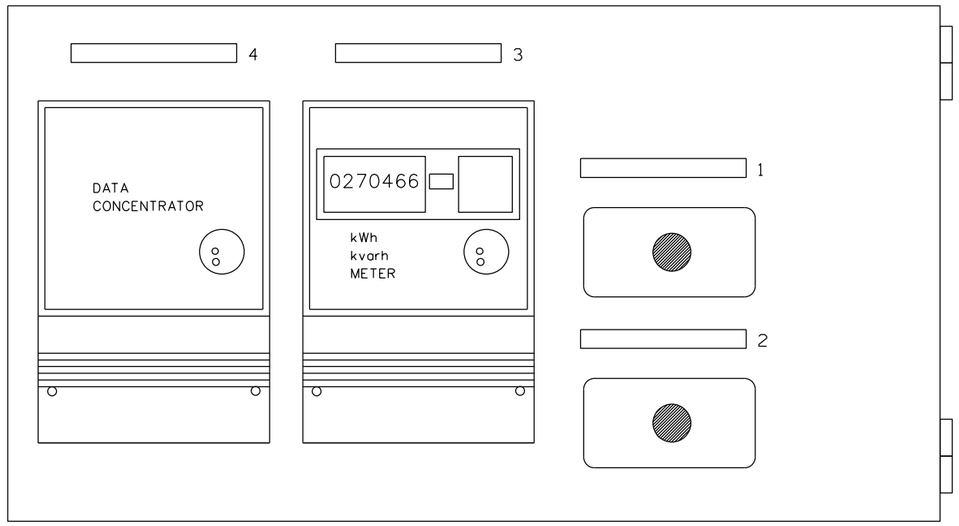
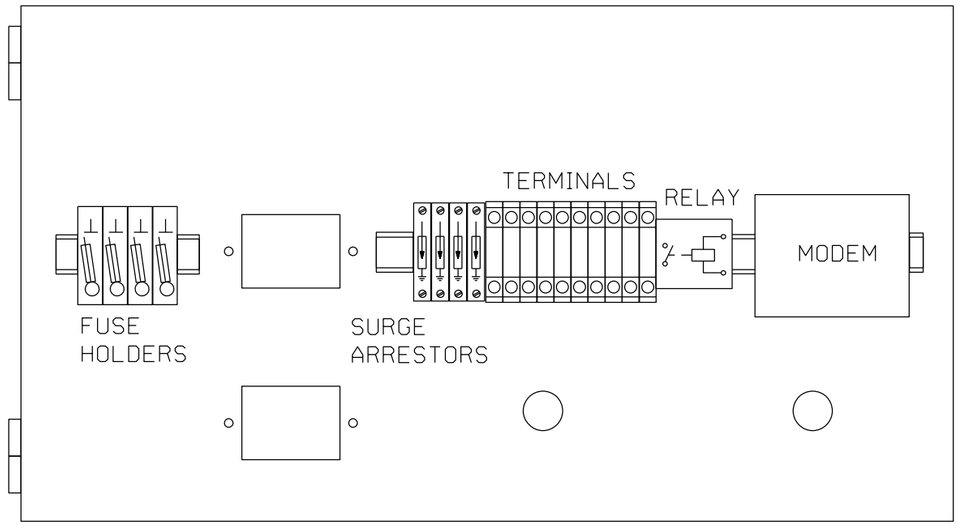


FRONT VIEW



BACK VIEW

No	LABEL
1	VT TEST BLOCK
2	CT TEST BLOCK
3	METER
4	DATA CONCENTRATOR

NOTES:
1. THE METER, DATA CONCENTROTOR AND MODEM TO BE SUPPLIED BY ESKOM

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.
5	REVISED METERING WIRING.	J.S.	H.GROENEWALD		22.11.2023	
4	OUTLAY AND WIRING CHANGED. ADDED CONCENTRATOR LAYOUT	HPD G	H.GROENEWALD		10.06.2015	
3	OUTLAY CHANGED, REMOVED MCBs • PHASE FAILURE RELAY AND WIRING	HPD G	H.GROENEWALD		25.01.2010	
2	APPROVED EQUIPMENT LIST ON SH. 4 FOR PHASE FAILURE RELAY 230V CHANGED	P.A.V.	R. KELLY		01.12.2006	
1	WIRING CHANGES, APPROVED EQUIPMENT LISTED	HPD G	H.GROENEWALD		05.06.2003	

