
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 + calendered 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

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