing EE04D/ 15/0280
2624 REV 4	7872	→	<u>Clacks</u> 2.50 mm Calibrated as per drawing T = 2.50 x 45 x 110 (121.50) T = 2.50 x 45 x 112 (123.50) Drawing EE04D/ 15/0280
2624 REV 4	7872	→	<u>Clacks</u> 2.00 2.50 mm Calibrated as per drawing T = 2.50 x 45 x 110 (121.50) T = 2.00 x 45 x 110 (121.50) Drawing EE04D/ 15/0280 T = 2 x 45 x 112 (123.50)
1	3	→	<u>Outer Yoke Collar</u> T = 2 x ID 1282 x OD 1519 x H 140 x "R 8"
1	3	→	<u>Outer Yoke Collar</u> T = 2 x ID 1282 x OD 1523 x H 140 x "R 8"
1	3	→	<u>Bottom Shieldring</u> T = 28 x ID 1282 x OD 1498 (Final Dimension) "See Drawing"
7	21	→	<u>Inner Edge Collars</u> T = 1.00 x ID 1279 x OD 1352 x H 13.50
5	15	→	<u>Outer Edge Collars</u> T = 1.00 x ID 1428 x OD 1502 x H 13.50
7	21		<u>Ring</u> (T = 8) ID 1263 x OD 1279 x H 13 "See Drawing"

Controlled Disclosure

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UANTITY PER PHASE	QUANTITY PER TRANSFORMER	UNIT	DESCRIPTION B / Winding 2.KMDM Gerus (Nampower) Continue
1	3	→	<u>Top Shieldring</u> T = 30 x ID 1282 x OD 1498 (Final Dimension) <u>See Drawing</u>
1	3	→	<u>Inner Yoke Collar</u> T = 3 x ID 1247 x OD 1499 x H 150 x "R 10"
1	3	→	<u>Inner Yoke Collar</u> T = 2 x ID 1243 x OD 1499 x H 150 x "R 10"
1	3	→	<u>Inner Yoke Collar</u> T = 2 x ID 1239 x OD 1499 x H 150 x "R 10"
64	192		<u>Rib</u> T = 6 x 20 x 2359 x R 2 "(R 1.5 on all 4 Edges + No sharp edges & Chamfer's")
40 meter	120 meters	→	<u>Clack Band</u> T = 6 x H 13 x 120 meter
	20	→	High density board T = 1mm x 2100mm x 3200mm
	5	→	High density board T = 2mm x 2100mm x 3200mm
	18	→	High density board T = 3mm x 2100mm x 3200mm
	1	→	High density board T = 6mm x 2100mm x 3200mm
	16	→	Crepe Tape 12HCC or HDC Reinforce paper Thickness 0.056mm x 16mm x 100m per roll
	10		Reinforced glass tape width 20mm x 100Meters/roll
	1		Kaseinlim Glue 33kg (Expiry Date)



WINDING	THICKNESS (T)	LENGTH (L)	WIDTH (W)	X	No. OFF	No. PER RIB
B / W	3	123.5	45	112	12768	133
B / W	2.5	123.5	45	112	7872	82
B / W	2	123.5	45	112	7872	82

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS
SURFACE FINISH:
TOLERANCES:
LINEAR:
ANGULAR:

FINISH:

DEBUR AND
BREAK SHARP
EDGES

DO NOT SCALE DRAWING

REVISION

3 (16.09.2020)

Eskom
Rotek Industries

	NAME	SIGNATURE	DATE
DRAWN	SD MATLABE		2015/11/03
CHK'D	NL MAPIMELE		2015/11/03
APPVD	I Myagkov		
	K Hoffmann	16.09.2020	

PROJECT No:	2.KMDM
SERIAL No:	ET 9495 / A
FROM:	Gerus
TYPE:	MV B / W

TITLE:

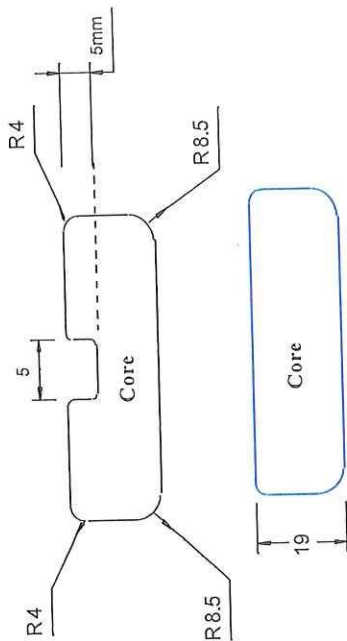
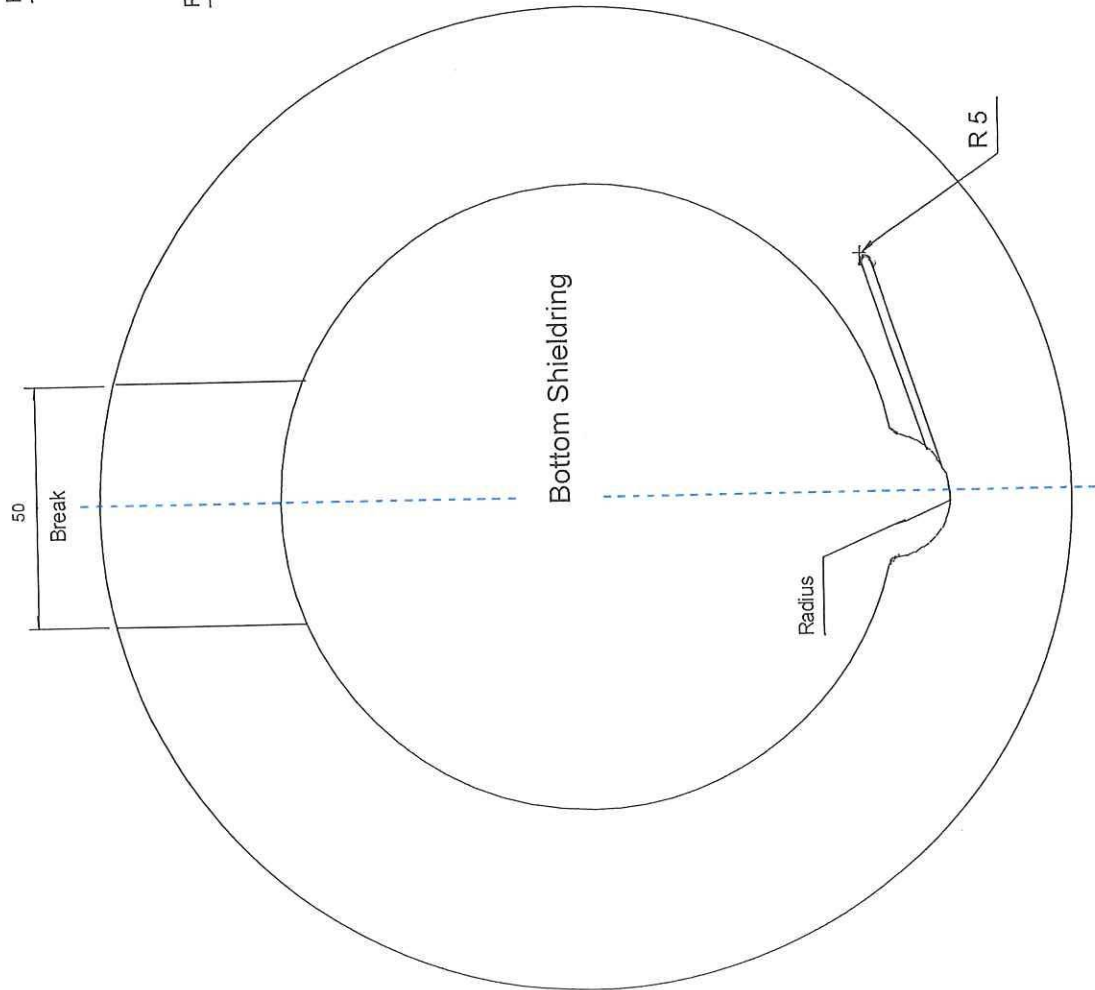
CLACK

