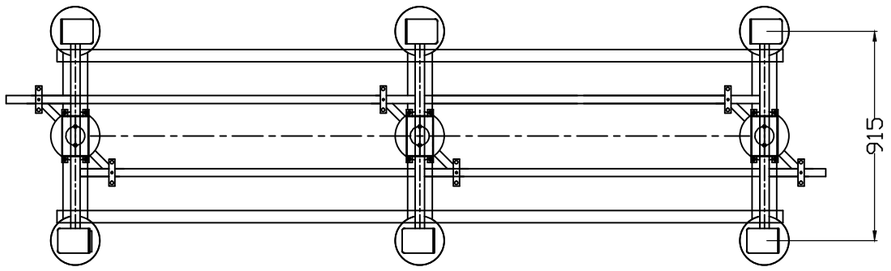
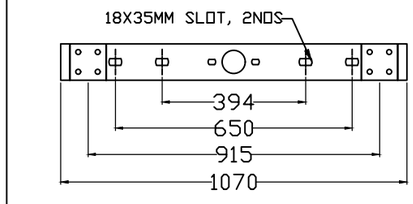


TOP PLAN



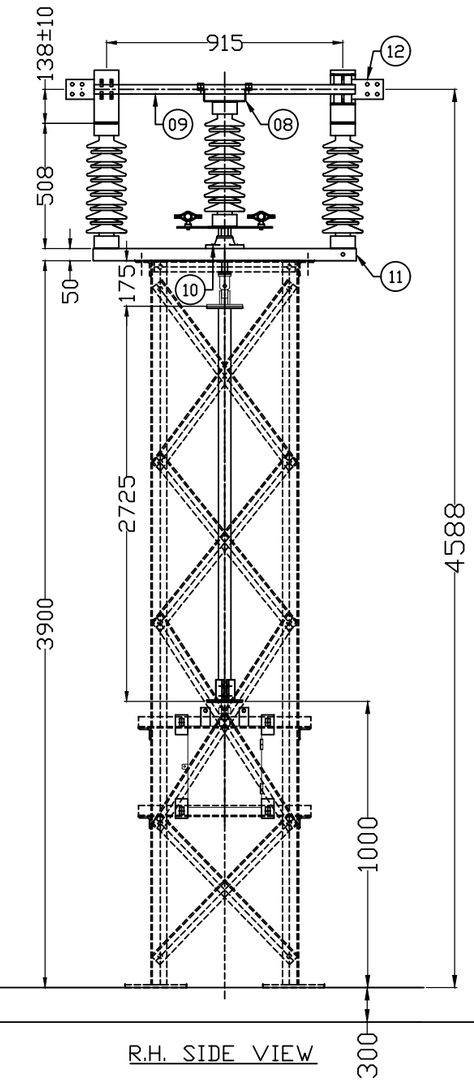
BASE CHANNEL MOUNTING DETAILS

SR.	DESCRIPTION	MATERIAL	QTY/ISO
1	FIX CONTACT L-BRACKET	M.S. H.D.G.	6 NOS
2	FIX CONTACT	CU. FLAT	6 NOS
3	TANDEM CLAMP (MAIN SWITCH)	M.S. H.D.G.	6 NOS
4	TANDEM PIPE FOR MAIN,NB-25 CLS-B	G.I. PIPE	2 NOS
5	33KV INSULATOR (NOT IN TRITECH SCOPE)	PORCELAIN	9 NOS
6	DOWN OP. PIPE MAINS NB-40 CLS-B	G.I. PIPE	1 NO
7	OPERATING BOX FOR MAINS	AL	1 NO
8	MOVING CONTACT SUPPORT	M.S. H.D.G.	3 NOS
9	MOVING CONTACT	CU. PIPE	3 NOS
10	ROTATING BEARING HOUSING	AL	3 NOS
11	BASE CHANNEL 100X50X5MM	M.S. H.D.G.	3 NOS
12	TERMINAL PAD	AL.	6 NOS

NOTE:-1.Drawings approval subject to valid type test reports, to be checked during acceptance tests.
2.For EPC contractors only.

