

RB35



Group: U1

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL SPECIFICATIONS

| Nominal Voltage | 12.8 V |
|---------------------------|------------------|
| Nominal Capacity | 35 Ah |
| Capacity @ 25A | 84 min |
| Energy | 448 Wh |
| Resistance | ≤50 mΩ @ 50% S0C |
| Efficiency | 99% |
| Self Discharge | <3% per Month |
| Maximum Modules in Series | 3 |
| | |

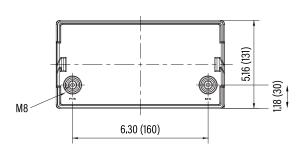
DISCHARGE SPECIFICATIONS

| Maximum Continuous Discharge Current | 35 A |
|--------------------------------------|----------------------------------|
| Peak Discharge Current | 70 A (7.5 s ±2.5 s) |
| BMS Discharge Current Cut-Off | 170 A ±20 A (20 ±5 ms) |
| Recommended Low Voltage Disconnect | 11 V |
| BMS Discharge Voltage Cut-Off | 8 V (2.0 ±0.08 vpc) (140 ±60 ms) |
| Reconnect Voltage | 10 V (2.5 ±0.10 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 | 176 °F (80 °C) |
| Reconnect Temperature | 122 °F (50 °C) |
| | |

DIMENSIONAL SPECIFICATIONS



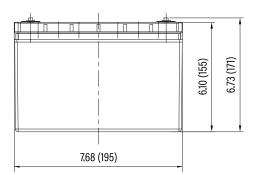
MECHANICAL SPECIFICATIONS 7.8 x 5.2 x 6.7" Dimensions (L x W x H) 195 x 131 x 171 mm Weight 11 lbs (4.8 kg) **Terminal Type** M8 **Terminal Torque** 80 - 100 in-lbs (9 - 11 N-m) ABS **Case Material Enclosure Protection** IP56 Cylindrical - LiFePO₄ Cell Type - Chemistry

CHARGE SPECIFICATIONS

| ••••••• | |
|--------------------------------|---|
| Recommended Charge Current | 1.75 A - 17.5 A |
| Maximum Charge Current | 35 A |
| Charge Current (0 to -10 °C) | ≤0.1 C |
| Charge Current (-20 to -10 °C) | ≤0.05 C |
| Recommended Charge Voltage | 14.2 V - 14.6 V |
| BMS Charge Voltage Cut-Off | 15.2 V (3.8 ±0.025 vpc) (1.1 ±0.4 s) |
| Reconnect Voltage | 14.4 V (3.6 ±0.050 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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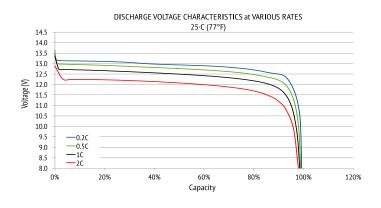
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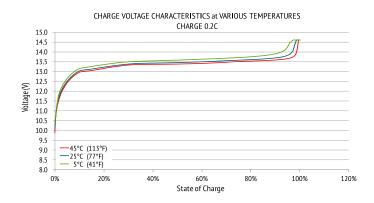


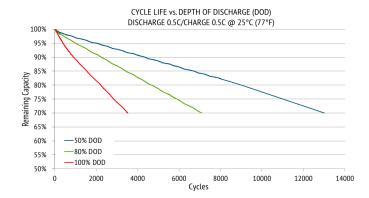


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PERFORMANCE CHARACTERISTICS





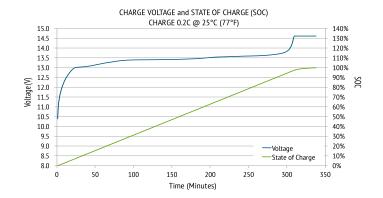


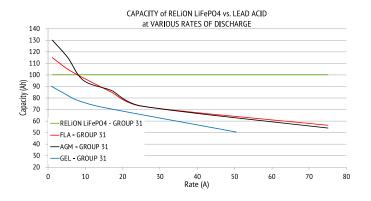


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DISCHARGE 1C 14.5 14.0 13.5 13.0 12.5 Voltage (V) 12.0 11.5 11.0 10.5 10.0 - 60°C (140°F) - 25°C (77°F) – 45°C (113°F) – 10°C (50°F) 9.5 9.0 - 0°C (32°F) -10°C (14°F) 8.5 — 20°C (-4°F) 8.0 0% 20% 40% 60% 80% 100% 120% Capacity

DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS TEMPERATURES







CE **UN38.3**

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