Features

- Universal AC Input (85-264VAC)
- 7 Year Warranty
- Protections: OVP, OCP, SCP, OTP
- 100% Full Load burn-in test
- DC OK Relay and indicator
- cooling by free air convection, 5000m operation
- UL, CE, CB Certified

POWERLINE
AC/DC-Converter
with 7 year Warranty

RECOM

60 Watt DIN-Rail Power Supply

RoHS 2011/65/EU 6/6 CE cULus 314885

CB-Report
UL-60950-1 Certified
UL-508 Certified
IEC-60950-1 Certified

REDIN60

Description

This DIN-rail mounted power supply uses high reliability components to give a long, trouble-free life. The power supply can be end mounted to save space or side mounted for use in low-profile cabinets. Relay contacts simplify DC OK monitoring and the units can be paralleled for redundancy. The REDIN series is fully certified for industrial use and carries a 7-year warranty.

Selection Guide

Part Number	Input Voltage Range (VAC)	Output Voltage (VDC)	Output Voltage Trim Range (VDC)	Rated Current (A)	Rated Power (W)	Efficiency typ. (%)
REDIN60-12*	85-264	12	12-15	5	60	85
REDIN60-24*	85-264	24	24-28	2.5	60	87

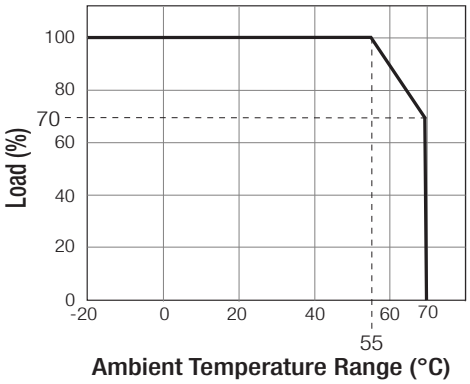
** add suffix „/NR“ for No Relay*

Specifications: (measured at TA: 25°C, 230VAC, rated Load)

Input Voltage Range (with Derating)		80-264VAC or 120-370VDC
Max. Input Voltage		300VAC/375VDC <1s
Input Frequency		47-63Hz
Input Current (Full Load)	115VAC	1.8A max.
	230VAC	1A max.
Inrush Current (Cold Start at 25°C)	115VAC	40A typ.
	230VAC	60A typ.
Input Fuse		T2.5A / 250VAC
No Load Power Consumption	(without DC OK Relay)	500mW
Leakage Current	240VAC	<1mA typ.
Current Tolerance	12VDC	0 - 5A
	24VDC	0 - 2.5A
Line Voltage Regulation		±1% typ.
Load Voltage Regulation		±1% typ.
Output Ripple & Noise (1)	12VDC	120mVp-p
	24VDC	150mVp-p
Start-up time (2)	230VAC	1000ms typ.
Rise time	230VAC	20ms typ.
Hold-up time	115VAC, Full Load	20ms typ.
	230VAC, Full Load	50ms typ.
Dynamic Load Regulation (3)	12VDC (step load change: 2.5A - 5A)	±5% typ.
	24VDC (step load change: 1.25A - 2.5A)	±5% typ.
Dwell Time:		100Hz & 1kHz 50% duty
Slew Rate		0.5A/µ sec
Isolation Voltage	I/P to O/P	3.75kVAC / 1minute
	I/P to FG	1.88kVAC / 1minute
	O/P to FG	0.5kVAC / 1minute
Isolation Resistance	500VDC, 70%RH	100MΩ min.
Over Voltage Protection (OVP)	12VDC	16-18V
Latch off	24VDC	30-35V
Power OK	Relay Contacts	1A, 30VDC / 120VAC
	LED/Relay	OK if Vout = 11-16V (12V) / 22-30V (24V)

continued on next page

Derating Graph
(Ambient Temperature)



Specifications: (measured at TA: 25°C, 230VAC, rated Load)

