



RLH Industries, Inc.

PRODUCT INFORMATION

The leader in
rugged fiber optic
technology.

R2010B-0414

RLH DIN Rail 48V UPS Battery Charge Controller

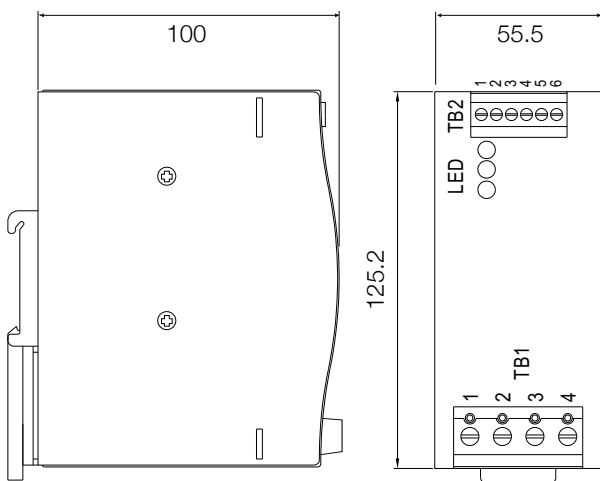
Provide backup battery power to 48VDC industrial equipment

Overview

RLH 48VDC DIN rail mount charge controllers are compact units designed to work with a DC power supply (such as the RLH DIN rail power supplies) and a backup battery to provide uninterruptible power in the event of a power outage.

The charge controller continuously maintains the correct charge level on the battery and ensures a seamless power transition to battery power when needed for a complete UPS power supply solution.

Dimensions

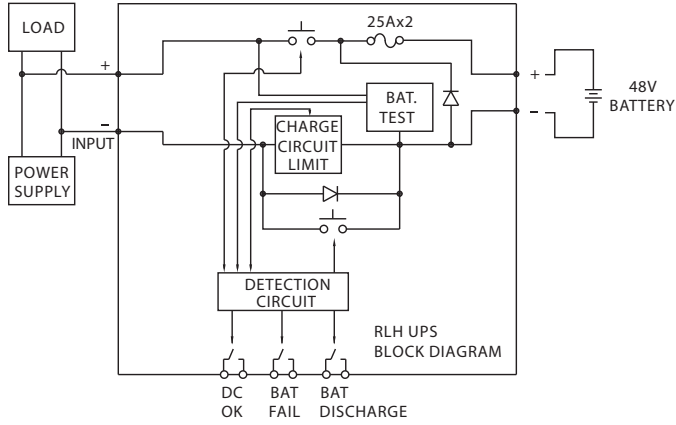


RLH-UPS-48-30-01 UPS Battery Charge Controller

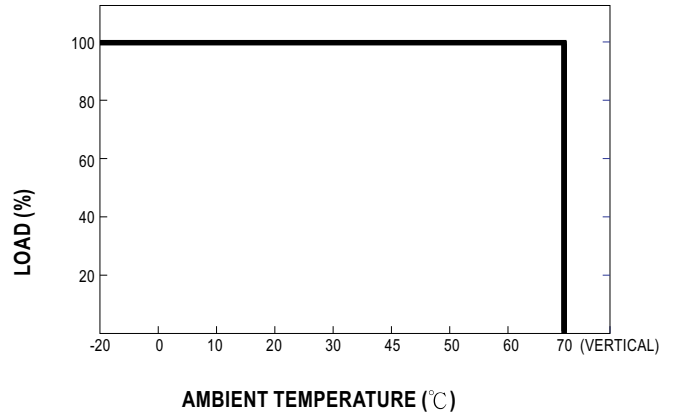
Standard Features

- Battery controller for DIN rail UPS systems
- Simple parallel connection to the DC bus
- Suitable for 48V systems up to 30A
- Installed on DIN Rail TS35 / 7.5 or 15
- Built-in battery test function
- Battery polarity protection
- Relay contact signal output and LED indicator for DC BUS OK, Battery Fail, and Battery Discharge
- Cooling by free air convection
- Convenient screw down terminals
- 6 inch DIN rail is included
- Exclusive unconditional lifetime warranty