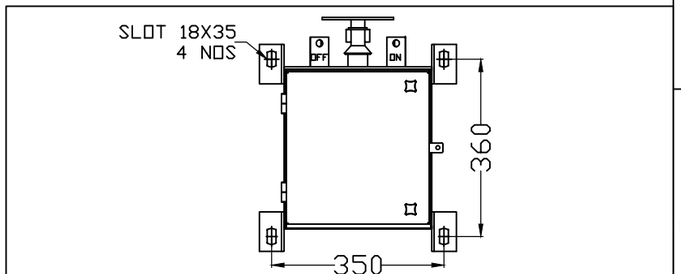
NOTES:

1. ALL DIMENSIONS ARE IN MM
2. ALL FERROUS PARTS ARE IN HOT DIP GALVANISED.(87 MICRONS)
3. ALL NON FERROUS CONTACT POINTS ARE SILVER PLATED. (15 MICRONS)
4. THE MAIN ROTATING POST HAS TWO NOS. OF BEARING.
5. ALL GI PIPES ARE 'B' CLASS AS PER IS:1239.
6. MOUNTING STRUCTURE & MOUNTING FASTNERS ARE IN THE SCOPE OF CONTRACTOR, NOT IN TRITECH SCOPE.
7. MANUFACTURING TOLERANCES:
   I) UP TO 50MM - ±3% II) 51MM TO 100MM - ±2%
   III) 101MM TO 300MM - ±1% IV) ABOVE 300MM - ±0.5%

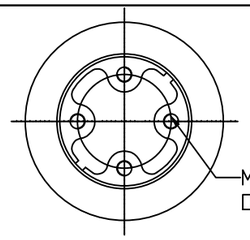


FRONT ELEVATION

R.H. SIDE VIEW



MAINS OPERATING BOX FIXING DETAILS



INSULATOR FIXING DETAILS

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Drawing approval subject to valid vendor registration

REV NO	DATE	DESCRIPTION	SIGN

REVISION

TRITECH DISCONNECTORS (INDIA) PVT. LTD.

	NAME	SIGN	DATE
DRWN	SHARAD	SRD	28.03.23
CHKD	P.JADHAV	P.J.	28.03.23
APPD	P.JADHAV	P.J.	28.03.23

TITLE: G.A. DRAWING OF 33KV 800 H.D.B. BANGING ISOLATOR WITHOUT EARTH

DWG. NO : I3086P262 | REV. NO. 00 | SIZE A4 | SHEET 01 OF 01 | SCALE N.T.S.

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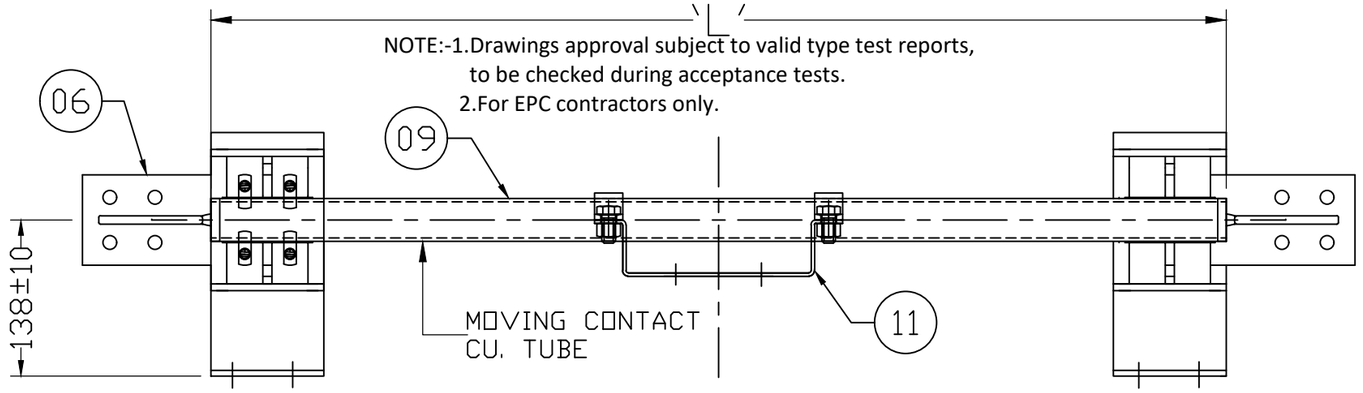
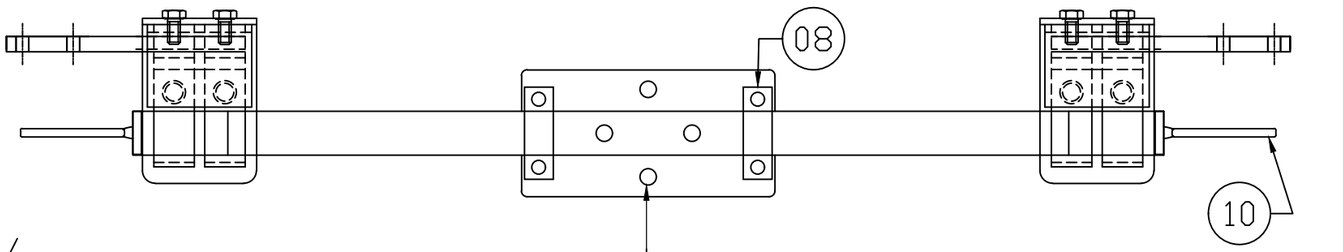
2.For EPC contractors only.



