

<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 : 10223-5	Customer : KKM POWER , FINLAND				
kVA : 500	kV :11/0.42	Phase : 3	Freq. : 50Hz	Cooling : ONAN	Doc No: EGT 40749R1

Sl. No.	Description	UNIT	500 kVA
1)	Make		Toshiba Transmission & Distribution Systems (India) Pvt. Ltd
2)	Type		Hermitically Sealed
3)	Phases	No.	Three
4)	Rating	kVA	500 kVA
5)a)	Rated Voltage:		
	HV	V	11000
	LV	V	420
b)	Highest voltage for equipment		
	HV	kV	12
	LV	kV	1
6)	Tappings		+5.0% to -5.0 % in steps of 2.5%
7)	Frequency	Hz	50
8)	Vector Group		Dyn11
9)	Insulation Level		
	HV	kV peak	75
	LV	kV peak	Not Applicable
10)	Power Frequency Level		
	HV	kV rms	28
	LV	kV rms	3
11)	Winding material		Aluminium
12)	Core Material		CRGO
13)	Temperature Rise:		
	Oil	°C	60
	Winding	°C	65
14)	Losses		
	No Load Losses at rated Voltage and Frequency	Watt	510 (MAX)-A0
	Load Losses at 75 °C	Watt	5500 (MAX)-Ck
15)	Impedance Voltage	%	4% (+/- IEC Tolerance Applicable)

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16)	Percentage Resistance	%	1.10	
17)	Regulation at:			
	Full Load UPF	%	1.17	
	Full Load 0.8 PF	%	3.22	
18)	Efficiency at 0.8 PF:			
	Full Load	%	98.52	
	¾ Full Load	%	98.81	
	½ Full Load	%	99.07	
19)	Terminal Arrangement:			
	HV		Bare Bushings – Porcelain-12kV/250A	
	LV		Bare Bushings – Porcelain-1kV/1250A	
20)	Actual Overall Dimensions:			
	Length	mm	As per OGA drawing	
	Width	mm	As per OGA drawing	
	Height	mm	As per OGA drawing (without rollers)*	
21)	Overall Weight			
	Total Weight	Kg.	1665	
22)	Noise Level	LwA dB (A )	51	
<b>Applicability of Optional Fittings For above mentioned Actual Overall Dimensions</b>				
23)	Rollers		Yes	
24)	Pole Mounting consoles		No	
25)	HV bushing flags/connector/lug		No	
26)	LV bushing flags/ connector/lug		No	
27)	HV Tapping/Tap Switch		Yes	

**Note:**

1. Actual overall dimensions and weights are subjected to +/-10% Tolerance, provided that the tolerance is not exceeded the maximum value defined.
2. All the efficiencies and regulations are calculated at the nominal values of NLL, LL @ 75DegC and %Z @75 DegC.
3. \* With Rollers transformer height will increase by 100mm.
4. With HV flags transformer overall height will increase.