

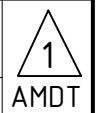
NOTES:

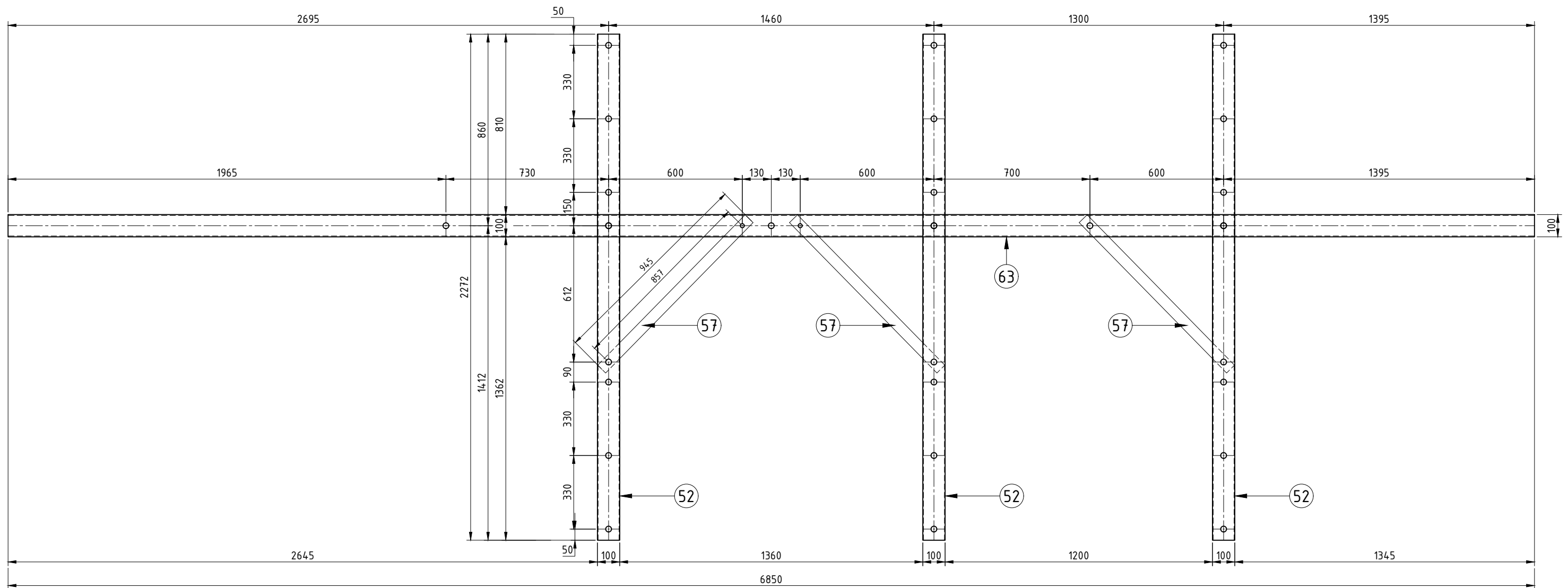
- THE CORRECT OPERATION OF A VOLTAGE REGULATOR IS HIGHLY DEPENDENT ON THE PHASE SEQUENCE OF THE MAINS AT THE POINT OF INSTALLATION. BEFORE MAKING CONNECTIONS, THE PHASE SEQUENCE AT THE POINT OF INSTALLATION MUST BE VERIFIED BY DESIGNER
 - THE PHASE SEQUENCE SHALL BE RED, WHITE, BLUE WHEN LOOKING AT THE VOLTAGE REGULATOR FROM SUPPLY TO LOAD
 - CONSTRUCTORS AND DESIGNERS SHALL ROTATE THE PHASES ON ADJACENT POLES TO ACHIEVE CORRECT PHASING
- POLE EARTHING TO BE AS PER APPLICABLE DRAWING S01-02-03-11 OR S01-02-03-12 OR S01-02-03-13
 - EARTH EACH CONTROL BOX TO BE BONDED VIA 70mm² INSULATED CONDUCTOR TO POLE (SHORTEST RUN POSSIBLE)
 - VR CANS CAN BE EARTHED AT TOP OF POLE
- POLE OVERHEAD CONNECTION TO POLE AS PER S01-02-01-27 ASSEMBLIES EARTHING CMEN UNDERSLUNG EARTH FOR UNIVERSAL POLE CONSTRUCTION
- HV EARTH TO BE SADDLED AT MAXIMUM 300MM INTERVALS.
- UMBILICAL CABLES, WHERE FITTED, TO BE SADDLED AT MAXIMUM 300MM INTERVALS.
- PLATFORM MOUNTS SHALL BE ATTACHED TO POLE AS PER NOTES ON S01-02-06-19_04
- PWC TO FASTEN HV DANGER SIGNS TO POLES IN LINE WITH S02-01-08-01
- LIGHTNING ARRESTORS MOUNTED ON REGULATORS TO BE CONNECTED TO EARTH VIA 70mm² PVC INSULATED CONDUCTOR GREEN/GOLD
- GAS SWITCH TO BE INSTALLED AS A REGULATOR BYPASS SWITCH
- REFER TO DRAWING S01-02-07-11 FOR GBS PART LIST
- REFER TO DRAWING S01-01-02-13 FOR OVERHEAD EARTH
- REFER TO DRAWINGS S01-02-06-13 FOR POLE STRUCTURES DOUBLE POLE TWO SINGLE PHASE REGULATORS GENERAL ARRANGEMENT
- ALL MEASUREMENTS IN MM UNLESS OTHERWISE NOTED
- IF PHASE ROTATION DOESN'T MATCH THE SINGLE LINE DIAGRAM, IT IS ALSO ACCEPTABLE TO ENSURE EACH CAN 'S' AND 'L' IS WIRED TO THE SAME PHASE
- SL CAN BE ON ANY ALTERNATIVE PHASE AS LONG AS EACH CAN IS USING A DIFFERENT PHASE
- T&P TO ENSURE PHASE ANGLES ARE CORRECT BY CHECKING POWER FACTOR AND ADJUSTING ACCORDINGLY DURING COMMISSIONING

