

## Technical Data Sheet

# Lignostone<sup>®</sup> M II/2-E3-HQ

### Typical characteristics

- High red beech veneer quality; crosswise stacked
- Very high mechanical strength at medium density
- Laminated densified wood C4R according to the standard IEC 61061

### Typical industries

- Transformer
- Electrical Industry
- Electrical Insulating Components
- Lignostone Transformerwood - for transformers
- Oil-filled transformers

	Test method	Unit	Guideline value
<b>Mechanical properties</b>			
Density	IEC 61061	g / cm <sup>3</sup>	1.25
Flexural strength <sup>⊥</sup>	IEC 61061	MPa	130
Modulus of elasticity in flexion <sup>⊥</sup>	IEC 61061	MPa	12 500
Compressive strength <sup>⊥</sup>	ISO 604	MPa	230
Compressive strength II	ISO 604	MPa	90
Shear strength II	IEC 61061	MPa	11
<b>Thermal properties</b>			
Thermal conductivity	DIN 52612	W/m K	0.22
Operating temperature continuous	DIN 7707	°C	100
Temperature limit when drying	DIN 7707	°C	130
<b>Physical properties</b>			
Oil absorption	IEC 61061	%	7
Moisture content	IEC 61061	%	5
<b>Dielectrical properties</b>			
Electric strength 90°C under oil <sup>⊥</sup>	IEC 61061	kV / mm	17
Electric strength 90°C under oil II	IEC 61061	kV/25mm	80
Relative permittivity (50 Hz)	IEC 60250	ε <sub>r</sub>	3.7
Dielectric loss factor (50 Hz)	IEC 60250	tan δ	0.01



	Test method	Unit	Guideline value
Specific volume resistance	IEC 60093	$\Omega \times \text{cm}$	$10^{12}$

= perpendicular to the lamination || = parallel to the lamination

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