CREATOR Project A1: Induction Motor

Stator Winding Insulation Technical Specifications: **Elan-tron® MC 4260/W 4260**

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The subsequent data is referenced from [1]. This table is also provided as a .csv file in the same directory.

Parameter	Value	Unit
Surface	Bright	
Density	1,73÷1,77	g/ml
Hardness	85÷90	Shore D/15
Glass transition (Tg)	55÷65	°C
Linear thermal expansion (Tg - 10°C)	60÷70	10^-6/°C
Linear thermal expansion (Tg +10°C)	135÷155	10^-6/°C
Thermal shock (n°10 cycles passed)	-55÷+180	°C
Flammability	6	mm
Max recommended operating temperature	180	°C
Thermal conductivity	0,60÷0,70	W/(m°K)
Dielectric constant at:	3,5÷4,5	
Loss factor at:	10÷30	x 10^-3
Volume resistivity at:	8 x 10^14÷3 x 10^15	Ohm x cm
Dielectric strength	19÷21	kV/mm
Tracking index	> 600	CTI
Flexural strength	75÷85	MN/m²
Strain at break	1,5÷2,5	%
Flexural elastic modulus	4.500÷5.500	MN/m²
Tensile strength	40÷50	MN/m²
Elongation at break	1,5÷3,0	%

[1] “Elan-tron MC 4260/W 4260,” kaltenbach elektrotechnik. [Online]. Available: https://www.kaltenbach-online.com/de/component/phocadownload/category/145-elan-tron-mc-4260-w-4260?download=204:elan-tron-mc-4260-w-4260