Eskom Distribution

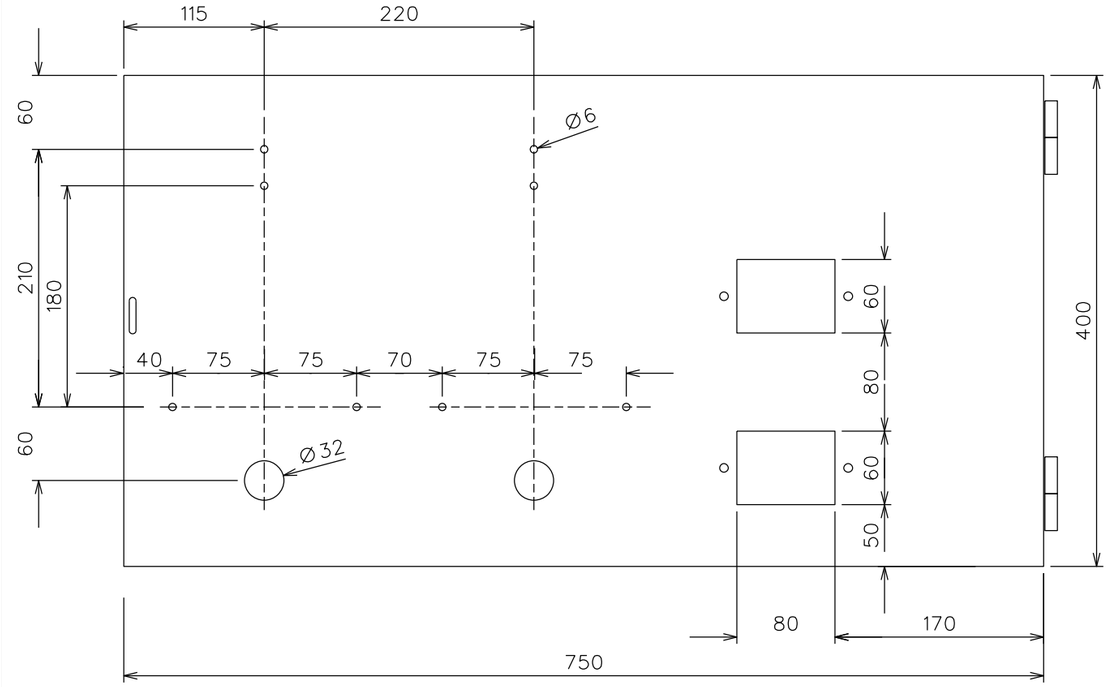
AUTH: PR GROENEWALD
DATE: 31/03/2003
CHKD: HPD GROENEWALD
DATE: 25/02/2003
DRAWN: HPD GROENEWALD P VERMAAK
DATE: 12/07/1996

