Technical Data Sheet

Lignostone® L I/2-E3-SQ (P1R)

Laminated Densified Wood

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

- Trasformatori
- Industria elettrica
- Isolanti elettrici
- Trasformatori in olio

	Test method	Unit	Guideline value
Mechanical properties			
Density	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

The data stated above are average values verified on the basis of regular statistical tests and controls. All information in this publication is based on current technical knowledge and experience. Due to the large number of possible influences during processing and application, it does not exempt the user/processor from carrying out their own tests and trials. Responsibility for the evaluation of the end product for the intended use and compliance with the applicable relevant legal requirements lies exclusively with the user/processor as well as the distributor of the respective product/end product. Suggested uses do not constitute an assurance of suitability for the recommended purpose. The information in this publication and our declarations in Connection with this publication do not constitute acceptance of a guaranteed or warranted characteristic. Guarantee declarations require our separate express written declaration in order to be effective. We reserve the right to adapt the product to technical progress and new developments. The products described in this publication are only sold to customers with the appropriate expertise and not to consumers. Please do not hesitate to contact us if you have any questions or if you experience any specific application problems. If the application for which our products are used is subject to an official approval requirement, the user/processor is responsible for obtaining these approvals. Our application recommendations do not exempt the user/processor from the obligation to examine and, if necessary, clarify the possibility of infringements of third-party rights. In all other respects, we refer to our General Terms and Conditions (GTC). These are available at: www.roechling-industrial.com/gtc