ELEVATION

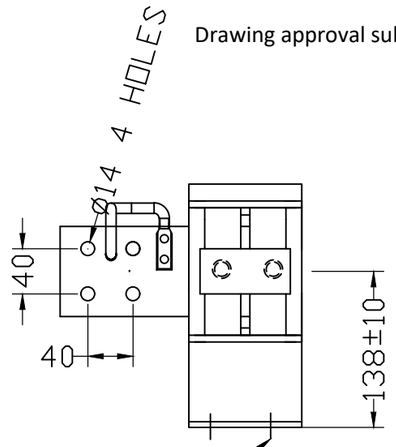


TOP PLAN

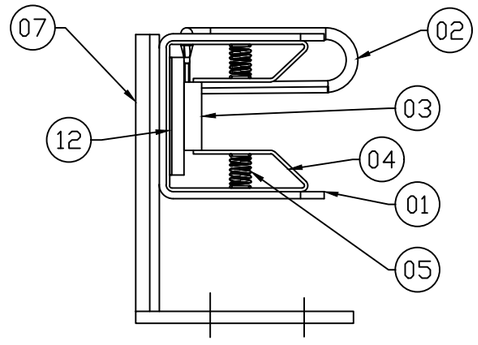
'B'

DETAILS OF
MOVING CONTACT ASSEMBLY

Drawing approval subject to valid vendor registration



ELEVATION



END VIEW

'A'

DETAILS OF
FIXED CONTACT ASSEMBLY

SR.	PART LIST	MATERIAL	QTY/ISO
1	FC C BRACKET / RAINHOOD-6MM THK	MS HDG	6 NOS
2	FC ARCING HORN-ø10MM	MS HDG	6 NOS
3	SPACER-10MM THK	BACKELITE	3 NOS
4	FC M CONTACT (32X4.0)	CU	12 NOS
5	FC SPRINGS	SS	24 NOS
6	TERMINAL PAD (100X10)	AL	6 NOS
7	SUPPORTING CHANNEL-4MM THK	MS HDG	6 NOS
8	MC SUPPORTING BLOCK	AL	6 NOS
9	MC COPPER TUBE HDEC(OD-38 ID-30)	CU	3 NOS
10	MC ARCING HORN ø10MM	MS HDG	6 NOS
11	MOVING CONTACT SUPPORT	MS HDG	3 NOS
12	BI-METALLIC SHEET 2MM THK	AL+CU	6NOS

NOTE:

1. ALL DIMENSIONS ARE IN MM.
2. ALL FERROUS PARTS ARE HOT DIP GALVANIZED.(87 MICRONS)
3. ALL HDE COPPER CONTACT POINTS ARE SILVER PLATED.(15 MICRONS)
4. TOLERANCE AS PER G.A. DRAWING.
5. FOR CONTACT DETAILS FIX CONTACT 'A' & MOVING CONTACT 'B' DETAILS REFER TABLE ANNEXURE 1
7. MOVING CONTACT LENGTH AND FIX CONTACT WILL VARY AS PER FIX CONTACT PAIRS REQUIRED AS PER ANNEXURE 1.