MINISUB METER PLATE MANUFACTURING DETAILS: GENERAL OUTLAY

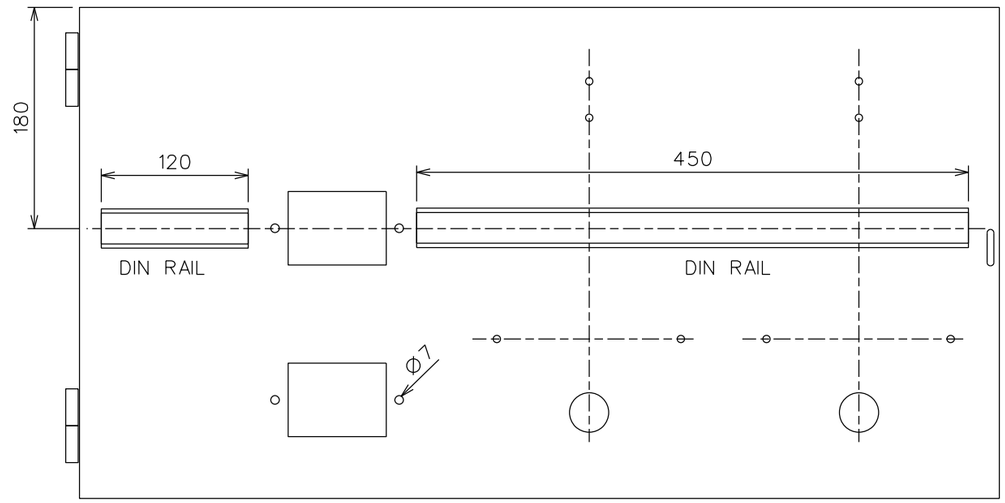
D-DT-1013

SET	SHEET	REVISION
4	1	5

GROOTTE A3L



FRONT VIEW



BACK VIEW

NOTES:

1. THE TOP, LEFT, RIGHT AND BOTTOM SIDES OF THE INNER PLATE SHALL HAVE A 90 DEGREE 10mm BEND.
2. THE INNER PLATE SHALL BE FASTENED ONTO THE RIGHT WITH TWO HINGES.
3. A SLOTTED HOLE SHALL BE PROVIDED ON THE LEFT SIDE FOR THE LOCKING OF THE INNER PLATE THROUGH THE LOCKING LIP.
4. THE DIN RAILS SHALL BE SECURED ONTO THE INNER PLATE BY MEANS OF STAINLESS STEEL BOLTS, NUTS AND SPRING WASHERS, RIVETS OR SPOT WELDING.
5. STAINLESS STEEL OR BRASS SELF CLINCHING NUTS OR RIVET NUTS WITH A M4 OR M5 THREAD SIZE SHALL BE INSTALLED ON ALL THE HOLES USED FOR THE FITMENT OF THE METERS.
6. 20mm M4 OR M5 STAINLESS STEEL OR BRASS SET SCREWS SHALL BE INSTALLED INTO ALL OF THESE HOLES.
7. THE INNER PLATE SHALL BE POWDER COATED WITH WHITE EPOXY POLYESTER POWDER (SANS COLOUR CODE 69-0135).

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.
5	REVISED METERING WIRING.	J.S.	H.GROENEWALD		22.11.2023	
4	OUTLAY AND WIRING CHANGED. ADDED CONCENTRATOR LAYOUT	HPD G	H.GROENEWALD		10.06.2015	
3	OUTLAY CHANGED, REMOVED MCBs + PHASE FAILURE RELAY AND WIRING	HPD G	H.GROENEWALD		25.01.2010	
2	APPROVED EQUIPMENT LIST ON SH. 4 FOR PHASE FAILURE RELAY 230V CHANGED	P.A.V.	R. KELLY		01.12.2006	
1	WIRING CHANGES, APPROVED EQUIPMENT LISTED	HPD G	H.GROENEWALD		05.06.2003	

