

TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD.

GUARANTEED TECHNICAL PARTICULARS FOR 245kV 800A HDB ISOLATOR WITH DOBULE EARTH SWITCH

S.No	DESCRIPTION	GUARANTEED VALUE
1	Type / Installation	: "DBR' Double Break Center post rotating type" / Outdoor installation
2	Manufacturer's Name and Country of Manufacture	: PAVANI POWR SYSYEM PVT LTD. INDIA
3	Standards according to which the isolators are manufactured	: IS: 9921 - Part-I to V / IEC:62271-102
4	Miximum design voltage at which the isolator can operate (kV)	: 245 Drawing approval subject to valid vendor registration
5	Frequency (Hz)	: 50
6	Rated voltage (kV)	: 220
7	Maximum current that can be safely interrupted by the isolator Inductive (A & % PF) Capacitive (A & % PF)	: Inductive- 0.7 Amps at 0.15 p.f. Capacitive- 0.7 Amps at 0.15 p.f.
8	Continuous current rating Nominal (Amps) under site conditions	: 800
9	Rated short time current	: MAIN SWITCH / EARTH SWITCH.
	i) For 3 seconds (kA rms)	: 40 / 50KA 3.Sec.
	ii) For 1 second (kA rms)	: Not applicable
	iii) Rated peak short time current (kVp)	: 100 / 125
10	Current density at the minimum cross-section of	: Contact sizes indicated in Annexure - III of specification & as per the property of materials.
	a) Moving blade (Amps/ Sq.mm) Cu. Tube	: 2.0 Amps / Sq.mm for HDE Cu. Tube
	b) Terminal pad : Aluminum Flat	: 1.0 Amp/ Sq.mm for EC grade Alu. Flat
	c) Contacts : Cu.Flat	: 1.6 Amps/Sq.mm for HDE Cu. Flat
	d) Terminal connector : Aluminm Casting	: 1.0 Amps/Sq.mm for Alu. Alloy.
11	Maximum Temp. Rise of current carrying parts when carrying rated current continuously (deg.C)	: Within the specified limits of IS: 9921 - PartII/ IEC-62271-102
12	Insulation Levels	:
	i) Impulse withstand voltage (kV peak) phase to earth across isolating distance:	: 1050/ 1200 kV peak CHIEF ENGINEER/PROJECTS
	ii) Switching surge withstand voltage (kV peak) phase to earth across isolating distance	: Not applicable APTRANSCO/VS/VIJAYAWADA
	iii) Power frequency withstand voltage (kV rms) Phase to earth isolating distance	: 460/ 530 kV rms
13	Minimum clearance in air	:
	i) Between poles (mm)	: Phase spacing of 4500 mm
	ii) Between live parts and earth (mm)	: 2100 mm (Equal to dry arcing distance of insulators selected)
	iii) Between live parts when switch is open	:
		a) On the same pole (mm)
	b) Between adjacent poles (mm)	: 4500

Since the supply of terminanal connectors is not in the scope of manufacturer as mentioned in the drawings. The EPC contractor shall be instructed to supply the same line with CT/PT/CVT/Isolator/IVT /LA /Breaker requirement and campability.

7621886/2023/EEMRT-ENE51-1999 since tests.

PAVANI POWER SYSTEMS PVT. LTD.

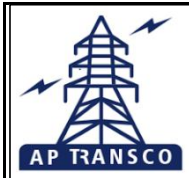
2. For EPC contractors only.

S.No		DESCRIPTION	GUARANTEED VALUE
15		Rated mechanical terminal load	:
i)	Load along the terminal connector side (Kg.)	:	102
ii)	Load across the terminal connector side (Kg.)	:	33.7
16	Torque required to operated the switch in Kg.m		: 40
17		Design and Construction	:
i)	No. of insulators per pole	:	Three
ii)	No. of breaks per pole	:	Two
iii)	Type of closing / opening mechanism (Horizontal/Vertical break straight etc.)	:	Horizontal double break
iv)	Contacts	:	
	a) Material and grade	:	Hard drawn electrolytic copper flat, contact area is silver plated (15 Microns)
	b) Cross-sectional area (mm)	:	512 sq.mm for 800 Amps
v)	Moving blades	:	
	a) Material and grade	:	Hard drawn electrolytic copper flat, contact area is silver plated (15 Microns)
	b) Cross-sectional area (mm)	:	427 sq.mm for 800 Amps
vi)	Contact support	:	
	a) Material and size of channel/block	:	4 mm thick, MS HDG
	b) Material and size of plate	:	6 mm thick, MS HDG Plate
vii)	Rain hood - Material grade and size	:	1mm GI Sheet
viii)	Turn and twist mechanism	:	
	a) Material and size of clamps	:	40 x 8 mm thick, MS HDG flat.
	b) Maerial size of springs	:	3.0 mm Stainless steel wire
	c) Whether springs are encased	:	Not encased.
ix)	Nuts and Bolts	:	
	a) Size, material and grade in live parts	:	Less than M12: Stainless steel
	b) Size, material and grade in other parts	:	M12 and above: MS HDG.
x)	Insulator base plate material and size of plate below insulators	:	270 x 270 mm X 12mm MS HDG plate
xi)	Bearings	:	
	a) Material and size of housing	:	MS HDG suitable for 40 ID tapper roller/ ball bearing.
	b) No. of bearings, location and size	:	2 Nos . Below centre rotating post insulator.

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7621886/2023/EEMRT-ENE51

PAVANI POWER SYSTEMS PVT. LTD.,

acceptance tests.
For EPC contractors only.

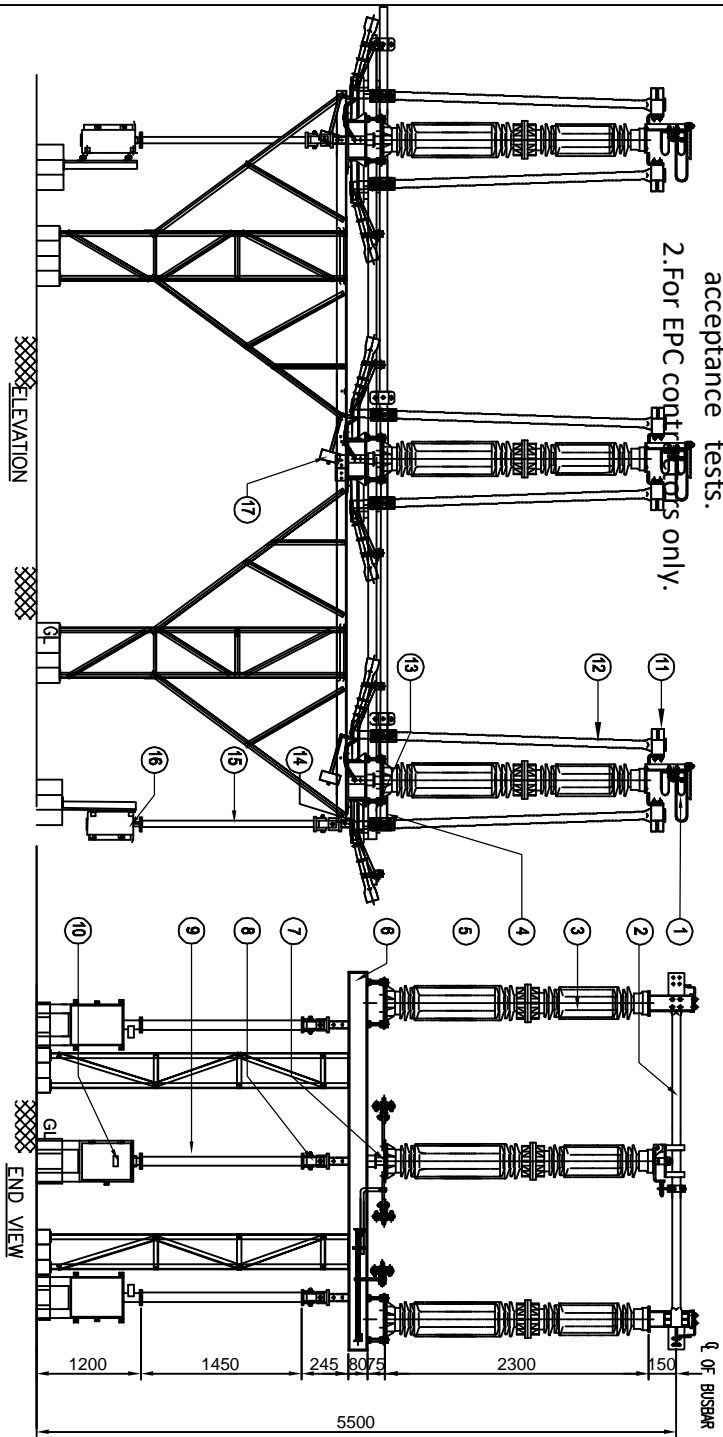
TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD.

