

LITHIONICS BATTERY®

LITHIUM ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL: 12V130A-G31-LRBM8
PART NUMBER: 74-505

INTERNAL BMS
VERSION



NEVERDIE®

Item	Description
Model	12V130A-G31-LRBM8
Nominal Voltage	12.8V
Nominal Capacity	130Ah
Internal Resistance	≤4mΩ
Features	NeverDie® Reserve, High and Low Voltage Cutoff, High and Low Temperature Cutoff, Short Circuit Protection, Bluetooth® App Support

NOTE: Battery may not be connected in series to make 24 volts or higher.

Charge	
Charging temperature range	32~113°F (0~45°C)
Charge voltage	14.4±0.1V
Recommended float charge voltage (for standby use)	13.5±0.1V
Recommended charge current	≤50A
Allowed max charge current	100A with starting temp of 77°F (25°C)
Discharge	
Discharging temperature range	-4~131°F (-20~55°C)
Output Voltage Range	10.0~14.6V
Recommended discharge current	≤80A
Max continuous discharge current	100A with starting temp of 77°F (25°C)
Surge discharge current	<400A for 30s max with starting temp of 77°F (25°C)
Pulse discharge current	<1000A for 1s max with starting temp of 77°F (25°C)
Reserve cut-off voltage	12.0V±0.05V
Discharge cut-off voltage	10.4±0.1V
Mechanical Characteristics	
Dimensions	Length 12.5in (318mm) Width 6.5in (165mm) Height 8.46in (215mm)
Mounting Orientation	Upright position only (terminals up)
Weight	Approx. 33.4lbs (15.1Kg)
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

INTERNAL NEVERDIE® COMPACT SERIES FEATURES

MiniBMS® Cell/Module Sensors and Microprocessors with Automatic Cell Balancing
NeverDie® Power Reserve (Spare Fuel) for Hotel Loads and Worry-Free Power for Engine Cranking
Over-Charge, Over-Discharge and Short-Circuit Protection (LVC, HVC, SCC)
Pushbutton Storage Operation, Optional Remote Switch Harness Available (Part Number 75-224-196)
Bluetooth®: Monitor Battery Voltage, State-of-Charge, Temperature, Current & Status Code remotely from your mobile device. Available for download on [Google Play](#) & [Apple App Store](#).



ENERGY

625 CRANKING AMPS

PULSE AMPS: 1,000 (1 SEC)

1,664 WATT-HOURS

WARNING

1. LITHIUM BATTERIES ARE NOT DESIGNED FOR CHARGING IN SUB-FREEZING TEMPERATURES. CONTACT LITHIONICS BATTERY® FOR DETAILS ON OUR COLD WEATHER PACKAGE.
2. INSTALLATION: IT IS REQUIRED THAT THE BATTERY BE INSTALLED TERMINAL SIDE UP.

NOTE: CONTACT LITHIONICS BATTERY® FOR A USER INSTALLATION GUIDE & STORAGE PROCEDURES. FOLLOW THE GUIDE TO ENSURE FITNESS OF USE & WARRANTY.

12V

ENERGY
SERIES

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LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL NUMBER:
GTX12V315A-E2107-CS200

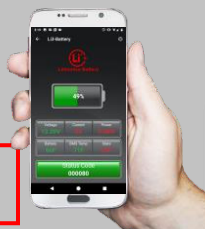
Designed with Bluetooth® Wireless Monitoring,
Internal Heater Kit, Aluminum Alloy Enclosure



INTERNAL BMS
VERSION



Wireless Battery Monitoring via
Lithionics Battery® Monitor App



Application Note: Compatible with a Maximum Inverter Size
of 3000 Watts. Do Not Connect to Larger Inverters or to
Parallel-Connected Inverters.