MATERIAL: **T4/HO ELBORRO**
T4/HO ELBORRO

DWG NO.

EE04D/15/0280

A4



Note:
Supply to manufacturer according to their own standards
procedure and landband to be used
Break 180 degrees opposite lead
Lead 800 mm Long and Flexi Cable used
Radius as indicated on drawing

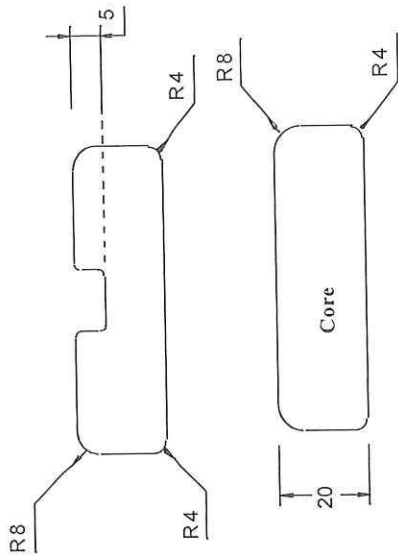
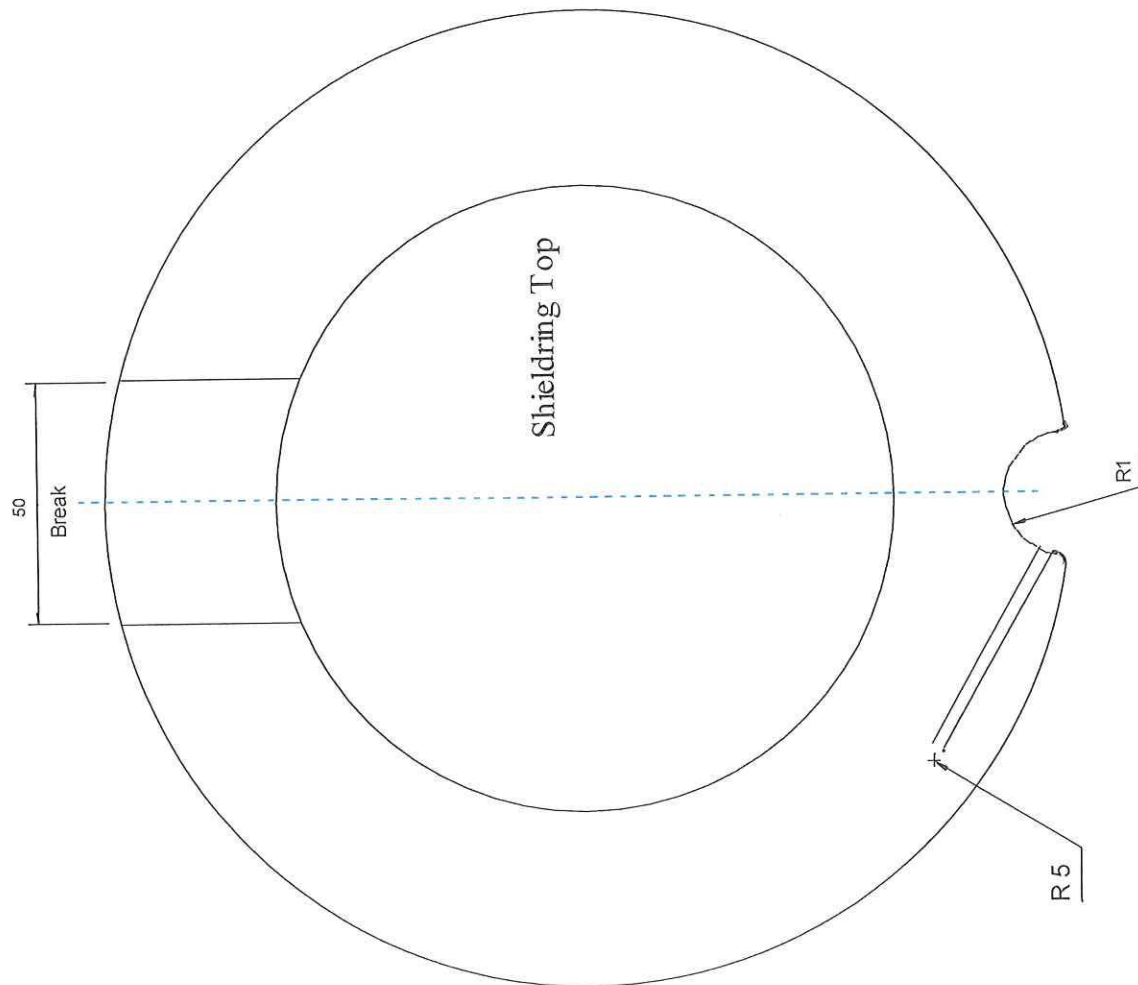
Covered Shield (Final Dimensions)			
THICK	ID	OD	NO Off
28	1282	1498	3

