

MAGNETEMP[®] C-180

MAGNETEMP[®] CN-180

Properties

Magnetemp[®] C-180 has the following characteristics:

- temperature index of 192°C,
- insulation at high temperatures,
- high cut-through and high resistance to heat shock and thermal overloads.

Insulation

Magnetemp[®] C-180 is a polyesterimide (THEIC) enameled copper wire.

Application

Magnetemp[®] C-180 is designed for the production of the following applications:

- winding on automatic winding machines,
- coils impregnated or encapsulated with solvent free resins

Main applications are found in relays, transformers, components for television as automotive, but also in micro-motors, and every winding used for class F and H equipment.

Production range

The standards are

Diameter: 0.05 to 5 mm

Thickness: Grade 1 and Grade 2

Color: Natural

This wire is also available with a polyamide overcoat under the following trademark:

Magnetemp[®] C-180

(NEMA MW76/IEC 60317-22)

The polyamide overcoat gives to **Magnetemp[®] C-180** high level of windability and excellent resistance to many chemicals, especially most impregnation and encapsulating resins.

Characteristics

Magnetemp[®] C-180 fulfills the requirements of the following specifications:

IEC 60317-8

NEMA MW 30

Magnetemp[®] C-180 and **Magnetemp[®] CN-180** have an official approval by UL, class 180.

MAGNETEMP[®] C-180

Valeurs typiques d'un fil Magnetemp[®] C-180 mesurées selon les normes CEI 60 851	Typical values for a Magnetemp[®] C-180 sample according to IEC 60 851 standards	
Diamètre du conducteur Diamètre sur émail Isolation de base	0,400 0,446 Polyesterimide (THEIC)	Conductor Diameter Overall Diameter Basecoat
Principales caractéristiques		Main characteristics
Indice de température	192°C	Thermal index
Durée de vie de 5000 h à	212°C	5000 h life test
Choc thermique	OK at 220°C	Heat shock
Thermoplasticité	≥ 320°C	Cut through temperature
Tension de claquage	≥ 1,5 IEC values	Breakdown voltage
Flexibilité	15 % + 1 diam.	Flexibility
Allongement	37 %	Elongation
Tangente Delta	≥ 180°C	Tangent Delta
Resistance aux agents chimiques	Good	Chemical resistance

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Valeurs typiques d'un fil Magnetemp[®] C-180 mesurées selon les normes CEI 60 851		Typical values for a Magnetemp[®] C-180 sample according to IEC 60 851 standards
Diamètre du conducteur Diamètre sur émail Isolation de base	0,800 0,873 Polyesterimide (THEIC)	Conductor Diameter Overall Diameter Basecoat
Principales caractéristiques		Main characteristics
Indice de température	192°C	Thermal index
Durée de vie de 5000 h à	212°C	5000 h life test
Choc thermique	OK at 220°C	Heat shock
Thermoplasticité	≥ 320°C	Cut through temperature
Tension de claquage	≥ 1,5 IEC values	Breakdown voltage
Flexibilité	10 % + 1 diam.	Flexibility
Allongement	40 %	Elongation
Tangente Delta	≥ 180°C	Tangent Delta
Resistance aux agents chimiques	Good	Chemical resistance

These values are for information only.