

**Preliminary: 300175Y-099-42 –**  
**Carbon-based Power Capacitor Specifications**



	300175Y-099-4 2	none	none	
Nominal capacity (discharged with standard profile <1C) ± 5%	9,90			Ah
Nominal energy (discharging @1C till cut-off)	33,0			Wh
Nominal voltage	4,00			V
Recommended cut-off voltage @ 1C	2,50			V
Max. recommended charging voltage **	4,20			V
Rated capacity (discharging 50% max current till cut-off voltage)	9,00			Ah
Rated energy (discharged 50% max. current until the cut-off voltage) (cell)	30,0			Wh
Max. C-rate charging *** (cell)	3,00			C
Max. C-rate discharging *** (cell)	10,0			C
Max. continuous charging current *** (cell)	29,7			A
Max. continuous discharging current *** (cell)	99,0			A
Max. sustained power capability *** (cell)	49,5			W
Ohmic Resistance Ri (@50% SoC)	1,00			mΩ
Gravimetric energy density (cells) (@1C)	97,1			Wh/kg
Volumetric energy density (cells) (@1C)	13,3			Wh/dm <sup>3</sup>
Gravimetric power density (cells) @ max. C-rate	1.165			W/kg
Cycles life at 25°C	10.000			cycles
Dimensions of cell	300 x 175 x 60			mm
Recommended transportation voltage	3,50			V
Recommended storage voltage	4,00			V
Operation temperature	-40 to +80			°C
Storage temperature	-20 to +45			°C
Retained energy after 28 days at 25°C	92,0			%
Short circuit temperature	< 150			°C
Weight of cells	340			g
Guarantee period (manufacturing)	12,0			months
Fire Hazardous substances: Cells do not pose a fire or explosion risk.				

\* Custom designed. Specifications might deviate.

\*\* Cell damage possible outside these margins

\*\*\* Max. C-rating of powerpack is limited by selected cable and connector parameters and can be lower than theoretical maximum derived from cell parameters. C-rates can be higher than maximum for a short duration. Contact Altreonic case by case.