GUARANTEED TECHNICAL PARTICULARS FOR 245KV 800A HDB
ISOLATOR WITH DOBULE EARTH SWITCH

S.No	DESCRIPTION	GUARANTEED VALUE
xii)	Tandem pipe	:
	a) Size, class and No. of pipes	: 32mm NB Class B,GI Pipe for Main switch-2Nos for Earth switch-1No.
	b) Size of shackle, screw	: Suitable for 32mm NB GI Pipe
	c) No. of bearings/bush and its material and size	: Not applicable
xiii)	Type of interlock	: Electrical interlock between isolator and correspondin breaker / Mechanical interlock between M.S & E.S.
xiv)	Down pipe size and class	: 50 NB Class B GI pipe
xv)	Type of universal/swivel joint	:
	a) Between bearing and down pipe	: Universal joint
	b) Between down pipe and operating mechanism	: Vernier flange
xvi)	Operating mechanism	: Motor operated mechanism for main switch and manual operated mechanism with reduction gear for earth switch.
	a) Control cabinet material and thickness	: 3.mm THK Aluminum Sheet
	b) Degree of protection	: IP: 55 as per IS: 2147
	c) Type, size and No. of cable glands	: Double compression type 2Nos. 19 mm (Contractor scope of supply)
	d) Whether removable gland plate provided	: Yes, provided.
	e) Make, type, rating and quantity of motors	: HE/CGL/Remi or Eqvt. 3 Phase, 415 V, 0.5 HP
	f) Auxilliary blocks	: 12 NO + 12 NC Contacts for main switch, 6 NO + 6 NC Contacts for Earth switch, 10 Amps, 2 A DC Breaking with 2A - 1 No.
	g) Terminal blocks	: UBT-4
	i) Insulated wires	: 1100 V grades, 2.5 Sq.mm PVC For Auxilliary Circuit and 2.5 Sq.mm for Power cricuit.
	j) HRC Fuse / MCB	: C&S/Siemns/ABB or Eqvt.
	k) Space Heater	: 1 No. 230 V AC - 80 watts
	l) Interlocks	: with Rotary switch Kaycee or Eqvt.
xvii)	Base:	:
	a) Size of steel section used	: 145x80x5mm Rectangle box profile(M.S.HDG)
	b) Overall sie	: 145 x 80 x 3560 mm
	c) Total weight.	: 95Kgs (Approx.) one pole
18	List of drawings furnished.	: Enclosed.
Name of the firm		: For Pavani Power Systems Pvt. Ltd.
Signature of Bidder		: 
Designation & Seal		: (T. SESHAGIRI RAO) Managing Director
Date		: 18-05-2023
CHIEF ENGINEER/PROJECTS APTRANSCO/VS/VIJAYAWADA		

NOTE: 1. Drawings Approval subject to valid type test reports, to be checked during acceptance tests.

2. For EPC contracts only.



PART LIST:

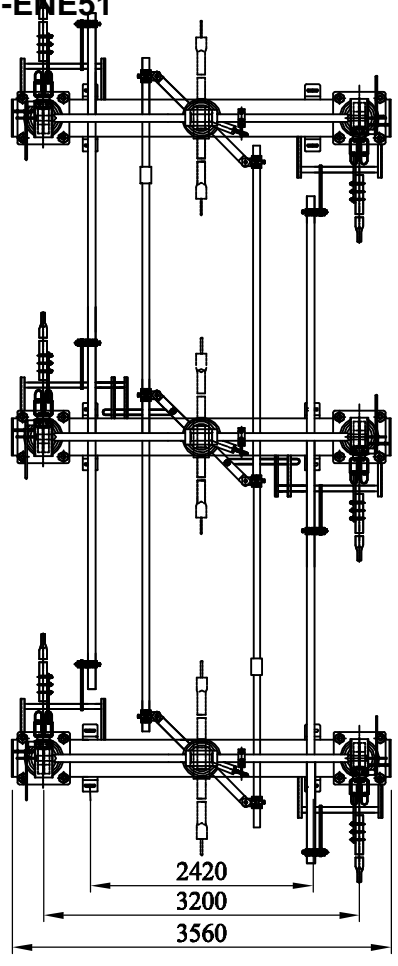
1. FIXED CONTACT ASSEMBLY
2. MOVING CONTACT ASSEMBLY
3. INSULATOR STACK (COSTUMER SCOPE)
4. TANDEM PIPE FOR INSULATOR (32NB, CLASS "B" G.I PIPE)
5. ELEVATOR PLATE (270X270X12MM THK M.S HDG)
6. BASE CHANNEL (145 X 80 X 5MM THK. M.S HDG)
7. ROTATING STOOL BASE WITH LEVER ARM & CLAMP (M.S HDG)
8. OPERATING PIPE CONNECTING BUSH (M.S HDG)
9. DOWN PIPE FOR INSULATOR (50NB CLASS"B" G.I PIPE)
10. MOTOR OPERATING MECHANISM FOR INSULATOR
11. E.S FIXED CONTACT ASSEMBLY
12. E.S MOVING CONTACT ASSEMBLY
13. TANDEM PIPE FOR E.S (32NB CLASS "B" G.I PIPE)
14. TOP OPERATING MECHANISM FOR EARTH SWITCH (M.S HDG)
15. DOWN PIPE FOR E.S (50NB CLASS "B" G.I PIPE)
16. MANUAL OPERATING MECHANISM FOR E.S (RG BOX)
17. COUNTER WEIGHT FOR E.S (Per pole 10Kgs Approx.)

REFERENCE DRAWINGS:

1. FOR INSULATOR CONTACT ASSEMBLY (800 AMPS)
2. FOR EARTH SWITCH CONTACT ASSEMBLY
3. FOR MOTOR OPERATED MECHANISM FOR MAIN SWITCH
4. FOR MANUAL OPERATED MECHANISM FOR EARTH SWITCH
5. FOR MECHANICAL INTERLOCK BETWEEN INSULATORS AND EARTH SWITCH.
6. FOR SCHEMATIC DIAGRAM
7. FOR TERMINAL BLOCK DETAILS
8. FOR NAME PLATE DETAILS

NOTE:

1. ALL DIMENSIONS ARE IN MILLIMETERS
2. THE INDICATED DIMENSIONS ARE SUBJECT TO THE MANUFACTURING TOLERANCE:
 UP TO 50mm -----±3%; 51 TO 100mm ----- ±2%
 101 TO 300mm ----- ±1%; ABOVE 300mm -----±0.5%
 3. SHORT TIME CURRENT RATING 40KA/50KA rms. FOR 3 Sec.
 4. MIN. CREEPAGE DISTANCE 3625 mm(25mm/KV)
 5. APPLICABLE STANDARD : IEC: 62271-102
 6. ALL FERROUS PARTS ARE HOT DIP GALVANIZED (BSMICRONS)



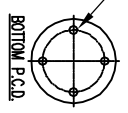
PLAN

Drawing approval subject to valid vendor registration

18 X 36 SLOT HOLES

INSULATOR FIXING DETAILS

4Nos. Ø16 TAP HOLES ON 127 PCD.