ANNEXURE 1

CURRENT RATING	FIXED CONTACT (A) (CU)				MOVING CONTACT (B) (CU)					TERMINAL PAD
AMPS	SIZE MMxMM	PAIRS NO	AREA SQMM	CURRENT DENSITY A/SQMM	OD MM	ID MM	* (L) LENGTH MM	AREA SQMM	CURRENT DENSITY A/SQMM	SIZE MMxMM
800	32X4.0	2	512	1.6000	38	30	1008	427	2.0000	100X10 AL.

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APTRANSCO/VS/Vijayawada

TRITECH DISCONNECTORS (INDIA) PVT. LTD.

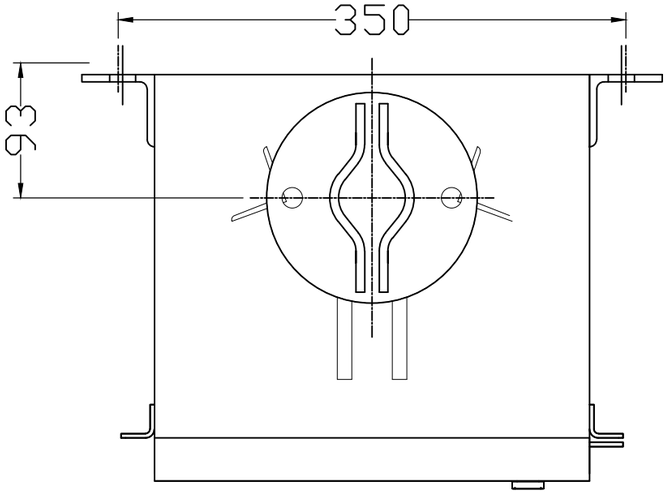
REV NO	DATE	DESCRIPTION	SIGN
		REVISION	

	NAME	SIGN	DATE
DRWN	SHARAD	SRD	28.03.23
CHKD	P.JADHAV	P.J.	28.03.23
APPD	P.JADHAV	P.J.	28.03.23

TITLE: MAIN CONTACTS DETAILS FOR 33KV 800A ISOLATOR

DWG. NO : A308MC11

REV. NO.	SIZE	SHEET	SCALE
	A4	01 OF 01	N.T.S.



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2.For EPC contractors only.

