

IND-BCH-480V-125V-50A

50A Industrial Rectifier / Battery Charger System - 480V AC Input, 125V DC Output - 8-Hour GEL Battery Backup - Modbus TCP/IP - NEMA 12

Product ID: 339824



Image: IND-BCH-480V-125V-50A

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IND-BCH-480V-125V-50A Industrial Rectifier / Battery Charger System

Unit Type: Industrial Rectifier / Battery Charger System

Input Voltage: 480V AC, 60 Hz

Frequency Tolerance: $\pm 5\%$

Output Voltage: 125V DC

Output Current: 50 Amps DC

Battery Autonomy: 8 Hours

Battery Installation: Rack Mounted

Enclosure: NEMA 12

Cable Entry: Bottom

Cable Outlet: Bottom

Communication: Modbus TCP/IP

Alarms: AC Failure, Battery High Voltage, Battery Low Voltage, Ground Failure, General Fault

DC Voltage Regulation: $\pm 1\%$ or Better

Operating Temperature: -20°C to $+50^{\circ}\text{C}$

Relative Humidity: Up to 95% Non-Condensing

Dimensions: 88"-W x 36"-D x 78"-H

Weight: 4,250 lbs

Features

Microprocessor Controlled

Automatic Float & Equalize Charging

Continuous Battery Charging & DC Supply

Automatic Recharge After AC Restoration

Special Orders - Special Requirements

Contact us for special requirements

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Made in the USA

The Larson Electronics IND-BCH-480V-125V-50A is an Industrial Rectifier / Battery Charger System designed to provide continuous DC power and reliable battery charging for mission-critical industrial applications. This unit operates from a 480V AC, 60Hz input and delivers 125V DC at 50 amps. The system includes an 8-hour rack-mounted GEL battery bank, Modbus TCP/IP communication, and a NEMA 12 enclosure for indoor industrial environments. LED indicators and an integrated controller provide real-time system monitoring, diagnostics, and alarm notification.

The IND-BCH-480V-125V-50A is engineered to supply regulated DC power while simultaneously maintaining battery charge for critical equipment during normal operation and providing uninterrupted backup power during AC outages. The rectifier accepts 480V AC, 60Hz input with a $\pm 5\%$ frequency tolerance and provides a regulated 125V DC, 50-amp output. The integrated charger automatically manages float and equalize charging to maximize battery life and ensure the 12V DC GEL battery bank remains fully charged, providing up to 8 hours of backup autonomy. Communication is available through Modbus TCP/IP for remote monitoring and integration with plant automation and SCADA systems.

Alarms and Monitoring: The system continuously monitors operating conditions and provides alarm notifications for AC Failure, Battery High Voltage, Battery Low Voltage, Ground Failure, and General Fault. System status is displayed locally through the controller interface and can also be monitored remotely via the Modbus TCP/IP communication interface.

Construction: The charger and battery system are housed in a durable NEMA 12 enclosure suitable for industrial indoor installations. The rack-mounted GEL batteries provide a compact, serviceable battery arrangement. Both cable entry and cable outlet are located at the bottom of the enclosure for simplified installation and cable management.

Applications: Industrial substations, switchgear and protection systems, utility power distribution, process control systems, SCADA installations, telecommunications facilities, power generation plants, emergency DC systems, oil and gas facilities, water and wastewater treatment plants, and other mission-critical industrial applications requiring dependable DC power and battery backup.

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Frequently Asked Questions (FAQ)

There are no Faqs