2420

2420

225

BASE CHANNEL FIXING DETAILS

CHIEF ENGINEER/PROJECTS
APTRANSCO/VS/VIJAYAWADA

For Pavani Power Systems Pvt. Ltd.

(T. SESHAGIRI RAO)
 Managing Director

TRANSMISSION CORPORATION OF
ANDHRA PRADESH LTD



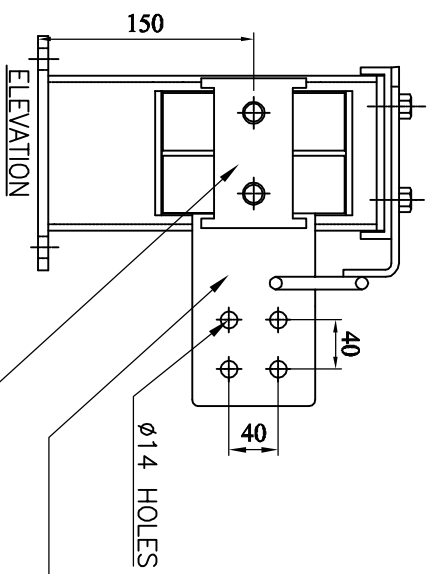
REVISIONS	D	C	B	A

TITLE:	SCALE: 1:1
245KV, 800A, TP, HDB, RT, INSULATOR WITH DOUBLE E.S. (WITH MOTOR OPERATING MECHANISM)	DATE: 18-05-2023
DRAWN	CHECKED
APPROVED	SHEET: 01 OF 09
DESIGN: PPSPT-APT-GAD-44-01	

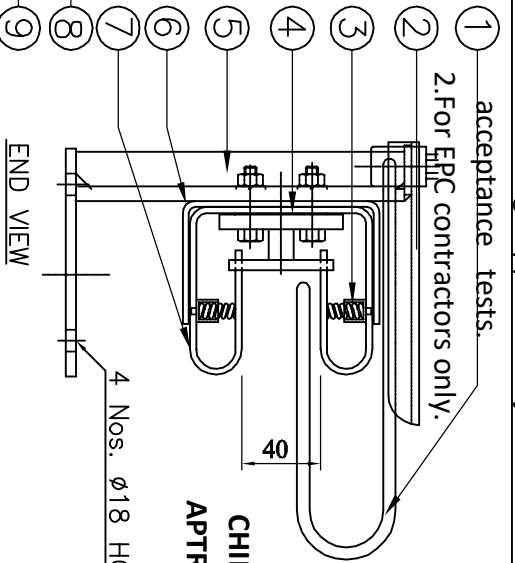
PAYANI POWER SYSTEMS PVT.LTD.
 Plot No. 06/065/4/6, K.K. OPINERS SOCIETY,
 TDA, DULLAPALLY, QUTHUBULLAPUR MANDAL,
 KODURU ROAD, HYDERABAD - 500100.
 MEDICAL MARKAIGER DIST. TELANGANA

NOTE: 1. Drawings Approval subject to valid type test reports, to be checked during

FIXED CONTACT ASSEMBLY:



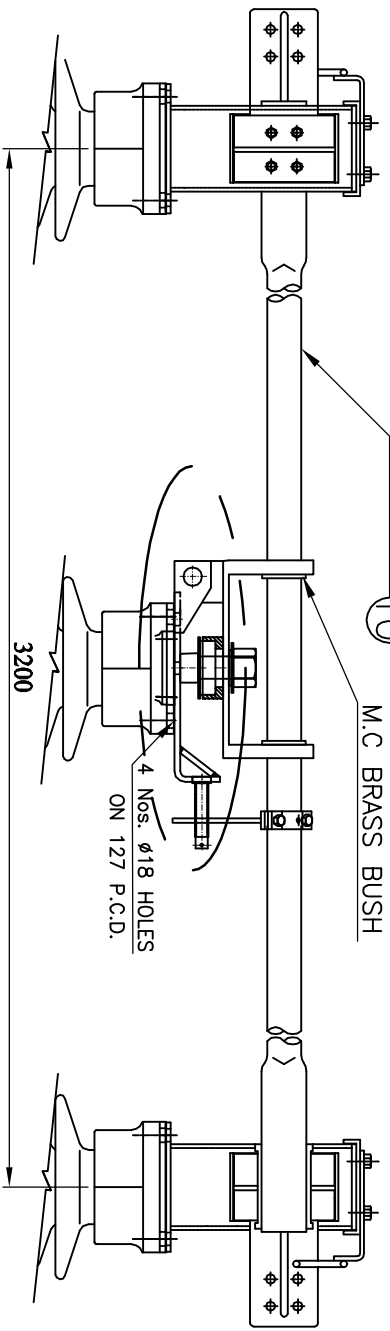
MOVING CONTACT ASSEMBLY:



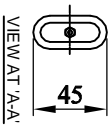
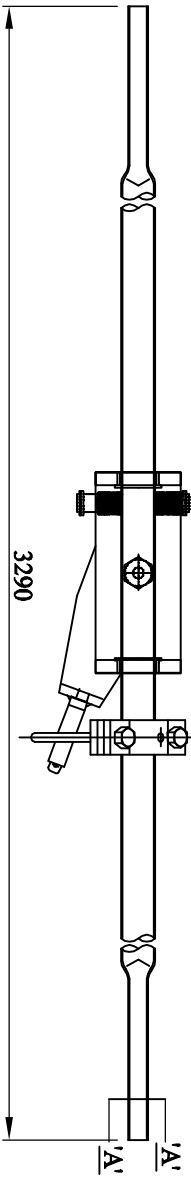
CHIEF ENGINEER/PROJECTS
APTRANSCO/VS/VIJAYAWADA

SL NO.	DESCRIPTION	SIZE IN MM	MATERIAL
1.	ARCING HORNS	Ø10MM ROD	M.S HDG
2.	RAIN HOOD	1MM SHEET	M.S HDG
3.	JAW SPRINGS	Ø2mm WIRE	STAINLESS STEEL
4.	BI-METALLIC SHEET	2mm THK	ALU. + CU.
5.	FIXED CONTACT SUPPORT CHANNEL	80x30x4 mm	M.S HDG
6.	JAW SUPPORT BRACKETS	32 X 5 FLAT	M.S HDG
7.	FIXED CONTACT JAWS (2. NOS)	32 X 4 FLAT	HDEC
8.	JUMPER PAD	75 X 12 FLAT	ALUMINIUM
9.	FC SPACER	-----	ALUMINIUM
10.	MOVING CONTACT	38-ODX30-ID	HDEC

BILL OF MATERIAL PER ONE SET



Drawing approval subject to valid vendor registration



- NOTE:
1. ALL DIMENSIONS ARE IN MILLIMETER
 2. ALL FERROUS PARTS ARE HOT DIP GALVANIZED (85 MICRONS)
 3. ALL NON FERROUS CONTACT POINTS ARE SILVER PLATED (15 MICRONS)
 4. MOVING CONTACT ASSEMBLY SHOWN IS FOR TURN & TWIST ASSEMBLY