Item	Description
Model	GTX12V315A-E2107-CS200
Nominal Voltage	12.8V
Nominal Capacity	315Ah
Nominal Watt Hours	4032Wh
Internal Resistance	<3mΩ
Charge	
Charging temperature range	32F/0C to 131F/55C
Charge voltage	14.4V
Recommended float charge voltage(for standby use)	13.4-13.6V
Recommended charge current*	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 6.6" Height 10.7"
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

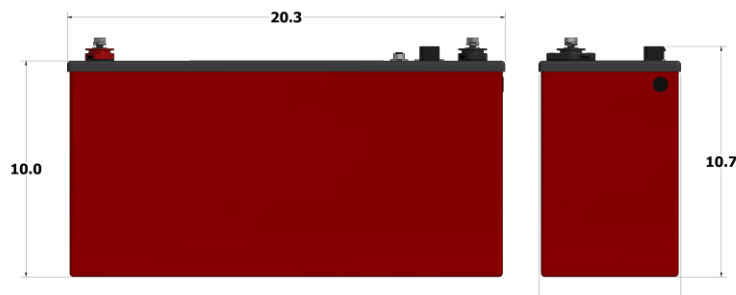
* Maximum charging and discharging rates apply depending upon the ambient temperature and duty cycle of the system.
UL1973 tests of maximum charge and discharge current were performed at 25°C/77°F



30% Smaller than 3 x 100Ah Group31
Batteries, with Extra 15Ah to Spare

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)



ENERGY

315 AMP HOURS

PULSE AMPS: 1200 (1 SEC)

4032 WATT-HOURS

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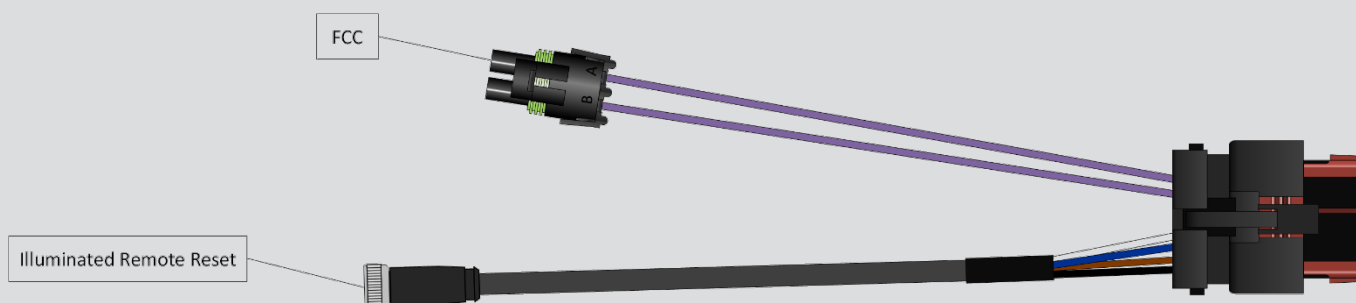
LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:
75-H1FBR-CS Ampseal 8 Harness Kit

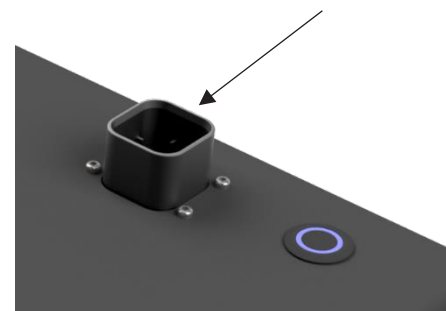
EXTERNAL
ACCESSORIES



Feature	Description
FCC	Alternator Field Control Circuit
Remote Reset Switch	Illuminated Remote Momentary Power Switch

ABOUT AMPSEAL 8

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

LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL NUMBER:
GTX12V320A-E2107-CS200

Designed with Bluetooth® Wireless Monitoring,
Internal Heater Kit, UL Aux. DC Breaker support,
Aluminum Alloy Enclosure



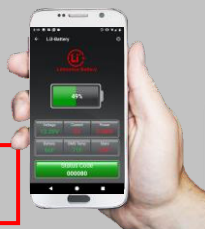
INTERNAL BMS
VERSION



Wireless Battery Monitoring via
Lithionics Battery® Monitor App



Application Note: Compatible with a Maximum Inverter Size
of 3000 Watts. Do Not Connect to Larger Inverters or to
Parallel-Connected Inverters.



