

Technical Data Sheet PF CC 202

PF CC 202

PF CC 202 acc. EN 60893 (Hgw 2082.5 acc. DIN 7735) – high-voltage-resistant cotton fabric phenolic laminate

Typical Properties

- High-voltage resistant
- Cotton-fabric-reinforced phenolic laminate
- Good mechanical properties
- Thermoset laminate (dimensionally stable)
- Good machinability
- Colour brown

Typical Industries

- High-voltage switchgear engineering
- Electrical engineering and insulation technology
- Transformer and motor manufacturing
- Mechanical engineering
- Jig, fixture and tool making

	Test Method	Unit	Value
Mechanical Properties			
Flexural strength	DIN 53452	MPa	145 (DIN 7735: 115)
Impact strength	DIN 53453	kJ / m ²	30 (DIN 7735: 20)
Notched impact strength	DIN 53453	kJ / m ²	20 (DIN 7735: 15)
Tensile strength	DIN 53455	MPa	100 (DIN 7735: 60)
Compressive strength	DIN 53454	MPa	190 (DIN 7735: 150)
Cleavage strength	DIN 53463	N	3800 (DIN 7735: 2500)
Modulus of elasticity	DIN 53452	MPa	8 · 10 ³ (DIN 7735: 7 · 10 ³)
Electrical Properties			
Insulation resistance	DIN 53482	Ω	5 · 10 ⁷ (DIN 7735: 10 ⁷)
Electric strength / ⊥	DIN 53481	kV	25 / 12 (DIN 7735: 20 / 5)
Permittivity	DIN 53483		5
Comparative tracking index (CTI)	IEC 112		100-160

	Test Method	Unit	Value
Thermal Properties			
Limiting temperature	VDE 0304 T.21	°C	110
Thermal conductivity	DIN 52612	W / (m·K)	0.2
Coefficient of linear expansion	VDE 0304	10 ⁻⁶ / K	20-40
Thermal class	VDE 0534		E
Resistance to glowing	DIN 53459		2b
General Properties			
Density	DIN 53479	g / cm ³	1.3-1.4
Water absorption (5 mm thickness)	DIN 53495	mg	130
Colour			brown

PF CC 202 (Hgw 2082.5 acc. DIN 7735) is a cotton-fabric-reinforced phenolic laminate according to EN 60893, resistant to high voltage. The stated values comprise the minimum requirement according to DIN 7735 as well as the typical measured value; they are subject to normal manufacturing tolerances and serve as an aid to material selection. They are not a legally binding warranty of specific properties. Actual values may vary slightly depending on manufacturer and sheet thickness. PF CC 202 is not declared suitable for direct food contact.