

Technical Data Sheet PF CC 204

PF CC 204

PF CC 204 acc. EN 60893 (Hgw 2083.5 acc. DIN 7735) – fine-cotton-fabric phenolic laminate, high tensile strength

Typical Properties

- Fine-cotton-fabric-reinforced phenolic laminate
- High tensile strength
- Reduced water absorption
- Good mechanical properties
- Thermoset laminate (dimensionally stable)
- 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	170 (DIN 7735: 130)
Impact strength	DIN 53453	kJ / m ²	40 (DIN 7735: 30)
Notched impact strength	DIN 53453	kJ / m ²	20 (DIN 7735: 15)
Tensile strength	DIN 53455	MPa	130 (DIN 7735: 80)
Compressive strength	DIN 53454	MPa	190 (DIN 7735: 150)
Cleavage strength	DIN 53463	N	4000 (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 53483	kV	30 / 15 (DIN 7735: 25 / 5)
Permittivity	DIN 53483		5
Comparative tracking index (CTI)	IEC 112		100-160

	Test Method	Unit	Value
Thermal Properties			
Limiting temperature	VDE 0304	°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 53452		2b
General Properties			
Density		g / cm ³	1.3-1.4 (typically 1.36)
Water absorption (5 mm thickness)	DIN 53495	mg	130 (DIN 7735: 110)
Colour			brown

PF CC 204 (Hgw 2083.5 acc. DIN 7735) is a fine-cotton-fabric-reinforced phenolic laminate according to EN 60893 with high tensile strength and reduced water absorption. 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 204 is not declared suitable for direct food contact.