

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

GUARANTEED TECHNICAL PARTICULARS THREE PHASE DISTRIBUTION TRANSFORMER					
Tender No : 09573-7		Customer :- KKM POWER OY, FINLAND Tender No :- 233449			
kVA : 1000	kV :20.5/0.41	Phase : 3	Freq. : 50Hz	Cooling : ONAN	Doc No: EGT 38074
Sl. No.	Description	UNIT	1000 kVA		
1)	Make		Toshiba Transmission & Distribution Systems (India) Pvt. Ltd		
2)	Type		Hermitically Sealed		
3)	Phases	No.	Three		
4)	Rating	kVA	1000 kVA		
5)	Voltage:				
	HV	V	20500		
	LV	V	410		
6)	Tapping		Not Applicable		
7)	Frequency	Hz	50		
8)	Vector Group		Dyn 11		
9)	Insulation Level				
	HV	kV peak	125		
	LV	kV peak	Not Applicable		
10)	Power Frequency Level				
	HV	kV rms	50		
	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	770 (MAX)-A0		
	Load Losses at 75 °C	Watt	10500 (MAX)-Ck		
15)	Impedance Voltage	%	6% (+/- IEC Tolerance Applicable)		
16)	Percentage Resistance	%	1.05		

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17)	Regulation at:			
	Full Load UPF	%		1.22
	Full Load 0.8 PF	%		4.47
18)	Efficiency at 0.8 PF:			
	Full Load	%		98.61
	¾ Full Load	%		98.90
	½ Full Load	%		99.16
19)	Terminal Arrangement:			
	HV			Bare Porcelain Bushings
	LV			Bare Porcelain Bushings
20)	Actual Overall Dimensions:			
	Length	mm		1745
	Width	mm		980
	Height	mm		1730
21)	Overall Weight			
	Total Weight	Kg.		2815
22)	Noise Level	LwA dB (A)		55

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 AT 75DegC and %Z at 75 Deg C.
3. Lowest cold start temperature shall be considered as -30°C.