

MAGNESOL[®] E-180

MAGNESOL[®] EN-180

Properties

Magnesol[®] E-180 has the following characteristics:

- temperature index of 190°C,
- excellent mechanical and chemical characteristics,
- designed for windings with special thermal resistance (higher than the polyurethane one),
- good solderability at 470°C without previous removal of the enamel coating.

Insulation

Magnesol[®] E-180 is a solderable polyesterimide enameled copper wire.

Application

Magnesol[®] E-180 is designed for the production of following applications:

- high-speed windings and automatic processes,
- windings that experience severe heat overloads,
- micro-motors,
- relays,
- solenoid valves,
- transformers,
- fine and ultra-fine windings.

Production range

The standards are:

Diameter: 0.03 to 0.71 mm

Thickness: Grade 1, Grade 2 and Grade 3 on request

Color: natural

This wire can also be ordered with a polyamide avercoat under the trademark:

Magnesol[®] E-180, particularly adapted for high speed winding machines (NEMA MW 78).

Characteristics

Magnesol[®] E-180 fulfills the requirements of the following specifications:

IEC 60317-23

NEMA MW77

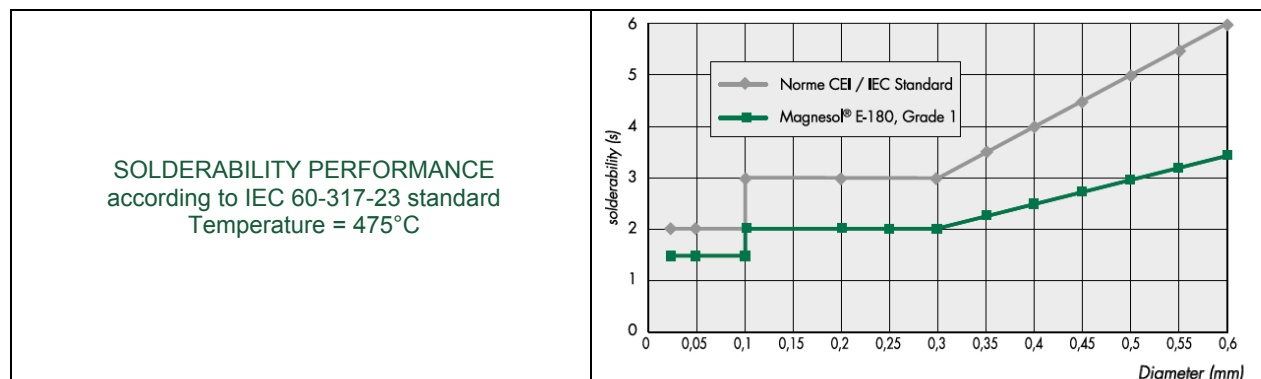
Magnesol[®] E-180 have an official approval by UL, class 180.

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Valeurs typiques d'un fil Magneso[®] E-180 mesurées selon les normes CEI 60 851		Typical values for a Magneso[®] E-180 sample according to IEC 60 851 standards
Diamètre du conducteur Diamètre sur émail Isolation de base	0,125 0,141 Polyesterimide brasable	Conductor Diameter Overall Diameter Basecoat
Principales caractéristiques		Main characteristics
Indice de température	190°C	Thermal index
Durée de vie de 5000 h à	210°C	5000 h life test
Choc thermique	OK at 220°C	Heat shock
Thermoplasticité	≥ 270°C	Cut through temperature
Tension de claquage	≥ 1,5 IEC values	Breakdown voltage
Flexibilité	20 % + 1 diam.	Flexibility
Allongement	28 %	Elongation
Tangente Delta	≥ 160°C	Tangent Delta
Résistance aux huiles de transformateurs	Good	Resistance to transformer oil
Soudabilité	470°C, 2 sec.	Solderability

These values are for information only.



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THERMAL ENDURANCE GRAPH
- TEMPERATURE INDEX
MAGNESOL[®] E-180, without impregnation
Nominal diameter 0,400 mm
Increase in diameter due to the insulation 0,034 mm
Test voltage 400 V