NO	DESCRIPTION	DRN	DATE	CKD	APPD
1	POLE CENTER TO CENTER DISTANCE, REGULATOR PLATFORM SIZE AND BRIDGING SUPPORT ARM SIZE AMENDED	P.G.	JUN'26	B.B.	B.V.
0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.	B.V.
AMENDMENTS					

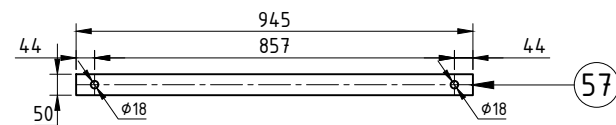


DES		POWER STANDARD DRAWING	
B.BAYRAM	P.GUNA	100A AND 200A POLE STRUCTURE DOUBLE POLE CLOSE DELTA REGULATOR SYSTEM GENERAL ARRANGEMENT	
B.BAYRAM	B.VANDERSTELT	SHEET 1 OF 7	
AS SHOWN	SEP'25	A3	DRAWING NUMBER S01-02-06-19_01
ALL DIM. IN mm			
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY	

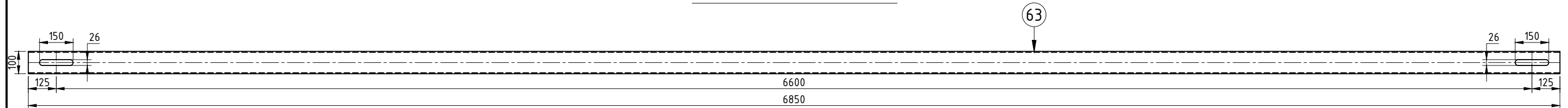




TOP VIEW SCALE 1:18



FLAT CROSSARM BRACE SCALE 1:18

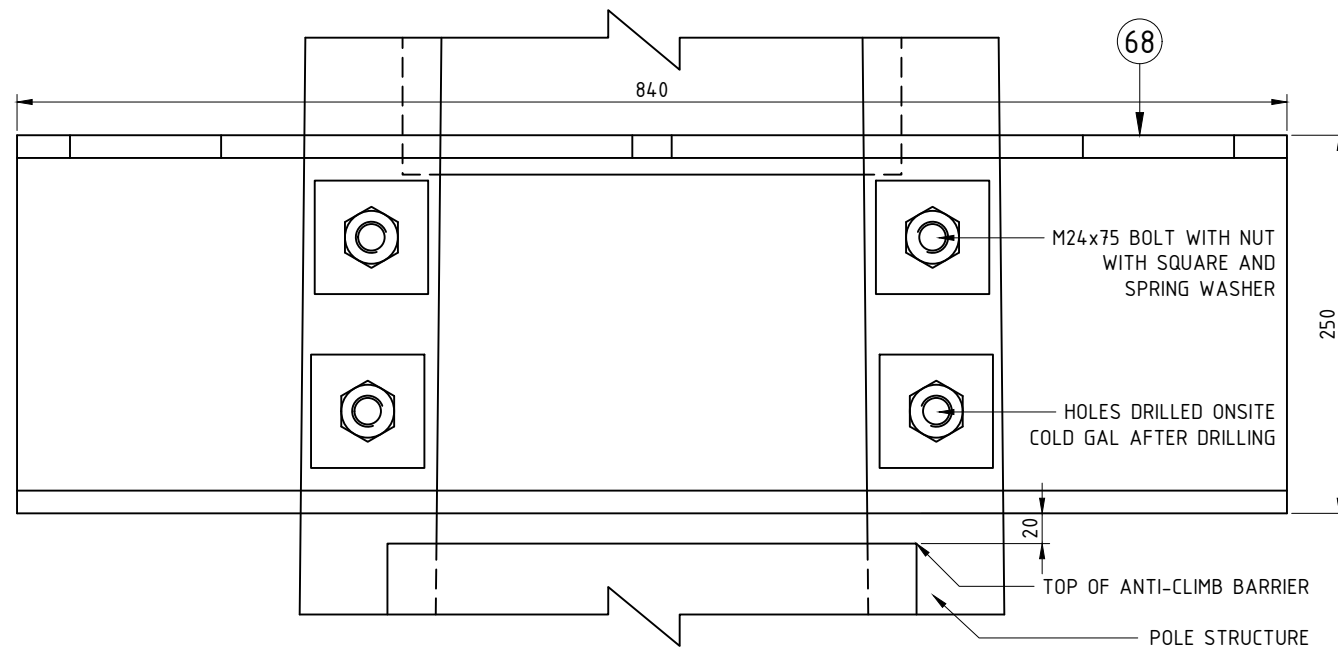


