

EXPION360®



LITHIUM IRON PHOSPHATE BATTERY DATA SHEET EX-GC2-48036-(BCH) (51.2 Vdc/36 Ah)

PERFORMANCE: Long Cycle Life
High Energy Density
High Power
Fast Charging
Maintenance Free
Low Weight

FEATURES: Integrated Battery Management System (BMS) for safety and reliability.
Oversized terminal connection pads.
Premium ABS plastic case.
Tie-down system accessories (sold separately).

Electrical Parameters	
Nominal Voltage	51.2 Vdc
Rated Capacity	36 Ah
Rated Energy	1843.2 Wh
Resistance	<50 mΩ
Cycle Life	>4000 cycles at 1C, 100 % DoD
Cell Self-Discharge	<5 % per month
Options	Bluetooth™, CAN Bus

Discharge Parameters	
Optimum Discharge Current	36 A
Max. Discharge Current	72 A (10 s)
Pulse Discharge Current	108 A (3 s)
Recommended Volt. Disconnect	44 Vdc
BMS Discharge Cut-off Voltage	40.8 Vdc

Compliance	
Certifications	UL 1642 For Cells, File no. MH64383
	UN3480, Class 9, UN38.3, UL2271 Pending

Mechanical Parameters	
Dimensions	10.2 in x 7.1 in x 10.9 in
	(260 mm x 181 mm x 276 mm)
Weight	38.5 lb (17.5 kg)
Terminal Thread	M 8 x 1.25
Battery Housing	ABS
Terminal Material	Brass
Cell	LiFePO ₄

Charge Parameters	
Charge Method	CC-CV
Recommended Charge Voltage	58.0 Vdc
Recommended Float Voltage	55.2 Vdc
Recommended Charge Current	7.2 A
Maximum Charge Current	18 A
BMS Charge Cut-off Voltage	58.4 Vdc
Max. Current from Regenerative Braking	72 A (10 s)

Temperature Parameters	
Discharge Temperature	-4 °F to 150 °F (-20 °C to 65 °C)
Charge Temperature	32 °F to 140 °F (0 °C to 60 °C)
Storage Temperature	-4 °F to 113 °F (-20 °C to 45 °C)

NOTE: A minimum of three batteries for golf a cart application is recommended. see Expion360 GC2 user manual for details.
Do not mix voltages, capacities, ages, or battery chemistries.
Do not mix with lead-acid batteries when recycling.
See Expion360, Inc. user's manual for proper operation.

DISCLAIMER: While every precaution has been taken to ensure the accuracy of the contents within this document, Expion360, Inc. assumes no responsibility for errors or omissions. Specifications and product functionality may change without notice.

STORAGE: One discharge-recharge cycle every 6 months.



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