

NOTE:

01. THE BOX SHALL BE MADE FROM 2MM COLD ROLLED SHEET STEEL.
02. ALL SEAMS ARE TO BE CONTINUOUSLY WELDED. THERE SHALL BE NO HOLES OR SOCKETS ON TOP AND SIDES.
03. THE ENCLOSURE OF BOX SHALL MEET HOSE PROOF AND WEATHER PROOF REQUIREMENT.
04. SINGLE PIECE NEOPRENE GASKET 6MM THICK OF SHORE HARDNESS 20 & DENSITY 0.49g/cc. SHALL BE PROVIDED IN ALL MATING SURFACES TO ENSURE WATER TIGHT SEAL/MATERIAL. CERTIFICATE INDICATING HARDNESS NUMBER, DENSITY AND COMPOSITION SHALL BE FURNISHED ON DEMAND.
05. TERMINAL BLOCKS TO BE SUPPLIED AND MOUNTED BY VENDOR. TERMINAL BLOCKS ARE TO BE MOUNTED HORIZONTALLY.
06. THE STRIP SHALL BE OF PVC WHITE BACKGROUND WITH BLACK LETTERS.
07. REMOVABLE GLAND PLATE OF 3MM THICK IS TO BE PROVIDED WITH NEOPRENE GASKET OF 3mm THICK OF SHORE HARDNESS 30.
08. BOLTS AND NUTS REQUIRED FOR MOUNTING THE LOCAL CONTROL BOXES AND FITTINGS ARE TO BE ELECTRO GALVANISED AND SUPPLIED BY THE VENDOR.
09. INTERNAL LOOPING SHALL BE MADE WITH 1100V GRADE PVC INSULATED STRANDED COPPER.
10. MATERIALS FOR CONTINUOUS HINGE PIN, RIDER CLAMP, RIDER BOLT/RIDER SPRING, WASHERS, ROLLER LIP SHALL BE PROVIDED AROUND THREE SIDES OF DOOR AND AROUND ALL SIDES OPEN CLOSURE ARE REQUIRED TO BE OF 316 STAINLESS STEEL FOR WITHSTANDING CORROSION.
11. OPENING THIS LIP IS TO INCREASE THE STRENGTH AND TO KEEP DIRT AND LIQUID FROM DROPPING INTO THE ENCLOSURE WHEN THE DOOR IS OPENED.
12. DOOR SHALL BE SUITABLE FOR 180° OPENING.
13. EARTHING BOLTS AND NUTS ON ROSE COURTESY WASHER SHALL BE PROVIDED AT OPPOSITE POINTS ON OUTSIDE OF THE LOCAL CONTROL BOX BODY WITH EARTH SYMBOL. MADE OF ALUMINIUM. NON RUSTING 3 PLY LAMINCO OR ANODISED ALUMINIUM PLATE NAME PLATE WITH SUITABLE INSCRIPTION SHALL BE PROVIDED WITH CLEAN TRANSPARENT SHEET AS FOLLOWS:

LEGEND

- FSU (32A) - FUSE SWITCH (POWER-3P)
- SS - SELECTOR SWITCH
- CS1I,2(CL-'B') - CONTROL SUPPLY TRANSFORMER 415/110V,150VA.
- TB - TERMINAL BLOCK ASSEMBLY
- K1 - POWER CONTACTOR(25A)AC 3 Rating
- L1 - L4 - INDICATING LAMPS(CLUSTERED LED TYPE)
- PB - TEST PUSH BUTTON.
- D - DIODE
- L1 - L4 - NEUTRAL LINK
- ASS - AMMETER SELECTOR SWITCH
- CTI - CT3 - CURRENT TRANSFORMER
- A - AMMETER