Item	Description
Model	GTX12V320A-E2107-CS200
Nominal Voltage	12.8V
Nominal Capacity	320Ah
Nominal Watt Hours	4096Wh
Internal Resistance	<3mΩ
Charge	
Charging temperature range	32F/0C to 131F/55C
Charge voltage	14.4V
Recommended float charge voltage(for standby use)	13.4-13.6V
Recommended charge current*	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

* Maximum charging and discharging rates apply depending upon the ambient temperature and duty cycle of the system.
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

INTERNAL NEVERDIE® BMS FEATURES

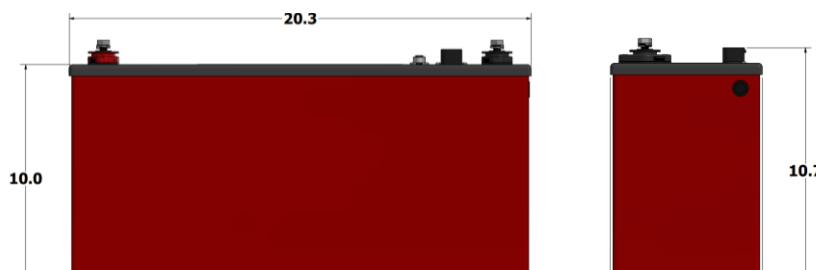
- NeverDie® Power Reserve (Spare Fuel) for Hotel Loads and Engine Cranking
- Over-Charge, Over-Discharge and Short-Circuit Protection (LVC, HVC, SCC)
- Low/High Temperature Charge/Discharge Protection
- Internal Heating Kit: Permits Charging as low as -20C/-4F
- Pushbutton On/Off switch for Safety and 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)

ENERGY

320 AMP HOURS

PULSE AMPS: 1200 (1 SEC)

4096 WATT-HOURS



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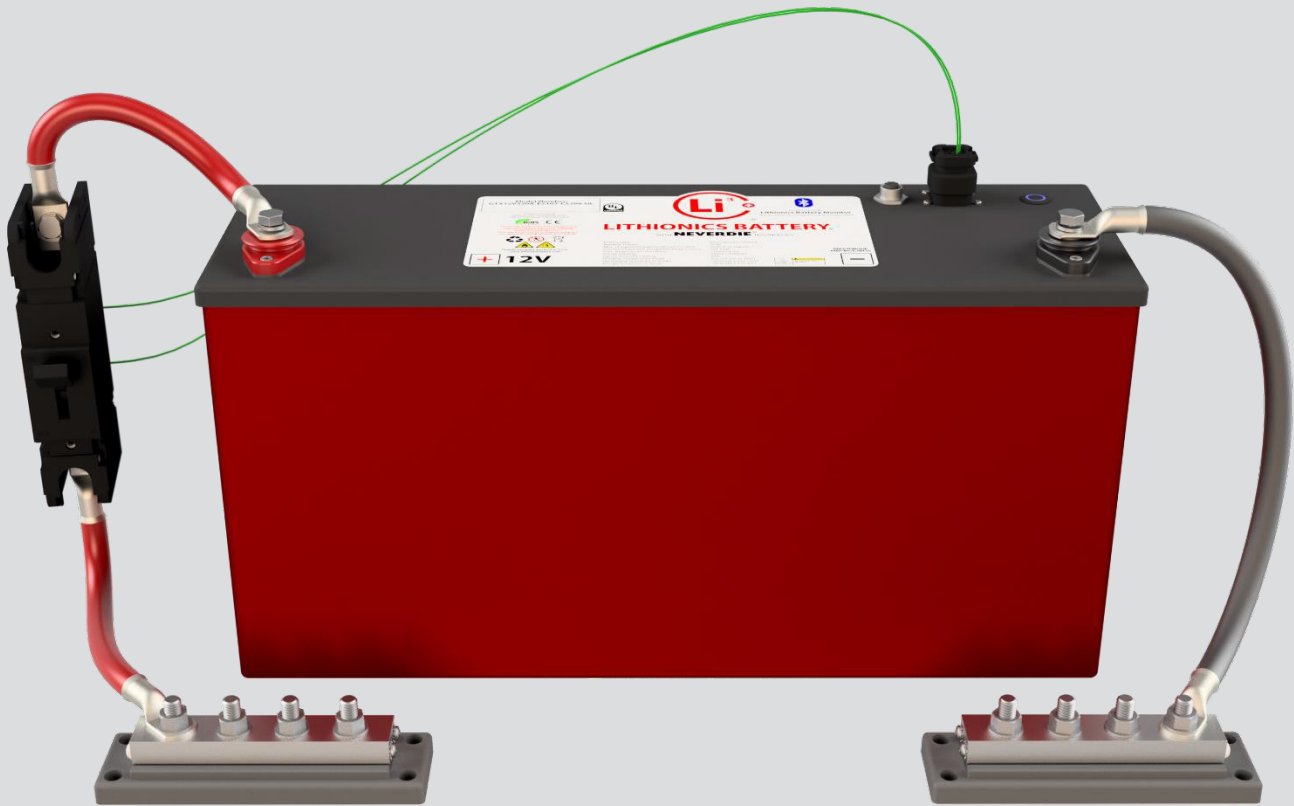
LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:
53-200 Auxiliary DC Breaker