BRIDGING SUPPORT ARM FRONT VIEW
6850 LONG 100x100x4mm SHS 1 OFF SCALE 1:18

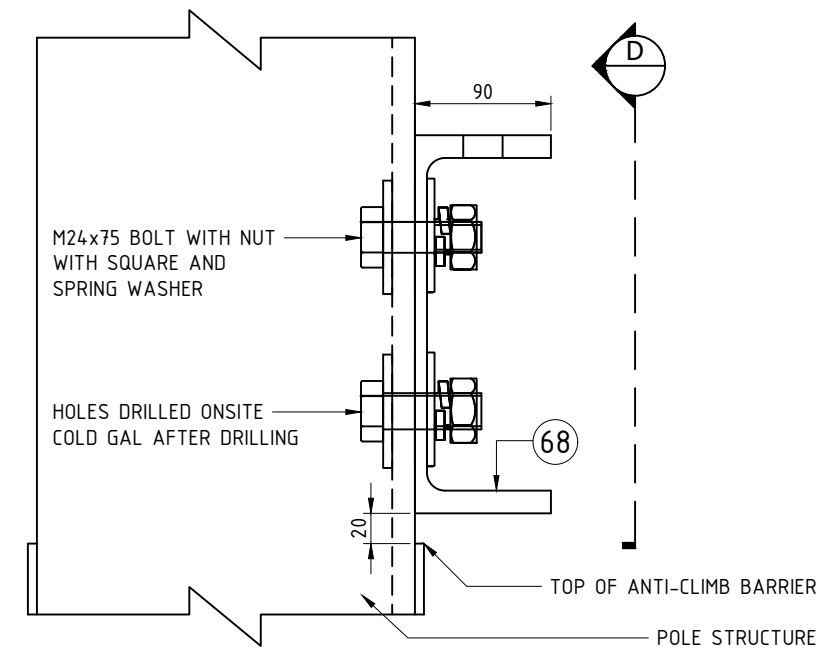
1	POLE CENTER TO CENTER DISTANCE, REGULATOR PLATFORM SIZE AND BRIDGING SUPPORT ARM SIZE AMENDED	P.G.	JUN'26	B.B.	B.V.
0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.	B.V.
NO	DESCRIPTION	DRN	DATE	CKD	APPD
AMENDMENTS					



DES	B.BAYRAM	POWER STANDARD DRAWING			
DRN	P.GUNA	100A AND 200A POLE STRUCTURE DOUBLE POLE CLOSE DELTA REGULATOR SYSTEM PLATFORM COMPONENTS			
CKD	B.BAYRAM	SHEET 2 OF 7			
APPD	B.VANDERSTELT	A3	DRAWING NUMBER	S01-02-06-19_02	
SCALE	AS SHOWN				
ISSUED	SEP'25				
ALL DIM.	IN mm				
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY			1 AMDT