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CHIEF ENGINEER/PROJECTS
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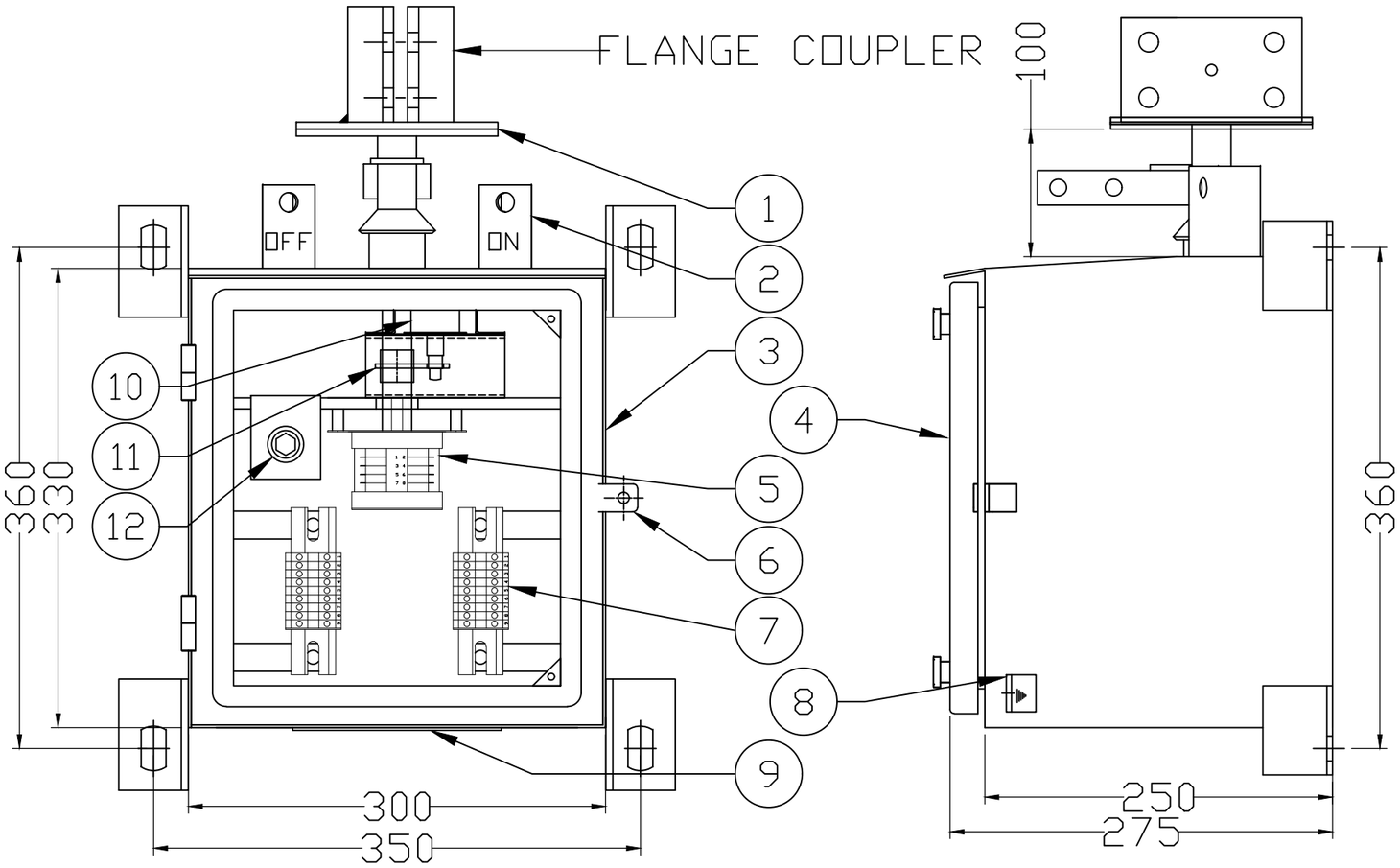
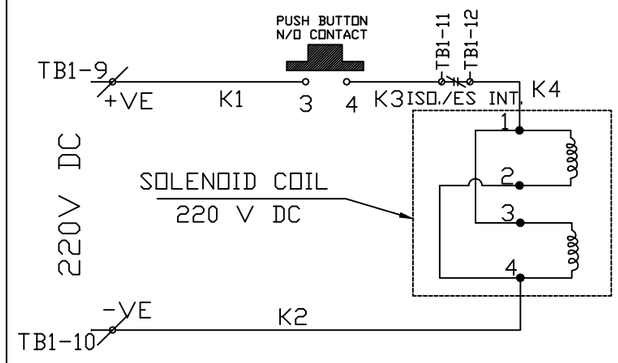
MAKE OF OPERATING BOX - TRITECH DISC.	
SR.	DESCRIPTION
1	TOP FLANGE-8MM THK
2	ON-OFF STOPPER
3	BOX (3MM THK. ALUMINIUM.)
4	DOOR WITH GASKET NEOPRENE 3MM THK.
5	AUX SWITCH (4NO + 4NC)
6	PROVISION FOR PADLOCK (WITHOUT LOCK)
7	TERMINAL CONNECTOR 20% EXTRA (STUD TYPE)
8	EARTHING TERMINAL (BOTH SIDE)
9	REMOVABLE GLAND PLATE
10	SOLENOID COIL
11	INTERLOCK DISC
12	PUSH BUTTON

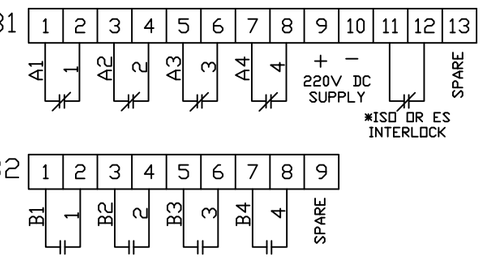


SCHEMATIC DIAGRAM



ELECTRICAL INTERLOCKING CIRCUIT DIAGRAM

AUXILIARY CONTACTS 4NO+4NC



NOTES:
1. ALL DIMENSIONS ARE IN MM.
2. DEGREE OF PROTECTION IP-55.
3. POWDER COATING SHADE OF BOX= LIGHT GRAY (LG 631) THK- 80 MICRONS
4. MANUFACTURING TOLERANCES: ±5%
5. TERMINAL SHALL BE STUD TYPE SUITABLE FOR RING TYPE LUG PROVIDED
6. 20% SPARE TERMINALS PROVIDED FOR CUSTOMER USE.
7. WIRING WILL BE DONE WITH 1100 V. GRADE WITH 2.5 SQ.MM CU. STRANDED P.V.C. INSULATED CONDUCTOR
8. MATERIAL- 3MM THK ALUMINIUM

