

# RB60-X



Group: 24

## LITHIUM IRON PHOSPHATE BATTERY

### **ELECTRICAL** SPECIFICATIONS

Nominal Voltage	12.8 V
Nominal Capacity	60 Ah
Capacity @ 25A	144 min
Energy	768 Wh
Resistance	≤20 mΩ @ 50% S0C
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series	4

## **DISCHARGE SPECIFICATIONS**

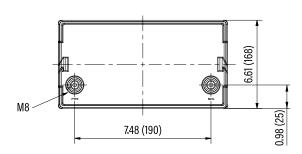
Maximum Continuous Discharge Current	100 A
Peak Discharge Current	200 A (7.5 s ±2.5 s)
BMS Discharge Current Cut-Off	550 A ±50 A (9 ±5 ms)
Recommended Low Voltage Disconnect	11 V
BMS Discharge Voltage Cut-Off	8 V (2.0 ±0.08 vpc) (144 ±30 ms)
Reconnect Voltage	8.64 V (2.16 ±0.24 vpc)
Short Circuit Protection	200-600 µs

## **TEMPERATURE SPECIFICATIONS**

Discharge Temperature	-4 to 140 °F (-20 to 60 °C)
Charge Temperature*	-4 to 113 °F (-20 to 45 °C)
Storage Temperature	23 to 95 °F (-5 to 35 °C)
BMS High Temperature Cut-Off	167 °F (75 °C)
Reconnect Temperature	122 °F (50 °C)

\*Refer to charge currents below 32°F (0°C)

## **DIMENSIONAL SPECIFICATIONS**

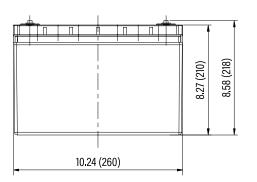


#### **MECHANICAL SPECIFICATIONS** 10.2 x 6.6 x 8.6" Dimensions (L x W x H) 260 x 168 x 218 mm Weight 20 lbs (8.9 kg) **Terminal Type** M8 **Terminal Torque** 80 - 100 in-lbs (9 - 11 N-m) Case Material ABS **Enclosure Protection** IP56 Cell Type - Chemistry Cylindrical - LiFePO<sub>4</sub>

#### **CHARGE SPECIFICATIONS Recommended Charge Current** 3 A - 30 A Maximum Charge Current 60 A Charge Current 14 to 32 °F (-10 to 0 °C) ≤0.1 C Charge Current -4 to 14 °F (-20 to -10 °C) ≤0.05 C **Recommended Charge Voltage** 14.2 V - 14.6 V 15.6 V (3.9 ±0.025 vpc) BMS Charge Voltage Cut-Off (1.2 ±0.3 s) 15.2 V (3.8 ±0.05 vpc) **Reconnect Voltage** 14.4 V (3.6 ±0.025 vpc) **Balancing Voltage**

## **COMPLIANCE** SPECIFICATIONS

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



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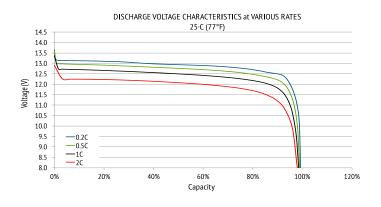
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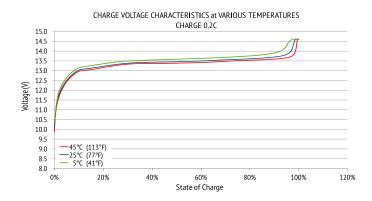


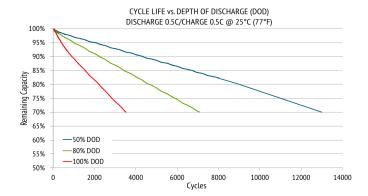


# **RB60-X**

## **PERFORMANCE CHARACTERISTICS**

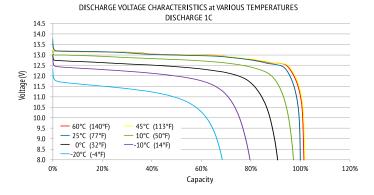




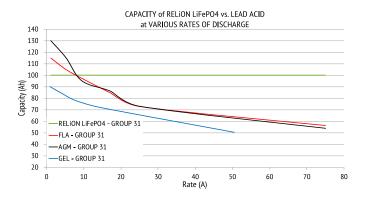




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CHARGE VOLTAGE and STATE OF CHARGE (SOC) CHARGE 0.2C @ 25°C (77°F) 15.0 140% 14.5 130% 120% 140 110% 13.5 13.0 100% 12.5 90% SOC Voltage (V) 12.0 80% 11.5 70% 11.0 60% 10.5 50% 10.0 40% 9.5 30% 9.0 20% -Voltage 8.5 10% -State of Charge 8.0 0% 50 150 350 100 200 250 300 0 Time (Minutes)



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thout notice or obligation.

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CE

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