

# TERMOGASKET sealing tehnology



**DIVISION: Technical laminates** 

## TECHNICAL DATA SHEET ELECTROINSULATING MATERIALS

#### **EPOXY GLASS CLOTH LAMINATED SHEETS**

The phenolic glass cloth laminated sheets are laminated material, made through the hot pressing of two or more layers of alkali-free gl ass material (with unbroken fibre), reinforced with thermoreactive resin of phenol or epoxide type.

\* Delivery at request of copper-folio-faced phenolic gla ss cloth laminated sheets.

#### PHENOLIC COTTON CLOTH LAMINATED SHEETS

The phenolic cotton cloth laminated sheets are made by a laminated material through the hot pressing of two or more layer s of cotton fabric, reinforced with synthetic thermoreactive resins of phenol-f ormaldehyde type, cresol-formaldehydes, mixture of these resins or their mo difications.

#### PHENOLIC COTTON CLOTH LAMINATED ROD

The phenolic cotton cloth laminated rods with circular sect ion are made through pressing of cotton fibre in a pressform, reinfor ced with thermoreactive resin of phenol type.

#### PHENOLIC PAPER LAMINATED SHEETS

The phenolic paper laminated sheets is a layered mater ial, made through the hotpressing of two or more layers of electroinsulati ng paper, reinforced with synthetic thermoreactive resins of phenol-formaldehyd e and cresol-formaldehyde type, mixture of these resins or their mod ifications.

The surface area of all materials is plain, smooth, evenl y painted in natural color, without air or gas bubbles and current-carring switches. They can be mechanically treated: cut, drilled, turned on a lathe, milled, pu nched with no occurrence of cracks or dislodges.

### **TECHNICAL PARAMETERS**

Size Thicknesses (diameters)	EPOXY GLASS CLOTH LAMINATED SHEETS 1980 x 980 ±10 mm  0.4 ÷ 50 mm	PHENOLIC COTTON CLOTH LAMINATED SHEETS  1980 x 980 ±10 mm  0.8 ÷ 50 mm	PHENOLIC COTTON CLOTH LAMINATED ROD  1000 ± 5 mm  Ø6 ÷ Ø200	PHENOLIC PAPER LAMINATED SHEETS  1980 x 980 ±10 mm  0.4 ÷ 50 mm
Density	1.7 ÷ 1.9 g/cm <sup>3</sup>	1.3 ÷ 1.4 g/cm <sup>3</sup>	1.32 ÷ 1.39 g/cm <sup>3</sup>	1.3 ÷ 1.4 g/cm <sup>3</sup>
Flexural strength perpendicular to lamination	> 340 MPa	> 70 MPa	> 88 MPa	> 90 MPa
Bonding strength		> 5500 N		> 2800 N
Notch impact strength parallel to lamination (Charpy)	> 33 kJ/m <sup>2</sup>			
Dielectric strength perpendicular to lamination (in oil 90 ± 2 °C)	> 14,2 MV/m	> 2 MV/m (1.5-2 mm)		> 12 MV/m
Breakdown voltage parallel to lamination (in oil 90 ± 2 °C)	> 35 kV			
Breakdown voltage parallel to lamination (in transformer oil 20 ± 5 °C)			> 10 kV	> 10 kV
Insulation resistance after impregnated in water	> 5x10 <sup>8</sup> Om			
Insulation resistance parallel to the lamination			> 1x10 <sup>8</sup> Om	> 1x10 <sup>9</sup> Om