





**RB48V25** 

Voltage: 51.2V | Capacity: 25 Ah | Energy: 1280 Wh | Group: 24

## LITHIUM IRON PHOSPHATE BATTERY LIFePO4

| Nominal Voltage           | 51.2 V           |
|---------------------------|------------------|
| Nominal Capacity          | 25 Ah            |
| Resistance                | ≤70 mΩ @ 50% SOC |
| Efficiency                | 99%              |
| Self Discharge            | <3% per Month    |
| Maximum Modules in Series | 1 (Single Use)   |

| DISCHARGE SPECIFICATIONS             |                                  |
|--------------------------------------|----------------------------------|
| Maximum Continuous Discharge Current | 20 A                             |
| Peak Discharge Current               | 25 A (4 ±1 s)                    |
| BMS Discharge Current Cut-Off        | 60 A ±10 A (6 ±3 ms)             |
| Recommended Low Voltage Disconnect   | 44 V                             |
| BMS Discharge Voltage Cut-Off        | 40 V (2.5 ±0.1 vpc) (100 ±50 ms) |
| Reconnect Voltage                    | 32 V (2.0 ±0.1 vpc)              |
| Short Circuit Protection             | 400-600 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 | 149º F (65º C)              |  |
| Reconnect Temperature        | 122º F (50º C)              |  |

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

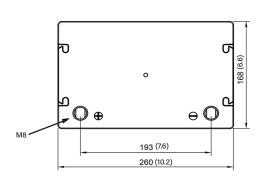
| MECHANICAL SPECIFICATIONS |   |  |
|---------------------------|---|--|
| Dimensions (L x W x H)    | 10.2 x 6.6 x 8.2"<br>260 x 168 x 210 mm |  |
| Weight                    | 27.6 lbs (12.5 kg)                      |  |
| Terminal Type             | M8 x 1.25                               |  |
| Terminal Torque           | 80 - 100 in-lbs (9 - 11 N-m)            |  |
| Case Material             | ABS                                     |  |
| Enclosure Protection      | IP66                                    |  |
| Cell Type - Chemistry     | Cylindrical - LiFePO4                   |  |

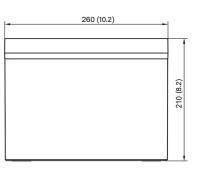
## **CHARGE SPECIFICATIONS**

| Recommended Charge Current                  | 1.25 A - 12.5 A                        |
|---|--|
| Recommended Maximum Charge<br>Current       | 20 A                                   |
| Charge Current 14 to 32°F<br>(-10 to 0°C)   | ≤0.1 C                                 |
| Charge Current -4 to 14°F<br>(-20 to -10°C) | ≤0.05 C                                |
| Recommended Charge Voltage                  | 56.0 V - 58.4 V                        |
| BMS Charge Voltage Cut-Off                  | 60.8 V (3.8 ±0.05 vpc)<br>(1.0 ±0.5 s) |
| Reconnect Voltage                           | 57.6 V (3.6 ±0.05 vpc)                 |
| Balancing Voltage                           | 57.6 V (3.6 ±0.025 vpc)                |
|   |  |

| COMPLIANCE SPECIFICATIONS |   |
|---------------------------|---|
| Certifications            | UN38.3 & CE (battery)<br>UL1642 (cells) (File# MH62098)<br>IEC62133 (cells) |
| Shipping Classification   | UN 3480, CLASS 9  |

## DIMENSIONAL SPECIFICATIONS





relionbattery.com

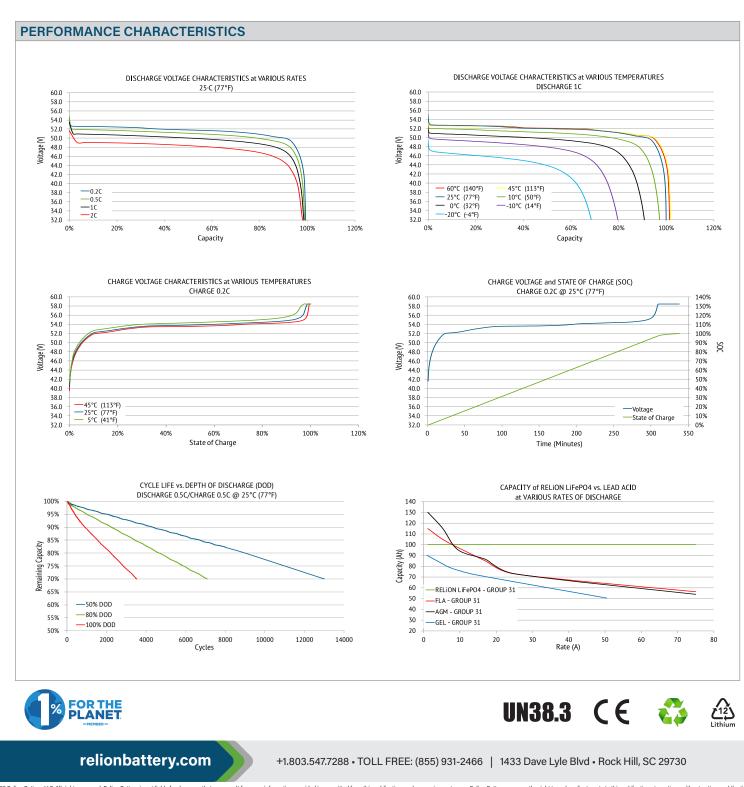




**RB48V25** 

Voltage: 51.2V | Capacity: 25 Ah | Energy: 1280 Wh | Group: 24

## LITHIUM IRON PHOSPHATE BATTERY LIFePO4



© 2022 Relion Battery, LLC. All rights reserved. Relion Battery is not liable for damages that may result from any information provided in or omitted from this publication, under any circumstances. Relion Battery reserves the right to make adjustments to this publication at any time, without notice or obligation. RB48V25 DATA SHEET • 02.16.22