

Summary of Core Details of CTs and CVTs

400kV CVT

Ratio	$\frac{400KV}{\sqrt{3}} / \frac{110V}{\sqrt{3}} / \frac{110V}{\sqrt{3}} / \frac{110V}{\sqrt{3}}$
Sec-I	Class - 3P , 100VA
Sec-II	Class - 3P , 100VA
Sec-III	Class - 0.2, 75VA
	Capacitance - 4400pF

400/132/33kV 125MVA ICT

400/132/33kV ICT BUSHING CT (HV Side)

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KVP (V)	Max Ie	Max Rct	Acc Class	Purpose
1	1000/1	-	500V	30mA at KVP/2	10 Ohms	PS	REF
2	1000-500/1	20VA	-	-	-	5P20	BACKUP PROTECTION

400/132/33kV ICT BUSHING CT (LV Side)

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KVP (V)	Max Ie	Max Ret	Acc Class	Purpose
1	1000/1	-	500V	30mA at KVP/2	10 Ohms	PS	REF

400/132/33kV ICT BUSHING CT (Neutral Side)

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KVP (V)	Max Ie	Max Rct	Acc Class	Purpose
1	1000/1	-	500V	30mA at KVP/2	10 Ohms	PS	REF
2	1000-500/1	20VA	-	-	-	5P20	Neutral E/F

63MVAR Line Reactor

400kV Line Reactor (Line Side)

Core No.	RATIO	Output Burden at lowest Tap (V/A)	Min KPV (V)	Max Ie	Max Rct	Acc Class	Purpose
1	200/1	-	200V	40mA at KPV/4	1 Ohm	PS	Reactor Differential
2	200/1	-	200V	40mA at KPV/4	1 Ohm	PS	REF
3	200/1	10V/A	-	-	-	5P20	Reactor B/U
4	200/1	10V/A	-	-	-	1.0	Metering

CT/CVT/EMVT CORE DETAILS (SHEET-2)

400kV Line Reactor (Neutral Side) 63MVAR

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min KVP (V)	Max Ie	Max Rct	Acc Class	Purpose
1	200/1	-	200V	40mA at KVP/4	1 Ohms	PS	Reactor Differential
2	2000-1000-500/1	-	1000-500-250V	30mA at KVP/2 at Highest Tap	10 Ohms 5 Ohms 2.5 Ohms	PS	Line Distance Protection
3	2000-1000-500/1	-	1000-500-250V	30mA at KVP/2 at Highest Tap	10 Ohms 5 Ohms 2.5 Ohms	PS	Line Distance Protection

Line Reactor NGR (Line Side)63 MVAR

1	200/1	-	200V	40mA at KPv/4	1 Ohms	PS	REF
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Line Reactor NGR (Neutral Side)63 MVAR

1	200/1	-	200V	40mA at KPv/4	1 Ohms	PS	REF
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80MVAR BUS REACTOR 400KV BUS REACTOR (LINE side)

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min. KVP (V)	Max. Ie	Max. Rct	Arc Class	Purpose
1	200/1		200V	40mA. at KVP/4	1 Ohms	PS	REF
2	200/1	10VA	-	-	-	5P 20	Reactor E/TU

Bus Reactor (Neutral Side)

Core No.	RATIO	Output Burden at lowest Tap (VA)	Min K _{PV} (V)	Max I _e	Max R _{ct}	Acc Class	Purpose
1	200/1	-	200V	40m A at K _{PV} /4	1 Ohms	PS	REF
2	2000-1000-500/1	-	1000-500-250V	30m A at K _{PV} /2 at Highest Tap	10 Ohms 5 Ohms 2.5 Ohms	PS	Reactor Differential

REV.	DATE	REASON FOR REVISION	PREPARED BY	CHECKED BY	APPROVED BY
04	02.07.11	REVISED AS PER APPROVED CT/OT/ENVMT PARAMETERS	RK	SK.	AS.
03	02.09.09	AS PER FIGHTNER MAIL DATED-12.05.09	JUGENDRA	WK./DS.	SN.
02	27.04.09	AS PER FIGHTNER LETTER DATED-25.03.09	-SD-	-SD-	-SD-
01	09.03.09	AS PER MOM DATED-30.01.09	JUGENDRA	SK.	DS./C.
			-SD-	-SD-	-SD-
			JUGENDRA	SK.	DS./C.
					SN.

 ONGC - Tripura Power Company Limited
PROJECT
726.6 MW Combined Cycle Power Project PALLATANA, TRIPURA, INDIA
OWNER'S ENGINEER
FIGHTNER Consulting Engineers (India) Pvt. Limited Chennai.
EPC CONTRACTOR
 BHARAT HEAVY ELECTRICALS LTD TRANSMISSION BUSINESS GROUP

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