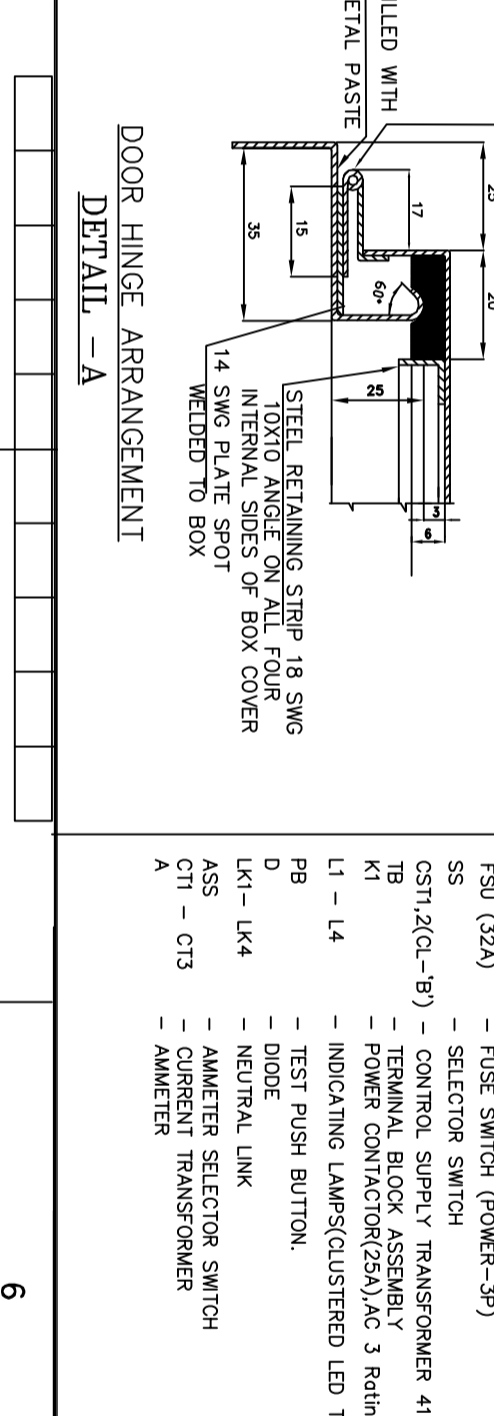
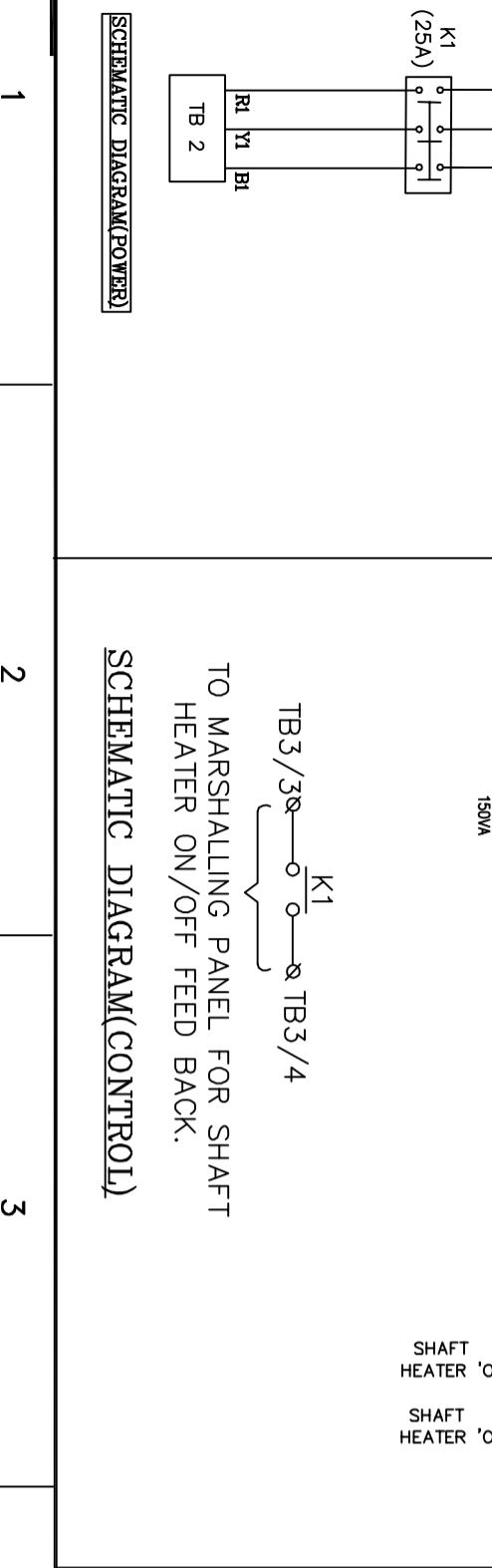
TABLE-1

