

RLH DC/DC Dual Output Power Supply DIN/Wall Mount

48VDC INPUT TO REGULATED
48VDC & 12VDC OUTPUT

Overview

The RLH 48V Dual Output DC/DC DIN rail mount power supply is a compact power supply designed to convert 48VDC power (36~75VDC) to regulated 48VDC and 12VDC output to power a wide range of industrial equipment.

Each internal regulated power supply section is separate and independent of the other power section, allowing for maximum efficiency and operation.

The power supply may be DIN rail or wall-mounted, and includes a power indicator for each output section so that performance and operation may be quickly assessed. It has low output ripple along with short circuit, over-voltage and overload protection, fan-less convection cooled design, and extended operating temperature range with high efficiency.

This rugged power supply features a tough aluminum alloy frame with powder coated galvanized steel housing for superior corrosion resistance.



RLH-D-DCDC-4812-2 Dual Output Power Supply

Standard Features

48VDC input with 48VDC & 12VDC output terminals

Short circuit, overload, over voltage and over temperature protection

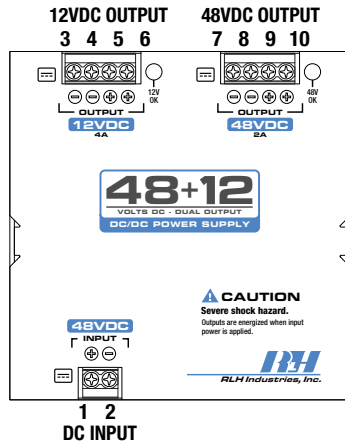
Cooling by free air convection

May be installed on 35mm DIN rail

Individual LED power indicators for each output

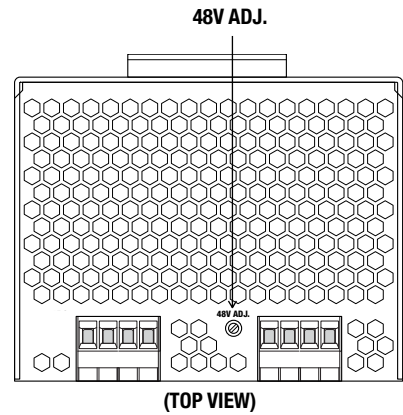
Convenient screw down terminals accept up to 8AWG wiring

Input / Output Terminals



Note: DC output is positive voltage as marked.
For negative DC voltage (-12VDC or -48VDC), reverse wiring polarity when connecting to the DC output terminals.

Output Voltage Adjustment



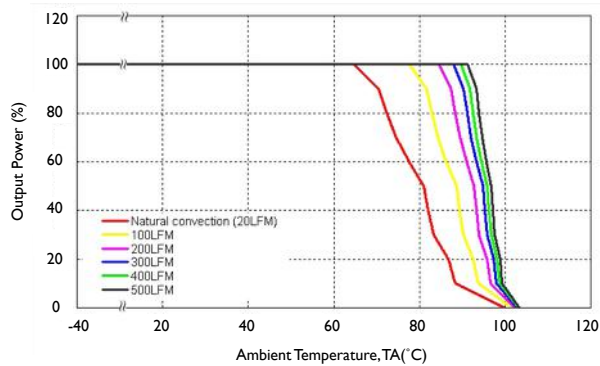
DC TERMINAL (INPUT)

No.	Description
1	48V DC +
2	48V DC -

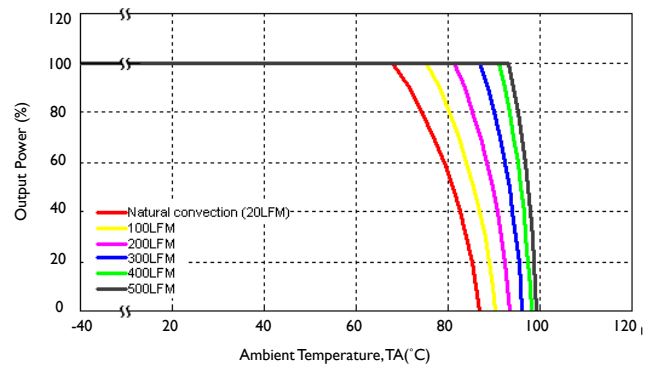
DC TERMINAL (OUTPUT)

No.	Description
3, 4	DC Output -12V
5, 6	DC Output +12V
7, 8	DC Output -48V
9, 10	DC Output +48V

