VOLTIS® SI 2965

VOLTIS® SI 2965 is according to the following international standards:

NEMA LI 1	G 7
IEC 60893	SI GC 201, SI GC 202
DIN 7735	Hgw 2572

Composition

VOLTIS® SI 2965 is a laminate from glasscloth and cured silicone resin.

Application

VOLTIS® SI 2965 is especially used in those areas where good insulating characteristics at high frequencies are required.

Availability

Thickness:	0,3 - 50 mm
Tolerances:	acc. IEC 60893
Sheet size:	2800 +20/-0 mm x 1230 +10/-0 mm Other sizes on request
Colour:	white

Machined parts and cuttings are available on request.

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A Constantia INDUSTRIES Company

Technical Data

Values in the table are mean values of our production. Values according to the standards are guaranteed.

Properties (acc. NEMA LI1)	Testmethod	Unit	Value
Minimum breakdown voltage (thickness up to 1 inch) A D-48/50	ASTM D229	kV	32 15
Maximum permittivity @ 1MHz (thickn. ≥0,125 inch) A D-24/23	ASTM D229	-	4,2 4,2
Maximum dissipation factor @ 1MHz (≥0,125 inch) A D-24/23	ASTM D229	-	0,003 0,022
Minimum arc resistance A D-48/50	ASTM D229	sec	180 180
Min. Izod impact strength lengthwise crosswise	ASTM D229	Ft-lb/in	6,5 5,5
Minimum flexural strength (thickness 0,5 inch) lengthwise crosswise	ASTM D229	ksi	16 13
Minimum bonding strength A D-48/50	ASTM D229	lb	650 550
Maximum water absorption (thickness 0,5 inch)	ASTM D229	%	0,20
Flammability	UL 94	Class	V-0

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Additional Properties (acc. IEC 60893)	Testmethod	Unit	Value
Density	ISO 1183/A	g/cm³	approx. 1.8
Flexural strength at 23°C / 150 °C / 180°C	ISO 178	MPa	120 / 70 / 60
Flexural modulus of elasticity	ISO 178	MPa	approx. 13000
Impact strength (Charpy) parallel to laminations	ISO 179/3 C	kJ/m²	25
Tensile strength	ISO 527	MPa	90
Compressive strength perpendicular to laminations	ISO 604	MPa	160
Insulation resistance after immersion in water	IEC 167	Ohm	10^{10}
Electrical strength at 90°C in oil perpendicular to laminations (thickness 3 mm)	IEC 243	KV/mm	5
Breakdown voltage at 90°C in oil parallel to laminations	IEC 243	kV	30
Permittivity at 50 Hz and 1 MHz	IEC 250	-	4,5
Comparative tracking index	IEC 112	-	CTI 450
Thermal endurance	IEC 216	T.I.	180
Water absorption (thickness 10 mm)	ISO 62/1	mg	27

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