



RB20-X

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL SPECIFICATIONS

| | |
|---------------------------|------------------|
| Nominal Voltage | 12.8 V |
| Nominal Capacity | 20 Ah |
| Capacity @ 25A | 48 min |
| Energy | 256 Wh |
| Resistance | ≤60 mΩ @ 50% SOC |
| Efficiency | 99% |
| Self Discharge | <3% per Month |
| Maximum Modules in Series | 3 |

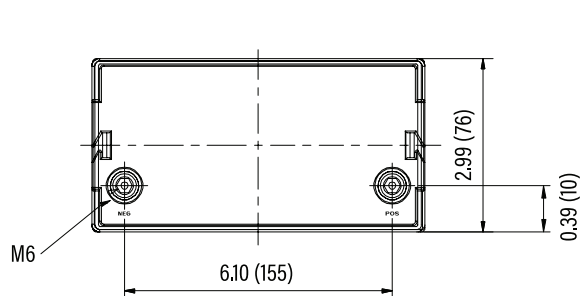
DISCHARGE SPECIFICATIONS

| | |
|--------------------------------------|--------------------------------|
| Maximum Continuous Discharge Current | 50 A |
| Peak Discharge Current | 90 A (4 s ±1 s) |
| BMS Discharge Current Cut-Off | 140 A ±20 A (12 ±5 ms) |
| Recommended Low Voltage Disconnect | 11 V |
| BMS Discharge Voltage Cut-Off | 8 V (2.0 ±0.08 vpc) (20 ±5 ms) |
| Reconnect Voltage | 9 V ±1.32 V (2.25 ±0.33 vpc) |
| Short Circuit Protection | 200-600 μs |

TEMPERATURE SPECIFICATIONS

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|------------------------------|-----------------------------|
| 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) |

DIMENSIONAL SPECIFICATIONS



MECHANICAL SPECIFICATIONS

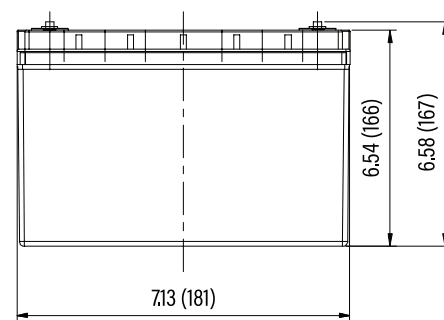
| | |
|------------------------|---|
| Dimensions (L x W x H) | 7.1 x 3.0 x 6.6" 181 x 76 x 166.5 mm |
| Weight | 6.1 lbs (2.75 kg) |
| Terminal Type | Flag Terminal |
| Terminal Torque | 35 - 44 in-lbs (4 - 5 N-m) |
| Case Material | ABS |
| Enclosure Protection | IP56 |
| Cell Type - Chemistry | Cylindrical - LiFePO ₄ |

CHARGE SPECIFICATIONS

| | |
|--------------------------------|---|
| Recommended Charge Current | 1 A - 10 A |
| Maximum Charge Current | 50 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 | 15.6 V (3.9 ±0.025 vpc) (1.0 ±0.5 s) |
| Reconnect Voltage | 15.2 V (3.8 ±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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PERFORMANCE CHARACTERISTICS