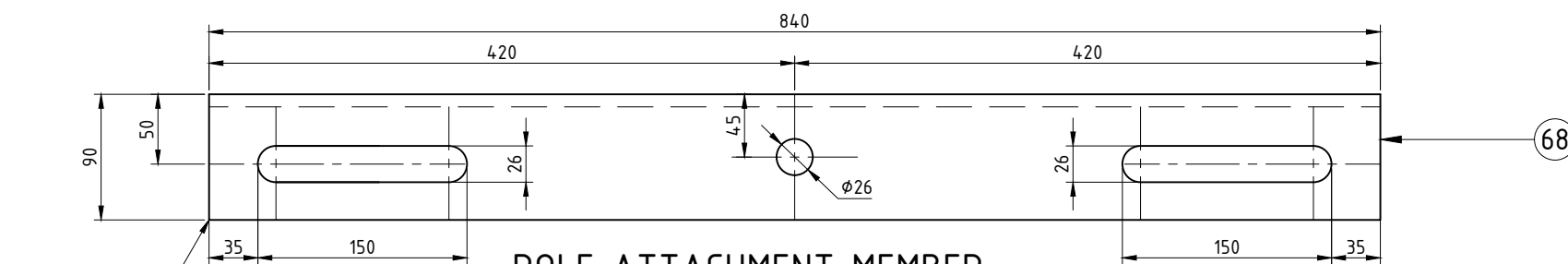
VIEW: D-D (LOOKING TOWARDS POLE)



SIDE VIEW

REGULATOR PLATFORM ATTACHMENT DETAIL

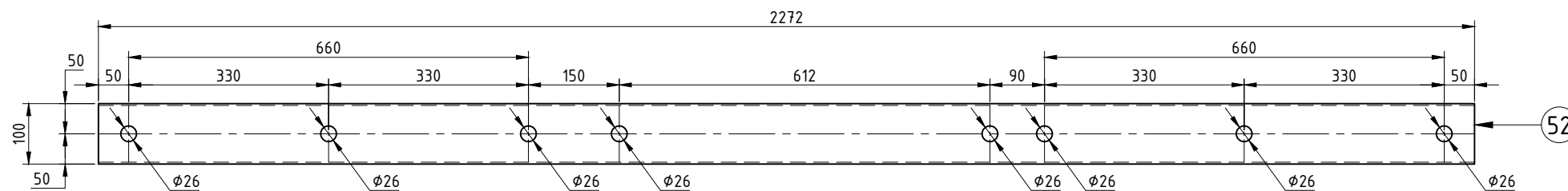
SCALE 1:5



POLE ATTACHMENT MEMBER

840 LONG 250x90x PFC
2 OFF
SCALE 1:5

DRILLING ON TOP FACE ONLY



BRIDGING SUPPORT ARM (52)

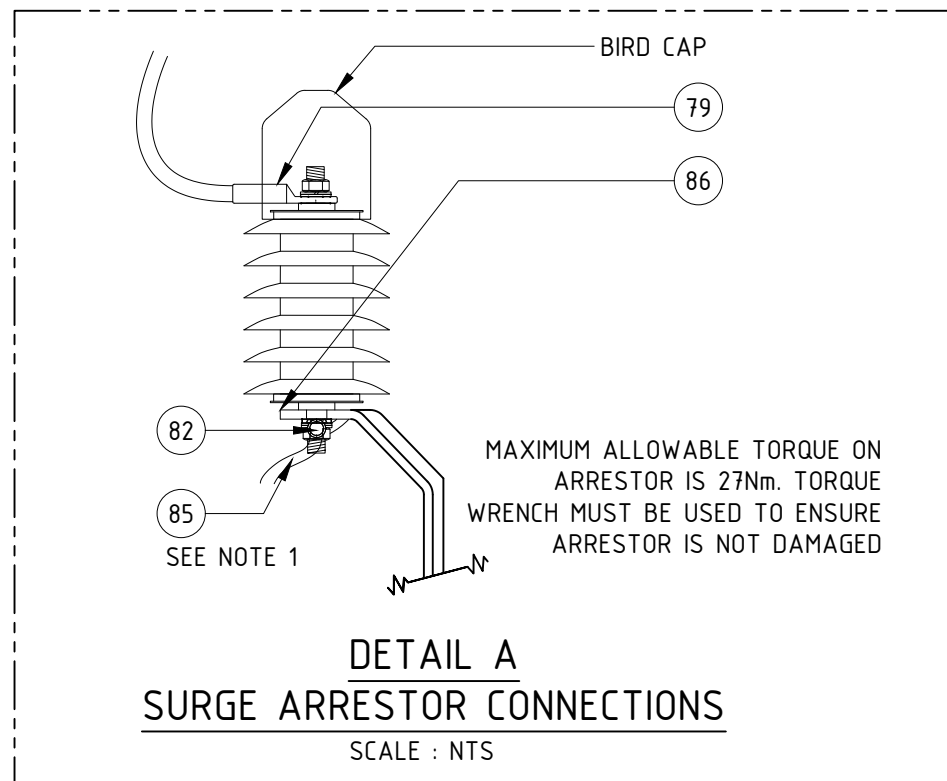
2272 LONG 100x100x3mm RHS
3 OFF
SCALE 1:10