Shield Core Dimensions			
Bear Lead AREA (mm2)	Thick	ID	OD
16	19	1291	1489
			Radius
			48

Material: Transformer Board



Project No: 2.KMDM	Signature:
Project: GERUS 2 (Nampower)	Date: 27/08/2020
Serial No ET 94851/A	Approved by: I Myagkov
Winding B Shielding Core	Date: 09.09.2020



Note:
Supply to manufacturer according to their own standards
procedure and landband to be used
Break 180 degrees opposite lead
Lead 800 mm Long and Flexi Cable used
Radius as indicated on drawing

Covered Shield (Final Dimensions)			
THICK	ID	OD	NO Off
30	1282	1498	3

Shield Core Dimensions			
Bar Lead AREA (mm ²)	Thick	ID	OD
16	20	1292	1488
			R1
			48

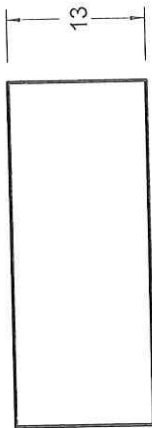
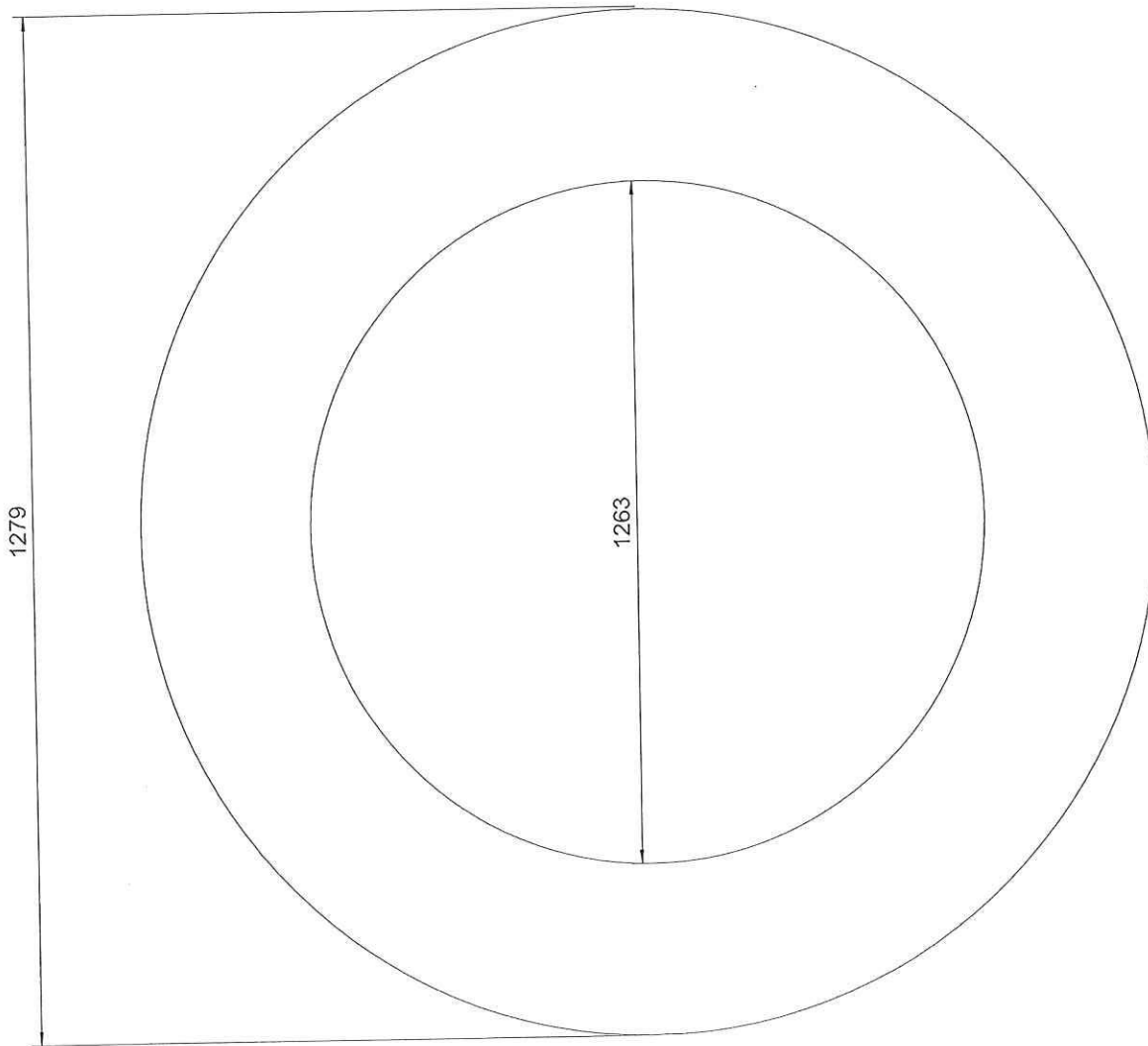
Material: Transformer Board



Project No: 2.KMDM
Project: GERUS 2 (Nampower)
Serial No ET 9495/A

Winding B Shielding Core

Drawn by: K Hoffmann	Signature:
Date: 27/08/2020	
Approved by: I Myagkov	Signature:
Date: 09.09.2020	



Material: T 4 Transformer Board

Quantity = ~~10~~ 21 Off

[Handwritten signature]

