

RLH DIN Rail 500W Switching Power Supply

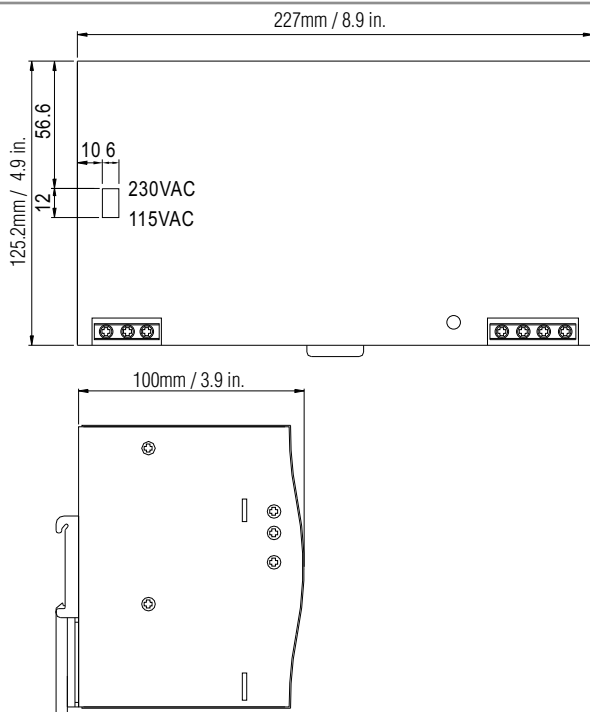
FLEX-POWER AC/DC & DC/DC

Overview

The RLH 500W AC/DC DIN rail mount power supply is a compact switching supply designed to convert AC or DC power (120/240VAC, 260~360VDC) to regulated DC power for a wide range of industrial equipment

Available in 24 and 48VDC output models, they have the advantage of being DIN rail or wall-mounted, include a power good signal indicator, feature flexible AC and DC input, and have low output ripple along with short circuit, overvoltage and overload protection.

Dimensions

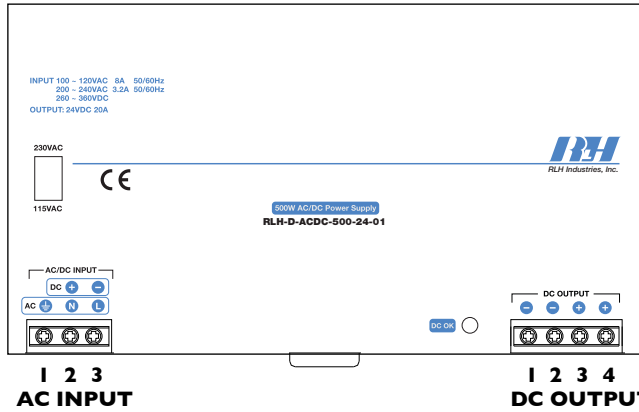


RLH-D-ACDC-500-24-01 500W DIN Mount Power Supply

Standard Features

- AC input range set by switch, DC input is auto sensing
- Short circuit, overload, over voltage and over temperature protection
- High efficiency 89%, low dissipation
- Built in passive PFC function compliance to EN61000-3-2
- Built in constant current limiting circuit
- Cooling by free air convection
- May be installed on DIN rail TS-35/7.5 or 15
- UL 508 (industrial control equipment) approved
- LED indicator for power on
- 100% full load burn-in test
- Fixed switching frequency at 100KHz
- Convenient screw down terminals accept up to 8AWG wiring
- Includes 19" DIN rail section that may be wall or rack mounted
- Includes wall/rack mount hardware
- Includes DIN mount circuit breaker and 8 position DIN mount terminal blocks
- Exclusive unconditional lifetime warranty

