

RB100-D



LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8 V
Nominal Capacity	100 Ah
Capacity @ 25A	240 min
Energy	1280 Wh
Resistance	≤30 mΩ @ 50% SOC
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series	4

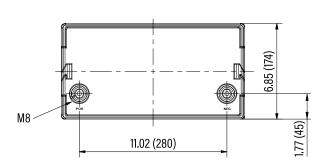
DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	100 A
Peak Discharge Current	200 A (7.5 s ±2.5 s)
BMS Discharge Current Cut-Off	280 A ±50 A (9 ±4 ms)
Recommended Low Voltage Disconnect	11 V
BMS Discharge Voltage Cut-Off	8 V (2.0 ±0.08 vpc) (140 ±60 ms)
Reconnect Voltage	9.2 V (2.3 ±0.1 vpc)
Short Circuit Protection	200-600 µs

TEMPERATURE SPECIFICATIONS

Discharge Temperature	-4 to 140 °F (-20 to 60 °C)
Charge Temperature	32 to 113 °F (0 to 45 °C)
Storage Temperature	23 to 95 °F (-5 to 35 °C)
BMS High Temperature Cut-Off	176 °F (80 °C)
Reconnect Temperature	122 °F (50 °C)

DIMENSIONAL SPECIFICATIONS



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Dimensions (L x W x H)	13.2 x 6.9 x 7.5" 335 x 174 x 191 mm
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MECHANICAL SPECIFICATIONS

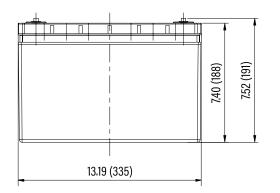
Weight	30 lbs (13.7 kg)
Terminal Type	M8
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)
Case Material	ABS
Enclosure Protection	IP56
Cell Type - Chemistry	Cylindrical - LiFePO₄

CHARGE SPECIFICATIONS

Recommended Charge Current	50 A
Maximum Charge Current	100 A
Recommended Charge Voltage	14.2 V - 14.6 V
BMS Charge Voltage Cut-Off	15.6 V (3.9 ±0.025 vpc) (1.1 ±0.4 s)
Reconnect Voltage	15.2 V (3.8 ±0.05 vpc)
Balancing Voltage	14.4 V (3.6 ±0.025 vpc)

COMPLIANCE SPECIFICATIONS

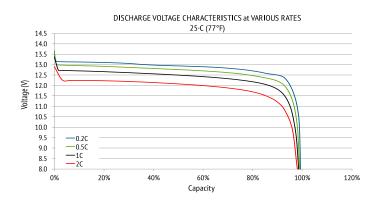
Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9

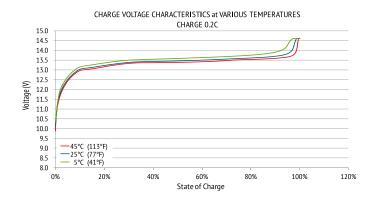


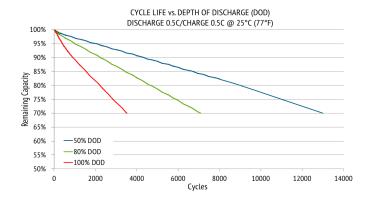


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PERFORMANCE CHARACTERISTICS







DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS TEMPERATURES DISCHARGE 1C 14.5 14.0 13.5 13.0 12.5 Voltage (V) 12.0 11.5 11.0 10.5 10.0 60°C (140°F) 45°C (113°F) 9.5 - 25°C (77°F) - 0°C (32°F) - 10°C (50°F) 9.0 -10°C (14°F) 8.5 -20°C (-4°F)

60%

Capacity

80%

100%

120%

40%

8.0

0%

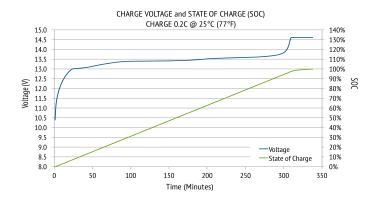
20%

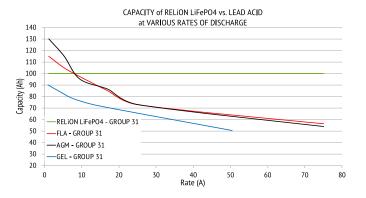
12.8V 100Ah

UN38.3 91 CE

RB100-D

RELION







CE **UN38,3 F**1 IEC

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