

HE 602030 NCA

55 Ah/ 198 Wh

Lithium Ion Cell



Physical and mechanical characteristics

Diameter	60 mm
Height	232 mm (203 mm without terminals)
Terminals	Positive terminal Al M12 L: 9 mm Negative terminal Cu M12 L: 9 mm
Weight	approx. 1500 g
Volume without terminals	0.57 l
Case material	Stainless Steel

Chemical characteristics

Positive electrode	Lithium nickel cobalt oxide
Negative electrode	Graphite

Electrical characteristics*

Nominal voltage	3.6 V
Nominal capacity at 0.2 C	55 Ah
Minimum capacity	52 Ah
AC Impedance (1 kHz)	≤ 0.5 mOhm
DC Resistance (ESR) (2 s pulse discharge @ 20 C/ 50% SOC)	≤ 1.5 mOhm
Specific energy at 0.2 C	132 Wh/kg
Energy density at 0.2 C	345 Wh/l
Specific power (2 s pulse discharge @ 16 C/ 100% SOC)	1460 W/kg
Power density (2 s pulse discharge @ 16 C/ 100% SOC)	3830 W/l

Operating conditions*

Recommended charge method	Constant current - constant voltage
End of Charge	$I \leq C/100$
Maximum charge voltage	4.2 V
Recommended charge current	up to 11 A (0.2 C)
Continuous charge current	up to 55 A (1 C)
Maximum pulse charge current (15 s) (Max. SOC 80 %, average current < 55 A)	110 A (2 C)
Recommended voltage limit for discharge	3 V
Lower voltage limit for discharge	2.7 V
Lower voltage limit for pulse discharge	2 V
Recommended discharge current	up to 27.5 A (0.5 C)
Maximum discharge current	up to 110 A (2 C)
Maximum pulse discharge current (2 s)	up to 880 A (16 C)
Operating temperature	- 30°C to + 60°C
Recommended charge temperature	0°C to + 40°C
Storage and transport temperature	- 40°C to + 60°C
Cycle life at 20°C and 100% DOD (0.2 C charge; 0.2 C discharge)	> 1000 cycles to 80% nominal capacity > 2000 cycles to 60% nominal capacity

* Reference temperature 20°C

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