FIRST ANGLE PROJECTION
DRG. NO. TB-3-321-510-001
SHT. NO. 1 OF 1 SHT.

Summary of Core Details of CTs and CVTs

132kV BAY Line, ICT & Bus Coupler CTs

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KPV (V)	Max Ie at Highest Tap	Max Rct	Acc Class	Purpose
5	1600-800-400/1	-	1600-800-400V	30mA at KPV/2	<8 Ohms at 1600/1 Tap	PS	PROTECTION
4	1600-800-400/1	-	1600-800-400V	30mA at KPV/2	<8 Ohms at 1600/1 Tap	PS	PROTECTION
3	1600-800-400/1	25VA	-	-	-	0.2 ISF<5	METERING
2	1600-800-400/1	30VA	-	-	-	5P20	PROTECTION
1	1600-800-400/1	-	1600-800-400V	30mA at KPV/2	<8 Ohms at 1600/1 Tap	PS	PROTECTION

132kV BAY ST CTs

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KPV (V)	Max Ie at Highest Tap	Max Rct	Acc Class	Purpose
5	1600-800-400/1	-	1600-800-400V	30mA at KPV/2	<8 Ohms at 1600/1 Tap	PS	PROTECTION
4	1600-800-400/1	-	1600-800-400V	30mA at KPV/2	<8 Ohms at 1600/1 Tap	PS	PROTECTION
3	500-250-125/1	25VA	-	-	-	0.2 ISF<5	METERING
2	500-250-125/1	30VA	-	-	-	5P20	PROTECTION
1	500-250-125/1	-	400V at 125/1 Tap	30mA at KPV/4 at 125/1 Tap	<1.25 Ohms at 125/1 Tap	PS	PROTECTION

400kV BAY CTs (5 Core)

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KPV (V)	Max Ie	Max Rct	Acc Class	Purpose
5	2000-1000/1	-	2000-1000V	30mA at 2000V 60mA at 1000V	10 Ohms 5 Ohms	PS	PROTECTION
4	2000-1000/1	-	2000-1000V	30mA at 2000V 60mA at 1000V	10 Ohms 5 Ohms	PS	PROTECTION
3	2000-1000-500/1	25VA, ISF<5	-	-	-	0.2	METERING
2	2000-1000-500/1	-	4000-2000-1000V	30mA at 4000V 60mA at 2000V 120mA at 1000V	10 Ohms 5 Ohms 2.5 Ohms	PS	PROTECTION
1	2000-1000-500/1	-	4000-2000-1000V	30mA at 4000V 60mA at 2000V 120mA at 1000V	10 Ohms 5 Ohms 2.5 Ohms	PS	PROTECTION

400kV TIE CTs (6 Core)

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KPV (V)	Max Ie	Max Rct	Acc Class	Purpose
1	2000-1000-500/1	-	4000-2000-1000V	30mA at 4000V 60mA at 2000V 120mA at 1000V	10 Ohms 5 Ohms 2.5 Ohms	PS	PROTECTION
2	2000-1000-500/1	-	4000-2000-1000V	30mA at 4000V 60mA at 2000V 120mA at 1000V	10 Ohms 5 Ohms 2.5 Ohms	PS	PROTECTION
3	2000-1000-500/1	25VA, ISF<5	-	-	-	0.2	METERING
4	2000-1000-500/1	25VA, ISF<5	-	-	-	0.2	METERING
5	2000-1000-500/1	-	2000-1000-500V	30mA at 4000V 60mA at 2000V 120mA at 1000V	10 Ohms 5 Ohms 2.5 Ohms	PS	PROTECTION
6	2000-1000-500/1	-	2000-1000-500V	30mA at 4000V 60mA at 2000V 120mA at 1000V	10 Ohms 5 Ohms 2.5 Ohms	PS	PROTECTION

132kV CVT

Ratio	$\frac{132KV}{\sqrt{3}} / \frac{110V}{\sqrt{3}} // \frac{110V}{\sqrt{3}} / \frac{110V}{\sqrt{3}}$
Sec-I	Class - 3P, 100VA
Sec-II	Class - 3P, 100VA
Sec-III	Class -0.2, 75VA
	Capacitance - 13200pF

132kV EMVT

Ratio	$\frac{132KV}{\sqrt{3}} / \frac{110V}{\sqrt{3}} / \frac{110V}{\sqrt{3}} / \frac{110V}{\sqrt{3}}$
Sec-I	Class - 3P, 100VA
Sec-II	Class - 3P, 100VA
Sec-III	Class -0.2, 75VA

CT/CVT/EMVT CORE DETAILS (SHEET-1)

REV.	DATE	REASONS FOR REVISION	DRN.	PREPARED BY	CHECKED BY	APPROVED BY
04	02.07.11	REVISED AS PER APPROVED CT/CVT/EMVT PARAMETERS	RK	SK.	VK.	AS.
03	02.09.09	AS PER FICHTNER MAIL DATED-12.05.09	JUGENDRA -SD-	SK. -SD-	VK./DS. -SD-	SN. -SD-
02	27.04.09	AS PER FICHTNER LETTER DATED-25.03.09	-SD- JUGENDRA	-SD- SK.	-SD- DS./GC.	-SD- SN.
01	09.03.09	AS PER MOM DATED-30.01.09	-SD- JUGENDRA	-SD- SK.	-SD- DS./GC.	-SD- SN.

OWNER: ONGC - Tripura Power Company Limited

PROJECT: 726.6 MW Combined Cycle Power Project
PALLATANA, TRIPURA, INDIA

OWNER'S ENGINEER: FICHTNER Consulting Engineers (India) Pvt. Limited
Chennai.

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
TRANSMISSION BUSINESS GROUP

DEPT CODE		NAME	SIGN.	DATE
422	DRN.	JUGENDRA	-SD-	19.12.08
	DESN	SK	-SD-	19.12.08
	CHD	DS/GC	-SD-	19.12.08
	APPD	SN	-SD-	19.12.08

TITLE: SINGLE LINE DIAGRAM FOR 400/132kV S/S AT ONGC TRIPURA

CV	ME	EL	I&C			DEPT.	SCALE NTS
						SIGN	
						DATE	

BHEL/SUB VENDOR DRG NO. TB-3-321-510-001

SHT. No 04 OF 05 REV. 04

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