

## M87

## SHEET

<b>Composite:</b>	glass mat + roving – epoxy resin self- extinguishing	
<b>Color:</b>	light green	

### CHARACTERISTICS AND APPLICATIONS

Laminated with good mechanical and dielectric characteristics, self-extinguishing V0 class. The product has been designed and manufactured to replace EPGC202 material, having a better quality / price ratio.

### Mechanical properties

<b>Flexural strength</b>	(ISO 178)	400 MPa
<b>Modulus of elasticity</b>	(ISO 178)	20000 MPa
<b>Compressive strength</b>	(ISO 604)	550 MPa
<b>Charpy impact strength</b>	(ISO 108)	100 kJ/m <sup>2</sup>
<b>Tensile strength</b>	(ISO 527)	240 MPa

### Electrical Properties

<b>Electrical strength at 90°C, in oil, perpendicular to lamination</b>	(IEC 243-1)	15 kV/mm
<b>Break down voltage, at 90°C in oil, parallel to laminations</b>	(IEC 243-1)	35 kV
<b>Permittivity at 48-62 Hz</b>	(IEC 250)	5,5
<b>Dissipation factor at 48-62 Hz</b>	(IEC 251)	0,04

## Physical and thermal properties

<b>Density</b>	(ISO 1183)	2,0 gr/cc
<b>Water absorption</b>	(ISO 62)	0,11 %
<b>thermal conductivity</b>	(ISO 8302)	0,3 W/mK
<b>linear expansion coefficient</b>	(VDE 0304/2)	10-20 $10^{-6} K^{-1}$
<b>Max working temperature</b>	(interno FILP)	130°C
<b>Insulating class</b>	(CEI)	B
<b>Flammability</b>	(UL94)	V0

Note: Above listed features are the result of tests performed in FILP internal laboratory and on products obtained from current production. Deviations from average values on these materials may normally occur. Suggestion and indications to final user are provided just to draw user's attention to check the product features on his own. User has to test the product to determine its suitability to the required application.

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