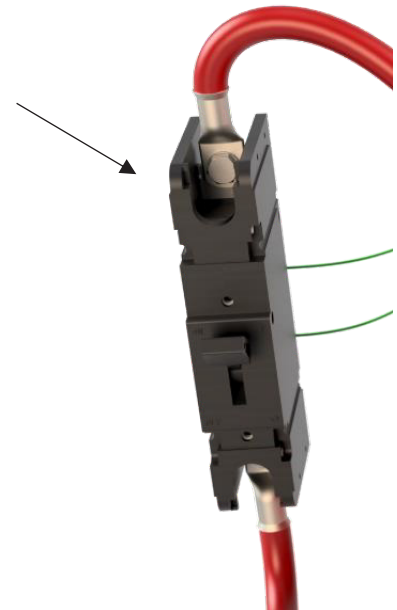
EXTERNAL
ACCESSORIES



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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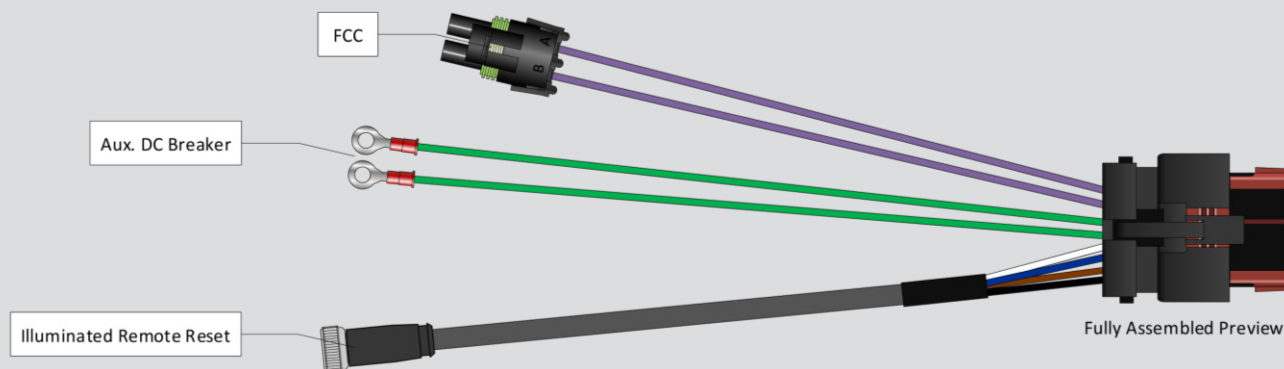
LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:

75-H1FCR-CS2-UL Ampseal 8 Harness Kit

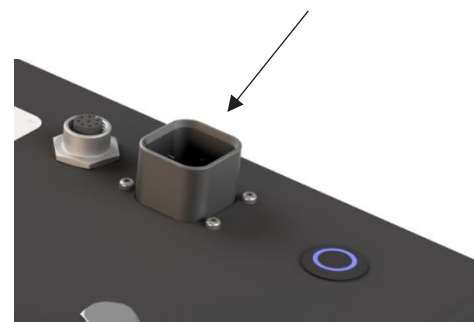
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ACCESSORIES



Feature	Description
FCC	Alternator Field Control Circuit
Remote Reset Switch	Illuminated Remote Momentary Power Switch
Aux. DC Breaker	Support for UL Aux. DC Breaker

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

LITHIONICS BATTERY®

LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL NUMBER:
GTX12V630A-E2112-CS200

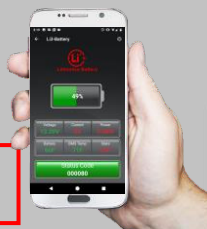
Designed with Bluetooth® Wireless Monitoring,
Internal Heater Kit, UL Aux. DC Breaker support,
Aluminum Alloy Enclosure



INTERNAL BMS
VERSION



Wireless Battery Monitoring via
Lithionics Battery® Monitor App



Application Note: Compatible with a Maximum Inverter Size
of 3000 Watts. Do Not Connect to Larger Inverters or to
Parallel-Connected Inverters.

Item	Description
Model	GTX12V630A-E2112-CS200
Nominal Voltage	12.8V
Nominal Capacity	630Ah
Nominal Watt Hours	8064Wh
Internal Resistance	<3mΩ
Charge	
Charging temperature range	32F/0C to 131F/55C
Charge voltage	14.4V
Recommended float charge voltage(for standby use)	13.4-13.6V
Recommended charge current*	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 12.3" Height 10.6"
Mounting Orientation	Upright position only (terminals up)
Weight	Approx. 128lbs (58.0kg)
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

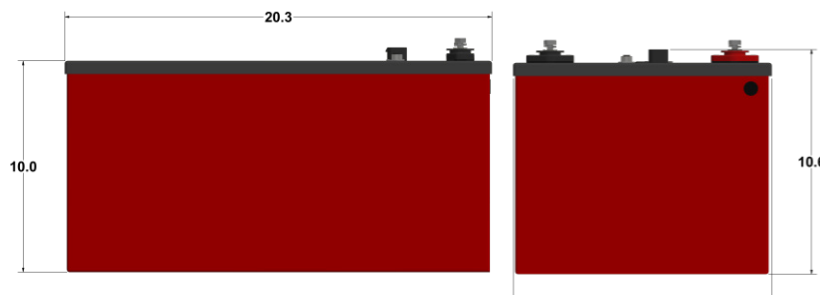
* Maximum charging and discharging rates apply depending upon the ambient temperature and duty cycle of the system.
UL1973 tests of maximum charge and discharge current were performed at 25°C/77°F



30% Smaller than 6 x 100Ah Group31
Batteries, with Extra 30Ah to Spare!