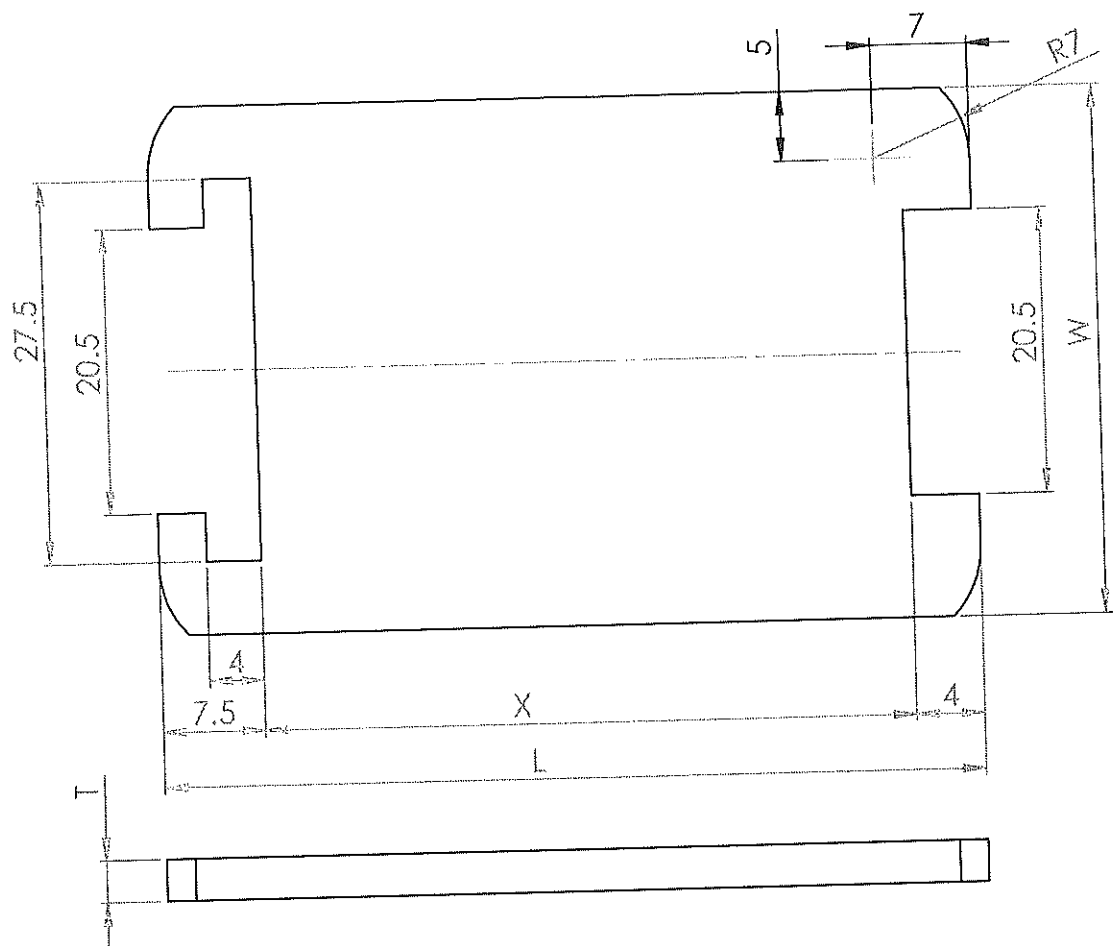
<input checked="" type="checkbox"/>	Ring	ID 1263 x OD 1279 x H 13
Quantity	Description	Dimensions
Project No: 2.KMDM Project : GERUS 2 (Nampower) Serial No: ET 9495 / A Winding B Ring for Oil Guide		
Drawn by: K Hoffmann	Signature: <i>[Handwritten signature]</i>	
Date: 11.09.2020		
Approved by: I Myagkov	Signature:	
Date:		

TRANSFORMER WINDING MATERIAL QUOTE REQUEST LIST

QUANTITY PER PHASE	QUANTITY PER TRANSFORMER	UNIT	DESCRIPTION D / Winding 2.KMDM Gerus (Nampower)
1	3	→	<u>Pre stabilized Cylinder</u> T = 5 x ID 1899 x OD 1909 x L 2570 Tolerance 5mm over on circumference NO MINUS TOLERANCE Overlap to be 120mm – 150mm / Use casein glue on joint/s.
32	96	→	<u>T.Stick</u> T = 8 x 26.50 x 2570
1	3	→	<u>Outer Yoke Collar (Bottom)</u> T = 2 x ID 1928 x OD 2154 x H 150 x R 15
1	3	→	<u>Outer Yoke Collar (Bottom)</u> T = 2 x ID 1928 x OD 2158 x H 150 x R 15
8288	24864		<u>Clacks "Calibrated"</u> T = 3 x 65 x 107 (118.50) Drawing EE04D/ 15/0280
1888	5664		<u>Clacks: "Calibrated"</u> T = 2.50 x 65 x 107 (118.50) Drawing EE04D/ 15/0280
1888	5664		<u>Clacks: "Calibrated"</u> T = 2.00 x 65 x 107 (118.50) Drawing EE04D/ 15/0280
1	3	→	<u>Shield ring (Bottom)</u> Drawing EE04D/16/0317
1	3	→	<u>Shield ring (Top)</u> Drawing EE04D/16/0317
21	63	→	<u>Inner Edge Collars</u> T = 1 x ID 1925 x OD 2001 x H 11
17	51	→	<u>Outer Edge Collars</u> T = 1 x ID 2057 x OD 2133 x H 11
7	21	→	<u>Ring</u> (T = 8) x ID 1909 x OD 1925 x H 11 ("See Drawing)
1	3	→	<u>Outer Yoke Collar</u> T = 3 x ID 1928 x OD 2154 x H 50 x R 12
1	3	→	<u>Ring</u> T = 12 x ID 1929 x OD 2128 Drawing EE04D/16/0004
1	3	→	<u>Inner Yoke Collar</u> T = 2 x ID 1895 x OD 2129 x H 150 x R 15

