



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 ≥ 180 °C

Heat shock: ≥ 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 $0,090 \leq \varnothing \leq 6,00$

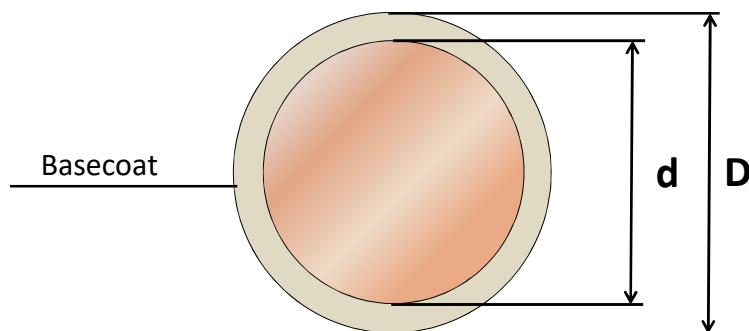
Standard packaging:

$0,150 \leq \varnothing \leq 3,35$ 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) |
|-------------------------------------|-----------------|--------------------------------------|---|
| <u>Thermal properties</u> | | | |
| 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 ¹⁾ | ≥ 180 °C ¹⁾ |
| <u>Electrical properties</u> | | | |
| Conductor resistance | IEC 60851 - 5.3 | 0,01724 $\Omega\text{mm}^2/\text{m}$ | 0,01724 $\Omega\text{mm}^2/\text{m}$ |
| Conductivity | 1/R | > 58 m/(Ωmm^2) | > 58 m/(Ωmm^2) |
| Breakdown voltage | IEC 60851 - 5.4 | IEC 60317-0-1 ²⁾ | $> 6,0$ kV cyl. |
| <u>Mechanical properties</u> | | | |
| Elongation | IEC 60851-3.3 | IEC 60317-0-1 ²⁾ | 40% |
| Springiness | IEC 60851-3.4 | Springiness ³⁾ | 43° |
| | | Springback ⁴⁾ | - |
| Flexibility | IEC 60851-3.5 | Mandrel wind ³⁾ | 15 % + 1x \emptyset |
| | | Stretching ⁴⁾ | - |
| Adherence | IEC 60851-3.5 | Jerktest ⁵⁾ | OK |
| | | Peeltest ⁶⁾ | - |

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.