For Pavani Power Systems Pvt. Ltd.
(T. SESHAGIRI RAO)
Managing Director

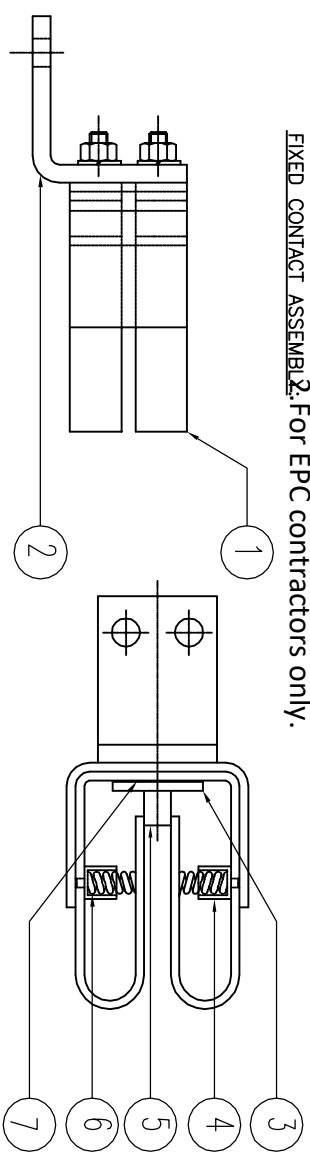
7621886/2023/EEMRT-ENE51

Since the supply of terminal connectors is not in the scope of manufacturer as mentioned in drawings. The EPC contractor shall be instructed to supply the same line with /PT/CVT/Isolator/IVT /LA /Breaker requirement and compability.

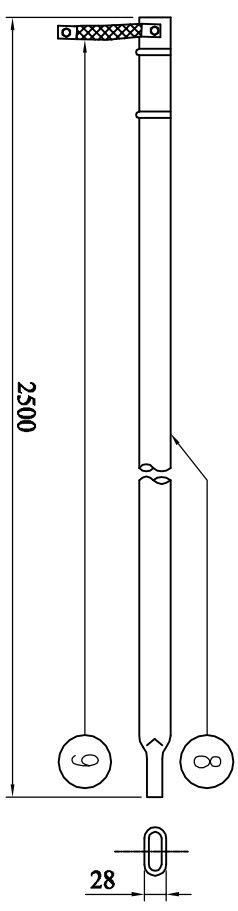
		TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD	
AP TRANSCO		MAIN SWITCH CONTACT ASSEMBLY (FOR 246kV, 800A ISOLATOR)	
		PAVANI POWER SYSTEMS PVT.LTD. Plot No. 06/056/4/6, K.K. OVERSEAS SOCIETY, TDA, DULLAPALLY, QUTHUBULLAPUR MANDAL, KOMARLA DIST, HYDERABAD - 500100. KORAPUT WALKER DIST, TELANGANA	
REVISIONS D C B A	SCALE: 1:1 DATE: 18-05-2023	CHECKED APPROVED SHEET: 02 OF 09 DRG. NO: PPSPT-APT-MSCA-A4-02	DATE: 18-05-2023

NOTE: 1. Drawings Approval subject to valid type test reports, to be checked during acceptance tests.

FIXED CONTACT ASSEMBLY: For EPC contractors only.



MOVING CONTACT ASSEMBLY:



Drawing approval subject to valid vendor registration

Since the supply of terminal connectors is not in the scope of manufacturer as mentioned in the drawings. The EPC contractor shall be instructed to supply the same line with CT/PT/CVT/Isolator/VT /LA /Breaker requirement and capability.

Live part to ground clearance shall be maintained during erection as per IE rules.

PART LIST:




1. JAWS (32 x 4 , 2 Nos. HDEC FLAT SILVER PLATED)
2. F.C. SUPPORT PLATE (8 mm THICK M.S. HDG)
3. JUMPER PLATE (75 x 12 AL. FLAT)
4. BUSH (NYLON)
5. SPACER (ALUMINIUM)
6. SPRINGS (φ2mm, STAINLESS STEEL WIRE)
7. MOVING CONTACT ASSEMBLY (38-ODX30-ID HDEC TUBE)
8. COPPER FLEXIBLE (25X4MM, 4NOS TIN PLATED)

NOTE:

1. ALL DIMENSIONS ARE IN MILLIMETER
2. ALL FERROUS PARTS ARE HOT DIP GALVANIZED (85 MICRONS)
3. ALL NON FERROUS CONTACT POINTS ARE SILVER PLATED (15 MICRONS)
4. NECESSARY BOLT, NUTS, PLAIN & SPRING WASHERS WILL BE FITTED WITH EQUIPMENT

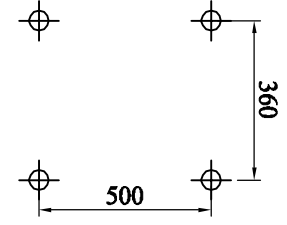
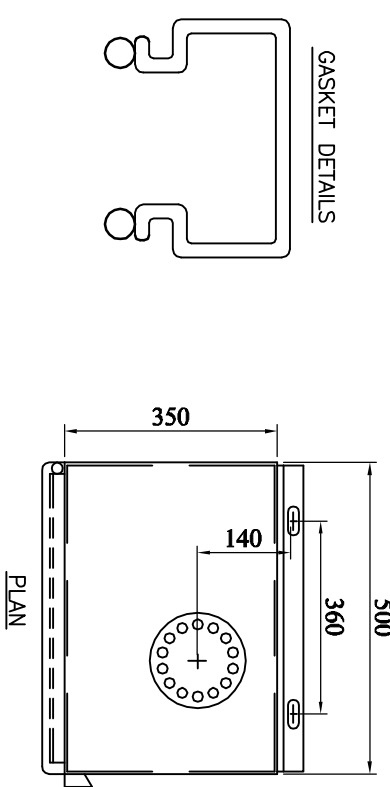
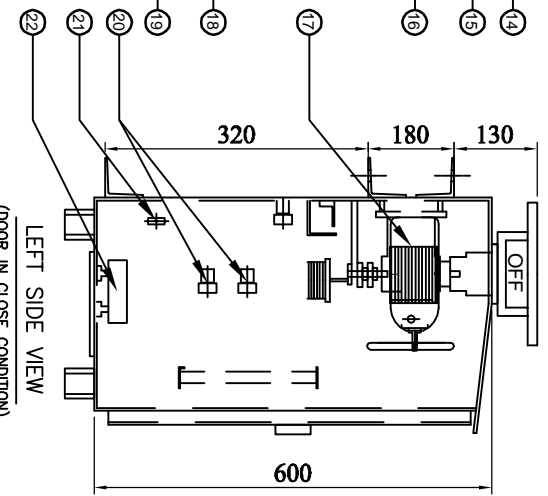
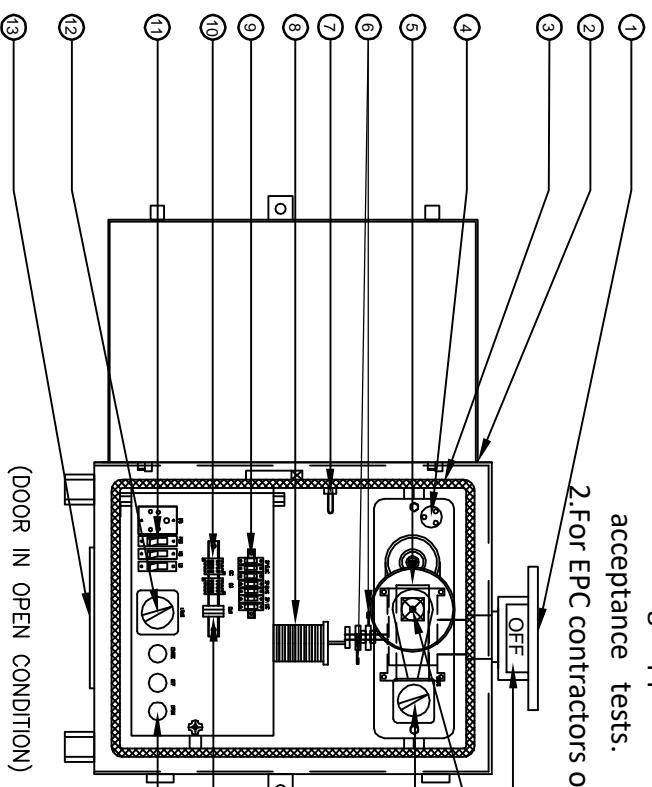
CHIEF ENGINEER/PROJECTS
APTRANSCO/VS/VIJAYAWADA

