

Date Generated: Friday 30th of January 2026

B3 Product Data Sheet

BSEN60893-3-4-PFCP203 B3 Phenolic Paper Laminate SRBP

Material Details

| | |
|------------------------|--|
| Grade: | B3 |
| Description: | Phenolic Paper. Electrical grade. Designed for immersion in oil. |
| Comments: | Designed for oil immersed and medium voltage applications. Better oil absorption than grade B1. Good electrical and mechanical properties. Water absorption intermediate between Grades B1 and B4. |
| Specifications: | BSEN60893-3-4-PFCP203 (Which supersedes BS2572 P2). The closest NEMA equivalent to this specification is NEMA XX |
| Body Colour: | Brown |
| Cover Colour: | Sepia Brown |
| Finish: | Satin/Glossy |
| Size: | 1220 x 1220 Thickness Range: 0.8 - 75.0 |

Typical Applications

- Busbar Supports
- Coil Formers
- High Voltage Insulation
- Mechanical Applications
- Pipeline Insulation
- Precision Machined Parts
- Terminal Boards and Tag Strips

General Properties

| Property | Unit of measure | Typical Value |
|------------------------------------|-----------------|---------------|
| Density | g/cm3 | 1.35 |
| Water Absorption | mg | 75 |
| Flammability Category [¥] | -- | FH1 |

¥ Where relevant, the flammability test method is used solely to control and monitor consistency of production. Under no conditions should the results be considered in relation to fire hazards under actual conditions of use.

Electrical Properties

| Property | Unit of measure | Typical Value |
|---------------------------------------|-----------------|---------------|
| IR (24hrs Water Immersed) | G Ω | 1.5 |
| IR (Dry) | G Ω | 1.5 |
| Electric Strength (Flat Rapid) | MV/m | 5.1 |
| Breakdown Voltage (Edge Step by Step) | kV | 21 |
| Relative Permittivity @ 1 MHz | -- | 5.2 |
| Dissipation Factor @ 1 MHz | -- | 0.04 |
| Tracking Index | V | 110 |

Mechanical Properties

| Property | Unit of measure | Typical Value |
|-------------------------|-------------------|---------------|
| Flexural Strength | MPa | 170 |
| Tensile Strength | MPa | 105 |
| Impact (Notched CHARPY) | kJ/m ² | 4 |

Thermal Properties

| Property | Unit of measure | Typical Value |
|----------|-----------------|---------------|
|----------|-----------------|---------------|

| | | |
|-----------------------------|----|-----|
| Thermal Rating Continuous | °C | 105 |
| Thermal Rating Intermittent | °C | 120 |

Disclaimer: The above values are based upon routine test data and do not form the basis of a supply contract. These products may be used in a diverse range of applications and whilst every effort is made to ensure the information in this data sheet is accurate, it must be stressed that it is the user's responsibility to ensure suitability for the intended end use.

Source: <https://www.attwater.com/products/b3/>