Input / Output Terminals



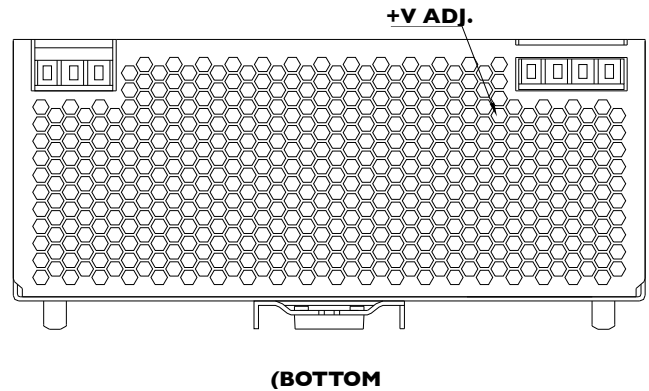
AC/DC TERMINAL (INPUT)

No.	Description
1	FG ⊕ -
2	AC / N DC +
3	AC / L DC -

DC TERMINAL (OUTPUT)

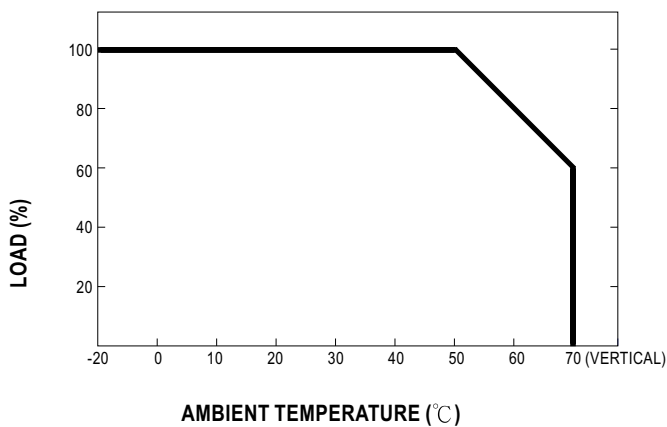
No.	Description
1, 2	DC Output -V
3, 4	DC Output +V

Output Voltage Adjustment

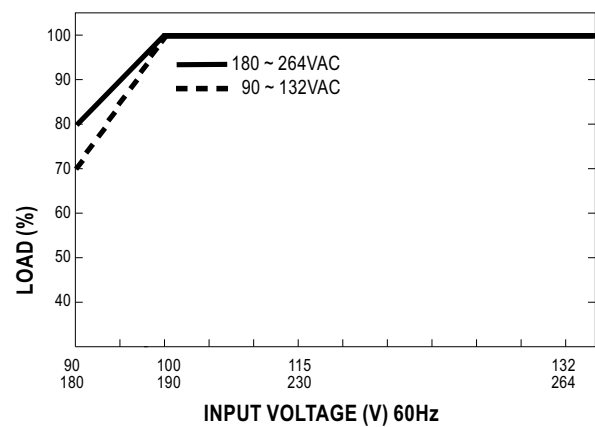


Note: DC output is positive voltage as marked. For negative DC voltage (-24VDC or -48VDC), reverse wiring polarity when connecting to the DC output terminals.

