### LITHIONICS BATTERY

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS

MODEL NUMBER: GTX12V320A-E2107-CS200

Full UL Listed Version for OEM's: Bluetooth® APP, UL Listed Internal Heater, Fireproof Enclosure, RV-C CANbus Telemetry, Remote Switch, NeverDie® Reserve Energy, Battery Life Recorder.



### **INTERNAL BMS VERSION**



Item		Description
Model		GTX12V320A-E2107-CS200
Nominal Voltage		12.8V
Nominal Capacity		320Ah
Nominal Watt Hours		4096Wh
Internal Resistance		<3mΩ
NOTE:	Battery may not be connected	in series to make 24 volts or higher.
Charge		
Charging temperature range		32F/0C to 131F/55C OR -4F/-20C with Heater Kit
Charge voltage		14.4V
Recommended float charge voltage(for standby use)		13.4-13.6V
Recommended charge cu	rrent*	150A
Maximum charge current*		200A
Discharge		
Discharging temperature range		-4F/-20C to 131F/55C
Operating Voltage Range		10.4-13.4V
Recommended discharge current*		150A
Maximum discharge current*		230A
Pulse discharge current (1 second)		1200A
Discharge cut-off voltage		NeverDie® Power Reserve @ 12.0V Low-Voltage Cut-Off @10.4V
Mechanical		
Dimensions		Length 20.3"
		Width 6.4"
		Height 10.0"
Mounting Orientation		Upright position only (terminals up)
Weight		Approx. 68lbs (30.8kg)
Terminal Bolt Size		M8-1.25x14mm
Storage		
Storage Temperature & Humidity Range	< 1 Month	-4~95°F (-20~35°C), 45~75%RH
	< 3 Months	14~86°F (-10~30°C), 45~75%RH
	Recommended storage	59~95°F (15~35°C), 45%RH~75%RH
Long Term Storage	If the battery needs to be stored for > 3 months the voltage should be 13.2V (50%SOC), and stored at the recommended storage specifications shown above. Additionally, the battery needs at least one charge & discharge cycle every six months.	
Self-discharge rate	Residual capacity	≤3% per month; ≤15% per year
	Reversible capacity	≤1.5%per month; ≤8% per year

UL1973 tests of maximum charge and discharge current were performed at 25°C/77°F

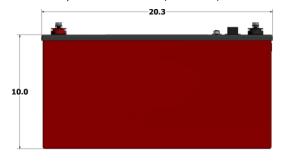


30% Smaller than 3 x 100Ah Group31 Batteries, with Extra 20Ah to Spare

320 AMP HOURS **PULSE AMPS: 1200 (1 SEC) 4096 WATT-HOURS** 

### **INTERNAL NEVERDIE® BMS FEATURES**

- NeverDie® Power Reserve (Spare Fuel) for Hotel Loads and Engine Cranking
- Over-Charge, Over-Discharge and Short-Circuit Protection (LVC, HVC, SCC)
- Low/High Temperature Charge/Discharge Protection
- Internal Heating Kit: Permits Charging as low as -20C/-4F
- Pushbutton On/Off switch for Safety and Storage
- Battery Gauge and Status Codes for Health Monitoring
- Bluetooth wireless telemetry with Lithionics Battery iOS and Android app
- CANbus telemetry in the RVIA RV-C format (M12)
- An alternator Field Control Circuit (FCC) (AMPSEAL8)
- Remote LED illuminated On/Off Power switch (AMPSEAL8)
- Auxiliary DC Breaker control (AMPSEAL8)

