PRELIMINARY

Carbon-based Power Capacitor Specifications



	60140Y-189-40	
Nominal capacity (discharged with standard profile <1C) ± 5%	18,0	Ah
Nominal energy (discharging @1C till cut-off)	65,0	Wh
Nominal voltage	4,00	V
Recommended cut-off voltage @ 1C	2,50	V
Max. recommended charging voltage **	4,20	V
Max. float charging voltage **	4,00	V
Rated capacity (discharging 50% max current till cut-off voltage)	17,9	Ah
Rated energy (discharged 50% max. current until the cut-off voltage) (cell)	61,5	Wh
Max. C-rate charging *** (cell)	10	С
Max. C-rate discharging *** (cell)	10	С
Recommenced Depth of Discharge	96	%
Max. continuous charging current *** (cell)	180	Α
Max. continuous discharging current *** (cell)	180	Α
Max. sustained power capability *** (cell)	720	W
Ohmic Resistance Ri (@50% SoC)	≤ 2	mΩ
Gravimetric energy density (cells) (@1C)	73,9	Wh/kg
Volumetric energy density (cells) (@1C)	164	Wh/dm³
Gravimetric power density (cells) @ max. C-rate	818	W/kg
Cycles life at 25°C	> 10.000	cycles
Dimensions of cell	60∅ x 140H	mm
Recommended transportation voltage	3,50	V
Recommended storage voltage	4,00	V
Operation temperature ***	-40 to +80 °C	°C
Storage temperature	-20 to +45 °C	°C
Energy leakage 30 days at 25°C/80%SoC	< 2	%
Short circuit temperature	< 150	°C
Weight of cells	880	g
Guarantee period (manufacturing)	12	months

^{*} 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.

The operating temperature must take into account cell heating resulting from load profile.

C-rates can be higher than maximum for a short duration. Contact Altreonic case by case.