



RB24V200

Voltage: 25.6V | Capacity: 200 Ah | Energy: 5120 Wh

LITHIUM IRON PHOSPHATE BATTERY LIFEPO4

ELECTRICAL SPECIFICATIONS		
Nominal Voltage	25.6 V	
Nominal Capacity	200 Ah	
Capacity @ 25A	480 min	
Resistance	≤35 mΩ @ 50% SOC	
Efficiency	99%	
Self Discharge	<3% per Month	
Maximum Modules in Series	1 (Single Use)	

DISCHARGE SPECIFICATIONS	
Maximum Continuous Discharge Current	200 A
Peak Discharge Current	250 A (7.5 s ± 2.5 s)
BMS Discharge Current Cut-Off	575 A ±60 A (12.5 ± 7.5 ms)
Recommended Low Voltage Disconnect	22 V
BMS Discharge Voltage Cut-Off	18.4 V (2.3 ±0.1 vpc) (100 ±50 ms)
Reconnect Voltage	20 V (2.5 ±0.1 vpc)
Short Circuit Protection	200-600 μs

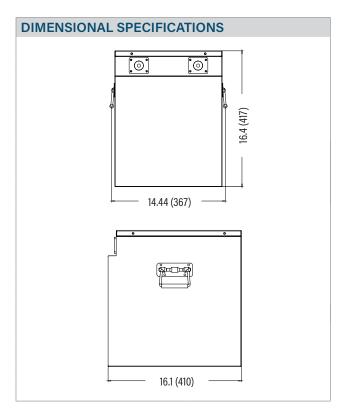
TEMPERATURE SPECIFICATIONS		
Discharge Temperature	-4 to 140 °F (-20 to 60 °C)	
Charge Temperature*	-4 to 113 °F (-20 to 45 °C)	
Storage Temperature	23 to 95 °F (-5 to 35 °C)	
BMS High Temperature Cut-Off	149 °F (65 °C)	
Reconnect Temperature	122 °F (50 °C)	

^{*}Refer to charge currents below 32°F (0°C)

MECHANICAL SPECIFICATIONS	
Dimensions (L x W x H)	16.1 x 14.44 x 16.4" 410 x 367 x 417 mm
Weight	110.2 lbs (50 kg)
Terminal Type	M10 x 1.5
Terminal Torque	110 - 125 in-lbs (12.2 - 14 N-m)
Case Material	Steel Case
Enclosure Protection	IP65
Cell Type - Chemistry	Cylindrical - LiFePO4

CHARGE SPECIFICATIONS	
Recommended Charge Current	10 A - 100 A
Maximum Charge Current	200 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	28.4 V - 29.2 V
BMS Charge Voltage Cut-Off	30.8 V (3.85 ±0.05 vpc) (1 ±0.05 s)
Reconnect Voltage	29.2 V (3.65 ±0.05 vpc)
Balancing Voltage	28.8 V (3.6 ±0.025 vpc)

COMPLIANCE SPECIFICATIONS	
Certifications	UN38.3 & CE (battery) UL1642 (cells) (File# MH64523) IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9







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PERFORMANCE CHARACTERISTICS DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS RATES DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS TEMPERATURES 25-C (77°F) 30.0 30.0 29.0 29.0 28.0 27.0 27.0 26.0 26.0 25.0 25.0 Voltage (V) 24.0 24.0 23.0 23.0 22.0 22.0 21.0 21.0 20.0 20.0 60°C (140°F) 45°C (113°F) 19.0 -0.2C 19.0 — 25°C (77°F) — 0°C (32°F) -0.50 10°C (50°F) 18.0 -10°C (14°F) 17.0 17.0 **-**2C 16.0 16.0 60% 100% 120% 40% 80% 0% 20% 40% 60% 80% 100% 120% Capacity Capacity CHARGE VOLTAGE CHARACTERISTICS at VARIOUS TEMPERATURES CHARGE VOLTAGE and STATE OF CHARGE (SOC) CHARGE 0.2C @ 25°C (77°F) 30.0 30.0 140% 29.0 130% 29.0 28.0 27.0 28.0 120% 270 110% 26.0 100% 26.0 25.0 25.0 90% Voltage (V) 24.0 24.0 80% 23.0 70% 60% 50% 22.0 21.0 21.0 20.0 40% 20.0 19.0 190 30% 18.0 20% 18.0 Voltage 17.0 17.0 10% State of Charge 16.0 16.0 0% 0% 60% 100% 120% 350 State of Charge Time (Minutes) CYCLE LIFE vs. DEPTH OF DISCHARGE (DOD) CAPACITY of RELION LIFePO4 vs. LEAD ACID DISCHARGE 0.5C/CHARGE 0.5C @ 25°C (77°F) at VARIOUS RATES OF DISCHARGE 100% 130 95% 120 90% 110 85% 100 80% Capacity (Ah) 90 80 75% 70 70% 60 -RELION LIFePO4 - GROUP 31 65% FI A - GROUP 31 -50% DOD 60% 40 -AGM - GROUP 31 -80% DOD 55% 30 GEL - GROUP 31 -100% DOD 20 6000 Cycles n 2000 4000 8000 10000 12000 14000









