

588335/2024/ISG-ELECTRICAL



INDENT SPECIFICATION FOR ELECTRICAL ITEMS _
MANDATORY SPARES FOR CONVEYOR AND DE
PACKAGES OF 2X660MW, STAGE-V, UNIT #7 AND 8,
SURATGARH SCTPS

DOCUMENT NO:
IS-1-13-2000/301

REF: IS-1-13-2000

CUSTOMER: RRVUNL

TECHNICAL SPECIFICATION OF ELECTRICAL ITEMS _ MANDATORY SPARES FOR CONVEYOR AND
DE PACKAGES OF 2X660MW SUPER CRITICAL THERMAL POWER STATION,
STAGE-V, UNIT #7 AND 8 AT SURATGARH, RAJASTHAN

Important instructions to be followed by bidder:

- No technical submittal such as copies of type test certificates, technical literature, etc. is required during tender stage. Any such submission, even if made, **shall not be considered as part of offer.**
- Any comments/ clarifications on technical/ inspection requirements furnished as part of bidder's covering letter shall not be considered by BHEL, and bidder's offer shall be construed to be in conformance with the specification.
- Kindly note that supplier shall not be allowed to revise price bid, if there is no change in technical specifications / quantity from BHEL.

BIDDER'S STAMP & SIGNATURE

PREPARED BY
V. VENKATESHWAR RAO

CHECKED AND APPROVED BY
RAJ KISHORE MAJHI

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BHEL – ISG
BENGALURU

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SECTION I: SITE CONDITIONS

1.1	GENERAL SITE CONDITIONS		
1.	Owner / Purchaser	:	Rajasthan Rajya Vidyut Utpadan Nigam Ltd. (RRVUNL)
2.	Engineer/consultant	:	Tata Consulting Engineers Ltd (TCE) 73/1, St. Marks Road, Bangalore – 560 001
3.	Project Title	:	2 x 660 MW, Super-Critical TPS, Stage-V, Unit # 7 & 8 at Suratgarh, Rajasthan
4.	Project location	:	Prabat Nagar, Suratgarh, Sriganganagar district, Rajasthan.
5.	Elevation (above Sea level)	:	186 m (approximate)
6.	Temperatures : Monthly basis	:	Mean of daily max. 32.8 deg.C (in the month of May) Mean of daily min. 17.6 deg.C (in the month of Jan)
7.	Temperatures : Annual basis	:	Mean of daily max. 32.3 deg.C Mean of daily min. 19.6 deg.C
8.	Highest temperature recorded	:	50 deg.C
9.	Lowest temperature recorded	:	(-) 2.8 deg.C
10.	Design temperature	:	50 deg. C
11.	Relative humidity	:	Varies between 21% and 81%
12.	Annual average rain fall	:	312 mm
13.	Annual mean wind speed : Calculations for wind effect shall be in accordance with IS:875- 1987(Part-3) taking into account the following	:	4 km/hr a) Basic wind speed = 47 m/sec b) Factor K1 = 1.07 c) Category of terrain = Category 2 d) K3 – as per IS 875
14.	Seismic data (As per IS: 1893 latest issue)	:	Zone II; Designs & design coefficients will be based on IS 1893:2002
15.	Nearest railway station	:	Suratgarh JN
16.	Nearest airport	:	Jaipur
1.2	POWER SUPPLY SYSTEMS		
1.2.1	MV System		
	System Voltage	:	6.6 kV $\pm$ 10%, 3 Phase, 3 wire
	System Frequency	:	50 Hz $\pm$ 5%
	Combined Variation	:	10% (absolute)
	System Fault level	:	40 kA for 3s
	System Earthing	:	Non effectively earthed
	Drives	:	161kW-1500kW
1.2.2	LV System		
	System A.C voltage	:	415 V $\pm$ 10%
	System Frequency	:	50 Hz $\pm$ 5%
	Combined Variation	:	10% (absolute)
	Phase	:	3 ph, 3- wire
	System fault level	:	50 kA for 1s
	System Earthing	:	Solidly grounded
	Panel space heater, lighting, AC Control & Protection Supply	:	240V, Single phase
	Drives	:	up to 160kW
1.2.3	DC System		
	System Voltage	:	220V, +10%, -15%, 2-wire
	Fault level	:	20 kA
	System Earthing	:	Unearthed

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SECTION II: SCOPE OF SUPPLY & WORK AND SPECIFICATIONS

Design, manufacture, inspection & testing at manufacturer's work, packing & forwarding, supply of Electrical items and Control Junction Boxes as detailed below:

Sl. No	DESCRIPTION	UNIT	QTY	Make	Model/Rating/Range/Specification
1	DE Package-Gasket	Nos	5	Reputed	
2	DE Package-Bus bar support insulators	Nos	10	PEX	
3	DE Package-Local/Remote selector switch	Nos	10	L&T (Salzer)	3Pole, 3 Way, 6A
4	DE Package-ASS	Nos	6	L&T (Salzer)	6A
5	DE Package-VSS	Nos	5	L&T (Salzer)	6A
6	DE Package- Control fuse base 20A with 2A fuse link	Nos	5	L&T	Fuse base 20A with 2A Fuse Link
7	DE Package-Control Transformers - 250 VA, 415/240V AC	Nos	1	Logicstat	Rating :250 VA, Voltage Ratio :415/240V AC
8	DE Package-Control Transformers - 400 VA, 415/240/110 V AC	Nos	2	Logicstat	Rating :400 VA, 2 winding in secondary & Voltage Ratio: 415/240/110 V AC
9	DE Package-Indicating Lamp - Red-110V AC	Nos	2	L&T (Esbee)	Colour- Red and Voltage-110V AC
10	DE Package-Indicating Lamp - Green-110V AC	Nos	2	L&T (Esbee)	Colour- Green and Voltage-110V AC
11	DE Package-Indicating Lamp - Amber-110V AC	Nos	2	L&T (Esbee)	Colour- Amber and Voltage-110V AC
12	DE Package-Indicating Lamp - Red-240V AC	Nos	1	L&T (Esbee)	Colour- Red and Voltage-240V AC
13	DE Package-Indicating Lamp - Green-240V AC	Nos	1	L&T (Esbee)	Colour- Green and Voltage-240V AC
14	DE Package-Indicating Lamp - Amber-240V AC	Nos	1	L&T (Esbee)	Colour- Amber and Voltage-240V AC
15	DE Package-Power contactor-110V AC, TP 9A	Nos	4	ABB	Rating: 9A, Pole: TP, Coil Voltage:110V AC
16	DE Package-Power contactor-110V AC, TP 145A	Nos	5	ABB	Rating: 145A, Pole: TP, Coil Voltage:110V AC
17	DE Package-Power contactor-110V AC, TP 145A with Aux. Contact block	Nos	1	ABB	Rating: 145A, Pole: TP, Coil Voltage:110V AC with 2NO+2NC Aux. Contact block
18	DE Package-Power contactor-110V AC, TP 185A	Nos	3	ABB	Rating: 185A, Pole: TP, Coil Voltage:110V AC
19	DE Package-Push button-Green	Nos	7	L&T (Esbee)	Colour: Green, Spring return with NO

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Sl. No	DESCRIPTION	UNIT	QTY	Make	Model/Rating/Range/Specification
20	DE Package-Push button-Red	Nos	7	L&T (Esbee)	Colour: Red, Mushroom Head. Press to Lock, turn to release with 2NC
21	DE Package-Push button-Yellow	Nos	7	L&T (Esbee)	Colour: Yellow, Spring return with NO
22	DE Package-MCCB-32A TP	Nos	4	ABB	25 KA WITH O/L, S/C & DOOR I/L HANDLE
23	DE Package-MCCB-200A TP	Nos	3	ABB	50 KA WITH O/L, S/C & DOOR I/L HANDLE
24	DE Package-MCCB 200A TP with Aux. Contact	Nos	1	ABB	50 KA WITH O/L, S/C & DOOR I/L HANDLE, WITH AUX CONTACTS
25	DE Package- MCCB 200A TP operating knob	Nos	2	ABB	
26	DE Package-Aux. contact for MCCB 200A	Nos	4	ABB	1NO+1NC
27	DE Package-MCCB-250A TP	Nos	2	ABB	50 KA WITH O/L, S/C & DOOR I/L HANDLE
28	DE Package-MCCB-100A TP	Nos	3	ABB	50 KA WITH O/L, S/C & DOOR I/L HANDLE
29	DE Package-Interposing relay	Nos	4	Omron	2C/ O, 24V DC, 5A
30	DE Package-Interposing relay with base	Nos	2	Omron	2C/ O, 24V DC, 5A, with base
31	DE Package-CTs -200/1, CL-1 15VA	Nos	3	AE	TAPE WOUND, CLASS-1, BURDEN - 15VA
32	DE Package-CTs-250/1, CL-1 15VA	Nos	3	AE	TAPE WOUND, CLASS-1, BURDEN 15VA
33	DE Package-CTs-100/1, CL-1 10VA	Nos	3	AE	TAPE WOUND, CLASS-1, BURDEN-10VA
34	DE Package-CTs-150/1, CL-1 10VA	Nos	6	AE	TAPE WOUND, CLASS-1, BURDEN-10VA
35	DE Package-CTs-200/1, CL-1 10VA	Nos	3	AE	TAPE WOUND, CLASS-1, BURDEN-10VA
36	DE Package-Auxiliary contactor	Nos	4	ABB	110 V AC, 5A
37	DE Package-Switch socket 5/15A	Nos	10	Anchor	5/15A
38	DE Package-Thermal overload relay (130-175 A)	Nos	2	ABB	RANGE :130-175 A
39	DE Package-Thermal overload relay (150-200 A)	Nos	1	ABB	RANGE :150-200 A
40	DE Package-Timers - 110 V AC (1-30 Sec)	Nos	2	L&T (GIC)	110 V AC (1-30 Sec)
41	DE Package-MPCB	Nos	4	ABB	Range :1.6-2.5A, TP,50KA WITH O/L, S/C & DOOR I/L HANDLE
42	DE Package-Aux. Contact (1NO+1NC) & trip contact for MPCB	Nos	4	ABB	1NO+1NC