Eskom Distribution

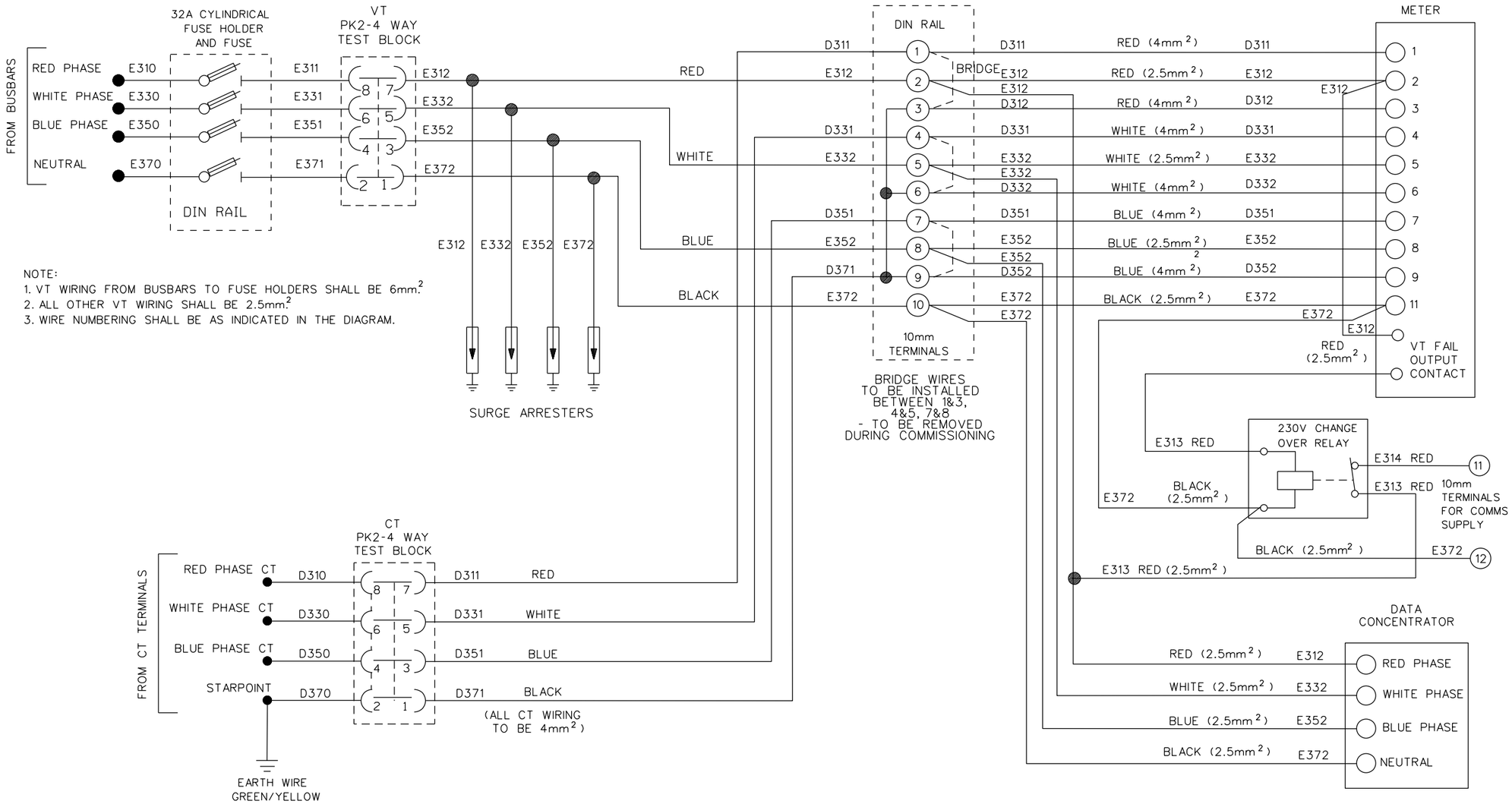
AUTH: PR GROENEWALD
DATE: 31/03/2003
CHKD: HPD GROENEWALD
DATE: 25/02/2003
DRAWN: HPD GROENEWALD P VERMAAK
DATE: 12/07/1996

MINISUB METER PLATE MANUFACTURING DETAILS

D-DT-1Ø13

SET	SHEET	REVISION
4	2	5

GROOTTE A3L



NOTE:
1. VT WIRING FROM BUSBARS TO FUSE HOLDERS SHALL BE 6mm².
2. ALL OTHER VT WIRING SHALL BE 2.5mm².
3. WIRE NUMBERING SHALL BE AS INDICATED IN THE DIAGRAM.

