

VOLTIS® Hgw 2082.5 CE

Composition

VOLTIS® Hgw 2082.5 CE is a phenolic woven cotton cloth laminate conforming PF CC 202 acc. IEC 60893, Hgw 2082.5 acc. DIN 7735 and CE acc. NEMA LI 1.

Application

VOLTIS® Hgw 2082.5 CE is especially used in mechanical applications with high demand on electrical insulation, such as switch gears.

Technical Data

Properties	Testmethod	Unit	Value
Density	ISO 1183 / A	g/cm³	approx. 1,4
Flexural strength	ISO 178	MPa	115
Flexural modulus of elasticity	ISO 178	MPa	approx. 7000
Impact strength (Charpy) parallel to laminations	ISO 179/3 C	kJ/m²	7,8
Tensile strength	ISO 527	MPa	60
Electric strength at 90°C in oil perpendicular to laminations (thickness 3mm)	IEC 243	kV/mm	3,0
Breakdown voltage at 90°C in oil parallel to laminations	IEC 243	kV	20
Permittivity at 50 Hz and 1 MHz	IEC 250	-	approx. 5
Insulation resistance after immersion in water	IEC 167	Ohm	5.10 ⁷
Comparative tracking index	IEC 112	-	CTI 100
Thermal endurance	IEC 216	T.I.	120
Water absorption (thickness 3 mm)	ISO 62 / 1	mg	100



Availability: thickness: 0,3 - 200 mm

thickness tolerances: up to 29 mm thickness: according IEC 60893

30 – 40 mm: +2,5/-0 mm 45 – 60 mm: +3,0/-0 mm 65 – 70 mm: +3,5/-0 mm 75 – 80 mm: +4,0/-0 mm 90 – 150 mm: +5,0/-0 mm 160 - 200 mm: +7,0/-0 mm

sheet size:

thickness	standard size	on request	size tolerances	
0,3 - 40 mm	2150 x 1250 mm	1450 x 950 mm 2140 x 1450 mm	+30/-10 mm	
	2800 x 1240 mm	-	+20/-0 mm	
41 - 100 mm	2150 x 1250 mm 1450 x 950 mm	-	±20 mm	
101 - 200 mm	1450 x 950 mm	-		

Cuttings are available on request.