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Sl. No	DESCRIPTION	UNIT	QTY	Make	Model/Rating/Range/Specification
43	DE Package-Digital Voltmeter (0-500V) 240V	Nos	1	AE	SIZE 96*96
44	DE Package-Digital Ammeter (0-250A) CTR 250/1, 240V AC	Nos	1	AE	SIZE 96*96
45	DE Package-Digital Ammeter (0-200A) CTR 200/1, 240V AC	Nos	1	AE	SIZE 96*96
46	DE Package-Digital Ammeter (0-100A) CTR 100/1, 240V AC	Nos	1	AE	SIZE 96*96
47	DE Package-Digital Ammeter (0-200A) CTR 200/1, 110V AC	Nos	1	AE	SIZE 96*96
48	DE Package-Digital Ammeter (0-150A) CTR 150/1, 110V AC	Nos	3	AE	SIZE 96*96
49	DE Package-MCB - 2A, SP	Nos	2	Schneider	C' CURVE
50	DE Package-MCB - 4A, SP	Nos	5	Schneider	C' CURVE
51	DE Package-MCB - 6A, DP	Nos	2	Schneider	C' CURVE
52	DE Package-MCB - 6A, TP	Nos	2	Schneider	C' CURVE
53	DE Package-MCB - 32A, DP	Nos	2	Schneider	10 KA, 'C' CURVE
54	DE Package-Power terminal Type XMT - 185 SQ MM	Nos	4	Elmex	
55	DE Package-Power terminal Type XMT - 150 SQ MM	Nos	6	Elmex	
56	DE Package-Power terminal Type XMT - 2.5 SQ MM	Nos	10	Elmex	
57	DE Package-Power terminal Type XPT - 2.5 SQ MM	Nos	26	Elmex	
58	DE Package-Control terminal - 2.5 SQ MM	Nos	50	Elmex	
59	DE Package-Thermostat 110 degree C space heater 100W	Nos	1	Anco/Telelec	110 degree C space heater 100W
60	DE Package-Panel light LED 5W, 240 V AC	Nos	1	Haveels	5W, 240 V AC
61	DE Package-Door Switch 10A	Nos	1	Hotline	
62	DE Package-Door Lock	Nos	100		
63	DE Package- 2.5Sq. mm PVC wire (Grey colour)	Mtr	100		
64	DE Package-Wire Duct	Mtr	5		
65	DE Package-DP Switch (50-1200 MMWC)	Nos	8	SWITZER	Model no: GM 310 N5 D4C 2 B
66	Conveyor Package-Control Junction Box -35 terminal	Nos	2		Shall be as per enclosed drawing (Annexure-II: IS-3-GA-843-100-E083, GA, Data sheet & Scheme for Control JB's)
67	Conveyor Package-Control Junction Box -50 terminal	Nos	2		

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Sl. No	DESCRIPTION	UNIT	QTY	Make	Model/Rating/Range/Specification
68	Conveyor Package-Control Junction Box -70 terminal	Nos	2		
69	Conveyor Package-Control Junction Box -85 terminal	Nos	2		
70	Conveyor Package-Control Junction Box -100 terminal	Nos	2		
71	Conveyor Package-Control Junction Box -130 terminal	Nos	2		
72	Conveyor Package-2A HRC FUSE	Nos	50	GE/EATON	2A
73	Conveyor Package-75A SEMICONDUCTOR FUSE	Nos	50	GE/EATON	75A
74	Conveyor Package-63A HRC FUSE LINK WITH BASE	Nos	50	L&T	63A
75	Conveyor Package-DP MCB-2A	Nos	10	SIEMENS	Short circuit rating :10 KA
76	Conveyor Package-TP MCB-2A	Nos	10		
77	Conveyor Package-DP MCB-4A	Nos	10		
78	Conveyor Package-DP MCB-6A	Nos	10		
79	Conveyor Package-SP MCB-6A	Nos	10		
80	Conveyor Package-SP MCB-4A	Nos	10		
81	Conveyor Package-SP MCB-2A	Nos	10		
82	Conveyor Package-DP MCB-10A	Nos	10		
83	Conveyor Package-DP MCB-16A	Nos	10		
84	Conveyor Package-60W Space heater	Nos	3	GIRISHEGO	
85	Conveyor Package-6" panel cooling fan-240V AC, 0.22A	Nos	4	JIGO	Size-6", voltage-240V AC, Current-0.22A
86	Conveyor Package-Fan with filter - 230 V AC	Nos	4	REXONARD	
87	Conveyor Package-Terminal Block- 2.5 SQMM	Nos	50	PHOENIX	
88	Conveyor Package-Terminal Block- 4 SQMM	Nos	20		
89	Conveyor Package-Terminal Block- 25 SQMM	Nos	10		
90	Conveyor Package-Terminal Block- 50 SQMM	Nos	10		
91	Conveyor Package-AUXILIARY RELAY_ 2NO + 2NC - 110 V AC	Nos	3	SALZER/PLA	Coil Voltage:110V AC
92	Conveyor Package-AUXILIARY RELAY_ 3NO + 1NC - 110 V AC	Nos	3	SALZER/PLA	Coil Voltage:110V AC
93	Conveyor Package-AUXILIARY RELAY_ 2NO + 2NC - 24 V DC	Nos	3	SALZER/PLA	Coil Voltage:24V DC