For Pavani Power Systems Pvt. Ltd.
(T. SESHAGIRI RAO)
Managing Director

 TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD		TITLE: BARTH SWITCH CONTACT ASSEMBLY (FOR 245KV, ISOLATOR)	
		SCALE: 1:1	
REVISIONS:		DATE: 18-05-2023	DRAWN:
D	C	B	A
 PAVANI POWER SYSTEMS PVT.LTD. Plot No. 06/065/4/6, K.K. OVERSEAS SOCIETY, DDA, DULAPALLY, QUTHUBULLAPUR MANDAL, KOMPALLA POST, HYDERABAD - 500100. MEDICAL WALKER DIST. TELANGANA		CHECKED:	APPROVED:
DRG. NO: PPSPT-APT-ESCA-44-03		SHEET: 03 OF 09	

7621886/2023/EPMRT-ENE51

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



Drawing approval subject to valid vendor registration.

PART LIST:-

1. 14-HOLES FLANGE
2. CUBICAL WITH DOOR (3mm Alu. SHEET)
3. RUBBER GASKET (EPDM)
4. THORMOSTAT (30°C TO 85°C)
5. REDACTION GEAR BOX
6. LIMIT SWITCHES (OPEN & CLOSE)
7. CUBICLE LAMP HOLDER
8. AUXILIARY SWITCH - 12NO+12NC
9. 3-POLE MCB-FOR MOTOR SUPPLY
2-POLE MCB-FOR SINGLE PHASE SUPPLY
10. CONNECTORS FOR OPEN & CLOSE
11. POWER SOCKET/LIGHT & HEATER SWITCHES
12. LOCAL/REMOTE/MANUAL SELECTOR SWITCH
13. DETACHABLE TYPE CABLE GLANDS PLATE
14. ON/OFF INDICATOR
15. MANUAL OPERATING ARRANGEMENT
16. INTER LOCK ROTARY SWITCH
17. MOTOR (0.5HP 415V AC, 50 Hz)
18. OLR-OVER LODE RELAY
19. PUSH BUTTONS
20. TERMINAL BLOCK
21. EARTHING TERMINAL-2 Nos.
22. HEATER

ALL DIMENSIONS ARE IN MILLIMETERS
CUBICLE WILL BE POWDER COATED WITH LIGHT GRAY SHADE NO:631 OF IS : 5
DEGREE OF PROTECTION IP: 55 AS PER IS : 13947
20% SPARE TERMINALS WILL BE PROVIDED AND SHALL BE UNIFORMLY DISRIBUTED
TO ALL TERMINAL BLOCKS EQUALLY
WIRING WILL BE DONE WITH 1100V.GRADE 2.5 Sq.MM CU STRANDED P.V.C.
INSULATED CONDUCTOR
WEIGHT OF THE BOX : 95Kg (APPROX.)
PPSP PL MAKE REDUCTION GEAR RATIO:20:1 MATERIALS EN8/STEEL

CHIEF ENGINEER/PROJECTS
APTRANSCO/VS/VIJAYAWADA

For Pavani Power Systems Pvt. Ltd.
(T. SESHAGIRI RAO)
Managing Director

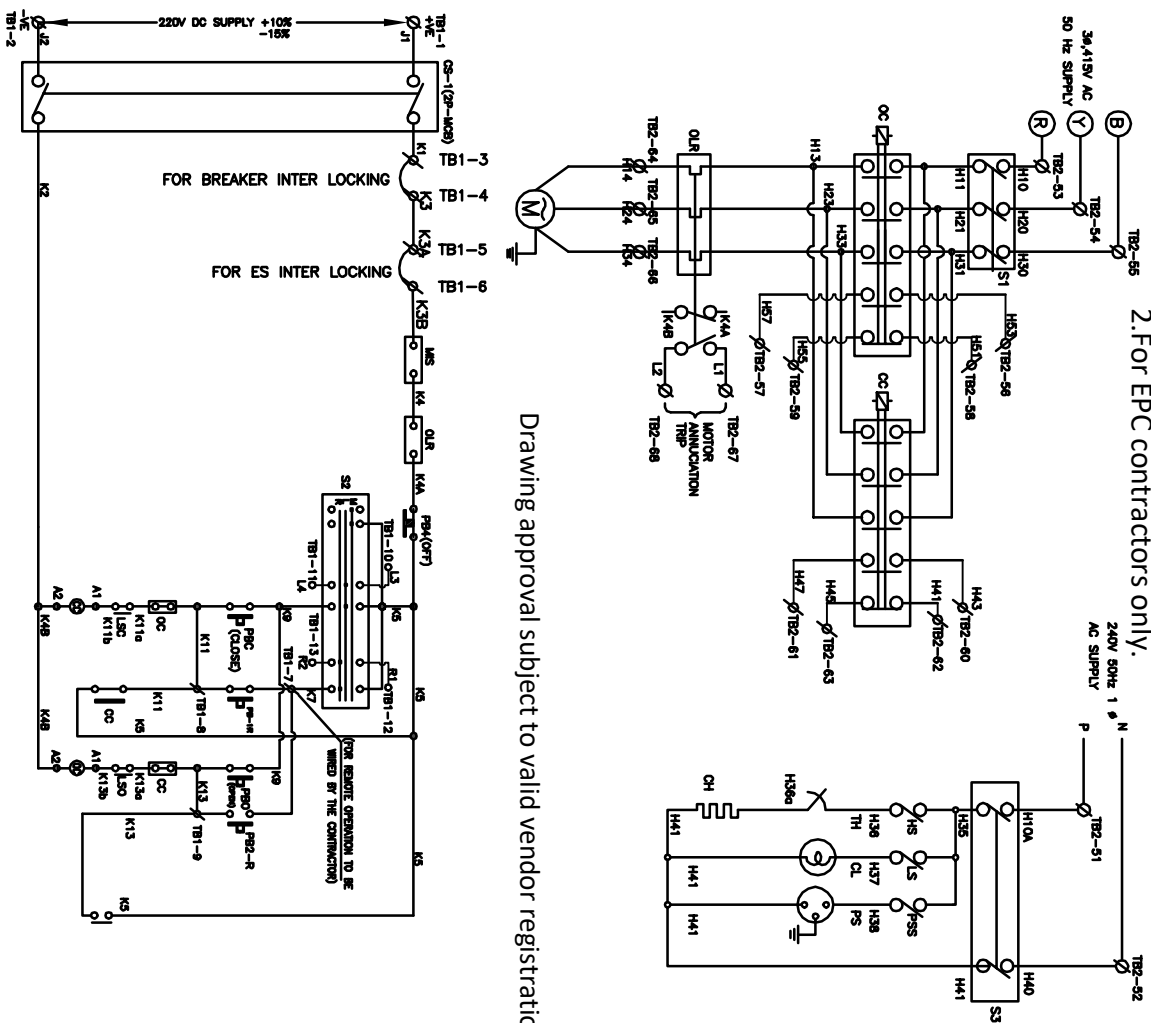


TRANSMISSION CORPORATION OF
ANDHRA PRADESH LTD

REVISIONS D C B A		SCALE: 1:1 DATE: 18-05-2023	
PROJECT: MOTOR OPERATING MECHANISM BOX (FOR 245KV ISOLATOR)		DRAWN:	
DESIGNER: PAVANI POWER SYSTEMS PVT.LTD. Plot No. 06/065/4/6, K.K. OVERSEAS SOCIETY, DDA, DULAPALLY, QUTHUBULLAPUR MANDAL, KODURU ROAD, HYDERABAD - 500100. MICROFIL MANUFACTURER DIST. TELANGANA		CHECKED:	
APPROVED:		SHEET: 05 OF 09	
DRG. NO: PPSP-APT-MOM-44-05		DATE:	

NOTE: 1. Drawings Approval subject to valid type test reports, to be checked during acceptance tests.