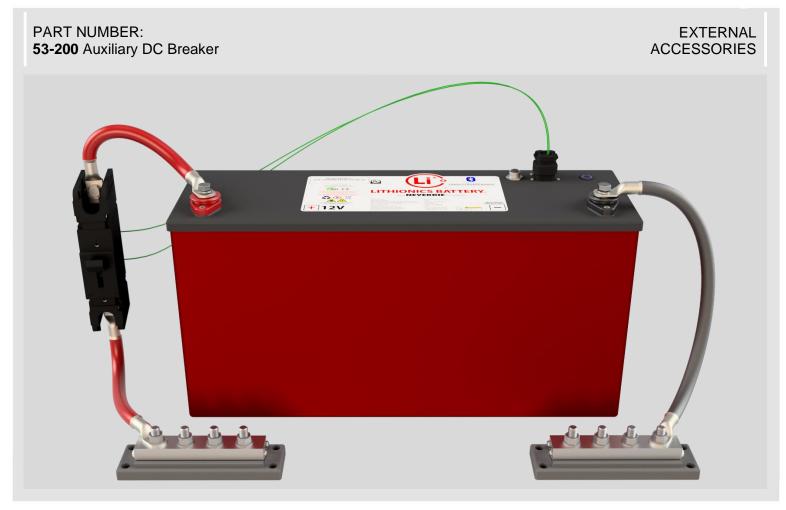




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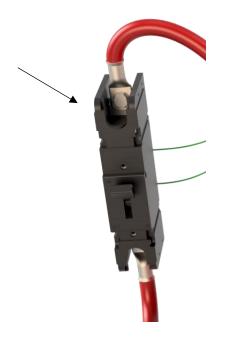
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### About the Auxiliary DC Breaker

When the Auxiliary DC Breaker is connected to the GTX12V320A-E2107-CS200-UL battery it qualifies as a UL1973 Listed system. UL1973 Listing represents a high degree of safety and performance tested by Underwriter Laboratories. The system works by using the Auxiliary DC Breaker as a redundant disconnect device if the battery must be isolated from its loads. The Auxiliary DC Breaker also replaces the need for a fuse and can serve as a manual disconnect for storage and maintenance via its toggle switch.

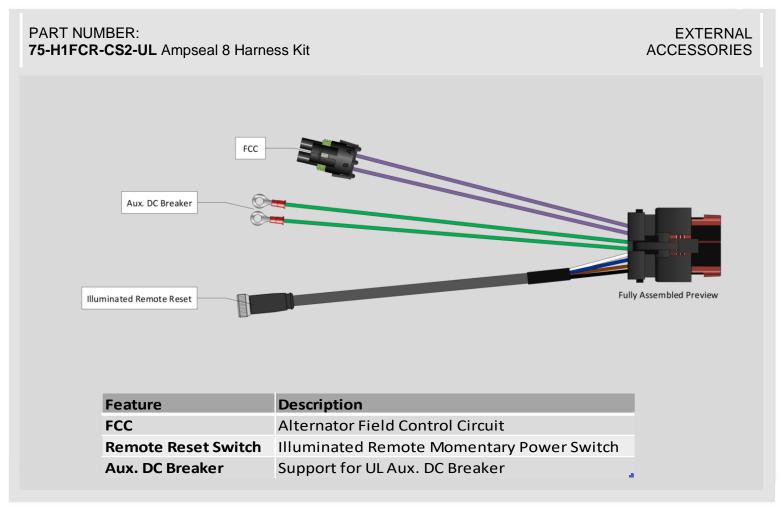
The 2 control wires for this added feature are wired through the 8-pin AMPSEAL connector.



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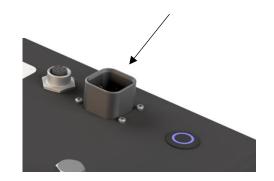


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#### About the AMPSEAL-8 Connector

The mating Ampseal 8 connector kit is designed for use with any battery equipped with the NeverDie® Compact Series 200 Internal Battery Management System (BMS). The 8 pin Ampseal connector is located on the top of the battery and is used to access the BMS's ported features. This allows implementation of the combination of BMS functions listed above. Mating cable extensions are optional and available separately per the part numbers listed below.



Optional Mating Extensions:		
Part Number	Model	Description
75-149-180	FCC Extension	Dual Weatherpack Connector to Bare Wires, 15ft Length
75-224-196	Illuminated Remote Reset	M8 Connector to Illuminated Remote Switch, 16ft Length
Note: Contact factory regarding mating connections for CANBus feature.		