

## **NOMEX POLYESTER LAMINATES**

### Description

This off white slot insulation consists of Nomex Aramid Paper laminated to Polyester Film in a two or three ply construction.

### Properties

The combination of these two materials gives excellent mechanical strengths with the advantage of high temperature use. The dielectric strength is good and the materials are resistant to most industrial chemicals. The materials can be cut, punched or folded to suit most applications and are also compatible with varnishes and resins.

### Classification

These composite materials are suitable for constant use at 155°C - i.e. Class F.

### Application

Slot linings, coil and phase separation and other similar applications in all types of electrical machines.

Standard thickness for the materials used in varying combinations.

#### NOMEX ARAMID PAPER

0.05mm	-	2 thou
0.075mm	-	3 thou
0.125mm	-	5 thou

#### POLYESTER FILM

0.025mm	-	1 thou	0.180mm	-	7 thou
0.05mm	-	2 thou	0.250mm	-	10 thou
0.075mm	-	3 thou	0.350mm	-	14 thou
0.125mm	-	5 thou			

Mechanical Properties (Tested in accordance with IEC 626-2).

Thickness mm	Tensile Strength			Tear Strength	
	MD	XMD	MD	XMD	
	N/CM	N/CM	N	N	
0.22	175	225	240	370	
0.30	285	295	300	435	
0.36	385	310	670	950	
0.38	465	345	740	1020	
0.42	435	385	680	960	
0.52	446	460	680	960	

Electrical Properties

Typical breakdown strength IEC 626-2 at 20°C, tested with 37/75mm. flat electrodes.

<u>Thickness</u>	<u>Average KV</u>
0.22	10
0.30	15
0.36	19
0.38	20
0.42	21
0.52	25