TRANSFORMER WINDING MATERIAL QUOTE REQUEST LIST

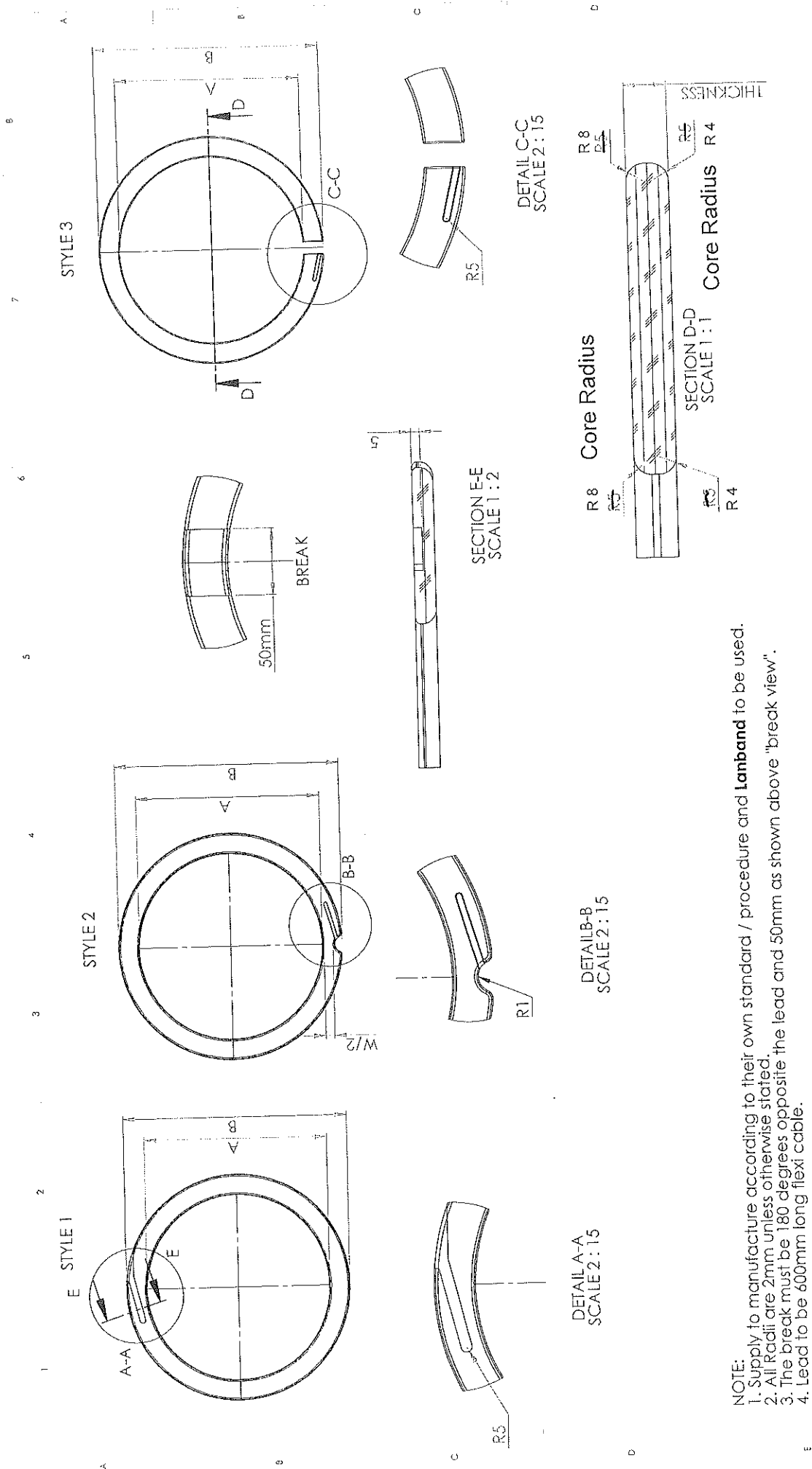
QUANTITY PER PHASE	QUANTITY PER TRANSFORMER	UNIT	DESCRIPTION D / Winding 2.KMDM Gerus (Nampower) Continue
1	3	→	<u>Inner Yoke Collar</u> T = 2 x ID 1891 x OD 2129 x H 150 x R 15
1	3	→	<u>Outer Yoke Collar (Top)</u> T = 2 x ID 1928 x OD 2154 x H 150 x R 15
1	3	→	<u>Outer Yoke Collar (Top)</u> T = 2 x ID 1928 x OD 2158 x H 150 x R 15
3	6	→	<u>Snout (Bottom + Top)</u> As per attached Drawing – (*Note Don't Bend)
1	3	→	<u>Snout (Centre)</u> As per attached Drawing
32	96	→	<u>Rib</u> T = 9.50 x 20 x 2370 x "R 2 on all edges" (No sharp edges & Chamfer's")
	20		High density board T1mm x 2100mm x 3200mm
	18	→	High density board T3mm x 2100mm x 3200mm
	5	→	High density board T2mm x 2100mm x 3200mm
	1	→	High density board T5mm x 2100mm x 3200mm
	16		Crepe Tape 12HCC or HDC Reinforce paper Thickness 0.056mm x 16mm x 100m per roll
	6	→	Reinforced glass tape width 20mm x 100Meters/roll



WINDING	THICKNESS (T)	LENGTH (L)	WIDTH (W)	X	No. OFF	No. PER RIB
D / W	3	118.5	65	107	24864	259
D / W	2.5	118.5	65	107	5664	59
D / W	2	118.5	65	107	5664	59

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: ANGULAR:		FINISH:		DEBUR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING		REVISION	
DRAWN: SD MATLABE		SIGNATURE: <i>[Signature]</i>		DATE: 2015/11/03		PROJECT No: 2.KMDM		TITLE: CLACK	
CHK'D: NL MAPIMELE		SIGNATURE: <i>[Signature]</i>		DATE: 2015/11/03		SERIAL No: ET 9495 / A			
APP'VD: I Myagkov		SIGNATURE: <i>[Signature]</i>				FROM: Gerus			
		SIGNATURE: <i>[Signature]</i>				TYPE: HV D / W			
		SIGNATURE: <i>[Signature]</i>				MATERIAL: T4/HD ELBOARD		DWG NO. EE04D/15/0280	
K Hoffmann		15.09.2020				WEIGHT:		SCALE: 1:1	
								SHEET 1 OF 1	

A4



NOTE:
 1. Supply to manufacture according to their own standard / procedure and **Lanband** to be used.
 2. All Radii are 2mm unless otherwise stated.
 3. The break must be 180 degrees opposite the lead and 50mm as shown above "break view".
 4. Lead to be 600mm long flexi cable.

