

GPO-3 is a fiberglass reinforced Thermoset Polyester laminate recognized industry-wide for an optimum of Flame- and Arc-Resistance in demanding Electrical applications.

The combination of high strength and Flame Resistance with Low-Smoke Generation characteristics are particularly critical in Marine and Transit applications where safe, economical Hi-Performance materials are required.

GPO-3 Technical Data Sheet 2100 x 1230 mm

| IEC 893 / EN 60893 Grade | | | | UP GM 203 |
|------------------------------|--|-------------------------------|-------------------|--------------------------|
| ANSI (NEMA) Grade NEMA LI-1 | | | | GPO-3 |
| Items | | Test Method | Unit | Values |
| Physical Properties | Color | Visual inspection | --- | Red/White |
| | Specific Gravity | IEC 60893-2:2003 8.1 | g/cm ³ | ≥1.80 |
| | Water absorption | ISO62:2008 8.2 | % | ≤0.5 |
| Mechanical properties | Flexural Strength _L | IEC 60893-2:2003 5.1 | Mpa | ≥160 |
| | Compressive strength | IEC 60893-2:2003 5.3 | Mpa | ≥300 |
| | Impact strength | IEC 60893-2:2003 5.5.3 | KJ/m ² | ≥60 |
| | Tensile Strength | IEC 60893-2:2003 5.7 | Mpa | ≥100 |
| Electrical properties | Electric Strength _⊥ | IEC 60893-2:2003 6.1.2 | kV/mm | ≥ 12 |
| | Breakdown Voltage // | IEC 60893-2:2003 6.1.3 | kV/25mm | ≥ 80 |
| | Dielectric Constant | IEC 60893-2:2003 6.2 | --- | 4.0-5.0 |
| | Dissipation Factor | IEC 60893-2:2003 6.2 | --- | ≤0.03 |
| | Proof Tracking Index | IEC 60893-2:2003 6.4 | --- | ≥600 |
| | Volume Resistivity | IEC 60093 : 1980 | Ω·m | ≥ 1.0 x 10 ¹⁰ |
| | Surface Resistivity | IEC 60093 : 1980 | Ω | ≥ 1.0 x 10 ¹⁰ |
| | Insulation resistance after immersion in water | IEC 60893-2 6.3 | Ω | ≥1.0×10 ¹⁰ |
| Thermal properties | Arc Resistance | IEC 61621 : 1997 | sec | ≥180 |
| | Coefficient of Thermal Expansion | ASTME 228-11 | 1/K | ≤2x10 ⁻⁶ |
| Flame Resistance performance | Temperature Index | IEC 60085:2004 7.1 | °C | 155 |
| | Oxygen Index | ISO 4589-2:1996 | %O ₂ | ≥ 30 |
| | Flame Resistance | IEC 60893-2:2003 7.2 UL 94 | --- | V-0 |