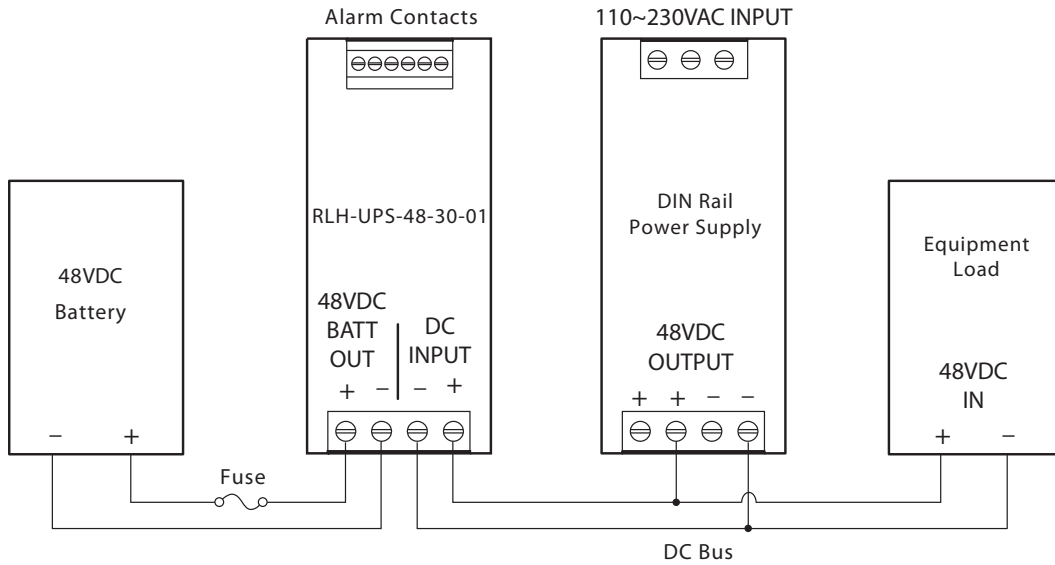
Block Diagram



Derating Curve



Application Diagram



Note: No DC voltage can be measured at the DC INPUT or the UPS unit without first having a working DC power source connected to the DC INPUT UPS terminals. The UPS unit employs a protective relay that allows voltage to only travel in one direction when that UPS system is connected to both the battery and power source.

Specifications

DC INPUT / DC BUS	DC VOLTAGE (Typ.)	48 ~ 55V
	RATED CURRENT	30A
BATTERY INPUT / OUTPUT	VOLTAGE RANGE (Typ.)	48 ~ 55V
	CURRENT RANGE	0 ~ 30A
	CHARGE CURRENT (Typ.)	2A
	EXTERNAL BATTERY (Typ.)	1.2 / 4.5 / 7AH / 48V
FUNCTION	RELAY CONTACT RATING	30VDC, 1A (max.)
	DC BUS OK	Relay contact : Short when DC voltage between 41~55V(3%), relay contacts LED (Green) ON : DC BUS OK; LED (Green) OFF : DC BUS failure
	BATTERY FAIL See Note 2	Relay contact : Short when battery failure is observed through the battery test function, relay contacts LED (Red) ON : Battery over-discharge warning or battery malfunction LED (Red) OFF : Battery OK
	BATTERY DISCHARGE	Relay contact : Short when battery in discharge condition, relay contacts LED (Yellow) ON : Battery discharging LED (Yellow) OFF : Battery is not discharging or discharging current <2.0A
ENVIRONMENT	WORKING TEMP.	-20 ~ +70
	WORKING HUMIDITY	20 ~ 90% RH
	STORAGE TEMP., HUMIDITY	-20 ~ +85° C, 10 ~ 95% RH
	VIBRATION	Component : 10 ~ 500Hz, 2G 10min./1cycle, 60min. each X, Y, Z axes ; Mounting : Compliance to IEC600068-2-6
SAFETY & EMC	WITHSTAND VOLTAGE	Terminal-Chassis :0.5KVAC, Relay Contacts-Terminal :0.5KVAC
	ISOLATION RESISTANCE	Terminal-Chassis :>100M Ohms/500VDC 25 70%RH
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8, ENV50204, heavy industry level, criteria A
OTHER	MTBF	161.9Khrs min. MIL-HDBK-217F (25° C)
	DIMENSIONS	55.5*125.2*100mm (W*H*D)
NOTE	1. All parameters NOT specially mentioned are measured at rated load and 25°C of ambient temperature. 2. Every 25 seconds, unit will send out test signal through "Battery Fail" relay contact and LED indicator once the battery has failed.	

Ordering Information

Description	Part Number	Input	Output Charge Current
48V UPS Battery Charge Controller	RLH-UPS-48-30-01	48 ~ 55VDC, 30A	2A



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Please contact your RLH sales representative for pricing and delivery information.

Specifications subject to change without notice.