

# RB24V40



Group: 24

### LITHIUM IRON PHOSPHATE BATTERY

#### **ELECTRICAL** SPECIFICATIONS

Nominal Voltage	25.6 V
Nominal Capacity	40 Ah
Capacity @ 25A	96 min
Energy	1280 Wh
Resistance	≤40 mΩ @ 50% SOC
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series	1 (Single Use)

#### **DISCHARGE SPECIFICATIONS**

Maximum Continuous Discharge Current	30 A
Peak Discharge Current	70 A (7.5 s ±2.5 s)
BMS Discharge Current Cut-Off	120 A ±15 A (9ms)
Recommended Low Voltage Disconnect	22 V
BMS Discharge Voltage Cut-Off	16 V (2.0 ±0.08 vpc)
Reconnect Voltage	18.4 V (2.0 ±0.10 vpc)
Short Circuit Protection	200-600µs

#### **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	149 °F (65 °C)

### MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	10.2 x 6.6 x 8.3" 260 x 168 x 210 mm
Weight	28.7 lbs (13 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>

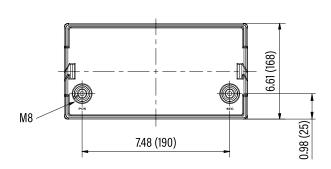
#### **CHARGE** SPECIFICATIONS

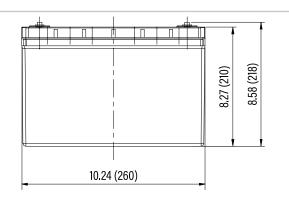
Recommended Charge Current	10 A
Maximum Charge Current	30 A
Recommended Charge Voltage	28.0 V - 29.2 V
BMS Charge Voltage Cut-Off	31.2 V (3.9 ±0.025 vpc)
Reconnect Voltage	30.4 V (3.8 ±0.05 vpc)
Balancing Voltage	28.8 V (3.6 vpc)

#### **COMPLIANCE** SPECIFICATIONS

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

#### **DIMENSIONAL SPECIFICATIONS**





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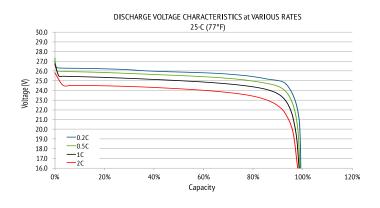
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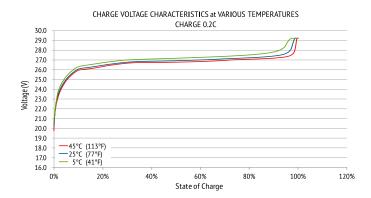


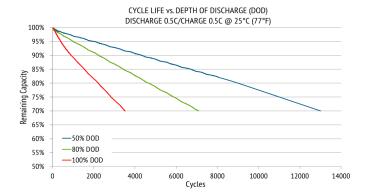


## **RB24V40**

#### **PERFORMANCE CHARACTERISTICS**

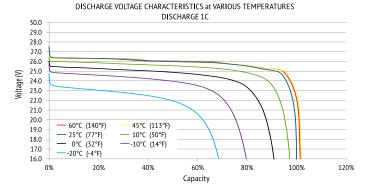




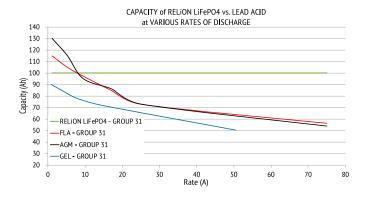


RB24V40 25.6V 40Ah i i³ON RE RU CE 🏔 🚊

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CHARGE VOLTAGE and STATE OF CHARGE (SOC) CHARGE 0.2C @ 25°C (77°F) 30.0 140% 130% 29.0 28.0 120% 27.0 110% 26.0 100% 25.0 24.0 90% Voltage (V) SOC 80% 23.0 70% 22.0 60% 21.0 50% 20.0 40% 30% 19.0 18.0 20% 17.0 10% State of Charge 16.0 0% 0 50 100 150 200 250 300 350 Time (Minutes)



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IEC

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