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Sl. No	DESCRIPTION	UNIT	QTY	Make	Model/Rating/Range/Specification
94	Conveyor Package-TIMER_ 5-100 SEC ON DELAY TIMER WITH 1 C/O CONTACT - 110 V AC	Nos	2	SIEMENS	
95	Conveyor Package-TIMER_ OFF DELAY TIMER (0-180 SEC) - 240 V AC	Nos	2	BCH	
96	Conveyor Package-CONTROL TRANSFORMER _415/110 V AC, 1KVA	Nos	1	EMD/EQUALENT	
97	Conveyor Package-Control Transformers - 415/230 V AC, 2.5KVA	Nos	1	EMD/EQUALENT	
98	Conveyor Package-INDICATING LAMP _ RED, 240 V AC	Nos	1	SIEMENS	Colour RED, RATING 240 VAC
99	Conveyor Package-INDICATING LAMP _ YELLOW, 240 V AC	Nos	1	SIEMENS	Colour YELLOW, RATING 240 VAC
100	Conveyor Package-INDICATING LAMP _ BLUE, 240 V AC	Nos	1	SIEMENS	Colour BLUE, RATING 240 VAC
101	Conveyor Package-INDICATING LAMP _ GREEN, 240 V AC	Nos	1	SIEMENS	Colour GREEN, RATING 240 VAC
102	Conveyor Package-INDICATING LAMP _ AMBER, 240 V AC	Nos	1	SIEMENS	Colour AMBER, RATING 240 VAC
103	Conveyor Package-POWER CONTACTOR_ 70A TP, 110V, 4 NO	Nos	4	SIEMENS	Rating: 70A, Pole: TP, Coil Voltage:110V AC, 1NO+1NC with 4NO add on Block.
104	Conveyor Package-POWER CONTACTOR_ 50A TP, 110V, 4 NO	Nos	4	SIEMENS	Rating: 50A, Pole: TP, Coil Voltage:110V AC, 1NO+1NC with 4NO add on Block.
105	Conveyor Package-POWER CONTACTOR_ 12A TP, 110V, 4 NO	Nos	4	SIEMENS	Rating: 12A, Pole: TP, Coil Voltage:110V AC, 1NO+1NC with 4NO add on Block.
106	Conveyor Package-POWER CONTACTOR_ 9A TP, 110V, 4 NO	Nos	4	SIEMENS	Rating: 9A, Pole: TP, Coil Voltage:110V AC, 1NO+1NC with 4NO add on Block.
107	Conveyor Package-POWER CONTACTOR_ 40 TP, 110V, 4 NO	Nos	4	SIEMENS	Rating: 40A, Pole: TP, Coil Voltage:110V AC, 1NO+1NC with 4NO add on Block.
108	Conveyor Package-POWER CONTACTOR_ 25 TP, 110V, 4 NO	Nos	4	SIEMENS	Rating: 25A, Pole: TP, Coil Voltage:110V AC, 1NO+1NC with 4NO add on Block.
109	Conveyor Package-PUSH BUTTON_ BLACK PB, 1 NO+1NC - 110V	Nos	4	TEKNIC	Colour: Black, Spring return with 1 NO+1NC
110	Conveyor Package-PUSH BUTTON_ RED PB, 1 NO+1NC - 110V	Nos	4	TEKNIC	Colour: Yellow, Mushroom Head. Press to Lock, turn to release with 1 NO+1NC

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Sl. No	DESCRIPTION	UNIT	QTY	Make	Model/Rating/Range/Specification
111	Conveyor Package-100A TP MCCB, 50KA, LSIG	Nos	4	SIEMENS	100A, ADJUSTABLE O/L AND S/C
112	Conveyor Package-315A TP MCCB, 50KA, LSIG	Nos	4	SIEMENS	315A, ADJUSTABLE O/L AND S/C
113	Conveyor Package-CTs_100/5 A, CL-1, 10VA	Nos	3	RISHAB	CLASS-1, BURDEN -15VA

The make & model of all items shall be same as that mentioned above and control junction Box shall be as per the enclosed drawing. If bidder /OEM is offering latest equivalent model/type, bidder/OEM shall submit clarification for latest equivalent and **confirmation of interchangeability** for end user approval.

All items to be supplied under this tender/ contract shall be supplied complete with all applicable accessories.

Bidder to submit the relevant data sheets, GA drawings and Catalogues for the supplied items.

Bidder shall submit signed & stamped/ digitally signed copy of technical specifications along with all annexures/ attachment along with the offer.

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SECTION III: INSPECTION AND TESTING

1. Inspection notice shall be issued fifteen (15 days) in advance along with internal (manufacturer) TCs.
2. **Material TC's and routine, acceptance & type test certificates (as applicable) shall be submitted for dispatch clearance from RRVUNL and BHEL. Fitment cum interchangeability certificate shall be submitted along with TC's.**
3. All material used for equipment manufacture shall be of tested quality as per relevant codes/ standards.
4. **PACKAGING AND TRANSPORTATION** All the equipment shall be suitably protected, coated, properly packed and crated to prevent damage or deterioration during transit, handling and storage at site.

SECTION IV: DOCUMENTATION

The following documentation shall be submitted to BHEL at different stages of the Project.

a. Along with the offer:

1. Signed technical specification and all enclosed annexures.

b. After award of order:

S. NO.	DESCRIPTION	NO. OF COPIES	STATUS	TIME SCHEDULE
1.	Routine, Acceptance and Type test certificate	02 Sets	After internal tests	Along with Dispatch.



