TCM SERIES TRANSFORMERS

TCM series transformers (three-phase, dry-type, multifunctional) rating

0.16...1.0 kV·A, are designed to be connected to three-phase networks for supplying reduced voltage to rectifying circuits, to semiconductor converters of machines and elevators, to electric tools, and to other current-using devices in general-purpose electric installations.

Primary winding voltage – 220, 380 V, secondary winding voltage – from 12 to 220 V. Winding connection/vector group - DYn-11.

Transformers are designed for indoor operation, under cold, moderate or tropical climatic conditions.

Transformers are resistant to mechanical impacts of acceleration max.:

- 1g within 0.5-55 Hz frequency range for up to 0.63 kV·A (inclusive) ratings (mounted in any desirable mounting position);

- 0.5g within 0.5-35 Hz frequency range for 1.0 kV·A rating (if mounted in horizontal position).

Transformers employ a strip-wound split-type magnetic core with coils of copper wire. Transformer assemblies are impregnated with insulating varnish in a vacuum impregnator.





percentage

Power, kV·A	Winding voltage, V		No-load current, A		Short-circuit voltage, V		Efficiency	
	of primary	of secondary	Rated	Tolerance limits	Rated	Tolerance limits	Rated	Tolerance limits
			%					
0.16	220; 380	Of 12 up to 220	24	+30	13	+20	84	
0.25					10.5		86	
0.4			20		7.0		89	-2
0.63					5.5		91	
1.0					5.0		92	

Note: Tolerance limits are given per cent as to nominal value.



Transformer type	В	L	Н	A	A ₁	d	Mass
		kg					
TCM-0.16	195	100	110	160	70	7.0	3.5
TCM-0.25	235	115	125	200	/0		5.4
TCM-0.4	245	120	150	210			7.5
TCM-0.63	300	300		260	90		11.0
TCM-1.0	365	125	190	325			13.7