NOTES:
DRILL REGULATOR FIXING HOLES ONSITE TO SUIT UNIT.
COLD GAL AFTER DRILLING

NO	DESCRIPTION	DRN	DATE	CKD	APPD
1	POLE CENTER TO CENTER DISTANCE, REGULATOR PLATFORM SIZE AND BRIDGING SUPPORT ARM SIZE AMENDED	P.G.	JUN'26	B.B.	B.V.
0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.	B.V.
AMENDMENTS					

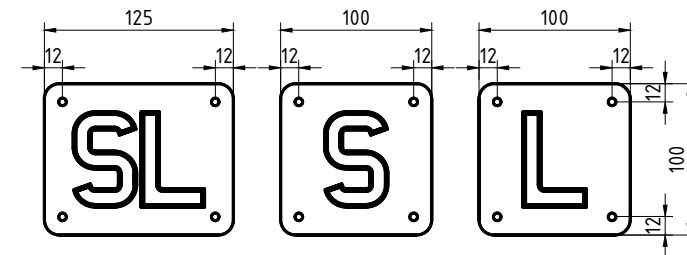


DES	B.BAYRAM	POWER STANDARD DRAWING		
DRN	P.GUNA	100A AND 200A POLE STRUCTURE DOUBLE POLE CLOSE DELTA REGULATOR SYSTEM PLATFORM COMPONENTS		
CKD	B.BAYRAM	SHEET 4 OF 7		
APPD	B.VANDERSTELT			
SCALE	AS SHOWN			
ISSUED	SEP'25	A3	DRAWING NUMBER	S01-02-06-19_04
ALL DIM.	IN mm			
DRAFTING STANDARD TO A.S.1100		CAD PRODUCT - DO NOT AMEND MANUALLY		1 AMDT



NOTE:

1. HV SURGE ARRESTERS ARE TO BE EARTHED BY DAISY CHAINING AND ELECTRICALLY BONDING TO THE TOP EARTH BAR USING 70mm² PVC INSULATED CONDUCTOR.
2. INSTALL MEDIUM WALLED MASTIC LINED BLACK HEATSHRINK OVER THE BARE LUG BARREL AND CABLE INSULATION.