WINDING	STYLE	BARE LEAD AREA (mm ²)	SHIELD CORE DIMENSION				COVERED SHIELD (FINAL DIMENSION)			No Off
			THICK	ID (A)	OD (B)	R 1	THICK	ID	OD	
D W Bottom	1	16	20	1939	2118	N/A	30	1929	2128	3
D W Top	1	16	20	1941	2116	N/A	32	1929	2128	3

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS

TOLERANCES:

LINEAR: ±0.15

ANGULAR: ±0.5°

FINISH: DEBUR AND BREAK SHARP EDGES

DO NOT SCALE DRAWING

REGION:

NAME: AG. Mupfong

DATE: 20/01/2021

SIGNATURE: [Signature]

PROJECT NO: 2KMDM

FROM: ET 9485 / A

SHEET NO: HV - D W

ESKOM

RATEK INDUSTRIES

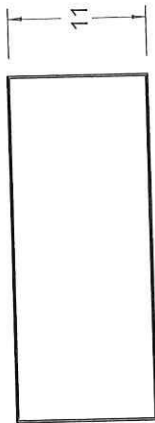
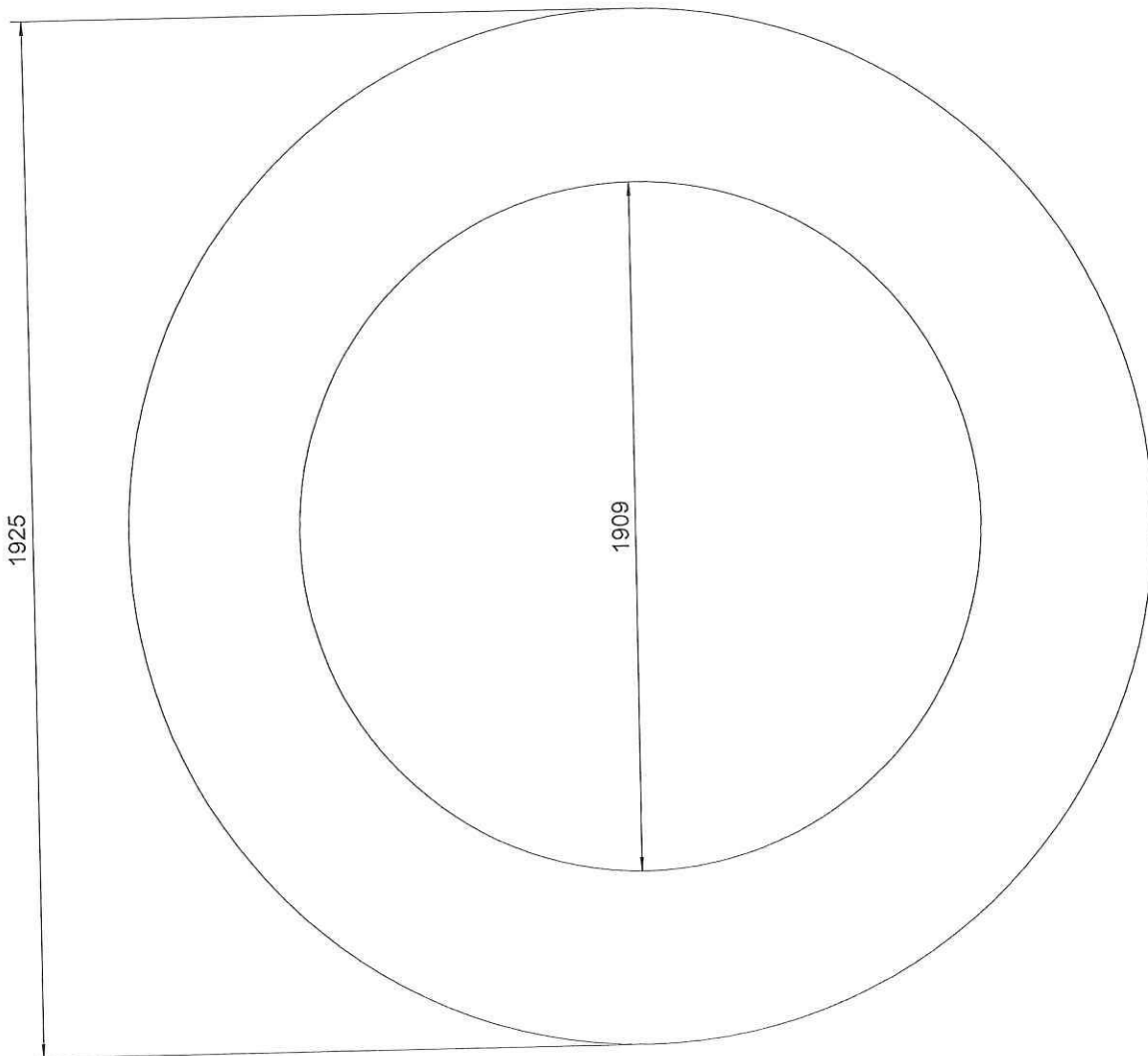
Shield Ring

DWG NO: EE04D/16/0317

Transformer Board

SCALE: 1:1

SHEET 1 OF 1



Material: T 4 Transformer Board

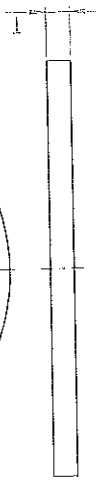
21 Off

Quantity	Ring	Description
21	Ring	ID 1909 x OD 1925 x H 11

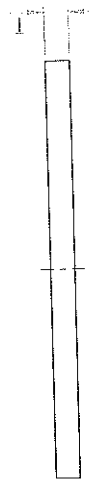
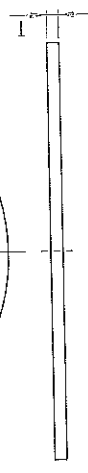
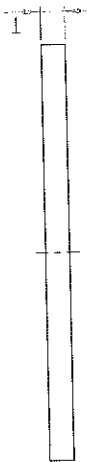
Project No: 2.KMDM	
Project : GERUS 2 (Nampower)	
Serial No: ET 9495 / A	Winding D Ring for Oil Guide
Drawn by: K Hoffmann	Signature:
Date: 11.09.2020	
Approved by: I Myagkov	Signature:
Date:	



Technical drawing of a circular part. The drawing shows a circle with a center point. A horizontal dimension line across the top is labeled "ID". A vertical dimension line on the left is labeled "A". A dashed line from the center to the top edge is labeled "OD".



