TECHNICAL DATA SHEET

CMC TYPES colourless polyester films, no coatings	CMC 29190 **190 µm** CMC 29250 **250 µm** CMC 29350 **350 µm**
Film material	PET (polyethylene terephthalate)
Density	1.4 g/cm³
Mechanical properties	
Tensile strength (machine direction)	ranging from about 150 to 190 MPa or N/mm²
Tensile strength (cross machine direction)	ranging from about 190 to 220 MPa or N/mm²
Elongation at break (machine direction)	ranging from about 190 to 240%
Elongation at break (cross machine direction)	ranging from about 140 to 200%
Young's module (machine direction)	ranging from about 2.95 to 3.6 GPa or kN/mm²
Electrical properties	
Breakdown voltages according to ASTM D 149 (manufacturers' data)	CMC 29190 about 17,5 $kV_{eff.}$ CMC 29250 about 19 $kV_{eff.}$ CMC 29350 about 20 $kV_{eff.}$
Breakdown voltages based on IEC 60243-1 (CMC method in ambient air and temperature, electrode shapes: hemispherical vs. plate, 50 Hz)	PET films of 190 µm and above will not show any breakdown during the following voltage curve: ramp up from 0 to 12 kV_{eff} at 0.5 kV_{eff}/s 15 s voltage hold at 12 kV_{eff} ramp down from 12 to 0 kV_{eff} at 0.5 kV_{eff}/s
Thermal properties	
Insulation class according to UL510 and IEC 60454-2	B (130°C)
RTI based on UL746 according to suppliers' UL files	A (105°C)
Shrinkage (machine direction, 30 min 150°C)	ca. 1.0 - 1.3%
Shrinkage (cross machine direction, 30 min 150°C)	ca. 0.3 - 1.3%
Other properties	RoHS compliant ✓ REACh compliant ✓