

Preliminary: 4050G-025-40 — 8256G-050-40
Carbon-based Power Capacitor Specifications



	221128G-200-4 0	4050G-025-40	8256G-050-40	
Nominal capacity (discharged with standard profile <1C) ± 5%	20,0	2,50	5,00	Ah
Nominal energy (discharging @1C till cut-off)	77,0	8,00	17,5	Wh
Nominal voltage	4,00	4,00	4,00	V
Recommended cut-off voltage @ 1C	2,50		2,50	V
Max. recommended charging voltage **	4,20		4,20	V
Rated capacity (discharging 50% max current till cut-off voltage)			4,90	Ah
Rated energy (discharged 50% max. current until the cut-off voltage) (cell)	69,3	7,20	17,0	Wh
Max. C-rate charging *** (cell)	1,25		1,50	C
Max. C-rate discharging *** (cell)	1,50		1,50	C
Max. continuous charging current *** (cell)	25,0		7,50	A
Max. continuous discharging current *** (cell)	30,0		7,50	A
Max. sustained power capability *** (cell)	100	12,5	160	W
Ohmic Resistance Ri (@50% SoC)	1,50	1,50	8,00	mΩ
Gravimetric energy density (cells) (@1C)	220	160	206	Wh/kg
Volumetric energy density (cells) (@1C)	327	400	476	Wh/dm ³
Gravimetric power density (cells) @ max. C-rate	343		353	W/kg
Cycles life at 25°C	20.000	20.000	20.000	cycles
Dimensions of cell	221 x 7,5 x 142	50 x 40 x 10	82 x 56 x 8	mm
Recommended transportation voltage	3,50		3,50	V
Recommended storage voltage	3,50		3,50	V
Operation temperature	-20 to +55		-20 to +70	°C
Storage temperature	-20 to +45		to +	°C
Retained energy after 28 days at 25°C			92,0	%
Weight of cells	350	50,0	85,0	g
Guarantee period (manufacturing)	12,0		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.