Drawing approval subject to valid vendor registration

REV NO	DATE	DESCRIPTION	SIGN

REVISION

TRITECH DISCONNECTORS (INDIA) PVT.LTD.
MANUFACTURER OF HV/ EHV ISOLATORS

TRITECH DISCONNECTORS (INDIA) PVT. LTD.

	NAME	SIGN	DATE
DRWN	SHARAD	SRD	06.04.23
CHKD	P JADHAV	P.J	06.04.23
APPD	P JADHAV	P.J	06.04.23

TITLE: MANUAL OPERATING BOX WITH CASTLE INTERLOCK FOR MAINS

DWG. NO :	REV. NO.	SIZE	SHEET	SCALE
BMN04DI0AP	00	A4	1/1	1:1

NOTE:-1.Drawings approval subject to valid type test reports,
to be checked during acceptance tests.
2.For EPC contractors only.

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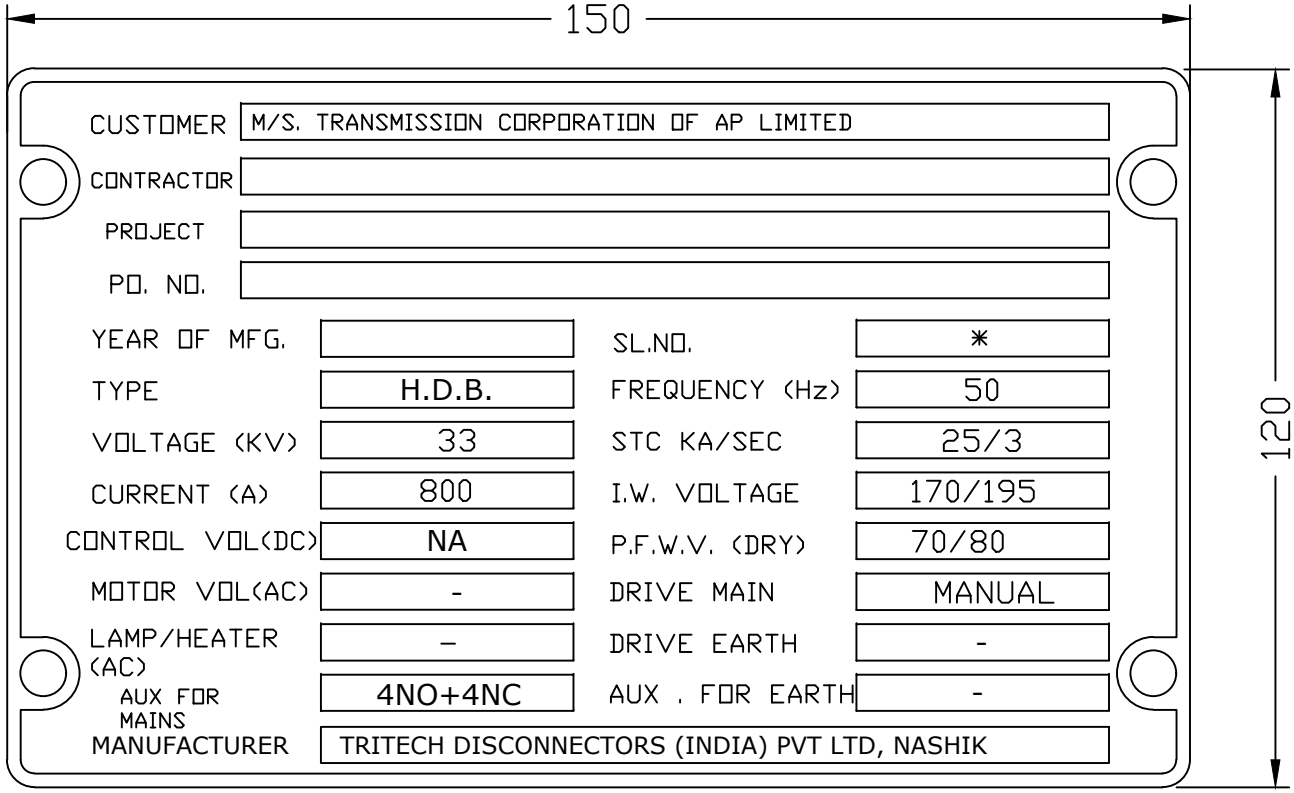