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Annexure-I: PRE-QUALIFICATION REQUIREMENT

TECHNICAL PQ CRITERIA:

1.	a) Bidder should have supplied at least 2 no's LV Switchgear Panels/Local Control panels and Control Junction Boxes in a single order or in separate orders for industrial application or Electricity utilities within last ten years as on 01.09.2024. (or) b) Bidder should have supplied at least 05 no's MCCB & 07 no's Power contractor and Control Junction Boxes in a single order in separate orders for industrial application or Electricity utilities within last ten years as on 01.09.2024.
2.	Bidder should submit documents related to orders received in last two years as on 01.09.24 to establish continuity in the business.

Notes:

- i) For SI no.1 (a) bidder should submit PO copy along with approved GA & SLD drawings and MDCC/ receipted LR/invoices.
- ii) For SI no.1 (b) bidder should submit PO copy along with drawing/catalogue and MDCC/ receipted LR/invoices.
- iii) For SI no.2 bidder should two nos. Purchase Orders executed or under execution in last two years.

Bidder to note that the acceptance of the offer is subjected to the "Bidder approval from RRVUNL"

CONSTRUCTION DETAILS

1.	PANEL TYPE	= WALL MOUNTED
2.	EARTH BUS	= M6 - BOLT
3.	MATERIAL SPECIFICATION	= CRCA SHEET STEEL WITH HOT DIP GALVANIZED
	a) ENCLOSURE	= 2mm THICK
	b) DOOR	= 2mm THICK
	c) GLAND PLATE	= 3mm THICK
	d) MOUNTING PLATE	= 2mm THICK
	e) STIFFENER	= MORE THAN 600mm HEIGHT DOORS ONLY
4.	FABRICATION TOLERANCE	= (+/-) 5.0mm PER METER
5.	PAINT	= EXTERIOR - 631 OF IS - 5 (POWDER COATING) = INTERIOR - GLASSY WHITE (POWDER COATING) = 7 TANK PROCESS & PP COATING FOR OUTDOOR PANELS DONE BEFORE POWDER COATING = NOT LESS THAN 60 MICRONS = ORANGE COLOUR (POWDER COATING)
6.	DEGREE OF PROTECTION	= OUTDOOR IP-65
7.	SYSTEM DESIGN PARAMETER	
	a) RATED VOLTAGE	= 3Ø, 4-WIRE,415V AC ± 6%
	b) RATED FREQUENCY	= 50Hz + 3%, - 5%
	c) RATED FAULT LEVEL	= AS PER SLD
	d) RATED CONTROL VOLTAGE	= 230V AC, 1Ø
8.	FERRULES	= WHITE COLOUR TUBE WITH NUMBER MARKED IN BLACK LETTERS
9.	LABELS/NAME PLATE	= ALUMINIUM WHITE BACKGROUND & BLACK LETTERS
10.	GASKET (NEOPRENE), LOCK & KEY	= WILL BE PROVIDED
11.	HARDWARE	= STAINLESS STEEL

1. REFERENCE DOCUMENTS & DOCUMENT NO.: CONTROL CABLE SCHEDULE - IS-3-KS-843-100-E089.
INSTRUMENTATION CABLE SCHEDULE - IS-3-KS-843-100-E090.
2. MANDATORY SPARES FOR JUNCTION BOX WILL BE SUPPLIED AS PER
RRVUNL TENDER SPECIFICATION VOLUME II, SECTION C'18.

