



# DAMID 180

Round enamelled winding wire of copper, heat resistant, class 180

## Product name:

Damid 180 - Gr 1

Damid 180 - Gr 2

## Specifications:

IEC 60317-8

## UL approval:

Approved: Damid 180

UL-file no: E101843

## Class: 180

Temperature index  $\geq 180$  °C

Heat shock:  $\geq 200$  °C

## Conductor material:

EN 1977 - ETP1 CW003A

EN 1977 - ETP CW004A

ASTM B49 - ETP C11000/C11040

## Insulation:

THEIC-modified esterimide

## Properties:

- Suitable for winding in high speed machines
- Very good resistance to transformer oils
- Very good resistance to typical solvent
- Freon resistant
- Excellent resistance to mechanical stress

## Field of application:

- Electrical devices
- Oil-immersed transformers
- Cast-resin transformers

## Dimension range:

Damid 180 - Gr 1  $0,090 \leq \varnothing \leq 6,00$

Damid 180 - Gr 2  $0,090 \leq \varnothing \leq 6,00$

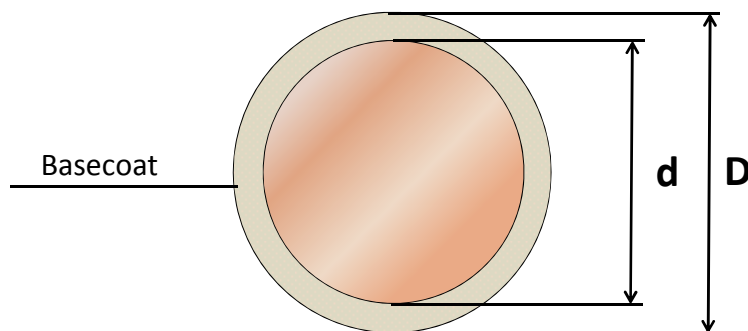
## Standard packaging:

$0,150 \leq \varnothing \leq 3,35$  mm A250/400, A315/500

$3,35 < \varnothing \leq 6,00$  mm K500, K630, K710

## Shelf life:

6 years, under normal ambient conditions



$D - d = \text{Increase}$

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## Properties for DAMID 180

Main characteristics	Test method	Acceptance criteria	Test values for a Damid 180 sample (1,00 mm, Gr2)
<b><u>Thermal properties</u></b>			
Heat shock	IEC 60851 - 6.3	≥ 200 °C	≥ 200 °C
Cut-through	IEC 60851 - 6.4	≥ 320°C	> 400 °C
Temperature index	IEC 60172	≥ 180 °C <sup>1)</sup>	≥ 180 °C <sup>1)</sup>
<b><u>Electrical properties</u></b>			
Conductor resistance	IEC 60851 - 5.3	0,01724 Ωmm <sup>2</sup> /m	0,01724 Ωmm <sup>2</sup> /m
Conductivity	1/R	> 58 m/(Ωmm <sup>2</sup> )	> 58 m/(Ωmm <sup>2</sup> )
Breakdown voltage	IEC 60851 - 5.4	IEC 60317-0-1 <sup>2)</sup>	> 6,0 kV cyl.
<b><u>Mechanical properties</u></b>			
Elongation	IEC 60851-3.3	IEC 60317-0-1 <sup>2)</sup>	40%
Springiness	IEC 60851-3.4	Springiness <sup>3)</sup>	IEC 60317-0-1 <sup>2)</sup>
		Springback <sup>4)</sup>	≤ 5°
Flexibility	IEC 60851-3.5	Mandrel wind <sup>3)</sup>	1x∅
		Stretching <sup>4)</sup>	min 32%
Adherence	IEC 60851-3.5	Jerktest <sup>5)</sup>	No loss of adhesion
		Peeltest <sup>6)</sup>	min. 110 <sup>7)</sup>

1. According to supplier certificate

2. Values depend on dimension and grade

3. Up to an including 1,60 mm

4. Over 1,60 mm

5. Up to an including 1,00 mm

6. Over 1,00 mm

7. Revolutions x nominal dimension

Values above are for information only. All values noted are typical and can vary between lots and dimensions.

The technical data included is up to date at the time of printing.

LWW reserves the right to make any amendments deemed necessary

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