* WOE SERIAL NO.:

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NAME PLATE DETAILS FOR ISOLATOR

1. Minimum 300mm plinth shall be maintained for CT/PT/CVT/ Isolators/IVT in the substation during foundation works to ensure safe live to ground clearance as per IE rules.
2. Since the supply of terminal connectors is not in the scope of manufacturers as mentioned in the drawings. The EPC contractors shall be instructed to supply the same in line with CT/PT/CVT/Isolator /IVTs requirement and capability.

NOTES:

01. ENGRAVE LETTER SIZE-3MM.
02. LETTER ETCHED WHITE ON BLACK BACKGROUND.
03. MATERIAL AIUMINIUM-THK. 24G/0.56MM.
04. PROJECT, CONTRACTOR, PO NO., YEAR OF MFG,SR NO WILL BE AS PER RESPECTIVE ORDER

REV NO	DATE	DESCRIPTION	SIGN
		REVISION	

TRITECH DISCONNECTORS (INDIA) PVT. LTD.

	NAME	SIGN	DATE
DRWN	SHARAD	SRD	30.1.22
CHKD	PRASHANT	P.J	30.1.22
APPD	PRASHANT	P.J	30.1.22

TITLE: 33KV 800A RATING PLATE

DWG. NO : NP036-0800 | REV. NO. 00 | SIZE A4 | SHEET 1/1 | SCALE 1:1

NOTE:-1.Drawings approval subject to valid type test reports, to be checked during acceptance tests.
2.For EPC contractors only.

TRITECH DISCONNECTORS (INDIA) PVT.LTD
MANUFACTURER OF HV/ EHV ISOLATORS

GTP-33KV 800A WITHOUT EARTH SWITCH ISOLATOR BANGING TYPE

Sr. No.	Description	Particulars
1)	Type/Installation	DBCR,OUTDOOR TYPE
2)	Manufacturer's Name and Country of Manufacture	TRITECH DISCONNECTORS (INDIA) PVT LTD ,INDIA
3)	Standards according to which the isolators are manufactured	IS 9921,IEC129
4)	Maximum design voltage at which the isolator can operate (kV)	36 KV
5)	Frequency (Hz)	50 HZ
6)	Rated Voltage (kV)	33 KV
7)	Maximum current that can be safely interrupted by the isolator	
a)	Inductive (A & % PF)	0.7A@0.15PF
b)	Capacitive (A & % PF)	0.7A@0.15PF
8)	Continuous current rating Nominal (Amps) Under site conditions (Amps)	800 AMPS
9)	Rated short time current	
a)	For 3 seconds (kA rms)	25 KA RMS
b)	For 1 second (kA rms)	-
c)	Rated peak short time current (kVp)	62.5 KAP
10)	Current density at the minimum cross-section of	**800**
a)	Moving blade (Amps/Sq.mm)	2.0
b)	Terminal pad	AL 1.0
c)	Contacts	1.6
d)	Terminal Connector	1
11)	Maximum Temp. rise of current carrying parts when carrying rated current continuously (deg.c)	WITHIN LIMITS OF IS/IEC-9921
12)	Derating factor for specified site conditions	UNITY
13)	Insulation Levels	
a)	Impulse withstand voltage (kV peak) Phase to Earth & Isolating Distance	170 KV/195 KVP
b)	Switching surge withstand voltage (kV peak) Phase to Earth & Isolating Distance	NOT APPLICABLE
c)	Power Frequency withstand voltage (kV rms) Phase to Earth & Across isolating Distance	70/80 KV RMS FOR 1MINUTE
14)	Minimum clearance in air:	
a)	Between poles (mm)	1100MM FOR PHASE SPACING OF 1300 MM.
b)	Between live parts and earth (mm)	508MM
c)	Between live parts when switch is open:	
	i) On the same pole (mm)	715 MM FOR POLE SPACING OF 915 MM.
	ii) Between adjacent poles (mm)	1100MM
15)	Rated mechanical terminal load	
	a) Load along the terminal connector side (kg.)	NOT ASSIGNED IN IS/IEC

