

Enameled and Taped wires

Thermex 200 G1 FO390

Enameled round copper wire Polyester-Film taped

Description:

THERMEX® 200 G1 FO 390 round wires are enameled, round copper wires taped with a Polyethylene-Terephthalate film. The additional taping of PET film is 45 ... 50 % overlapped and heat shrunk on itself to avoid the loosening due to cut off.

The enamel consists of an excellent thermal base insulation of modified Polyester-imide and a modified Polyamide-imide overcoat. It presents outstanding mechanical, thermal and chemical properties which are manifested by the high flexibility, abrasion resistance, the very good resistance against the action of solvents and insulating oil.

The Temperature Index of the enamel base is TI 200. The Polyester film will enhance both the mechanical and dielectrical properties.

Dimension:

Round copper wires in coating class Grade 1.
0,80 2,00 mm nominal diameter

The individual conventional conductor dimensions (nominal dimensions), the tolerances and the nominal cross-section areas correspond to IEC Publication 60317-0-1.

Standards:

IEC-Publication doesn't exist for such product.

The test methods are based on IEC Publication 60851: 60851-1 General
60851-2 Definition of dimensions
60851-3 Mechanical properties
60851-4 Chemical properties
60851-5 Electrical properties
60851-6 Thermal properties

Advantages:

Due to the good temperature resistance in connection with very good mechanical and chemical properties. THERMEX® 200 G1 FO 390 wires are specially applicable for windings constantly exposed to high temperature conditions in combination with high field intensity. Their chemical resistance against humidity, cooling agents, detergents, solvents and oils made them specially suited for windings under particularly severe conditions.

Application:

- LV Motors of class 200
- Special motors exposed to severe conditions.

Process Notes:

No reservation under normal working conditions.

**Value
for Ø 1.50 mm
Standard**

Insulation

Thickness increase due to insulation	mm	0.13-0.17	
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Mechanical properties

Elongation at break	%	≥ 30	IEC 60851-3, Test 6
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Springiness	°	max. 5.5	IEC 60851-3, Test 7
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Electrical properties

Nominal resistance D.C. at 20 °C	Ohm/m	max. 0.00967	IEC 608515, Test 5
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Breakdown voltage Mandrel Ø =4 x d in metal shot bath	V	> 3000	IEC 608515, Test 13
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Order data :

Quantity, Designation and Mode of Supply

The designation shall contain:

Type of wire round (DR)
Nominal dimension (bare diameter) e.g. 1.50 mm
Conductor material Cu
Designation of the insulation Thermex 200 G1 FO 390

The mode of supply shall indicate the type of reel required, e.g. cylindrical reels according to IEC 60264-2 (identical with DIN 46399).

Example of complete order:

500 kg DR Cu 1.50 Thermex 200 G1 FO 390, reels DIN 355

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