NOTES:
1. PK2 4-WAY TEST BLOCKS:
   THE CT TEST BLOCK SHALL HAVE SHORTING STRIPS ON THE INCOMING SIDE OF THE CT SUPPLY.
   THE VT TEST BLOCKS SHALL HAVE NO SHORTING STRIPS.
2. METER AND DATA CONCENTRATOR TO BE SUPPLIED BY ESKOM
3. ALL CT WIRING SHALL BE 4mm²
   THE WIRING SHALL BE COLOUR CODED TO REPRESENT THE DIFFFERENT PHASES.
   WIRE NUMBERING SHALL BE AS INDICATED IN THE DIAGRAM
4. THE FUSE HOLDERS SHALL BE MOUNTED ON THE SHORT DIN RAIL
5. THE SURGE ARRESTORS, TERMINALS AND 230V CHANGE OVER RELAY SHALL BE MOUNTED ON THE LONG DIN RAIL

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.
5	REVISED METERING WIRING.	J.S.	H.GROENEWALD		22.11.2023	
4	OUTLAY AND WIRING CHANGED. ADDED CONCENTRATOR LAYOUT	HPD G	H.GROENEWALD		10.06.2015	
3	OUTLAY CHANGED, REMOVED MCBs + PHASE FAILURE RELAY AND WIRING	HPD G	H.GROENEWALD		25.01.2010	
2	APPROVED EQUIPMENT LIST ON SH. 4 FOR PHASE FAILURE RELAY 230V CHANGED	P.A.V.	R. KELLY		01.12.2006	
1	WIRING CHANGES, APPROVED EQUIPMENT LISTED	HPD G	H.GROENEWALD		05.06.2003	

Eskom Distribution

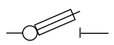
AUTH: PR GROENEWALD
DATE: 31/03/2003
CHKD: HPD GROENEWALD
DATE: 25/02/2003
DRAWN: HPD GROENEWALD P VERMAAK
DATE: 12/07/1996

MINISUB METER PLATE MANUFACTURING DETAILS: ELECTRICAL WIRING

D-DT-1Ø13

SET	SHEET	REVISION
4	3	5

SIZE GROOTTE A3L

EQUIPMENT SPECIFICATION:		
LEGEND	DESCRIPTION	APPROVED EQUIPMENT
	THREE PHASE 230V, 5A, PROGRAMMABLE METER CALLIBRATED, SEALED AND WITH TESTED STICKER	ESKOM APPROVED - TO BE SUPPLIED BY ESKOM
	THREE PHASE 230V DATA CONCENTRATOR	ESKOM APPROVED - TO BE SUPPLIED BY ESKOM
	CURRENT TRANSFORMERS: RING TYPE CLASS 0.5 5VA 5A SECONDARY	ITT: 1600/5A, 800/5, 500/5, 300/5 or CURRENT ELECTRIC: 1600/5A, 800/5, 500/5, 300/5
	PK2 4-WAY TEST BLOCK	IST PK2 4-WAY TEST BLOCK or ALLBRO PK2 4-WAY TEST BLOCK
	FUSE BASE (SEALABLE) 10x38 FUSE - 32A, 500VAC	ELECTRO MECHANICA: df TYPE PMF 10x38 or WOHNER TYPE AES 10x38 INDUSTRIAL 1 POLE FUSE HOLDER + 32A CLASS aM CYLINDRICAL FUSE
	SURGE ARRESTOR: 275V 20/40kA (SINGLE POLE DIN)	CBI: TYPE QKL1-(13)D 275V 20/40kA (CBI BOM CODE QKLD0001) or SIMILAR
	TERMINALS FOR COMMS SUPPLY	WEIDMULLER TYPE WDU 10 SL or ENTRELEC TYPE M 10/10.RS or ALSTOM: ELMEX TYPE KULT1
	MINIATURE RELAY AND DIN BASE 230V 10A 1 CHANGEOVER	FINDER TYPE 40.51 RELAY & TYPE 95.05 BASE or SIMILAR