Short Circuit Protection (SCP)		Current limiting, auto-recovery after fault condition
Over Current Protection (OCP)		110-150%, auto-recovery
Over Temperature Protection (OTP)		105°C ±5°C, shut-down and latch-off output voltage, re-power on the recover
Operating Temperature Range (free air convection)		-20°C to +70°C
Storage Temperature Range		-30°C to +85°C
Storage Humidity		10% - 90% RH
Humidity	Non-condensing	20% - 90% RH max.
Vibration		10-500Hz, 2G 10min / 1 cycle, period for 60 Min.
Shock	3 times each axis	10G / 11ms, along X, Y and Z axis
Altidude		5000m
Weight		307g
Packing (LxWxH) / Carton		115 x 55 x 99mm
Dimension	(L x W x H)	88.6 x 41.1 x 101.4mm
MTBF (+25°C, MIL-HDBK-217F)	115VAC / 60Hz / 75% Load	200 x 10^3 hours
Design Lifetime	Ta= +40°C	87.6 x 10^3 hours
EMI	Conduction and Radiated	EN55011, Class B
		EN55022, Class B
		EN55024
		FCC, Class B

EMC	ESD	±8kV Contact & Air Discharge	EN61000-4-2, Criteria A
	Radiated Immunity	10V/m, 80-3000MHz, 80% AM at 1kHz	EN61000-4-3, Criteria A
	Fast Transient	Level 2	EN61000-4-4, Criteria A
	Surge	±2kV / L-N, ±4kV / L, N-PE	EN61000-4-5, Criteria A
	Conducted Immunity	10V rms, 0.15-80MHz, 80% AM at 1kHz	EN61000-4-6, Criteria A
	Power frequency magnetic field immunity test		EN61000-4-8, Criteria A
	Noise Immunity	40% reduction, 200ms	EN61000-4-11, Criteria A
		70% reduction, 500ms	EN61000-4-11, Criteria B
		95% reduction, 5s	EN61000-4-11, Criteria B
	Harmonic Immunity	not applicable input below 75W	EN61000-3-2
	Voltage Flicker		EN61000-3-3

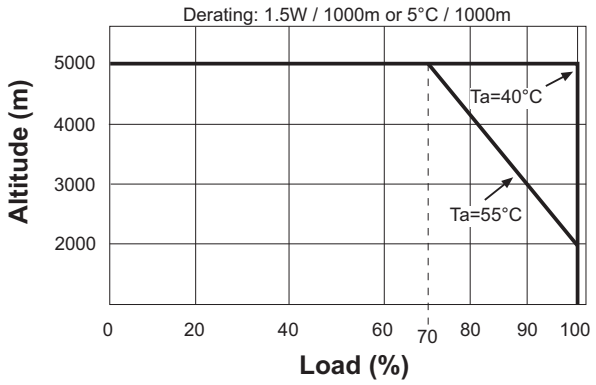
Certifications:	UL General Safety	Report:	UL508
		Report:	UL60950-1
	IEC General Safety	Report:	IEC60950-1

Notes:

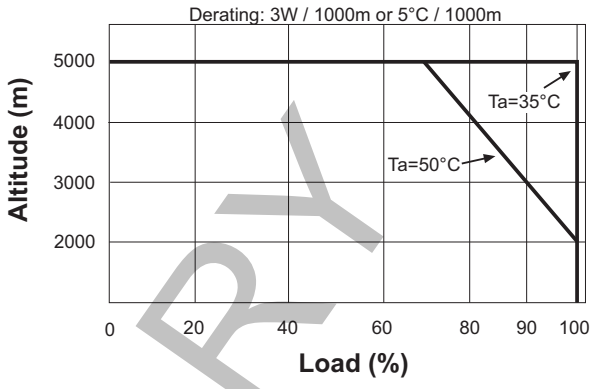
1. Ripple and Noise measured @ 20MHz of bandwidth by using a 12“ twisted pair-wire terminated with 0.1µF & 47µF parallel capacitor
2. Length of Start-up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the Start-up time.
3. Dynamic Load Regulation + E-Cap loading 3300µF. Other specs with resistive load only.