INCOMING		OUTGOING	
CABLE SIZE(A)	TERMINAL BLOCK(TB)	CABLE SIZE(CU)	TERMINAL BLOCK (TB2 & TB3)
3C-6 SQ MM	CST -16	2C-2.5	CP-19
	CU5-18		CP-10

TABLE-2

TERMINAL BLOCK	WIRING
FSU	SIEMENS / MDS/L&T/ CONTROL & SWGR
POWER CONTACTOR(40A)	SIEMENS / L&T/CONTROL & SWITCHGEAR/SCHENIDER
TERMINAL BLOCK	ELMEX / CONNECTELL/TOSHIBA/CK&WAGO/ESSEN.
NEUTRAL LINK (20A)	CANDOS/CONTROL & SWITCHGEAR/L&T/SIEMENS. (TO BE SUITABLE LOCATED)
415/110V,150VA CST CLASS 'B'	AE/KAPP/AND COIL/LOGIC STAT.
INDICATING LAMP(LED TYPE)	TEKNOI/SEIKENS/VASHNO/L&T/BGH/ESSEN/RAAS CONTROLS/SECO.
CABLE GLAND	CONKET / SIEMENS / SUNI/KCC / BRACC / ARUP ENGINEERING /
CABLE LUG	DOMWELLS / JANSSEN / LOTUS
CURRENT TRANSFORMER	AE / KAPP/ AND COIL / PRAVAG/ PRAGATI/ AW - SEG & CONTROLS (CONTROLS & SWITCHGEAR)/ PRECISE/ SOUTHERN ELECTRICAL/ G&M
	AE/MP / RISHAB/ L&T / MECO

