
SynTherm® AHA

SynTherm® AHA is a flexible 3-ply insulation consisting of a polyimide film with a calendered aramid paper layer on both sides.

Attributes

The excellent electric and thermal properties of the polyimide film and the excellent mechanical and thermal properties of the outer aramid paper layers result in a high performance insulating material. The outer layers protect the polyimide film against hydrolysis influences and mechanical stress.

Application

SynTherm® AHA is used in electric motors with high performance ratio as slot and phase insulation or wedge. SynTherm® AHA can also be used as core, interlayer und final insulation for transformers when a very high temperature resistance at high mechanical load is requested.

Standards

- Temperature resistant up to 180 °C

Delivery forms

Total thickness in µm: 200, 300, 400

SynTherm® AHA is available:

- tapes as of 6 mm width
- rolls approx. 920 mm width

Base

Polyimide film + calandered aramid paper on both sides

Typical mechanical properties	Unit of measure			
Nominal thickness	mm	0.20	0.30	0.40
Typical thickness	mm	0.20±15 %	0.29±15 %	0.39±10 %
Specific weight	g/m ²	190	315	440
Polyimide thickness	µm	40	125	125
Aramid paper thickness	µm	80	80	130
Tensile strength longitudinal	N/10 mm	190	280	400
Tensile strength transversal	N/10 mm	100	180	230

Typical electrical properties	Unit of measure			
Nominal thickness	mm	0.20	0.30	0.40
Dielectric strength (unfold)	kV	8	14	14

The information on this data sheet is based on the information provided by our supplier. It does not represent any specification or agreements regarding conditions or properties. The indicated values are standard values. Deviations from those values due to production and application cannot be excluded. The information on this data sheet is addressed to experts who use it at their own discretion and at their own risk. We do not guarantee results, or accept liability for the indicated specifications or for results obtained based on the specifications. Please contact us for more detailed information. Non-toxic and toxic substances are listed on the safety data sheet.

Updated 10/18

SynTherm® is a registered trademark of SynFlex.