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	b) Load across the terminal connector side (kg.)	NOT ASSIGNED IN IS/IEC	
16)	Torque required to operate the switch in Kgm (Not specified)	MAIN-35KGM,EARTH-35 KGM	
17)	Contact Zone		
a)	Horizontal deflection (mm)	NOT APPLICABLE FOR DOUBLE BREAK ISO.	
b)	Vertical deflection (mm)	--------D0----------	
c)	Total amplitude of longitudinal movement w.r.t. conductor supporting fixed contact (mm)	---------DO----------	
18)	Design and Construction		
a)	No. of insulators per pole	THREE STACKS/POLE	
b)	No. of breaks per pole	MAIN-2	
c)	Type of closing /Opening mechanism (Horizontal/Vertical break straight etc.)	MAIN-HORIZONTAL	
d)	Contacts:	**MAINS**	**E/S**
	i) Material and grade	CU	NA
	ii) Cross-sectional area (Sq.mm)	512	NA
e)	Moving Blades:	**MAINS**	**ENA**
	i) Material and grade	CU	NA
	ii) Cross-sectional area (Sq.mm)	427	NA
f)	Contact Support:		
	i) Material and size of channel/block	MS HDG, 4MM	
	ii) Material and size of plate	MS HDG., 6MM	
g)	Rain hood - Material grade and size	MS HDG , 5MM	
h)	Turn and twist mechanism		
	i) Material and size of clamps	NA	
	ii) Material size of springs	NA	
	iii) Whether springs are encased	NA	
i)	Nuts and Bolts:		
	i) Size, material and grade in live parts	LESS THAN 3/8” SS,ABOVE 5/8”HDG	
	ii) Size, material and grade in other parts	3/8” ABOVE HDG	
j)	Insulator base plate Material and size of plate below insulators	MS HDG-10MM	
k)	Bearings:		
	i) Material and size of housing	AL ALLOY SUITABLE FOR 25 MM DIA SHAFT	
	ii) No. of bearings, location and size	2, BELOW ROTATING INSULATOR STACK.	
l)	Tandem pipe:		
	i) Size, length, class and no. of pipes	NB25,CL B,GI PIPE-3.5 M	
	ii) Size of shackle, screw	-	
	iii) No. of bearings/bush and its material and size	BRASS BUSH.	
m)	Type of interlock	MECHANICAL.	
n)	Down pipe size, length and class	40 NB,CL B,GI PIPE	
o)	Type of universal/swivel joint		
	i) Between bearing and down pipe	UNIVERSAL.	
	ii) Between down pipe and operating mechanism	VERNIER TYPE	
p)	Operating mechanism:	MAINS- MANUAL	
	i) Control cabinet		

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NOTE:-1.Drawings approval subject to valid type test reports, to be checked during acceptance tests.
2.For EPC contractors only.

	Material and thickness	3MM THK ALUMINIUM
	Degree of protection	IP 55
	Type size and No. of cable glands	CONTRACTORS SCOPE
	Whether removable gland plate provided	YES
q)	Base:	
	i) Size of steel sections used	100X50X5 MM FORMED
	ii) Overall size	100X50X5X1070 MM
	iii) Total weight	8.50 KG /POLE
r)	Aux switch	4NO / 4NC CONTACT FOR MAINS SWITCH 10A,DC breaking with 2A - 1 No.
s)	Terminal blocks	M3 Stud type TB
t)	Insulated Wires	1100 V grades, 2.5 Sq.mm PVC For Auxiliary Circuit and 2.5 Sq.mm for Power circuit

1. Minimum 300mm plinth shall be maintained for CT/PT/CVT/ Isolators/IVT in the substation during foundation works to ensure safe live to ground clearance as per IE rules.
2. Since the supply of terminal connectors is not in the scope of manufacturers as mentioned in the drawings. The EPC contractors shall be instructed to supply the same in line with CT/PT/CVT/Isolator /IVTs requirement and capatibility.

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