15. ALL THE TERMINALS BLOCKS SHALL BE PROVIDED WITH CRIMPING TYPE LUGS FOR INCOMING AND OUTGOING CABLES AS RECOMMENDED IN TABLE-1.
16. LUGS SHALL BE PROVIDED FOR EACH INCOMING AND OUTGOING TERMINALS.SUITABLE NUMBER OF LUGS FOR INTERNAL WIRING SHALL BE PROVIDED.
17. TYPE NUMBER INDICATED IS FOR ELMEX TERMINAL BLOCK AND DOWELL LUG.EQUIVALENT TYPE NOCAN BE USED FOR OTHER NTPC APPROVED MAKES.
18. THE LOCAL CONTROL BOX SHALL BE HOT DIP GALVANISED. THE MASS OF ZINC COATING SHALL NOT BE LESS THAN 610 GM/SQM. THE MINIMUM COATING THICKNESS ON THE LOCAL CONTROL BOX SHALL NOT BE LESS THAN 86 MICRONS.
19. NICKEL CHROMIUM PLATED BRASS HEAVY DUTY DOUBLE COMPRESSION CABLE GLANDS SHALL BE PROVIDED AND FIXED IN GLAND PLATE BY VENDOR. 2 NOS OF GLANDS SUITABLE FOR INCOMING CABLES INDICATED ABOVE CEMO2 OR EQUIVALENT SHALL BE PROVIDED & 12 NOS. GLANDS SUITABLE FOR 2C-2.5 SQMM CBWITS OR EQUIPMENT.
20. FOR EXTERNAL CABLE TERMINATION, TWO NUMBERS LUGS SHALL BE FITTED AND SUPPLIED IN EACH TERMINAL. THE TB SHALL BE SUITABLE FOR TERMINATING TWO LUGS IN A SINGLE BLOCK FOR BOTH INCOMING OUT OUTGOING CABLES.
21. NAME PLATE INDICATING NAME OF THE SUPPLIER SHALL BE PROVIDED ON THE DOOR.
22. THE NAME PLATE SHALL CONTAIN VENDOR DETAILS LIKE YEAR OF MANUFACTURE, WEIGHT OF THE JOB, BHEL PURCHASE ORDER NUMBER AND DATE.
23. MAKE OF COMPONENTS:
24. THE FSU SHALL BE SUITABLE FITTED AND WIRED TAKING CARE OF ELECTRICAL CLEARANCES BY VENDOR.
25. ALL COMPONENTS SHALL BE IDENTIFIED/LABELLED USING NON - RUSTING 3 PLY LAMINCO OR ANODISED ALUMINIUM PLATE.
26. ALL INTERNAL POWER WIRING SHALL BE 1100V, GRADE PVC INSULATED MULTISTRANDED 6 SQ.MM COPPER CONDUCTOR WIRE(S) CERTIFIED MAKE).
27. ALL CONTROL WIRING SHALL BE 1100V, GRADE PVC INSULATED MULTISTRANDED 2.5 SQ.MM COPPER CONDUCTOR WIRE(S) CERTIFIED MAKE).
28. INSTEAD OF WELD FLAT ARRANGEMENT,ALTERNATE ARRANGEMENT OF FIXING THE GLAND PLATE TO THE BOTTOM OF THE JUNCTION BOX BY SUITABLE STEELING PLATED RIVET NUTS IS ALSO ACCEPTABLE IN WHICH CASE THE MAKE OF RIVET NUT AND FIXING ARRANGEMENT IS SUBJECT TO BHEL APPROVAL.MAKE SHALL BE BOLDHOF/GERMANY OR EQUIVALENT.
29. AMMETER, AMMETER SELECTOR SWITCH,INDICATING LAMPS AND PPS SHALL BE MOUNTED ON THE DOOR.
30. INDICATING LAMPS (LED TYPE) SHALL BE 'UNIVERSAL' TYPE SUITABLE FOR AC/DC.
31. AMMETER SHALL BE 96SQ.MM X 96SQ.MM,0 TO 25 Amps.
32. CT SHALL BE SUITABLE FOR 25/1A, 5VA, CLASS 1,CAST RESIN TYPE AS PER LATEST IS STANDARDS & PROVIDED WITH NEUTRAL LINKS.
33. RIDER SHALL PROVIDE/FIT TWO NO OF CABLE GLANDS FOR INCOMING CABLES. TB-1 SHALL BE SUITABLE FOR TERMINATING THE SAME ALONG WITH ATC LUGS OR CBWITS (COMET OR EVO) SIZE SHALL BE FITTED IN AS.
34. 12 NOS OF CABLE GLANDS FOR TERMINATING 0/5 CABLES OF CBWITS (COMET OR EVO) SIZE SHALL BE FITTED IN AS.
35. THE DIMENSIONS INDICATED FOR LOCAL CONTROL BOX FOR SUPPORT HEATER IS MINIMUM & TENTATIVE. IF DIMENSIONS NEED TO BE INCREASED FOR SATISFACTORY OPERATION / MAINTENANCE TO ACCOMMODATE ALL COMPONENTS,THE SAME SHALL BE TAKEN CARE BY VENDOR IN THEIR OFFER SUITABLE X.
36. TWO NOS OF EARTH TERMINAL SHALL BE PROVIDED.



CUSTOMER NO. R674 & R675.

DRG NO 4-00-114-32163 SHALL BE REFERRED FOR PACKING.

CUSTOMER NO : NTPC LTD.

PROJECT : TANDU SHPP, STAGE-II (2X660MW)

DATE : 20.02.2016

SCALE : NTS

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