# RELi<sup>3</sup>ON<sup>®</sup>

**RB**&(j)\$



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## Group 31

### LITHIUM IRON PHOSPHATE BATTERY

#### **ELECTRICAL SPECIFICATIONS**

Nominal Voltage	25.6 V
Nominal Capacity	50 Ah
Capacity @ 25A	120 min
Energy	1280 Wh
Resistance	60 mΩ
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series	1

#### **DISCHARGE** SPECIFICATIONS

Maximum Continuous Discharge Current	50 A
Peak Discharge Current	100 A (7.5 s ±2.5 s)
PCM Discharge Current Cut-Off	215 A (±15 A)
Recommended Low Voltage Disconnect	22 V
PCM Discharge Voltage Cut-Off	16 V
Reconnect Voltage	20 V
Short Circuit Protection	200-600 µs

#### **TEMPERATURE SPECIFICATIONS**

Discharge Temperature	-4 to 140 °F (-20 to 60 °C)
Charge Temperature	32 to 131 °F (0 to 55 °C)
Storage Temperature	-4 to 140 °F (-20 to 60 °C)
PCM High Temperature Cut-Off	176 °F (80 °C)

### MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	13.0 x 6.8 x 8.8" 329 x 172 x 223 mm
Weight	29 lbs (13.2 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

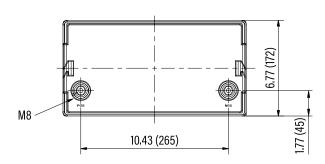
#### **CHARGE** SPECIFICATIONS

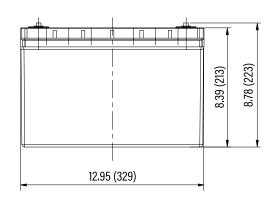
Recommended Charge Current	25 A
Maximum Charge Current	50 A
PCM Charge Current Cut-Off	215 A (±15 A)
Recommended Charge Voltage	28.4 V - 29.2 V
PCM Charge Voltage Cut-Off	31.2 V
Reconnect Voltage	30.4 V
Balancing Voltage	28.8 V

#### **COMPLIANCE** SPECIFICATIONS

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

#### **DIMENSIONAL SPECIFICATIONS**





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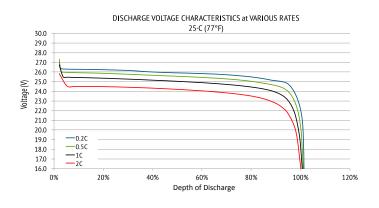
#### Coastal Climate Control, Inc.

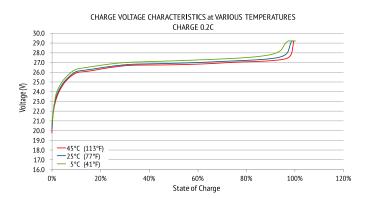
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### Group 31

### RB24v50

#### **PERFORMANCE CHARACTERISTICS**

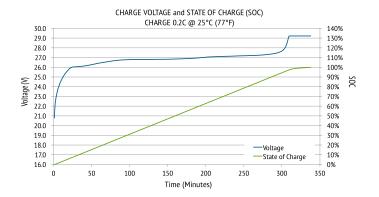


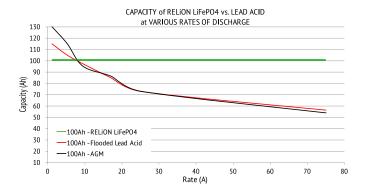


CYCLE LIFE vs. DEPTH OF DISCHARGE (DOD) DISCHARGE 0.5C/CHARGE 0.5C @ 25°C (77°F) 100% 95% 90% 85% 80% Remaining Capacity 75% 70% 65% 60% 55% —50% DOD 50% -80% DOD 45% -100% DOD 40% 20000 25000 0 5000 10000 15000 Cvcles

DISCHARGE 1C 30.0 29.0 28.0 27.0 26.0 Voltage (V) 25.0 24.0 23.0 22.0 21.0 20.0 60°C (140°F) 45°C (113°F) 19.0 10°C (50°F) 18.0 -10°C (14°F) 17.0 -20°C (-4°F) 16.0 0% 20% 40% 60% 80% 100% 120% Depth of Discharge

DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS TEMPERATURES







RB24V50DS06.29.2017

#### CE **7**1° IEC

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