



<b>TOSHIBA</b>	Toshiba Transmission & Distribution Systems (India) Pvt.Ltd. Distribution Transformers Division	Engineering
		Unit-10

**GUARANTEED TECHNICAL PARTICULARS  
THREE PHASE DISTRIBUTION TRANSFORMER**

Enquiry No : E-12405-2	Customer: M/s. RE-Tech Oy, FINLAND				
kVA : 100	kV :20.5/0.41	Phase : 3	Freq. : 50Hz	Cooling : ONAN	Doc No: EGT 50188

Sl. No.	Description	UNIT	100 kVA
1)	Make		Toshiba Transmission & Distribution Systems (India) Pvt. Ltd
2)	Type		Hermitically Sealed
3)	Phases	No.	Three
4)	Rating	kVA	100 kVA
5)a)	Rated Voltage:		
	HV	V	20500
	LV	V	410
b)	Highest voltage for equipment		
	HV	kV	24
	LV	kV	1
c)	HV Tapping Range		+5% to -5% insteps of 2.5%
6)	Frequency	Hz	50
7)	Vector Group		Dyn11
8)	Insulation Level		
	HV	kV peak	125
	LV	kV peak	Not Applicable
9)	Power Frequency Level		
	HV	kV rms	50
	LV	kV rms	3
10)	Winding material		Aluminium
11)	Core Material		CRGO
12)	Temperature Rise:		
	Oil	° C	60
	Winding	° C	65
13)	Losses		
	No Load Losses at rated Voltage and Frequency	Watt	130 (MAX)-Tier-2
	Load Losses at 75 ° C	Watt	1250 (MAX)-Tier-2
14)	Impedance Voltage	%	4% (+/- IEC Tolerance Applicable)
15)	Percentage Resistance	%	1.25
16)	Regulation at:		
	Full Load UPF	%	1.32
	Full Load 0.8 PF	%	3.31
17)	Efficiency at 0.8 PF:		

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	Full Load	%	98.30
	¾ Full Load	%	98.63
	½ Full Load	%	98.91
18)	Terminal Arrangement:		
	HV		Bare Bushings – Plug In 24kV/250A
	LV		Bare Bushings – Porcelain-1kV/250A
19)	Actual Overall Dimensions:		
	Length	mm	1015
	Width	mm	765
	Height	mm	1320
20)	Overall Weight		
	Total Weight	Kg.	860
21)	Noise Level	LwA dB (A)	41
<b>Applicability of Optional Fittings For above mentioned Actual Overall Dimensions</b>			
22)	Rollers		No
23)	Pole Mounting consoles		No
24)	HV flags/connector/lug		No
25)	LV flags/connector/lug		No
26)	HV Tapping/Tap Switch		Yes

Note:

1. Actual overall dimensions and weights are subjected to +/-10% Tolerance.
2. All the efficiencies and regulations are calculated at the nominal values of NLL, LL AT 75DegC and % Z at 75 Deg C.
3. If HV/LV flags required transformer overall height will increase.