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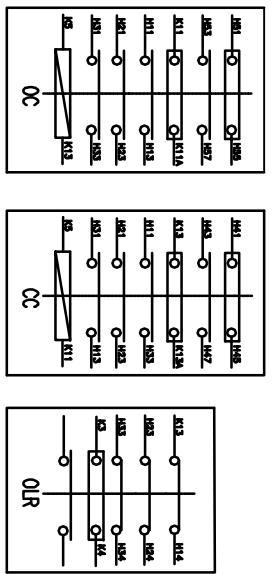
Drawing approval subject to valid vendor registration

LEGEND	DESCRIPTION	MAKE
CC & OC	Close & Open contactors 220V DC, 7A	C&S/ SIEMENS/ Schneider/ ABB
CS1&CS2	Compact fluorescent lamp	PROVISION FOR LAMP.
S3	Cubic heater (80W,240V)	Grish Ego./Kontakt Pyrosensors
HS	AC 3ø 415V MCB-6A for motor	C&S/ SIEMENS/ Schneider/ ABB
MIS	AC 1ø 240V MCB-16A for AC supply	C&S/ SIEMENS/ Schneider/ ABB
LS	AC 1ø 240V, 6A one way switch for heater	Anchor/MARU
LSC	Manual interlock switch	Recom/Kaycee/Jabdalaji/MANI
LSD	Lamp switch 240V, 6A one way switch	Anchor/MARU
OLR	Opens when the isolator opens, 10A 1NO+1NC	JAI BALAJI/MANI
PBC & PBO	Thermostat 30° to 85°C	Bhoskary/Mavis/Grish EGO
	Over load relay with SPP (1.0A TO 1.6A)	C&S/ SIEMENS/ Schneider/ ABB
	Close and open push buttons, 10A	Vishnov/Siemens/Schneider/C&S
	Power socket 6A, 1ø, 3pin, 230V	Anchor/CGL OR Equip.
	Power socket 6A, 1ø, 3pin, 230V	Anchor / Maru OR Equip.
	AC 1ø 230V one way switch	Anchor/Maru
	Local / Remote / Manual selector switch	Recom/Kaycee/Jabdalaji/MANI
	Motor (0.5 HP 3ø 415V AC, 50Hz)	REMI/LHP/ELCEN/CGL
	08NO + 08 NC	Power Drives/Imax/Mani's
AUX SWITCH	Push button to OFF the circuit 10 A	Vishnov/Siemens/Schneider/C&S
	Terminal block.	Vin Mech/Elmex/Connectwell

OPERATING INSTRUCTIONS:


1. Operation is possible only when the breaker is 'OPEN' ensure this condition is satisfied
2. For manual operation of isolator follow the following steps:
 - i) Keep selector switch (s2) in manual position.
 - ii) Rotate the rotary switch provided on the top panel board, insert the handle for the manual operation.
 - iii) Rotate the handle clockwise / anticlockwise to open / close the isolator respectively
 - iv) When the manual operation is not needed restore the position of rotary switch on top panel

7621886/2023/EEMRT-ENE51



CHIEF ENGINEER/PROJECTS
APTRANSCO/VS/VIJAYAWADA

REV	DESCRIPTION
D	C
B	A
A	



TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD

For Pavani Power Systems Pvt. Ltd.

(T. SESHAGIRI RAO)
Managing Director

SCHEMATIC DIAGRAM
FOR MOTOR / DC CONTROL PANEL

PAYANI POWER SYSTEMS PVT.LTD.
Plot No. 06/055/4/6, K.K. OVERSEAS SOCIETY,
KODAPALLI POST, HYDERABAD - 500100.
MEDICAL MAJKAR DIST. TELANGANA