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)



ENERGY

630 AMP HOURS

PULSE AMPS: 1200 (1 SEC)

8064 WATT-HOURS

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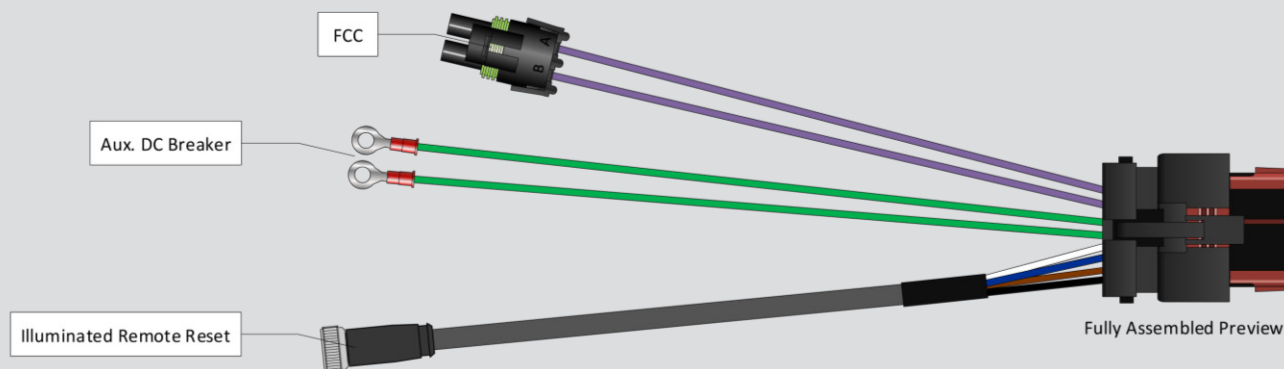
LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:

75-H1FCR-CS2-UL Ampseal 8 Harness Kit

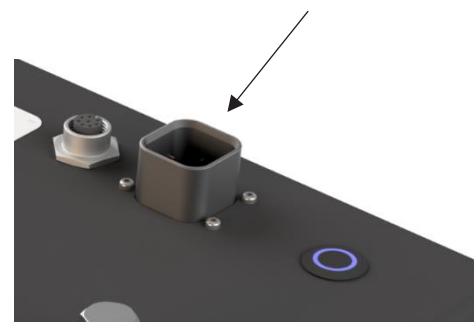
EXTERNAL
ACCESSORIES



Feature	Description
FCC	Alternator Field Control Circuit
Remote Reset Switch	Illuminated Remote Momentary Power Switch
Aux. DC Breaker	Support for UL Aux. DC Breaker

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

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LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



MODEL NUMBER:
GTX12V630A-E2112-CS200-UL

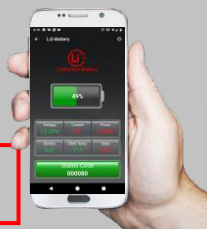
Designed with Bluetooth® Wireless Monitoring,
Internal Heater Kit, UL Aux. DC Breaker support,
Aluminum Alloy Enclosure



INTERNAL BMS
VERSION



Wireless Battery Monitoring via
Lithionics Battery® Monitor App



Application Note: Compatible with a Maximum Inverter Size
of 3000 Watts. Do Not Connect to Larger Inverters or to
Parallel-Connected Inverters.

Item	Description
Model	GTX12V630A-E2112-CS200-UL
Nominal Voltage	12.8V
Nominal Capacity	630Ah
Nominal Watt Hours	8064Wh
Internal Resistance	<3mΩ
Charge	
Charging temperature range	32F/0C to 131F/55C
Charge voltage	14.4V
Recommended float charge voltage(for standby use)	13.4-13.6V
Recommended charge current*	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 12.3" Height 10.6"
Mounting Orientation	Upright position only (terminals up)
Weight	Approx. 128lbs (58.0kg)
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
Long Term Storage	Recommended storage 59~95°F (15~35°C), 45%RH~75%RH 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

