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## SynTherm® AHA

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

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### 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.

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### 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.

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### Standards

- Temperature resistant up to 180 °C

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### Delivery forms

Total thickness in µm: 200, 300, 400

SynTherm® AHA is available:

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

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### 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 <sup>2</sup>	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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