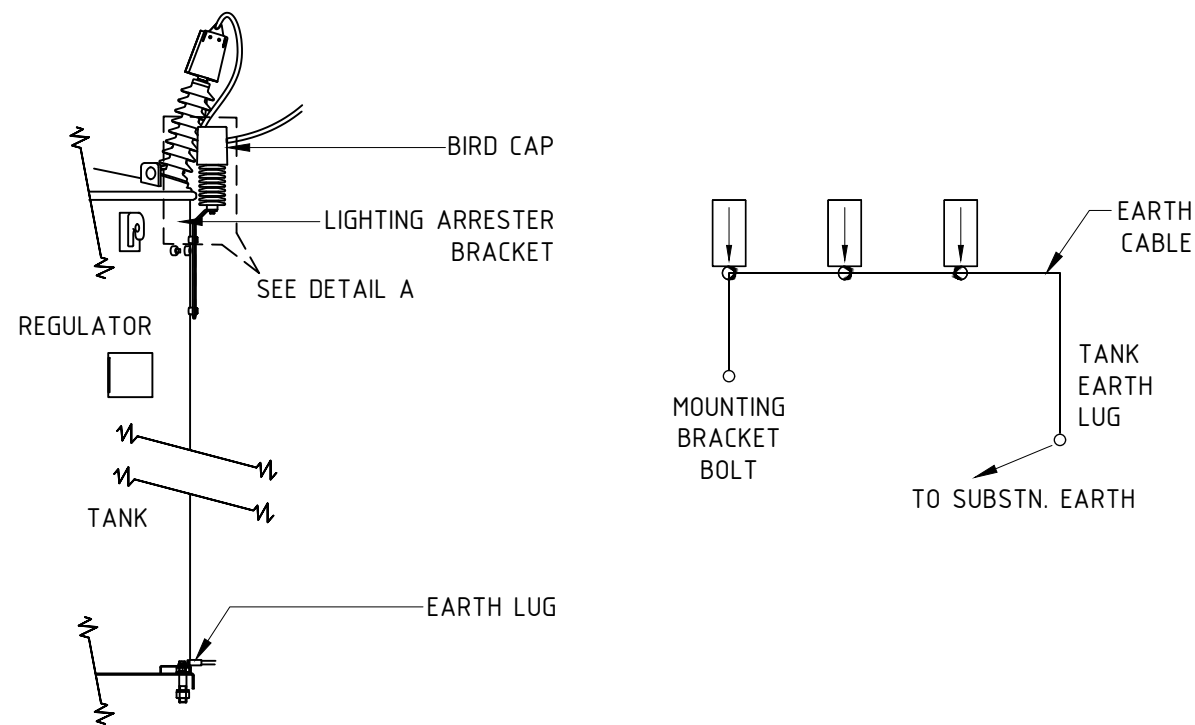


SWITCH LETTERS

BLACK ON YELLOW
SCALE 1:5

SINGLE SIGNS

- SL : 502100 x 4
- S : 502098 x 2
- L : 502099 x 4



SURGE DIVERTER EARTHING ARRANGEMENT

SCALE : NTS

NO	DESCRIPTION	DRN	DATE	CKD	APPD
1	POLE CENTER TO CENTER DISTANCE, REGULATOR PLATFORM SIZE AND BRIDGING SUPPORT ARM SIZE AMENDED	P.G.	JUN'26	B.B.	B.V.
0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.	B.V.
AMENDMENTS					





DES	B.BAYRAM	POWER STANDARD DRAWING			
DRN	P.GUNA	100A AND 200A POLE STRUCTURE DOUBLE POLE CLOSE DELTA REGULATOR SYSTEM			
CKD	B.BAYRAM	MISCELLANEOUS			
APPD	B.VANDERSTELT	SHEET 5 OF 7			
SCALE	AS SHOWN	A3	DRAWING NUMBER	S01-02-06-19_05	
ISSUED	SEP'25				
ALL DIM. IN mm					
DRAFTING STANDARD TO A.S.1100			CAD PRODUCT - DO NOT AMEND MANUALLY		





3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
1	1	LINE POLE 16.5D BOLTED CONNECTIONS	S01-01-01-14	298505
2	1	LINE POLE 12.0D BOLTED CONNECTIONS	S01-01-01-12	298489
3	3	COOPER POWER SERIES VR-32 VOLTAGE REGULATOR - 22000 VOLT / 200 AMP	-	-
4	4	SIGN - "DANGER HIGH VOLTAGE"	S02-01-08-01	6429
HV ARM COMPONENTS				
5	1	FIBREGLASS HV TERMINATION CROSSARM	S01-01-02-10	414398
6	2	FIBREGLASS CROSSARM SHACKLE PLATE	S01-01-04-37	406938
7	6	22kV STRAIN INSULATOR ASSEMBLY	S01-01-03-09	-
8	1	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
9	1	M24x50mm GALV. BOLT C/W UT	S01-01-04-43	114629
10	1	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
11	2	M24x180 GALV. BOLT C/W NUT	S01-01-04-43	400802
12	8	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
13	5	M24 GALV. SPRING WASHER	S01-01-04-43	114330
14	2	18kN M24 GALV. EYENUT	-	298711
15	2	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
16	4	M16 65x65 GALV. SQUARE WASHER	S01-01-04-43	298695
17	2	M16 GALV. SPRING WASHER	S01-01-04-43	114322
18	2	ANGLE CROSSARM BRACE -75x75x5mm DURAGAL ANGLE	S01-02-01-49	400815
MIDMOUNT GAS SWITCH				
19	6	LIVE LINE CLAMP - 460A	S01-01-04-17	2121
20	1	SIDE MOUNT HANGING ARM	S01-01-06-17	400813
21	1	MANUAL OPERATION STANDARD GBS	S01-01-06-17	400823
22	2	22kV CYCLOALTIPTIHC POST INSULATOR	S01-01-03-10	300467
23	2	POLE MOUNTED INSULATOR STUDS	S01-01-04-44	300517
24	1	NGK GAS SWITCH DOWN ARM	S01-01-04-56	AR
25	2	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
26	8	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
27	4	M24 GALV. SPRING WASHER	S01-01-04-43	114330