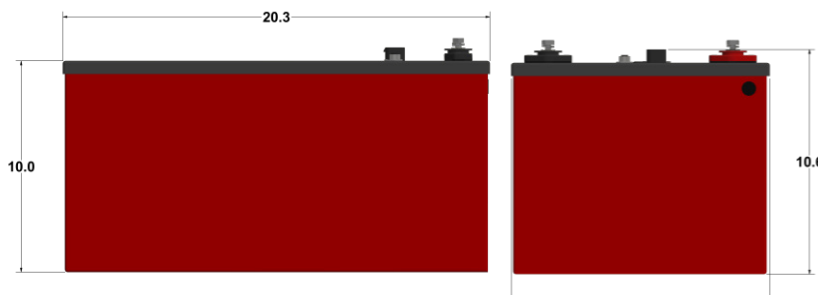
* Maximum charging and discharging rates apply depending upon the ambient temperature and duty cycle of the system.
UL1973 tests of maximum charge and discharge current were performed at 25°C/77°F



30% Smaller than 6 x 100Ah Group31
Batteries, with Extra 30Ah to Spare!

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)



ENERGY

630 AMP HOURS

PULSE AMPS: 1200 (1 SEC)

8064 WATT-HOURS

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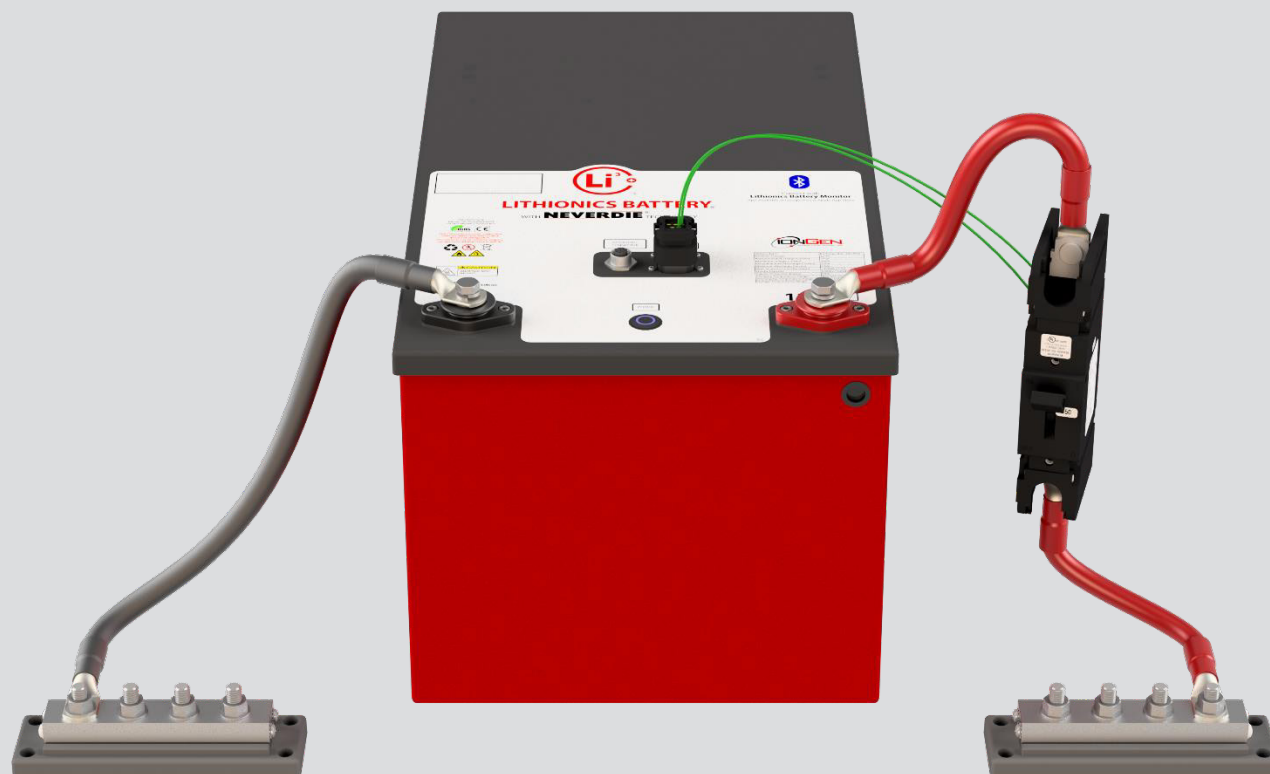
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LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:
53-200 Auxiliary DC Breaker

