



DAMIDFIBRE 180 EP

Rectangular enamelled and glass-fibre covered conductor of copper, with epoxy, class 180

Product name:

Damidfibre 180 EP

Specifications:

Internal LWW or customer specification

UL approval:

Not approved

Class: 180

Temperature index $\geq 180^{\circ}\text{C}$ acc. to experience

Heat shock: $\geq 180^{\circ}\text{C}$

Insulation:

Basecoat: THEIC-modified polyester(imide)

Overcoat: Polyamide-imide

1-2 layers of glass-fibre yarn

Impregnation: Polyesterimide

Adhesive layer: Epoxy

Properties:

- Good resistance to mechanical stress
- B-stage cured epoxy layer allows pre-pressing of windings

Field of application:

- Transformers
- Large generators
- Electric motors

Standard packaging:

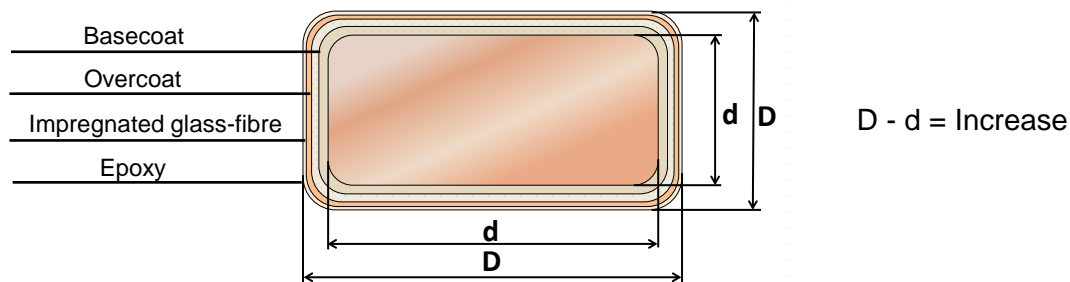
Drum 500 and 630

Shelf life:

6 month, under normal ambient conditions

Conductor material

Cu according to EN 1977/ASTM B49



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

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%

DAMIDFIBRE 180 EP

Rectangular enamelled and glass-fibre covered conductor of copper, with epoxy, class 180

Insulation increase

Designation	Nominal width of conductor	Increase in thickness	Increase in width
Damidfibre 180 EP 1	$2,00 \leq W \leq 3,15$	$0,30 \pm 0,06$	max. 0,36
	$3,15 < W \leq 6,30$	$0,32 \pm 0,06$	max. 0,38
	$6,30 < W \leq 12,50$	$0,35 \pm 0,07$	max. 0,42
	$12,50 < W \leq 20,50$	$0,38 \pm 0,08$	max. 0,46
Damidfibre 180 EP 2¹⁾	$2,00 \leq W \leq 3,15$	$0,37 \pm 0,06$	max. 0,51
	$3,15 < W \leq 6,30$	$0,37 \pm 0,06$	max. 0,53
	$6,30 < W \leq 12,50$	$0,42 \pm 0,08$	max. 0,57
	$12,50 < W \leq 20,50$	$0,47 \pm 0,08$	max. 0,63

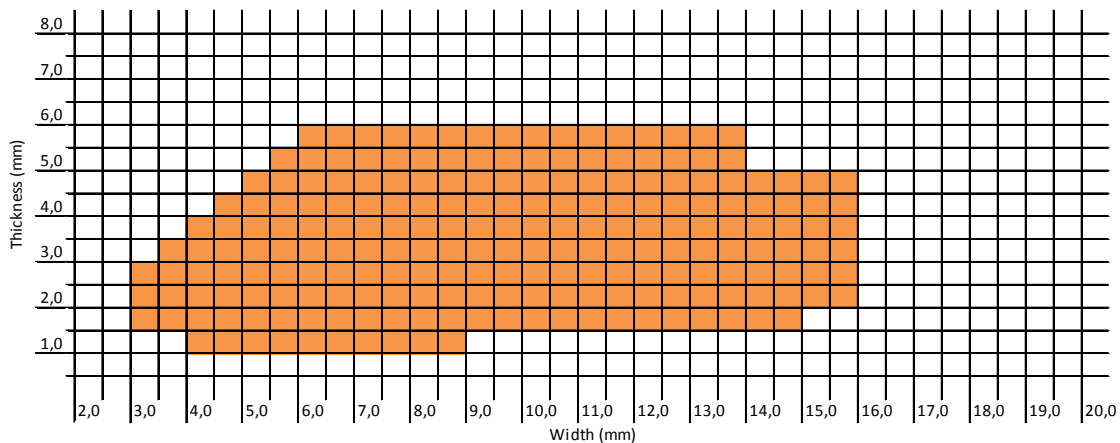
1. Not IEC standard, values modified to suit LWW production process

Properties for DAMIDFIBRE 180 EP

Main characteristics	Test method	Interval	Acceptance criteria
Electrical properties			
Conductor resistance	IEC 60851 - 5.3	1)	$0,01709 \Omega \text{mm}^2/\text{m}$
Conductivity	1/R	1)	$> 58 \text{ m}/(\Omega \text{mm}^2)$
Breakdown voltage	IEC 60851 - 5.4	All sizes	1,5 kV
- Damidfibre 180 EP 1 - Damidfibre 180 EP 2			2,0 kV
Mechanical properties			
Elongation	IEC 60851-3.3	$1,00 \leq T \leq 2,50$	$\geq 30\%$
		$T > 2,50$	$\geq 32\%$
Springback angle	IEC 60851-3.4	All sizes	$\leq 5,5^\circ$
Flexibility	IEC 60851-3.5	$W \leq 8 \text{ mm}$	10 x width
- Bending edgewise		$W > 8 \text{ mm}$	15 x width
- Bending flatwise		All sizes	10 x thickness
Adherence	IEC 60851-3.5	All sizes	10 % stretch, no loss of adhesion
-Stretch			

1. Dependence of dimension is expressed by the unit

Dimension range



The technical data included is up to date at the time of printing.
LWW reserve the right to make any amendments deemed necessary

Liljedahl Winding Wire

dahréntråd | isodraht | śląska | 利里达尔电磁线
liljedahl winding wire