3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
EDO ARM COMPONENTS - 1 OFF				
28	1	FIBREGLASS ARM	S01-01-02-10	298547
29	1	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
30	1	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
31	4	M24 65x65 GALV. SQUARE WASHER	S01-01-04-43	298828
32	2	M24 GALV. SPRING WASHER	S01-01-04-43	114330
33	1	FLAT CROSSARM BRACE 50x5 CF	S01-02-01-49	298687
34	1	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
35	1	M16 75x75 GALV. SQUARE WASHER	S01-01-04-43	298695
36	1	M16 GALV. SPRING WASHER	S01-01-04-43	114322
37	3	EDO FUSE ASSEMBLY	S01-01-06-06	3863
38	3	200A BARREL FOR EDO ASSEMBLY	S01-01-06-06	407372
39	3	100A K TYPE FUSE	S01-01-06-05	283226
POLE MOUNTED BRIDGING ARM - 1 OFF				
41	1	FIBREGLASS EDO FUSE ARM	S01-01-02-10	298547
42	1	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
43	1	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
44	4	M24 65x65 GALV. SQUARE WASHER	S01-01-04-43	298828
45	2	M24 GALV. SPRING WASHER	S01-01-04-43	114330
46	1	FLAT CROSSARM BRACE 50x5 CF	S01-02-01-49	298687
47	1	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
48	1	M16 75x75 GALV. SQUARE WASHER	S01-01-04-43	298695
49	1	M16 GALV. SPRING WASHER	S01-01-04-43	114322
50	3	22kV CYCLOALTIPTIHC POST INSULATOR	S01-01-03-10	300467
51	3	FIBREGLASS CROSSARM INSULATOR STUDS	S01-01-04-44	500500

1	POLE CENTER TO CENTER DISTANCE, REGULATOR PLATFORM SIZE AND BRIDGING SUPPORT ARM SIZE AMENDED	P.G.	JUN'26	B.B.	B.V.	 NORTHERN TERRITORY	DES	B.BAYRAM	POWER STANDARD DRAWING				
	0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.		B.V.	DRN	P.GUNA	100A AND 200A POLE STRUCTURE DOUBLE POLE CLOSE DELTA REGULATOR SYSTEM MATERIAL LIST SHEET 6 OF 7			
	NO	DESCRIPTION	DRN	DATE	CKD		APPD	APPD	B.VANDERSTELT	SCALE	AS SHOWN	A3 DRAWING NUMBER S01-02-06-19_06	 AMDT
	AMENDMENTS						ISSUED	SEP'25	DRAFTING STANDARD TO A.S.1100				
							ALL DIM. IN mm						

3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
SUPPORT MOUNTED BRIDGING ARM - 3 OFF				
40	2	ISOLATING SWITCH 630A	S01-01-06-07	2204
52	3	SUPPORT MOUNTED BRIDGING ARM	S01-02-06-19_04	-
53	2	M24x220mm GALV. BOLT C/W NUT	S01-01-04-43	400803
54	2	M24x65mm GALV. BOLT C/W NUT	S01-01-04-43	400800
55	8	M24 65x65 GALV. SQUARE WASHER	S01-01-04-43	298828
56	4	M24 GALV. SPRING WASHER	S01-01-04-43	114330
57	2	FLAT CROSSARM BRACE 50x5 CF	S01-02-01-49	298687
58	2	M16x180 GALV. BOLT C/W NUT	S01-01-04-43	114561
59	2	M16 75x75 GALV. SQUARE WASHER	S01-01-04-43	298695
60	2	M16 GALV. SPRING WASHER	S01-01-04-43	114322
61	3	22kV CYCLOALTIHATIC POST INSULATOR	S01-01-03-10	300467
62	3	FIBREGLASS CROSSARM INSULATOR STUDS	S01-01-04-44	500500
BRIDGING SUPPORT ARM				
40	2	ISOLATING SWITCH 630A	S01-01-06-07	2204
63	1	BRIDGING SUPPORT ARM	S01-02-06-19_02	-
64	2	M24x180mm GALV. BOLT C/W NUT	S01-01-04-43	400802
65	8	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
66	4	M24 GALV. SPRING WASHER	S01-01-04-43	114330
REGULATOR PLATFORM				
67	2	250 PFC - 6350 LONG - 350 MPA - GALV.	S01-02-06-19_03	-
68	2	250PFC - 840 LONG - 350 MPA - GALV.	S01-02-06-19_04	-
70	20	M24 GALV. THREADED ROD - CUT TO SUIT	S01-01-04-43	401393
71	40	M24x75mm GALV. BOLT C/W NUT	S01-01-04-43	503757
72	40	M24 75x75 GALV. SQUARE WASHER	S01-01-04-43	298828
73	40	M24 GALV. SPRING WASHER	S01-01-04-43	114330