Technical drawing of a circular part. The drawing shows a cross-section of a circular component with a central hole. The outer diameter is labeled 'OD'. The inner diameter is labeled 'ID'. The thickness of the outer ring is labeled 'A'. The thickness of the inner ring is labeled 'B'. The distance from the center to the outer edge is labeled 'C'. The distance from the center to the inner edge is labeled 'D'.

[illegible]

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS

Eskom
Ratek Industries
DO NOT SCALE DOWN

END INSULATION
WINDING RINGS

ANGULAR:	NAME	SIGNATURE	DATE	PROJECT NO:	2-KMDM
DRAWN	SD MATLAGE		2016/01/14	SERIAL NO:	ET 9495 / A
CHECKED	RL MARPREE			TYPE	HV - DW
					Gerlis

06.09.2020

K Hoffmann

MATERIAL:

T4 TRANSFORMER BOARD

EE04D/16/0004

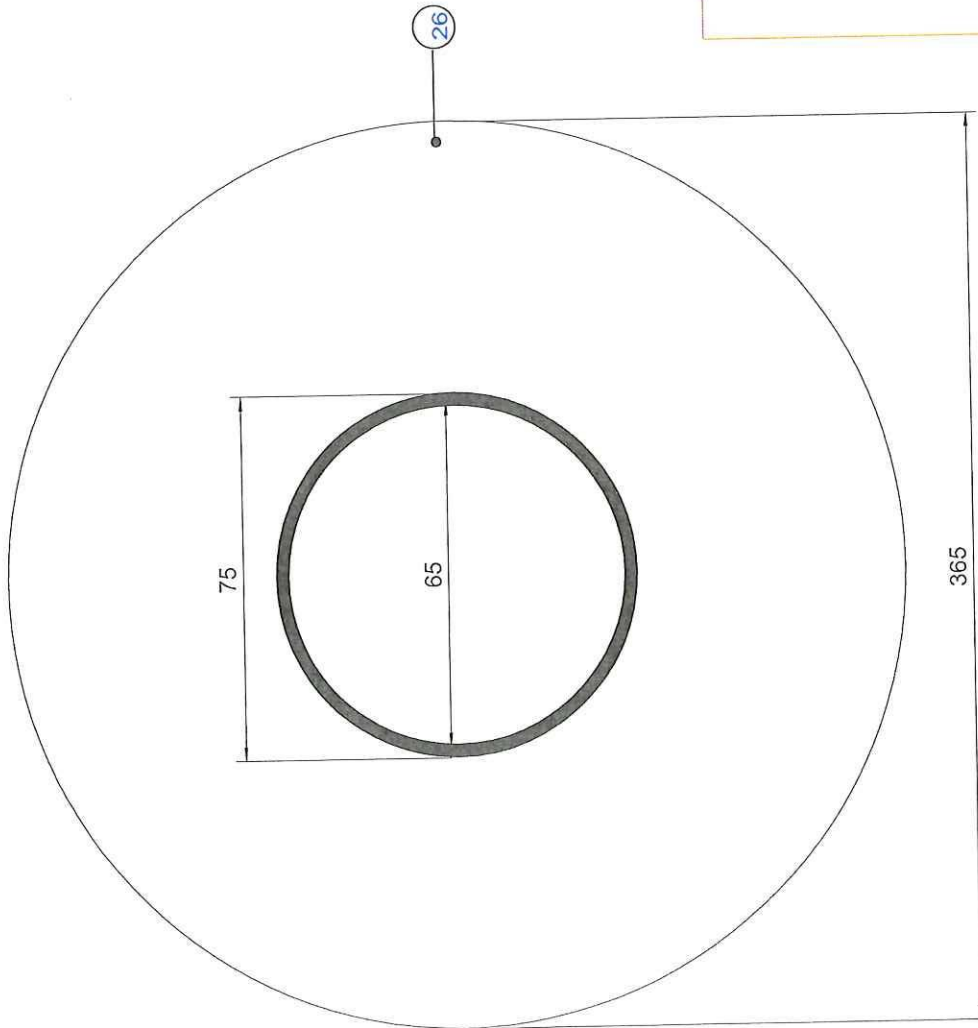
1501 JESHS

SCALE:2

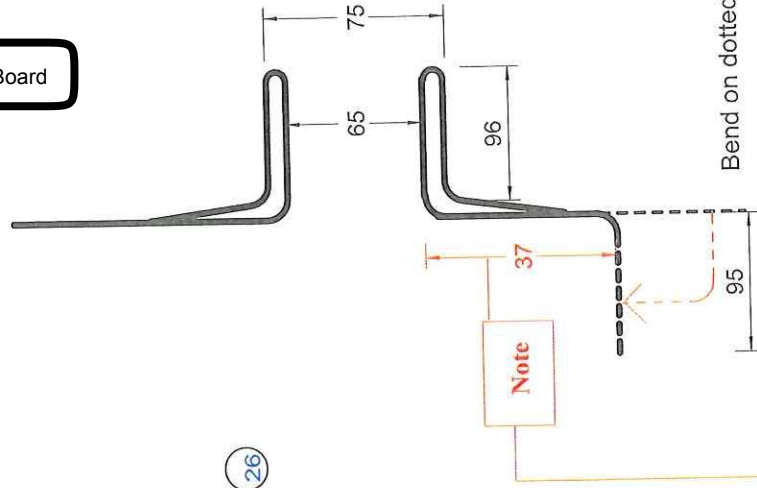
Weight:



Mouldable Transformer Board



T = 3 x ID 65 x OD 365 x (6 Off)