SCALE: 1:1

DATE: 18-05-2023

DRAWN: _____

CHECKED: _____

APPROVED: _____

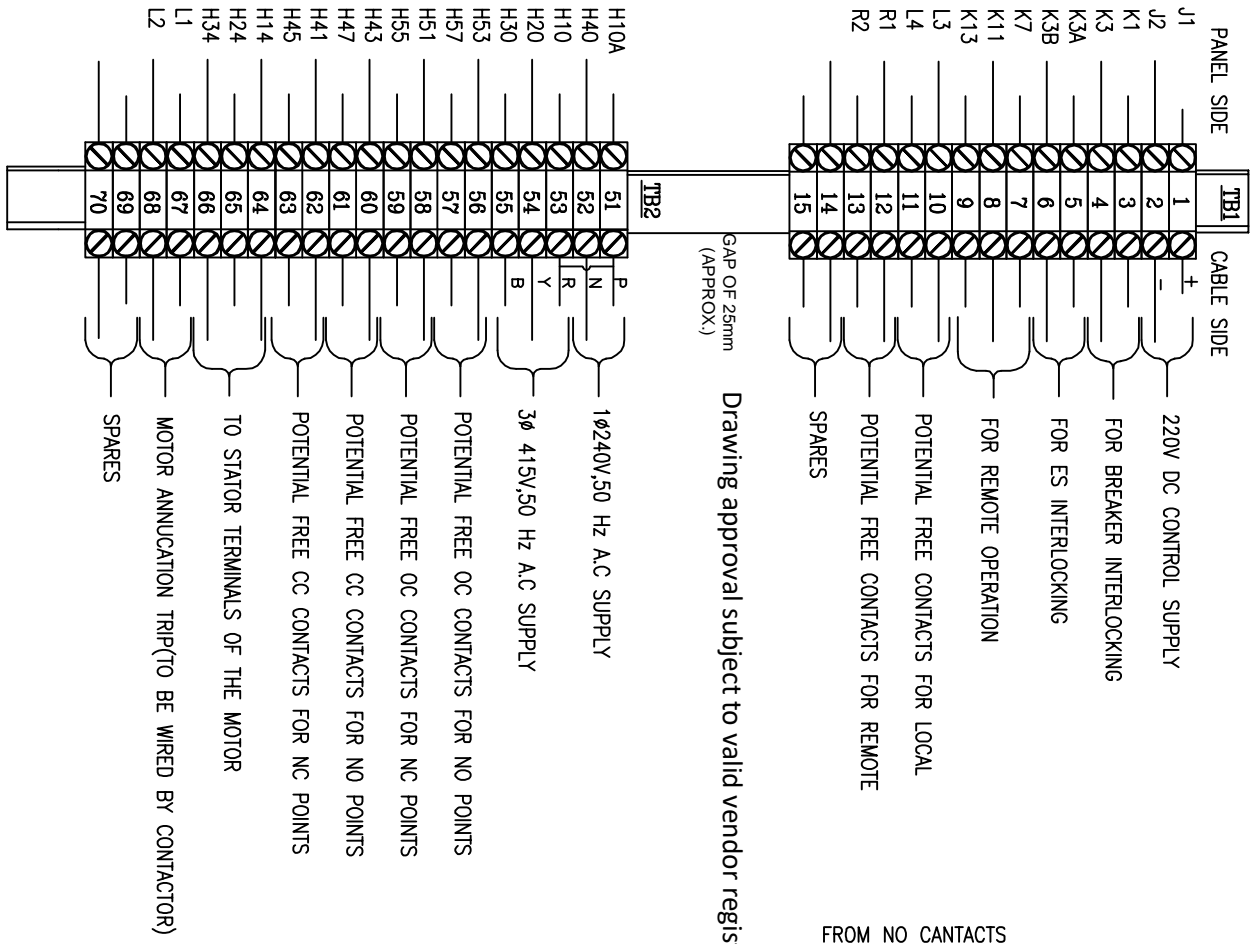
SHEET: 06 OF 09

DRG. NO: PPSPT-APT-SD-A4-06

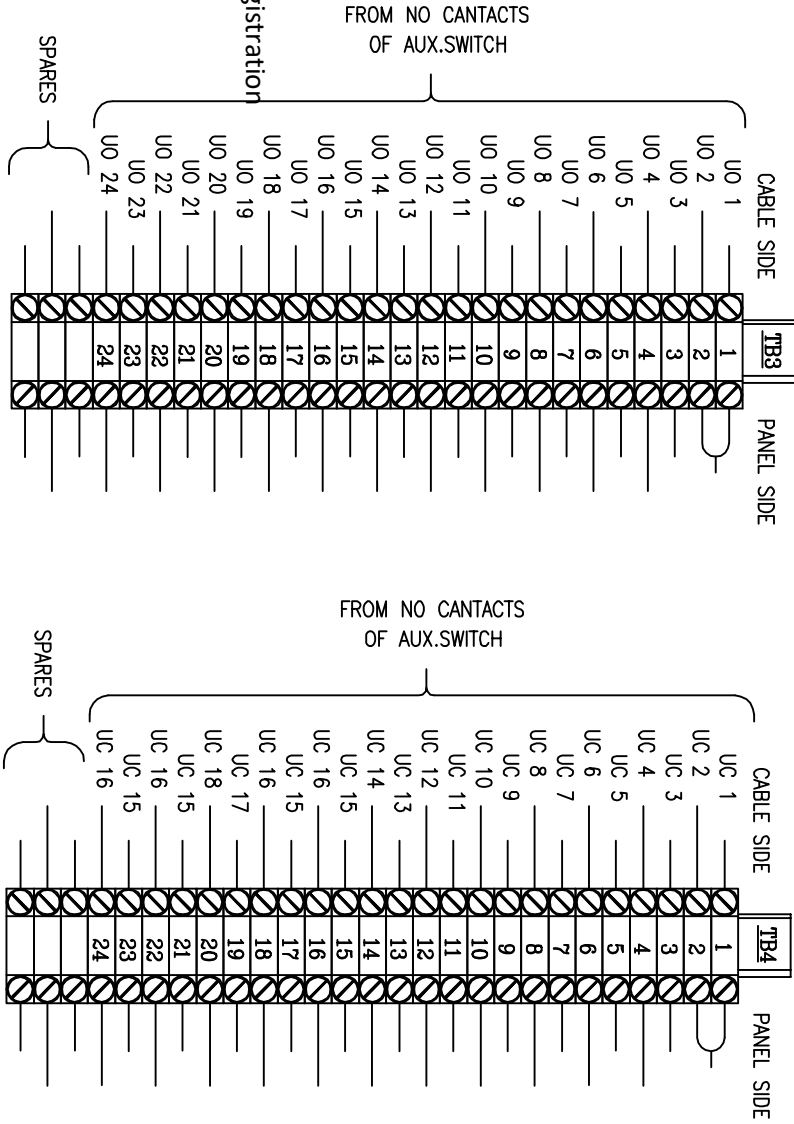
NOTE: 1. Drawings Approval subject to valid type test reports, to be checked during acceptance tests.

TERMINAL BLOCK FOR DC & AC
2. For EPC contractors only.

AUX. SWITCH 12NO / 12NC



Drawing approval subject to valid vendor registration




CHIEF ENGINEER/PROJECTS
APTRANSCO/VIS/VIJAYAWADA

For Pavani Power Systems Pvt. Ltd.
(T. SESHAGIRI RAO)
Managing Director

7621886/2023/EEMRT-ENE51

Since the supply of terminal connectors is not in the scope of manufacturer as mentioned in the drawings. The EPC contractor shall be instructed to supply the same line with CT/PT/CVT/Isolator/VT /LA/Breaker requirement and capability.



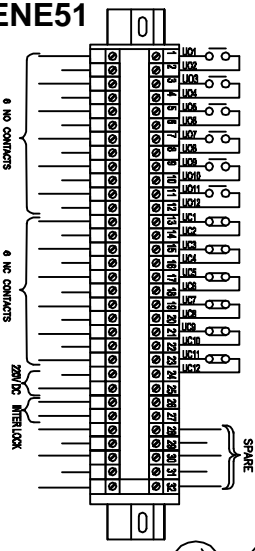
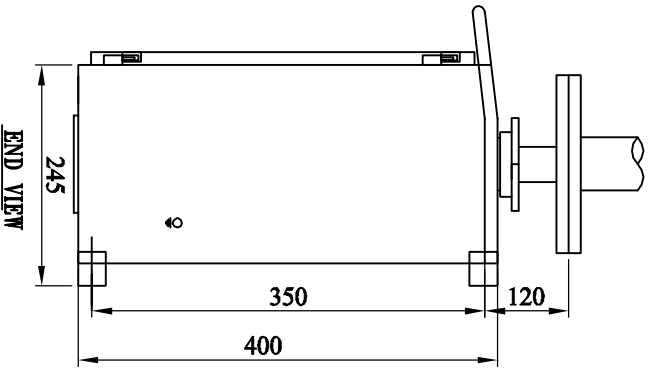
TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD

TERMINAL BLOCK DETAILS

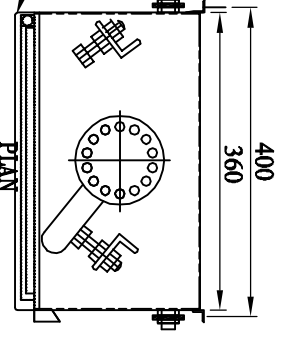
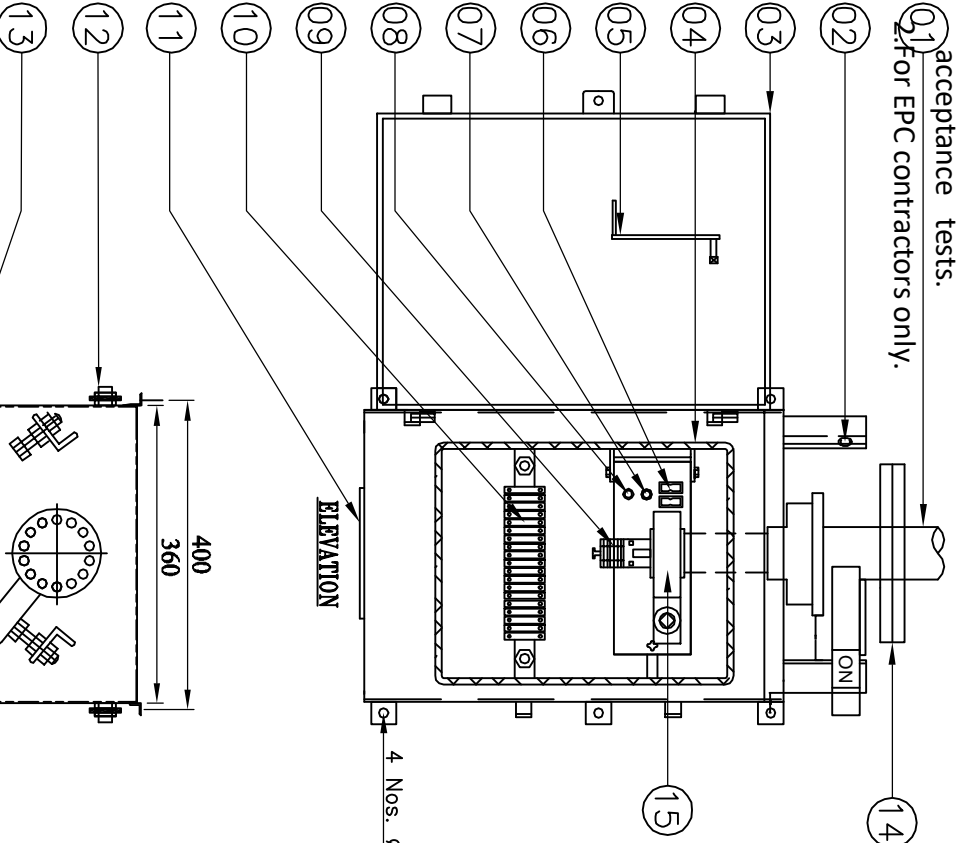
REVISIONS	D	C	B	A
SCALE: 1:1				
DATE	18-05-2023			
DRAWN				
CHECKED				
APPROVED				
SHEET	07 OF 09			
DRAWING	PPSP-APT-TBD-44-07			