CONTROL WIRING SPECIFICATION:		
DESIGNATION	COLOUR	CONDUCTOR SIZE
RED PHASE VOLTAGE (BUSBAR TO FUSE HOLDER)	RED	6mm²
WHITE PHASE VOLTAGE (BUSBAR TO FUSE HOLDER)	WHITE	6mm²
BLUE PHASE VOLTAGE (BUSBAR TO FUSE HOLDER)	BLUE	6mm²
RED PHASE VOLTAGE (ALL OTHER VT WIRING)	RED	2,5mm²
WHITE PHASE VOLTAGE (ALL OTHER VT WIRING)	WHITE	2,5mm²
BLUE PHASE VOLTAGE (ALL OTHER VT WIRING)	BLUE	2,5mm²
RED PHASE CURRENT	RED	4mm²
WHITE PHASE CURRENT	WHITE	4mm²
BLUE PHASE CURRENT	BLUE	4mm²

LUG SPECIFICATION:			
CONNECTED ONTO:	CONDUCTOR SIZE	LUGS	COLOUR
BUSBAR	6mm²	HELLERMANN RING TYPE T3R10 or JST TYPE FVD5.5-10	YELLOW
FUSE BASE (TOP)	6mm²	HELLERMANN DISCONNECT MALE TYPE T3DM or JST TYPE FVDDM5.5-250	YELLOW
FUSE BASE (BOTTOM)	2.5mm²	HELLERMANN DISCONNECT MALE TYPE T2DM or JST TYPE FVDDM2-250	BLUE
PK2 VT TEST BLOCK	2,5mm²	HELLERMANN RING TYPE T2R6 or JST TYPE FVD2-6	BLUE
SURGE ARRESTORS	2,5mm²	HELLERMANN DISCONNECT MALE TYPE T2DM or JST TYPE FVDDM2-250	BLUE
TERMINALS 10mm	2,5mm²	HELLERMANN HOOKED BLADE TYPE T2HB or JST TYPE FVDAH-2	BLUE
RELAY BASE	2,5mm²	HELLERMANN BLADE TYPE T2FB9 or PIN TYPE 2P8 or JST BLADE TYPE FVD2-1AF or PIN TYPE FVDPC-2	BLUE
PK2 CT TEST BLOCK	4mm²	HELLERMANN RING TYPE T3R6 or JST TYPE FVD5.5-S6	YELLOW

NOTES:
1. LUGS SHALL BE OF THE DOUBLE CRIMP TYPE.
2. LUGS SHALL EACH BE MARKED WITH TYPE AND MANUFACTURER NAME

REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.
5	REVISED METERING WIRING.	J.S.	H.GROENEWALD		22.11.2023	
4	OUTLAY AND WIRING CHANGED. ADDED CONCENTRATOR LAYOUT	HPD G	H.GROENEWALD		10.06.2015	
3	OUTLAY CHANGED, REMOVED MCBs + PHASE FAILURE RELAY AND WIRING	HPD G	H.GROENEWALD		25.01.2010	
2	APPROVED EQUIPMENT LIST ON SH. 4 FOR PHASE FAILURE RELAY 230V CHANGED	P.A.V.	R. KELLY		01.12.2006	
1	WIRING CHANGES, APPROVED EQUIPMENT LISTED	HPD G	H.GROENEWALD		05.06.2003	

Eskom Distribution

AUTH: PR GROENEWALD
DATE: 31/03/2003
CHKD: HPD GROENEWALD
DATE: 25/02/2003
DRAWN: HPD GROENEWALD, P VERMAAK
DATE: 12/07/1996

MINISUB METER PLATE MANUFACTURING DETAILS: APPROVED EQUIPMENT

D-DT-1013

SET	SHEET	REVISION
4	4	5

SIZE GROOTTE A3L