Typical Characteristics

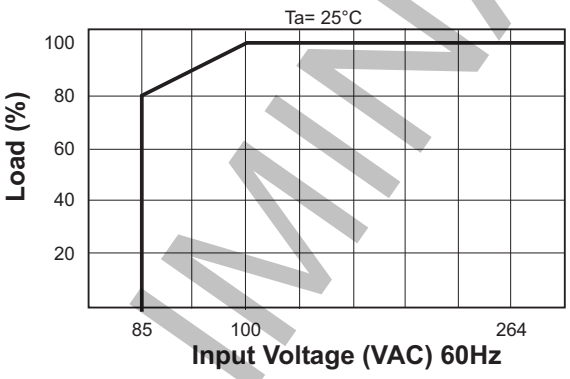
REDIN60-24



REDIN60-12

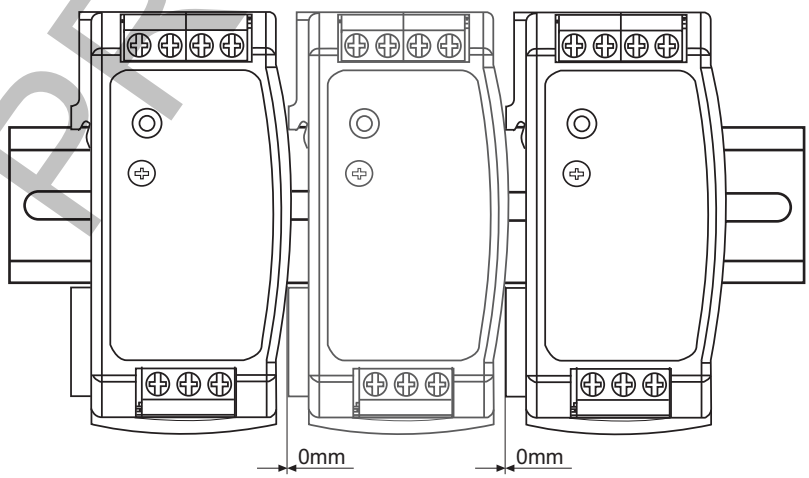


REDIN60-12 & 24



REDIN60

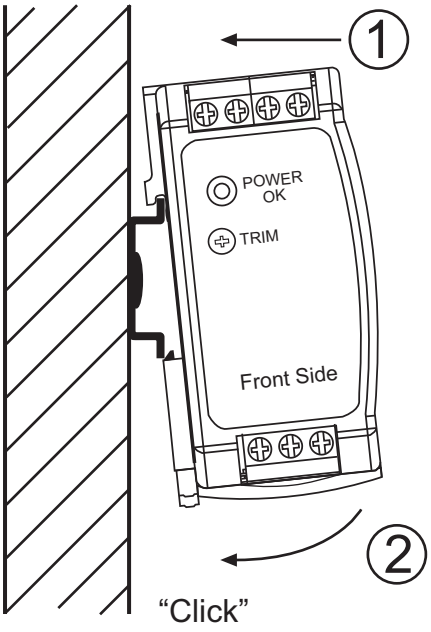
Mounting multiple power supplies



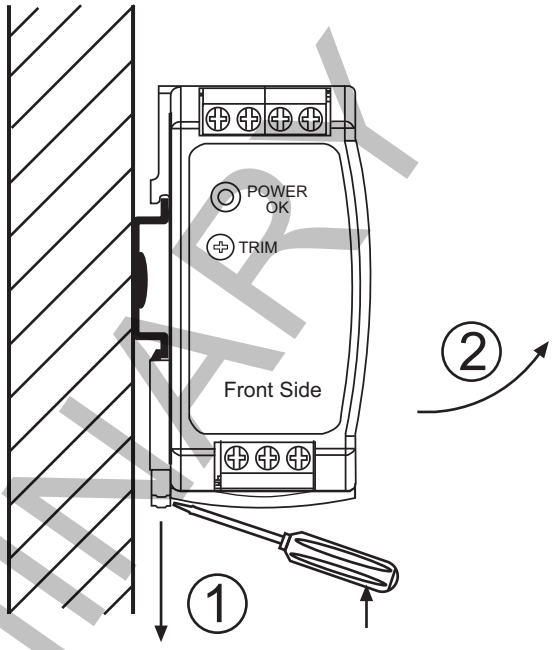
no spacers between
supplies required

Mounting instruction

Mounting

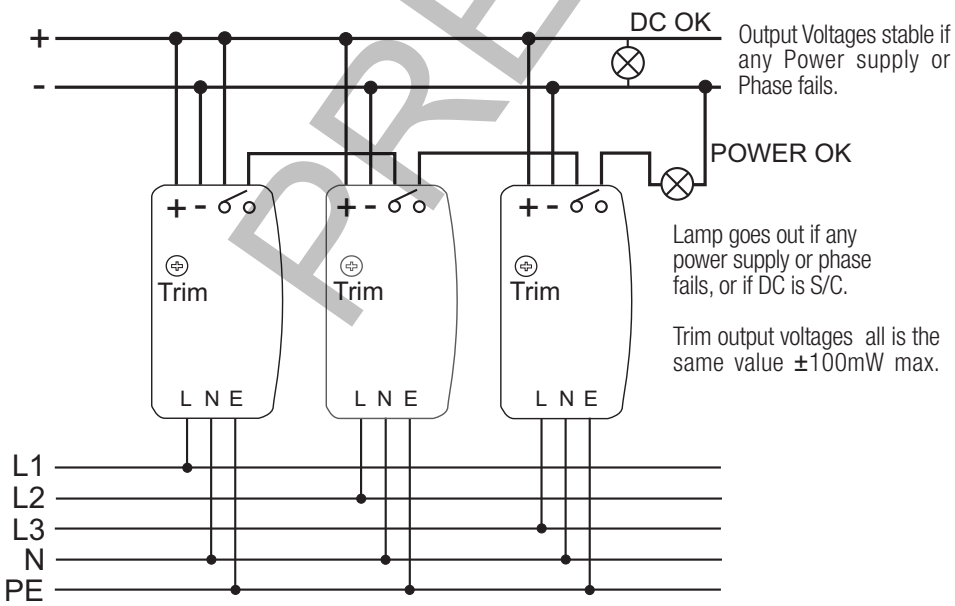


Releasing



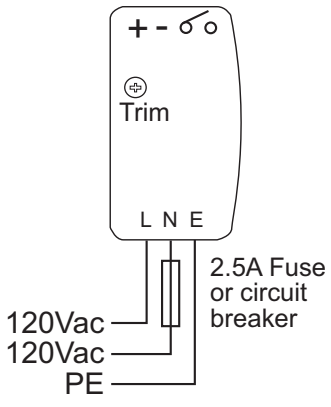
Application Suggestion