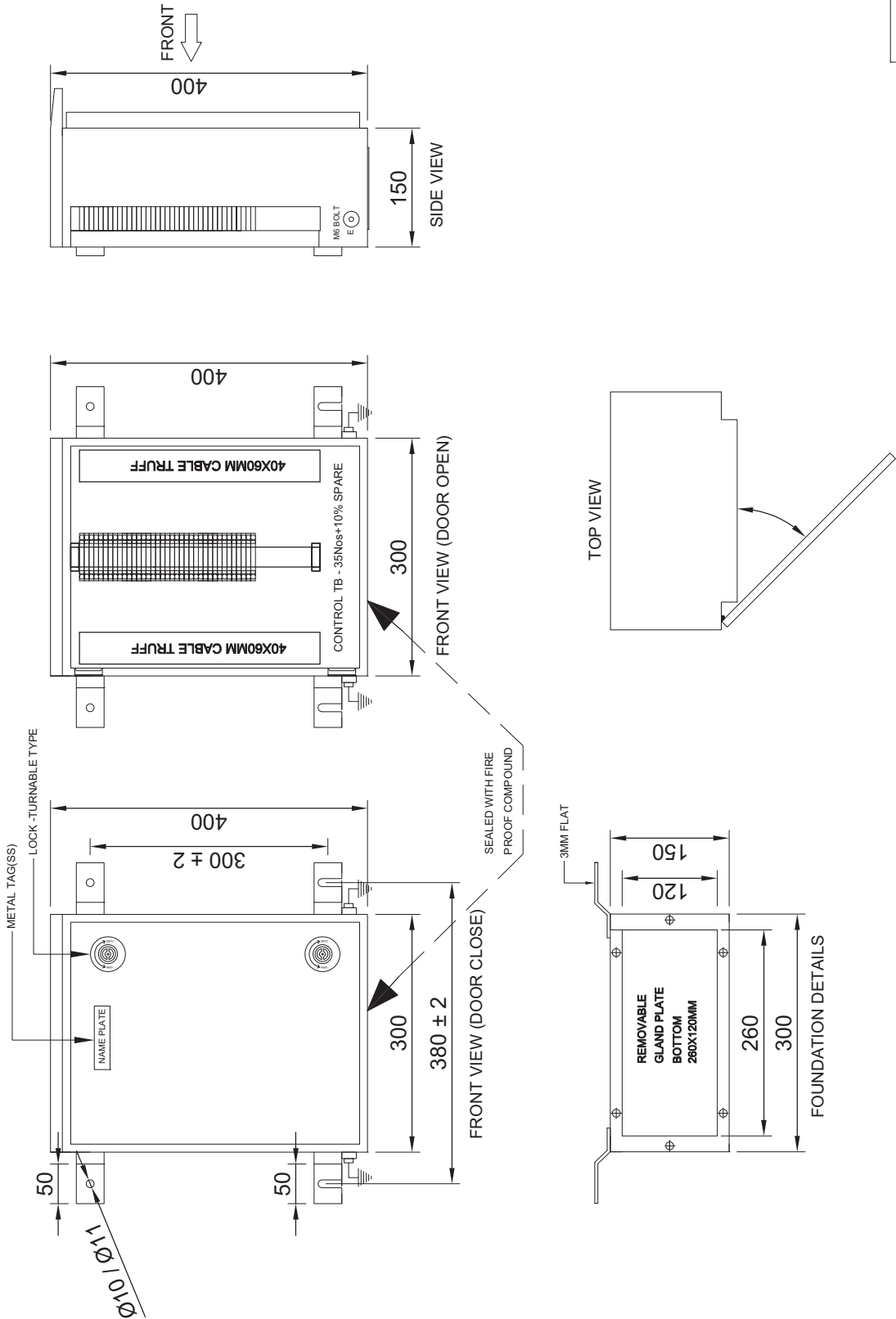
12.	a) CABLE ENTRY SEALED WITH FIRE PROOF COMPOUND WILL BE PROVIDED.
	b) SEPERATE TERMINAL BLOCKS WILL BE USED FOR ANALOG AND DIGITAL SIGNAL AND ALSO FOR SIGNALS WITH DIFFERENT VOLTAGES.
	c) PROVISION WILL BE PROVIDED TO ADD 10% ADDITIONAL TERMINALS.
	d) ACCESSORIES (CLAMPS, FIXTURES, BOLTS (SS), NUTS, ETC.) WILL BE OF SS316 GRADE.
	e) TERMINAL BLOCK-6.6 POLYIMIDE TO WITH STAND CORROSION AND THE METALLIC PORTION WILL BE COATED AGAINST RUST / CORROSION.
	f) ALL TERMINAL BLOCKS ARE OF SCREW TYPE.
	g) INDIVIDUAL CANOPIES FOR ALL JUNCTION BOXES IN LINE WITH RRVUNL TENDER SPECIFICATION, VOLUME V, SECTION D5.4, CL. NO 1.22
△	h) DOOR DETAILS (OPEN SIDE WAYS, LOCK WITH COMMON KEYS)