PAVANI POWER SYSTEMS PVT.LTD.
Plot No. 06/056/4/6, K.K. OVERSEAS SOCIETY,
PDA, DULAPALLY, QUTHUBULLAPUR MANDAL,
KODURU ROAD, HYDERABAD - 500100.
REGISTRAR MALKAJGIR DIST. TELANGANA

NOTE: 1. Drawings Approval subject to valid type test reports, to be checked during



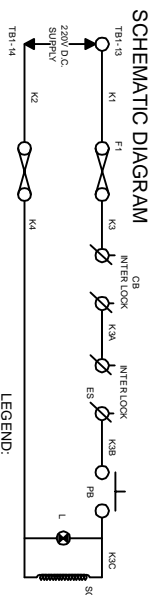
AUX. SWITCH CONTACT DETAILS FOR ISOLATOR (6 NO + 6 NC)



Drawing approval subject to valid vendor registration

01 acceptance tests.
02 For EPC contractors only.

- PART LIST:-**
1. DOWN PIPE
 2. ON & OFF STOPPER
 3. CUBICAL WITH DOOR 3mm Alu. SHEET)
 4. RUBBER GASKET (EPDM)
 5. OPERATING HANDLE
 6. FUSES (2A)
 7. INDICATION LAMP
 8. PUSH BUTTON
 9. AUXILIARY SWITCH 6NO + 6NC
 10. TERMINAL BLOCK(UBT-4 (VINMECH OR EQVT.))
 11. DETACHABLE TYPE CABLE GLANDS PLATE
 12. EARTHING TERMINAL-2 Nos.
 13. RAIN SHADE
 14. 12/14 HOLES FLANGE 8MM THK. (M.S HDG)
 15. REDUCTION GEAR BOX



LEGEND:
 F1 F2-----FUSES (2amp Rating)
 PB-----PUSH BUTTON
 L-----INDICATION LAMP
 SC-----SOLENOID COIL

7621886/2023/EMRT-ENE51

ALL DIMENSIONS ARE IN MILLIMETERS
 CUBICLE WILL BE POWDER COATED WITH LIGHT GRAY SHADE NO:631 OF IS : 5
 DEGREE OF PROTECTION IP: 55 AS PER IS :13947
 20% SPARE TERMINALS WILL BE PROVIDED AND SHALL BE UNIFORMLY DISRIBUTED
 TO ALL TERMINAL BLOCKS EQUALLY
 WIRING WILL BE DONE WITH 1100V.GRADE 2.5 Sq.MM CU STRANDED P.V.C.
 INSULATED CONDUCTOR
 WEIGHT OF THE BOX : 35Kg (APPROX.)
 PPSPL MAKE REDUCTION GEAR RATIO:20:1 MATERIALS EN8/STEEL

CHIEF ENGINEER/PROJECTS
 APTRANSCO/VS/VIJAYAWADA

AP TRANSCO

TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD

For Pavani Power Systems Pvt. Ltd.
(T. SESHAGIRI RAO)
Managing Director

REVISIONS

REV	NO	DESCRIPTION
D	C	B
		A

MANUAL OPERATING MECHANISM BOX
(FOR 245kV EARTH SWITCH)

PAVANI POWER SYSTEMS PVT.LTD.
 Plot No. 06/065/4/6, K.K. OVERSEAS SOCIETY,
 DDA, DULAPALLY, QUTHUBULLAPUR MANDAL,
 KOMPALA POST, HYDERABAD - 500100.
 MEDICAL WALKER DIST. TELANGANA

SCALE: 1:1

DATE: 18-05-2023

DRAWN:

CHECKED:

APPROVED:


SHEET: 08 OF 09


DRG. NO.: PPSPL-APT-RES-44-08

NOTE: 1. Drawings Approval subject to valid type test reports, to be checked during acceptance tests.

2. For EPC contractors only.

Drawing approval subject to valid vendor registration

 <p>MANUFACTURED & SUPPLIED BY PAVANI POWER SYSTEMS PVT.LTD. PLOT No.05/055/A/6, K.K.OWNERS SOCIETY, DULAPALLY INDUSTRIAL AREA, KOMMIPALLY POST, HYDERABAD-500100. MEDICAL MALAKAIGRI DIST. T.S.</p>	
ISOLATOR RATING NAME PLATE	
CLIENT:	TRANSMISSION CORPORATION OF A.P LTD
CUSTOMER:	---
PO.No./DATE:	---
YEAR OF MFG.	---
TYPE	DBR
VOLTAGE (kV)	245
STC kA/SEC.	50/3
CURRENT (A)	800
SL.No.	---
FREQUENCY (Hz)	50
I.W. VOLTAGE	1050kVp
P.F.W. VOLTAGE(DRY)	460kVrms
OPERATING DRIVE	MOTOR
CONTROL VOLTAGE	220 V DC


 <p>MANUFACTURED & SUPPLIED BY PAVANI POWER SYSTEMS PVT.LTD. PLOT No.05/055/A/6, K.K.OWNERS SOCIETY, DULAPALLY INDUSTRIAL AREA, KOMMIPALLY POST, HYDERABAD-500100. MEDICAL MALAKAIGRI DIST. T.S.</p>	
ISOLATOR RATING NAME PLATE	
CLIENT:	TRANSMISSION CORPORATION OF A.P LTD
CUSTOMER:	---
PO.No./DATE:	---
YEAR OF MFG.	---
TYPE	VERTICAL
VOLTAGE (kV)	245
STC kA/SEC.	50/1
CURRENT (A)	---
SL.No.	---
FREQUENCY (Hz)	50
I.W. VOLTAGE	1050kVp
P.F.W. VOLTAGE(DRY)	460kVrms
OPERATING DRIVE	MANUAL
CONTROL VOLTAGE	220 V DC

CHIEF ENGINEER/PROJECTS
APTRANSCO/VS/VIJAYAWADA

For Pavani Power Systems Pvt. Ltd.
(T. SESHAGIRI RAO)
 Managing Director

Since the supply of terminal connectors is not in the scope of manufacturer as mentioned in the drawings. The EPC contractor shall be instructed to supply the same line with CT/PT/CVT/isolator/VT/LA/Breaker requirement and compability.

Live part to ground clearance shall be maintained during erection as per IE rules.

 <p>TRANSMISSION CORPORATION OF ANDHRA PRADESH LTD</p>	
<p>NAME PLATE DETAILS (FOR 245kV, ISOLATOR AND E.S)</p>	
REVISIONS	DATE
D C B A	18-05-2023
<p>SCALE: 1:1</p>	
<p>DATE: 18-05-2023</p>	
<p>DRAWN: _____</p>	
<p>CHECKED: _____</p>	
<p>APPROVED: _____</p>	
<p>SHEET: 09 OF 09</p>	
<p>DRG.No: PPSPT-APT-NPD-44-09</p>	