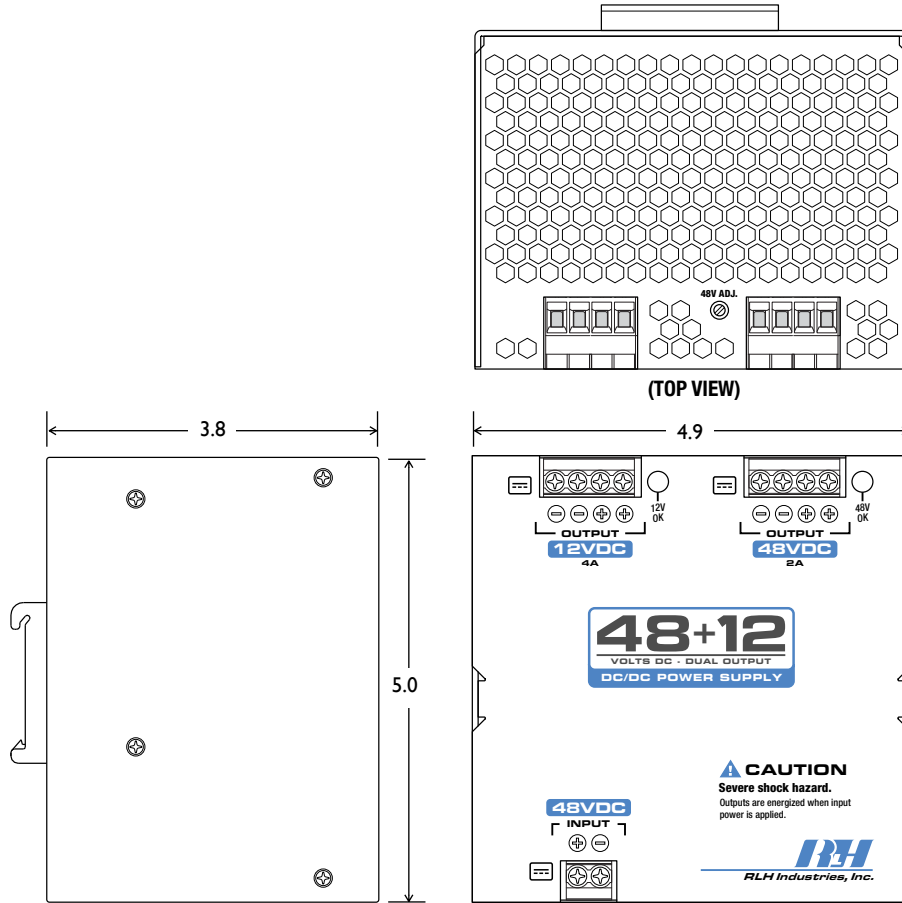
48V Output Derating Curve



12V Output Derating Curve



Dimensional Information



Ordering Information

Part Number	Input	Output
RLH-D-DCDC-4812-2	48VDC	48VDC, 2.1A / 12VDC, 4.1A

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

Specifications

INPUT	VOLTAGE RANGE	Min	36VDC	
		Max	72VDC	
		Typical	48VDC	
	UNDERVOLTAGE LOCKOUT	Power Down	35.5VDC or lower	
OUTPUT	VOLTAGE OUTPUT	Dual outputs	48VDC @ 2.1A 12VDC @ 4.1A	
		VOLTAGE ACCURACY	±1.5% Max.	
	TRANSIENT RESPONSE	400µs typ. (25% Step Load Change)		
	48VDC TRIM ADJ. RANGE	±10%		
	RIPPLE & NOISE, 20MHz BW	300mV pk-pk max.		
	TEMPERATURE COEFFICIENT	±0.03% / °C		
	SHORT CIRCUIT PROTECTION	continuous, automatic recovery		
	LINE REGULATION	±0.2% max. (Measured from low line to high line)		
		±0.5% max. (Measured from no load to full load)		
	CURRENT LIMIT	120% of lout rated		
	START UP TIME	25ms typ. (nominal Vin and constant resistive load)		
	GENERAL	EFFICIENCY	85%	
		ISOLATION VOLTAGE	Input/Output	1500VDC
			Input/Case	1500VDC
		ISOLATION RESISTANCE	100M ohm min.	
SWITCHING FREQUENCY		300KHz typ.		
DERATING		Refer to derating curve		
ENVIRONMENTAL	OPERATING TEMP.	-25°C to +70°C		
	STORAGE TEMP	-30°C to +80°C		
	HUMIDITY	95% RH max., non-condensing		
	MTBF	74Khrs MIL-HD-217F2		
PHYSICAL	DIMENSIONS	H 5.0 in. x W 4.7 in. x D 3.7 in. (127mm x 119mm x 94mm)		
	HOUSING	Aluminum alloy, galvanized steel, powder coated.		
	MOUNTING	35mm DIN rail		