PANEL LIST

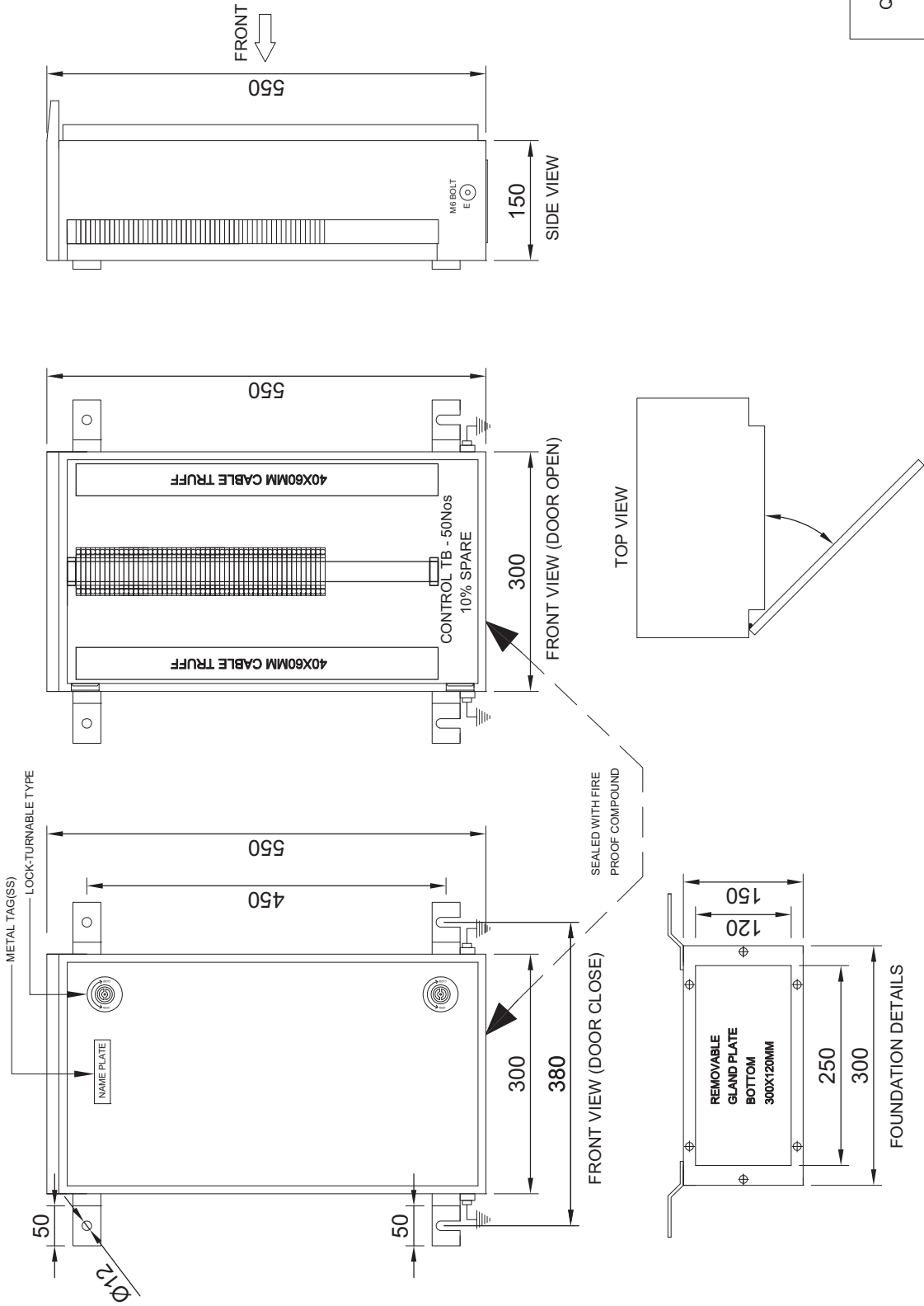
SL NO.	PANEL DESCRIPTION	DRAWING NO.	QUANTITY	UNIT-7	UNIT-8
1	JUNCTION BOX - CONTROL - 1	IS-3-GA-843-100-E083-01	14 Nos.	5 Nos.	9 Nos.
2	JUNCTION BOX - CONTROL - 2	IS-3-GA-843-100-E083-02	07 Nos.	04 Nos.	03 Nos.
3	JUNCTION BOX - CONTROL - 3	IS-3-GA-843-100-E083-03	09 Nos.	06 Nos.	03 Nos.
4	JUNCTION BOX - CONTROL - 4	IS-3-GA-843-100-E083-04	04 Nos.	01 Nos.	03 Nos.
5	JUNCTION BOX - CONTROL - 5	IS-3-GA-843-100-E083-05	04 Nos.	03 Nos.	01 Nos.
6	JUNCTION BOX - CONTROL - 6	IS-3-GA-843-100-E083-06	01 Nos.	-	01 Nos.

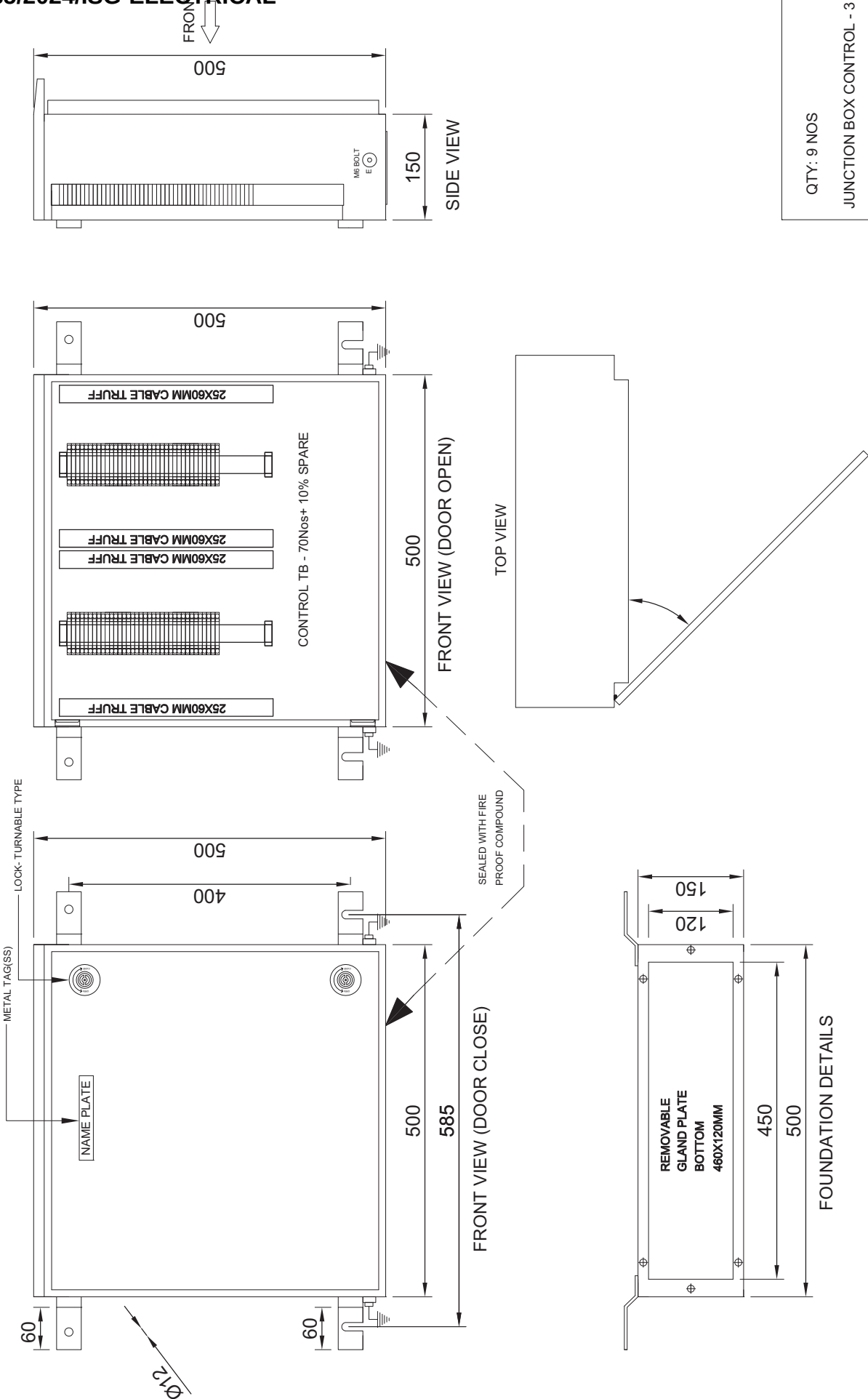
MAKE OF COMPONENTS:

