

## Technical Data Sheet PF CP 202 (Hp 2061.5)

# PF CP 202 (Hp 2061.5)

Phenolic paper laminate (phenolic resin, paper reinforcement) to DIN 7735 / EN 60893 – electrically improved grade (NEMA XX)

### Typical Properties

- Electrically improved grade with high test voltage (40 kV)
- Good mechanical strength and delamination resistance
- Good machinability
- Thermal class E (120 °C limiting temperature)
- Brown colour

### Typical Industries

- Electrical and electronics industry
- Switchgear manufacturing
- Mechanical and plant engineering
- Transformer manufacturing
- Power engineering

|                                        | Test Method | Unit                | Value |
|----------------------------------------|-------------|---------------------|-------|
| <b>Mechanical Properties</b>           |             |                     |       |
| Flexural strength (23 °C)              | DIN 53452   | MPa                 | 130   |
| Impact strength                        | DIN 53453   | kJ/m <sup>2</sup>   | 15    |
| Notched impact strength (Charpy)       | DIN 53453   | kJ/m <sup>2</sup>   | 4     |
| Tensile strength                       | DIN 53455   | MPa                 | 100   |
| Compressive strength    to laminations | DIN 53454   | MPa                 | 100   |
| Compressive strength ⊥ to laminations  | DIN 53454   | MPa                 | 250   |
| Delamination strength                  | DIN 53463   | N                   | 2000  |
| Modulus of elasticity                  | DIN 53457   | MPa                 | 7000  |
| <b>Electrical Properties</b>           |             |                     |       |
| Test voltage    to laminations         | DIN 53481   | kV                  | 40    |
| Test voltage ⊥ to laminations          | DIN 53481   | kV                  | 40    |
| Dielectric dissipation factor (50 Hz)  | DIN 53483   |                     | 0.08  |
| Permittivity                           | DIN 53483   |                     | 5     |
| Comparative tracking index (CTI)       | IEC 112     |                     | 100   |
| <b>Thermal Properties</b>              |             |                     |       |
| Thermal conductivity                   | DIN 52612   | W/(m·K)             | 0.2   |
| Coefficient of linear expansion        | VDE 0304/2  | 10 <sup>-6</sup> /K | 20–40 |
| Limiting temperature                   | VDE 0304/2  | °C                  | 120   |

|                                   | Test Method | Unit              | Value    |
|-----------------------------------|-------------|-------------------|----------|
| Thermal class                     | IEC 85      |                   | E        |
| Glow-wire / ember resistance      | DIN 53459   |                   | Level 2a |
| <b>General Properties</b>         |             |                   |          |
| Density                           | DIN 53479   | g/cm <sup>3</sup> | 1.4      |
| Water absorption (4 mm thickness) | DIN 53495   | mg                | 210      |
| Colour                            |             |                   | brown    |

The values stated are typical properties according to DIN 7735 / EN 60893, provided as information about this product and as an aid to material selection. Actual values may vary slightly depending on sheet thickness and batch. No specific properties or fitness for a particular purpose are legally warranted by this information.

Liedtke  
Kunststofftechnik.de