3 PHASE VOLTAGE REGULATOR PARTS LIST				
ITEM	QTY	DESCRIPTION	DRAWING No.	ITEM NUMBER
BRIDGING CONDUCTOR				
74	AR	0.6/1kV 150mm ² CU XLPE/PVC	S02-01-01-35	503088
75	30	M12 150mm ² LUG	S02-01-02-11	5561
76	4	'SL' SWITCHING LETTER (BLACK ON YELLOW)	S01-02-06-19_05	502100
77	2	'S' SWITCHING LETTER (BLACK ON YELLOW)	S01-02-06-19_05	502098
78	4	'L' SWITCHING LETTER (BLACK ON YELLOW)	S01-02-06-19_05	502099
78A	1	PHASE ID MARKERS R/W/B	S02-01-08-13	7591
SURGE ARRESTOR CONNECTIONS				
79	1	LUG - COMPRESSION, COPPER, Ø14mm HOLE (TO SUIT 35mm ² CABLE)	S02-01-02-11_02	156240
80	1	NUT- M12, HEX, STAINLESS STEEL	S01-01-04-43	504650
81	1	WASHER - SPRING, M12 STAINLESS STEEL	S01-01-04-43	407991
82	1	LUG - COMPRESSION, COPPER, Ø14mm HOLE (TO SUIT 70mm ² CABLE)	S02-01-02-11_02	406766
83	1	WASHER - FLAT, M12, STAINLESS STEEL	S01-01-04-43	407991
84	1	SCREW -SET, M12x 40mm, HEX, STAINLESS STEEL	S01-01-04-43	114066
85	1	CONDUCTOR - EARTH (70mm ²) COPPER, PVC COVERED, GREEN YELLOW	-	401059
86	1	PLATE - TINNED COPPER (33kV UGOH TERMINATION PLATE)	-	91132
HV 'A TOP' ARM COMPONENTS				
88	1	CROSSARM, FIBREGLASS, HV LINE	S01-01-02-10	298802
89	2	CROSSARM BRACE. 70X5 DURAGAL CF	S01-01-04-38	298687
90	3	22KV VERTICAL LINE POST INSULATOR	S01-02-01-49	300467
91	2	INSULATOR MOUNTING STUD, 140/30 M24	S01-01-04-44	300483
92	1	INSULATOR MOUNTING STUD, 40/30 M24	S01-01-04-44	298745
93	1	M24 GALV. STEEL SPRING WASHER	S01-01-04-43	114330
	2	M24 GALV. STEEL 75x75x5 FLAT WASHER	S01-01-04-43	298828
94	1	M24x220 GALV. STEEL BOLT C/W NUT	S01-01-04-43	400803
	1	M24 GALV. STEEL SPRING WASHER	S01-01-04-43	114330
	2	M24 GALV. STEEL 75x75x5 FLAT WASHER	S01-01-04-43	298828
95	1	M24x65 GALV. STEEL BOLT C/W NUT	S01-01-04-43	400800
	2	M16 GALV. STEEL SPRING WASHER	S01-01-04-43	114322
	4	M16 GALV. STEEL 65x65x5 FLAT WASHER	S01-01-04-43	298695
	2	M16x180 GALV. STEEL BOLT C/W NUT	S01-01-04-43	114561

1	POLE CENTER TO CENTER DISTANCE, REGULATOR PLATFORM SIZE AND BRIDGING SUPPORT ARM SIZE AMENDED	P.G.	JUN'26	B.B.	B.V.	 NORTHERN TERRITORY	DES	B.BAYRAM	POWER STANDARD DRAWING 100A AND 200A POLE STRUCTURE DOUBLE POLE CLOSE DELTA REGULATOR SYSTEM MATERIAL LIST SHEET 7 OF 7		A3	DRAWING NUMBER S01-02-06-19_07	 AMDT
	0	ISSUED FOR CONSTRUCTION	P.G.	SEP'25	B.B.		B.V.	DRN					
NO	DESCRIPTION	DRN	DATE	CKD	APPD								
AMENDMENTS													