

## RLH DIN Rail 24V UPS Battery Charge Controller

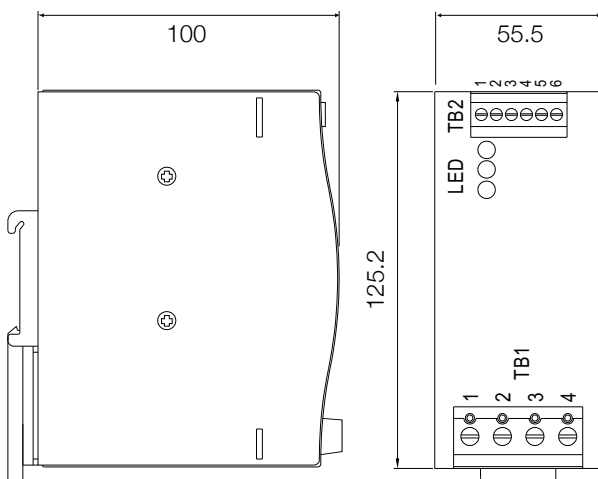
Provide backup battery power to 24VDC industrial equipment

### Overview

RLH 24VDC 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-24-30-01 UPS Battery Charge Controller

### Standard Features

- Battery controller for DIN rail UPS systems

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- Simple parallel connection to the DC bus

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- Suitable for 24V systems up to 30A

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- Installed on DIN Rail TS35 / 7.5 or 15

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- Built-in battery test function

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- Battery polarity protection

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- Relay contact signal output and LED indicator for DC BUS OK, Battery Fail, and Battery Discharge

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- Cooling by free air convection

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- Convenient screw down terminals

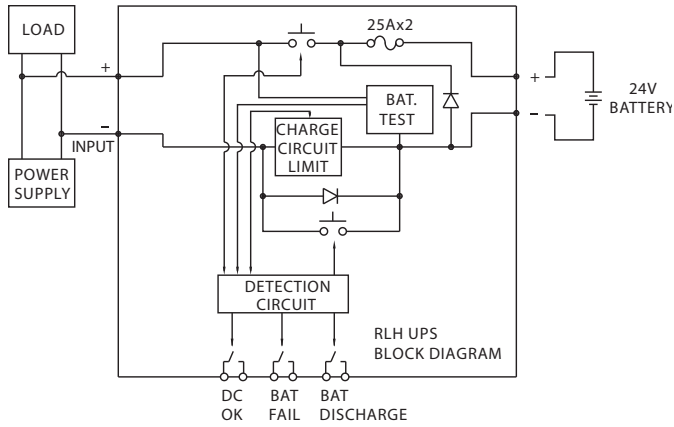
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- 6 inch DIN rail is included

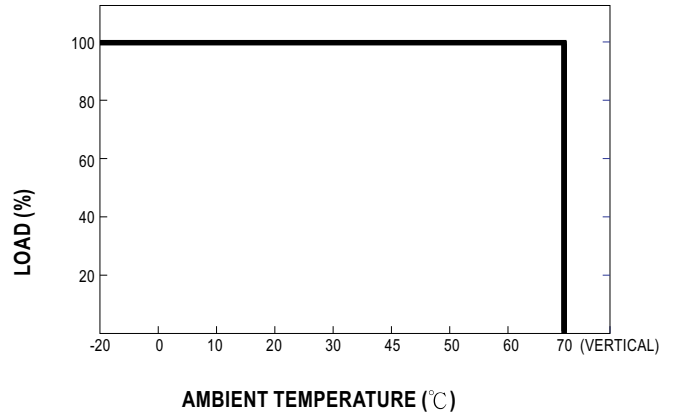
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- Exclusive unconditional lifetime warranty

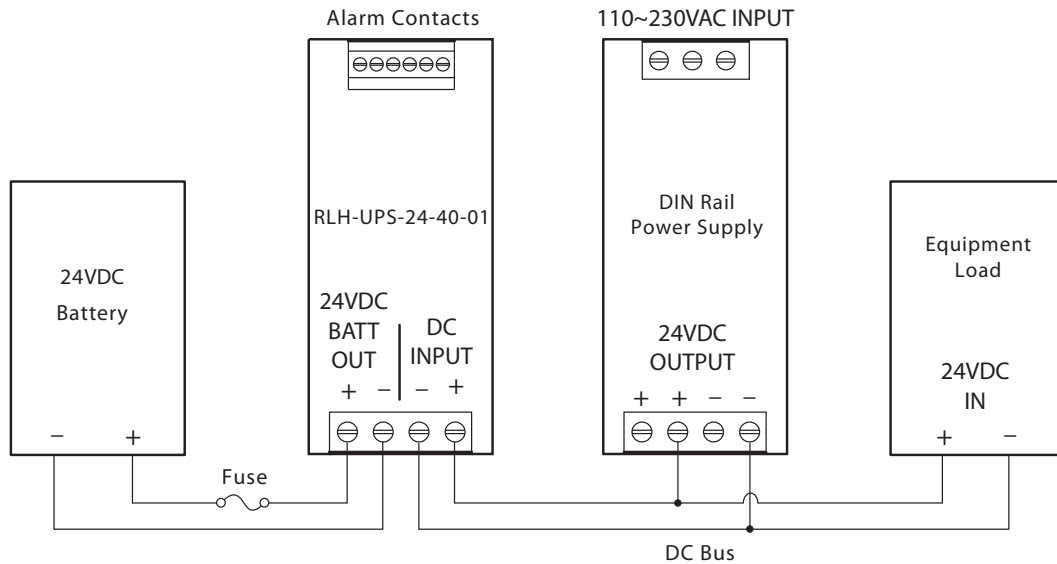
**Block Diagram**



**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

<b>DC INPUT / DC BUS</b>	DC VOLTAGE (Typ.)	24 ~ 29V
	RATED CURRENT	30A
<b>BATTERY INPUT / OUTPUT</b>	VOLTAGE RANGE (Typ.)	21 ~ 29V
	CURRENT RANGE	0 ~ 30A
	CHARGE CURRENT (Typ.)	2A
	EXTERNAL BATTERY (Typ.)	4 / 7 / 12 / 20AH / 24V
<b>FUNCTION</b>	RELAY CONTACT RATING	30VDC, 1A (max.)
	DC BUS OK	Relay contact : Short when DC voltage between 21~29V( 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
<b>ENVIRONMENT</b>	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
<b>SAFETY &amp; EMC</b>	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
<b>OTHER</b>	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
24V UPS Battery Charge Controller	RLH-UPS-24-30-01	24 ~ 29VDC, 30A	2A



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

Specifications subject to change without notice.