



LEGEND

(Symbol)	AUTO TRANSFORMER WITH DELTA STABILISING WINDING
(Symbol)	TWO WINDING TRANSFORMER WITH DELTA STABILISING WINDING
(Symbol)	COUPLING CAPACITOR OLW CAPACITIVE VOLTAGE TRANSFORMER
(Symbol)	ELECTROMAGNETIC VOLTAGE TRANSFORMER
(Symbol)	WAVE TRAP
(Symbol)	LIGHTNING ARRESTOR
(Symbol)	SF6/VAQUUM CIRCUIT BREAKER
(Symbol)	CURRENT TRANSFORMER
(Symbol)	GENRE ROTATING DOUBLE BREAK ISOLATOR WITH TWO EARTH SWITCH (MOTOR OPERATED)
(Symbol)	GENRE ROTATING DOUBLE BREAK ISOLATOR WITH ONE EARTH SWITCH (MOTOR OPERATED)
(Symbol)	GENRE ROTATING DOUBLE BREAK ISOLATOR WITHOUT EARTH SWITCH (MOTOR OPERATED)
(Symbol)	GENRE ROTATING DOUBLE BREAK ISOLATOR WITHOUT EARTH SWITCH (MANUAL)
(Symbol)	HORN GAP FUSE
(Symbol)	MINIATURE CIRCUIT BREAKER
(Symbol)	BAY CONTROL UNIT
(Symbol)	PHASE FAULT DISTANCE PROTECTION RELAY
(Symbol)	GROUND FAULT DISTANCE PROTECTION RELAY
(Symbol)	DISTANCE TO FAULT LOCATOR
(Symbol)	LOSS OF VT SUPPLY DETECTION RELAY
(Symbol)	BREAKER FAILURE DETECTION RELAY
(Symbol)	AUTO RECLOSE RELAY WITH SYNCHRO CHECK FUNCTION UNDER VOLTAGE RELAY
(Symbol)	OVER VOLTAGE RELAY
(Symbol)	OVER FREQUENCY/UNDER FREQUENCY
(Symbol)	OVER FREQUENCY/UNDER FREQUENCY
(Symbol)	DIAT DIRECTIONAL OVER CURRENT RELAY
(Symbol)	DIAT DIRECTIONAL OVER CURRENT RELAY
(Symbol)	DIAT NONDIRECTIONAL OVER CURRENT RELAY
(Symbol)	DIAT NONDIRECTIONAL EARTH FAULT RELAY
(Symbol)	INSTANTANEOUS HIGHEST OVER CURRENT RELAY
(Symbol)	TRANSFERRED DIFFERENTIAL RELAY
(Symbol)	RESTRICTED EARTH FAULT RELAY FOR TRANSFORMER LV WINDING
(Symbol)	RESTRICTED EARTH FAULT RELAY FOR TRANSFORMER HV WINDING
(Symbol)	RESTRICTED EARTH FAULT RELAY FOR TRANSFORMER LV WINDING
(Symbol)	TRIVECTOR METER
(Symbol)	TEST TERMINAL BLOCK FOR TRANSFORMER METER
(Symbol)	TRIP RELAY FOR CIRCUIT BREAKER
(Symbol)	SUPER VISION RELAY FOR TRIP CIRCUIT 1
(Symbol)	SUPER VISION RELAY FOR TRIP CIRCUIT 2
(Symbol)	BUSBAY DIFFERENTIAL RELAY FOR MAIN ZONE
(Symbol)	BUSBAY DIFFERENTIAL RELAY FOR CHECK ZONE
(Symbol)	BUCHHOLZ ALARM RELAY FOR MAIN TANK
(Symbol)	BUCHHOLZ TRIP RELAY
(Symbol)	WINDING TEMP ALARM RELAY
(Symbol)	WINDING TEMP TRIP RELAY
(Symbol)	OIL TEMP TRIP RELAY
(Symbol)	PRESSURE RELIEF DEVICE TRIP
(Symbol)	OLTC OIL SURGE RELAY-TRIP
(Symbol)	MAGNETIC OIL LEVEL GAUGE FOR MAIN TANK-ALARM

PROJECT	DESIGN, ENGINEERING, SUPPLY, ERECTION, TESTING AND COMMISSIONING OF 220/132/33 KV GRID SUB STATION AT CHARTRA
CLIENT	JHARKHAND STATE ELECTRICITY BOARD
CONTRACTOR	SATCON (CONSULTANTS AND ENGINEERS)
DESIGN	TMM
DRAWN	NKD
CHECKED	TMM
APPROVED	SW
DATE	12.09.13
SCALE	NIS
SHEET NO.	2 OF 2
REV. NO.	0
SUBMITTED FOR APPROVAL	INFORMATION
REFERENCE	CONSTRUCTION

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH KEY SID DRAWING NO.-F1/JSEB/CHARTRA/E/-SID-01
2. ALL MAIN PROTECTION RELAYS SHALL BE NUMERICAL TYPE WITH IEC 61850 COMMUNICATION PROTOCOL.
3. ALL NUMERICAL RELAY SHALL BE PROVIDED WITH FAULT RECORDING AND DISTURBANCE RECORDING FACILITIES.
4. MAKE AND MODEL OF RELAYS, BCU AND TMM SHALL BE INDICATED IN CONTROL AND RELAY PANEL DRAWING.
5. THIS PROTECTION AND WETTING SID IS TYPICAL IN NATURE AND ILLUSTRATES THE PROTECTION AND WETTING PHILOSOPHY OF EACH TYPE OF BAY.
6. FALLING IN BUS SECTION-2, THIS SUPPLY WILL BE FROM BPT-1, FOR THOSE CIRCUITS.

REVISION DETAILS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
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6		

DRAWING TITLE REFERENCE DRAWINGS

DRAWING NO. SHEET REV

14 15 16