Technical Data Sheet

Lignostone® L I/2-E3-SQ (P1R)

Kunstharzpressholz

Typical characteristics

- Laminated densified wood P1R according to the standard IEC 61061
- Standard quality red beech veneer; parallel stacked
- High mechanical strength at low density

Typical industries

- Transformateurs
- Industrie de l'équipement électrique
- Composants d'isolation électrique
- Transformateurs à huile

	Test method	Unit	Guideline value
Mechanical properties			
Densité	IEC 61061	g / cm^3	0.85
Flexural strength [1] ⊥	ISO 178	MPa	140
Modulus of elasticity in flexion [1] ⊥	IEC 61061	MPa	11000
Compressive strength ⊥	ISO 604	MPa	100
Compressive strength II	ISO 604	MPa	55
Shear strength II	IEC 61061	MPa	8
Thermal properties			
Thermal conductivity	DIN 52612	W/m K	0.22
Operating temperature continuous	DIN 7707	°C	105
Temperature limit when drying	DIN 7707	°C	130
Physical properties			
Oil absorption	IEC 61061	%	30
Moisture content	IEC 61061	%	5
Dielectrical properties			
Electric strength 90°C under oil ⊥	IEC 61061	kV / mm	15
Electric strength 90°C under oil II	IEC 61061	kV/25mm	70
Relative permittivity (50 Hz)	IEC 60250	ε_r	3.7
Dielectric loss factor (50 Hz)	IEC 60250	tan δ	0.01

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	Test method	Unit	Guideline value
Specific volume resistance	IEC 60093	Ω x cm	10^{12}

$^{\perp}$ = perpendicular to the lamination
II = parallel to the lamination

[1] Minimum 4 longitudinal layers in the tension zone

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