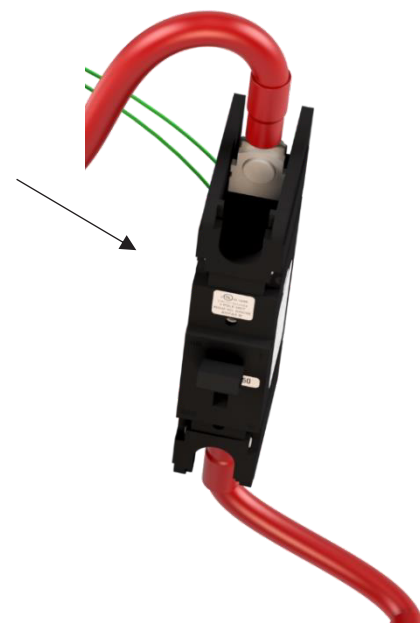
EXTERNAL
ACCESSORIES



About the Auxiliary DC Breaker

When the Auxiliary DC Breaker is connected to the GTX12V630A-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.



NOTE: Cabling and busbars shown are for reference only and not included.

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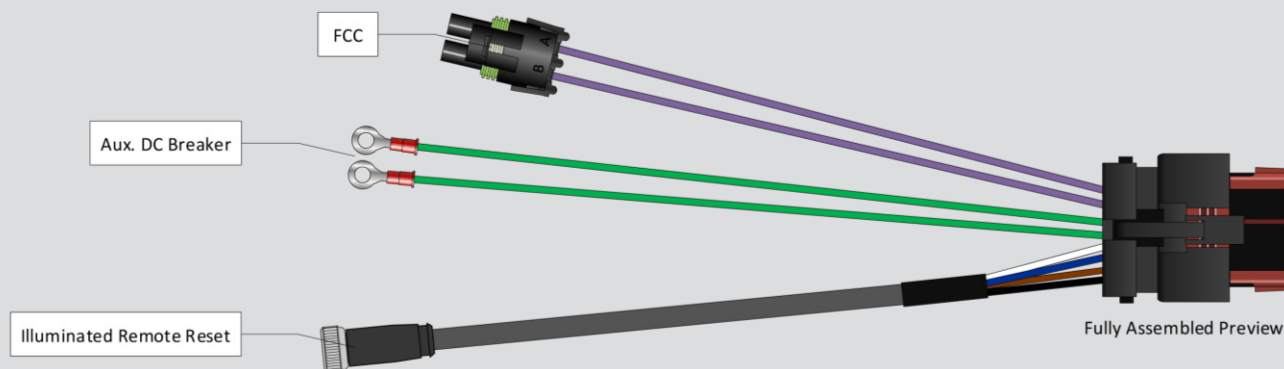
LITHIUM-ION IRON PHOSPHATE BATTERY SYSTEMS



PART NUMBER:

75-H1FCR-CS2-UL Ampseal 8 Harness Kit

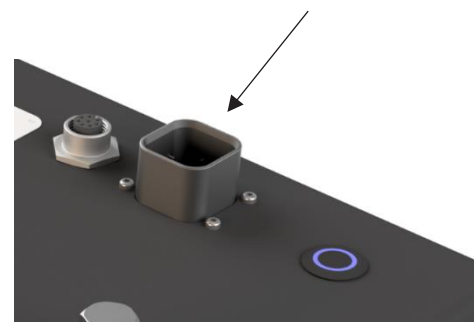
EXTERNAL
ACCESSORIES



Feature	Description
FCC	Alternator Field Control Circuit
Remote Reset Switch	Illuminated Remote Momentary Power Switch
Aux. DC Breaker	Support for UL Aux. DC Breaker

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