Redundant power supply (100W max.)



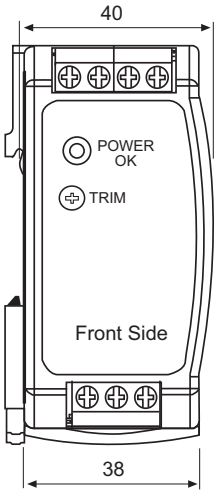
Do not parallel up more than three power supplies.

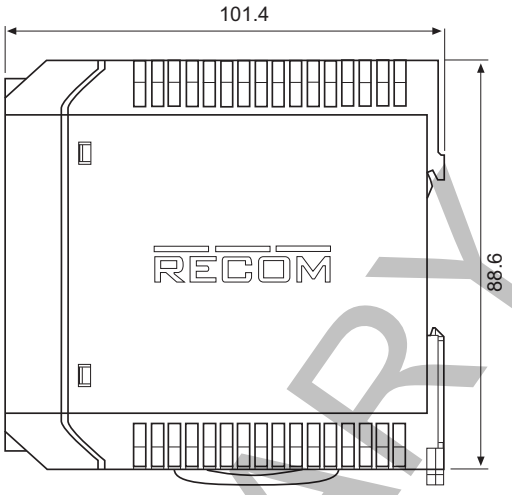
208Vac 2-Phase Operation

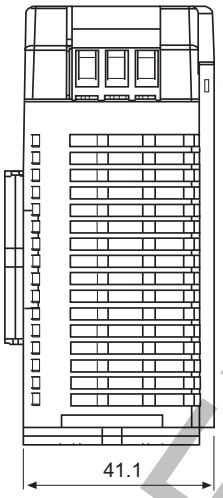


Do not use without PE connection.

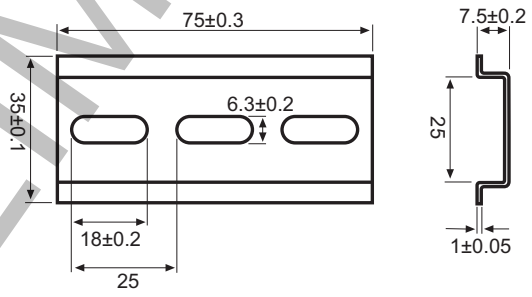
Mechanical Dimensions



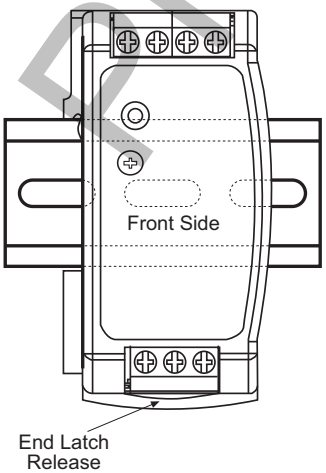




DIN-Rail mounting bracket
(75mm) included



END MOUNTING



SIDE MOUNTING