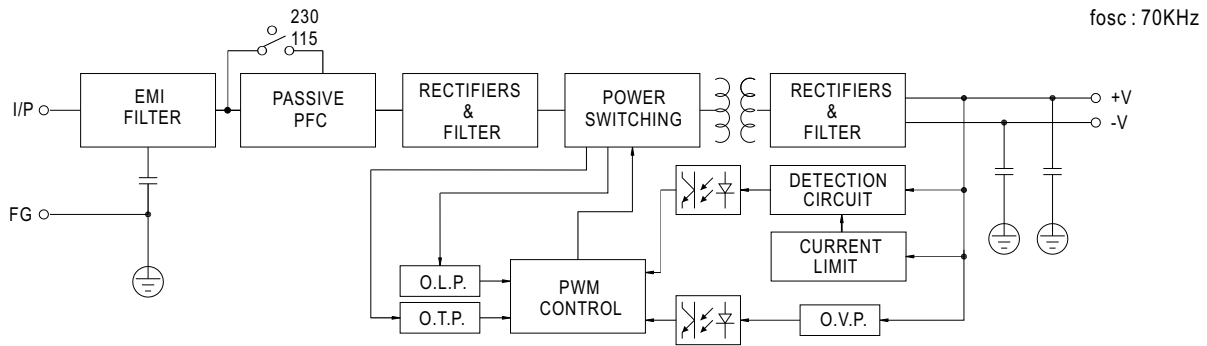
Derating Curve



Static Characteristics (24V)



Block Diagram



Specifications

		RLH-D-ACDC-500-24-01	RLH-D-ACDC-500-48-01
DC OUTPUT	DC VOLTAGE Note 2	24V	48V
	RATED CURRENT	20A	10A
	CURRENT RANGE	0 ~ 20A	0 ~ 10A
	RATED POWER	500W	500W
	RIPPLE & NOISE (max.) Note 3	120mVp-p	120mVp-p
	VOLTAGE ADJ. RANGE	24 ~ 28V	48 ~ 55V
	VOLTAGE TOLERANCE Note 4	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%
	LOAD REGULATION	±1%	±1%
	SETUP, RISE TIME	1200ms, 40ms/230VAC, 115VAC at full load	
	HOLD UP TIME (Typ.)	23ms/230VAC, 115VAC at full load	
	INPUT	VOLTAGE RANGE Note 5	90 ~ 132VAC / 180 ~ 264VAC by switch
FREQUENCY RANGE		47 ~ 63Hz	
POWER FACTOR (Typ.)		≥0.7/230VAC only	
EFFICIENCY (Typ.)		89%	
AC CURRENT (Typ.)		8A/115VAC	3.2A/230VAC
INRUSH CURRENT (Typ.)		Cold Start 27A/115VAC	45A/230VAC
LEAKAGE CURRENT		<3.5mA / 240VAC	
PROTECTION	OVERLOAD	105 ~ 150% rated output power	
	OVER VOLTAGE	30 ~ 36V	59 ~ 66V
	OVER TEMPERATURE	100°C ±5°C (TSW: detect on heat sink of power transistor)	
ENVIRONMENT	WORKING TEMP.	-20°C ~ +70°C (Refer to output load derating curve)	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40°C ~ +85°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, 60min. each along X, Y, Z axes; Mounting: Compliance to IEC60068-2-6	

Specifications

	RLH-D-ACDC-500-24-01	RLH-D-ACDC-500-48-01
SAFETY & EMC	SAFETY STANDARDS	UL508, UL60950-1, TUV EN60950-1 approved
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VD/25°C/70% RH
	EMI CONDUCTION & RADIATION	Compliance to EN55011 (CISPR11), EN55022 (CISPR22), EN61204-3 Class B
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61204-3, EN61000-6-2 (EN50082-2), heavy industry level, criteria A
OTHER	MTBF	187.9Khrs min. MIL-HDBK-217F (25°C)
	DIMENSIONS	WxHxD 227mmx125.2mmx100mm (8.9"x4.9"x3.9")
	WEIGHT	1.8Kg / 4lbs. (Not including packing and accessories)
NOTE	<ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Output terminals are marked for positive DC voltage output. For negative DV output, reverse wiring polarity when connecting to the DC output terminals. 3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 4. Tolerance : includes set up tolerance, line regulation and load regulation. 5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 	



Includes Power Supply, DIN rail, mounting hardware, circuit breaker, terminal blocks and AC power cord.

Ordering Information

Part Number	Input	Output
RLH-D-ACDC-500-24-01	110-240AC/254~370VDC	24VDC/20A
RLH-D-ACDC-500-48-01	110-240AC/254~370VDC	48VDC/10A

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



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Specifications subject to change without notice.