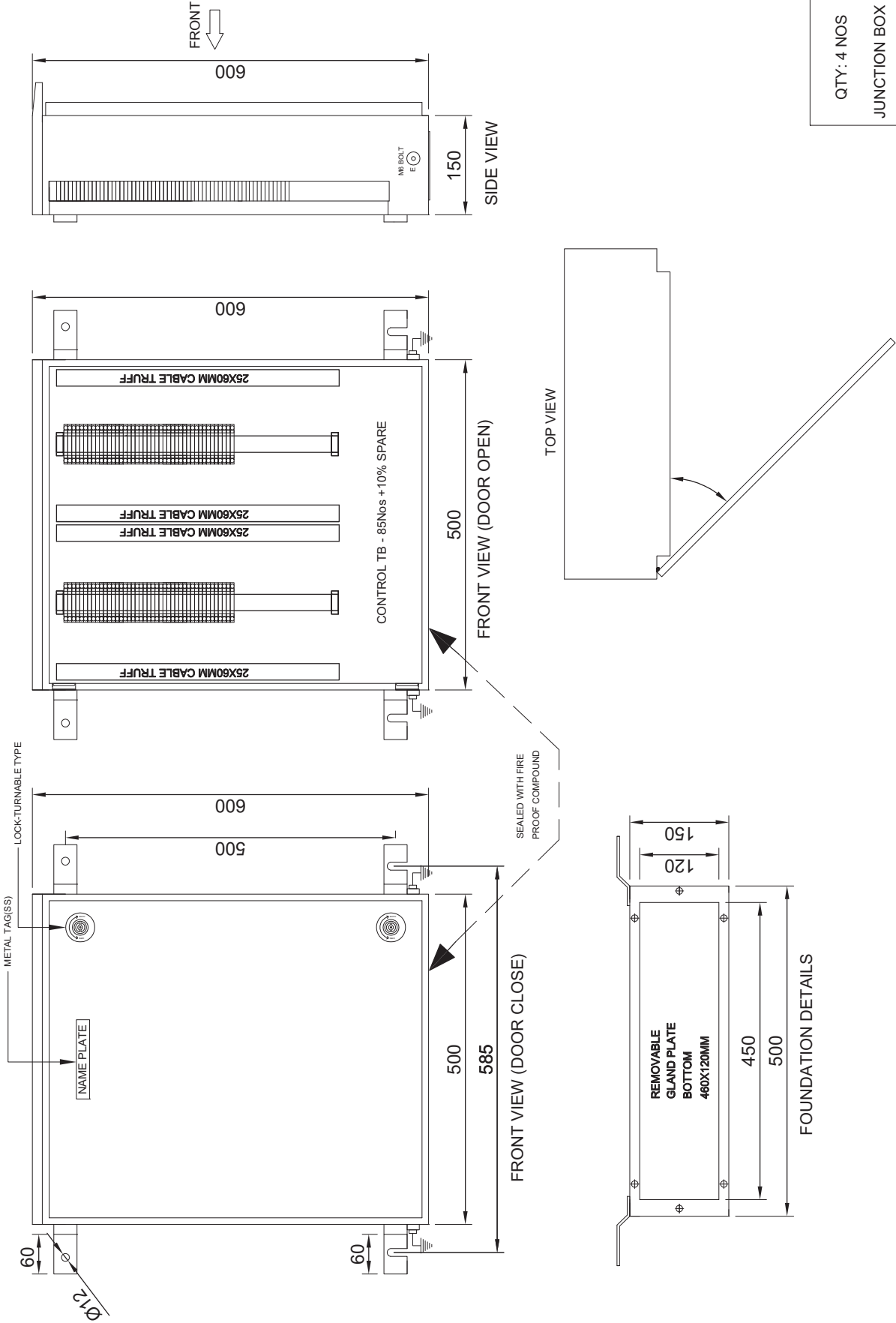
SL. NO.	LEGEND	DESCRIPTION	MAKE
1	TB	TERMINAL BLOCK	PHOENIX



QTY: 07 NOS
JUNCTION BOX CONTROL - 2







QTY: 4 NOS
JUNCTION BOX CONTROL - 500

