DAMID 220

Rectangular enamelled conductor of copper, heat resistant, class 220

Intended for special customer projects

Product name:
Damid 220

Specifications:
IEC 60317-58

UL approval:
Approved: Damid 220
UL-file no: E101843

Class: 220
Temperature index ≥ 220°C
Heat shock: ≥ 240°C

Conductor material:
EN 1977 - ETP1 CW003 A

Insulation:
Basecoat: Polyamide-imide

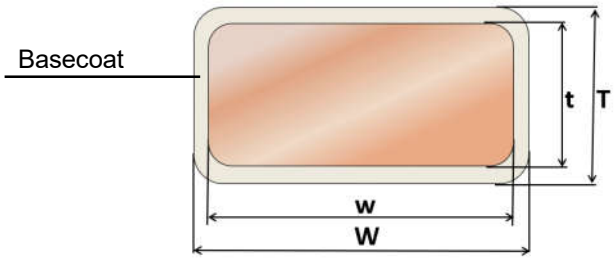
Properties:
- High heat resistance
- Very good resistance to transformer oils
- Very good resistance to typical solvent
- Freon resistant
- Excellent resistance to mechanical stress

Field of application:
- Electric motors
- Rotor coils
- Transformers and Chokes

Dimension range:
Damid 220 - Gr 1 2,00 - 70 mm² ≤ 14 mm width
Damid 220 - Gr 2 2,00 - 70 mm² ≤ 14 mm width
Damid 220 - Gr 3 2,00 - 10 mm² ≤ 5 mm width

Standard packaging:
K355, K500, VM630, VM710

Shelf life:
6 years, under normal ambient conditions



T - t = Increase in thickness

W - w = Increase in width

Increase in dimension due to insulation (double sided wall thickness)
Gr1: 0,06 - 0,11 mm, Gr2: 0,12 - 0,17 mm, Gr3: 0,18 - 0,23 mm

Conductor corner radius

Nominal thickness of conductor (*mm*)		Corner radius (*mm*)	Tolerance
Over	Up to and including		
-	1,00	0,5 nominal thickness	+/- 25%
1,00	1,60	0,50	+/- 25%
1,60	2,24	0,65	+/- 25%
2,24	3,55	0,80	+/- 25%
3,55	-	1,00	+/- 25%

Conductor tolerances

Nominal width or thickness of the conductor (mm)		Tolerance +/- (mm)
Over	Up to and including	
-	3,15	0,030
3,15	6,30	0,050
6,30	12,50	0,070
12,50	-	0,100

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Properties for DAMID 220

Main characteristics	Test method	Interval	Acceptance criteria	Test values for a Damid 220 Gr 2 sample (4,00 x 2,00 mm)
Thermal properties				
Heat shock	IEC 60851 - 6.3	All sizes	≥ 240°C, 6 x t	≥ 240°C, 6 x t
Temperature index	IEC 60172	1)	≥ 220°C 2)	≥ 220°C 2)
Electrical properties				
Conductor resistance	IEC 60851 - 5.3	3)	0,01724 Ωmm²/m	0,01724 Ωmm²/m
Conductivity	1/R	3)	> 58 m/(Ωmm²)	> 58 m/(Ωmm²)
Breakdown voltage	IEC 60851 - 5.4	All sizes	Gr 1 1,0 kV	-
			Gr 2 2,0 kV	> 5,0 kV
			Gr 3 3,0 kV	-
Mechanical properties				
Elongation	IEC 60851-3.3	1,00 ≤ t ≤ 2,50	≥ 30%	57%
		t > 2,50	≥ 32%	-
Springback angle	IEC 60851-3.4	All sizes	≤ 5°	4,2°
Flexibility	IEC 60851-3.5			
- Bending edgewise		width ≤ 10 mm	4 x width	3 x width
		width > 10 mm	5 x width	4 x width
- Bending flatwise		All sizes	4 x thickness	3 x thickness
Adherence -Cut and stretch	IEC 60851-3.5	All sizes	15% stretch, Loss of adhesion < 1 x width	30% stretch

1. Test conducted on round wire, 1,00 mm grade 2, according to IEC 60172
2. According to supplier certificate
3. Dependence of dimension is expressed by the unit

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

Dimension range

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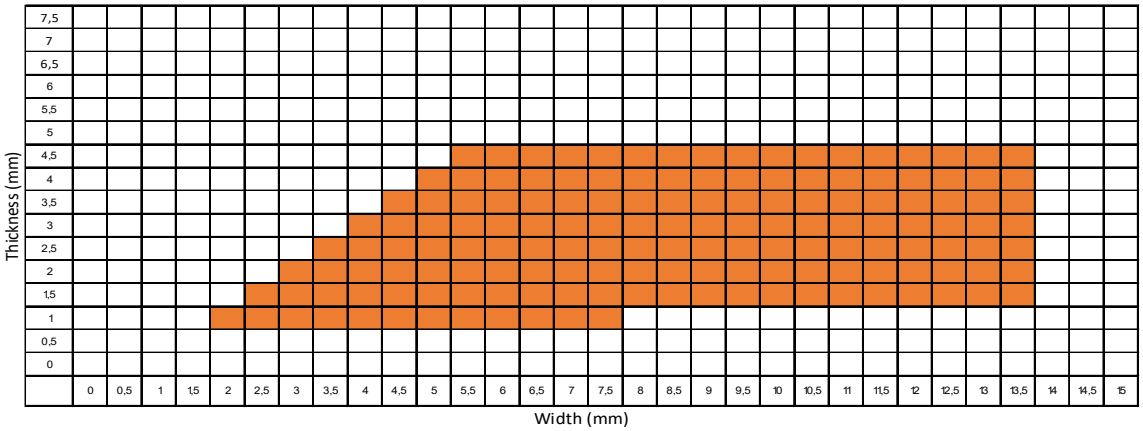

The technical data included is up to date at the time of printing.
Dahrén reserves the right to make any amendments deemed necessary. Ed. 4

Certified according to ISO 9001, IATF 16949, ISO 14001

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