**Supplier not to bend
will bend at ERI Workshop
act winding**

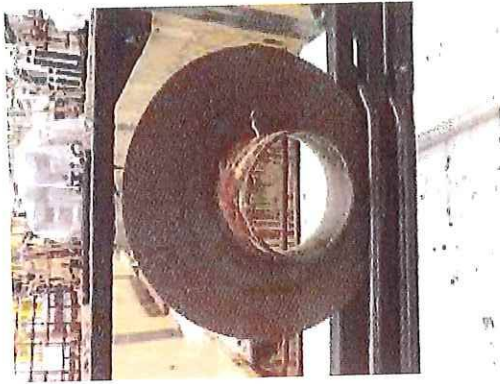
I Myagkov

K Hoffmann

Eskom Rotek Industries

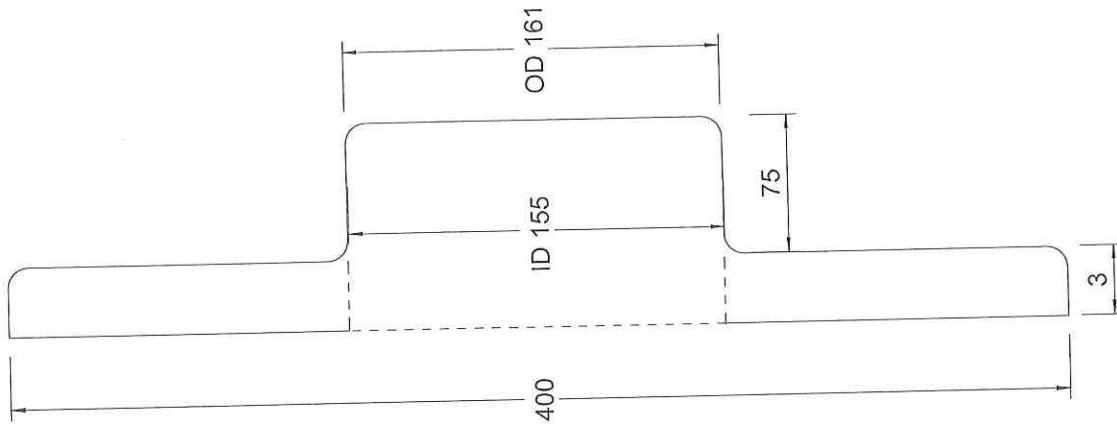
Gerus / Nampower
Bottom and Top
Lead Snout
D / W (HV)

Page 2 off 3

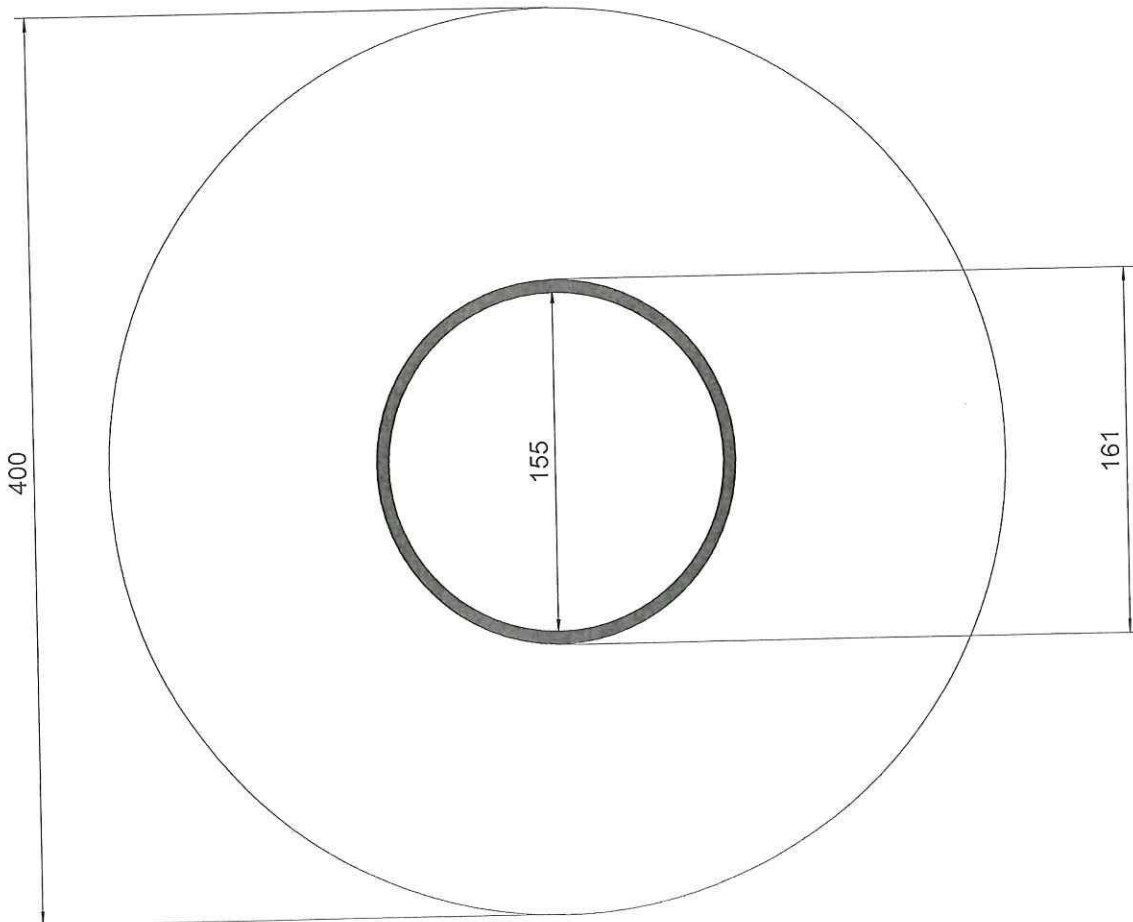


Mouldable Transformer Board

2.KMDM
Gerus 2 / (Nampower)
ET 9495 / A
Center Snout
D Winding



Drawn by: K Hoffmann Signature:
Date: 18/11/2019
Approved by: Igor Myagkov Signature:
Date:



Quantity : 3 OFF

T = 3 x ID 155 x OD 400