

## 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

### 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. (%)
REDIN45-12*	85-264	12	12-15	3.75	45	85
REDIN45-24*	85-264	24	24-28	1.875	45	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	1.35A max.
	230VAC	0.75A 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.
	24VDC	0 - 1.875A
Current Tolerance	12VDC	0 - 3.75A
	24VDC	0 - 1.875A
Line Voltage Regulation	±1% typ.	
Load Voltage Regulation	±1% typ.	
Output Ripple & Noise <sup>(1)</sup>	12VDC	120mVp-p
	24VDC	150mVp-p
Start-up time <sup>(2)</sup>	230VAC	1000ms typ.
Rise time	230VAC	20ms typ.
Hold-up time	115VAC, Full Load	20ms. typ.
	230VAC, Full Load	50ms typ.
Dynamic Load Regulation <sup>(3)</sup>	12VDC (step load change: 1.875A - 5A)	±5% typ.
	24VDC (step load change: 0.937A - 1.875A)	±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

## POWERLINE

AC/DC-Converter

with 7 year Warranty

# RECOM

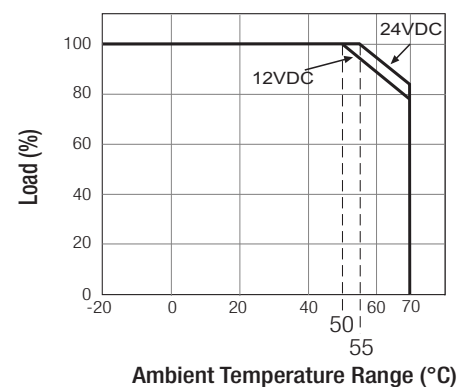
## 45 Watt DIN-Rail Power Supply



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

## REDIN45

### Derating Graph (Ambient Temperature)



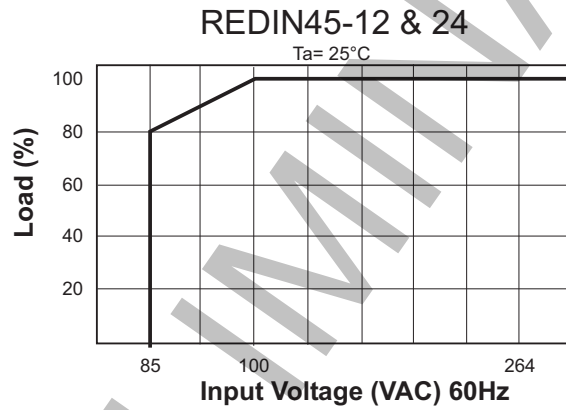
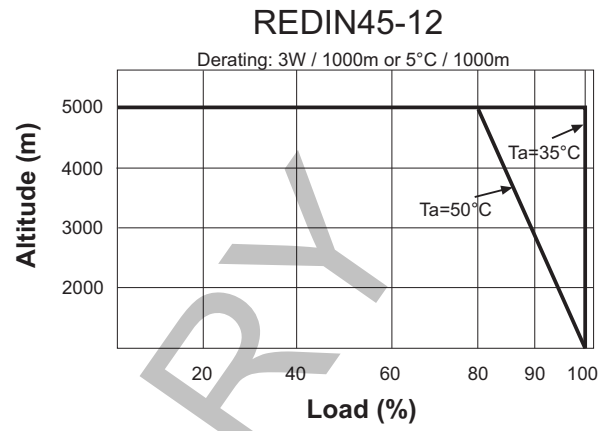
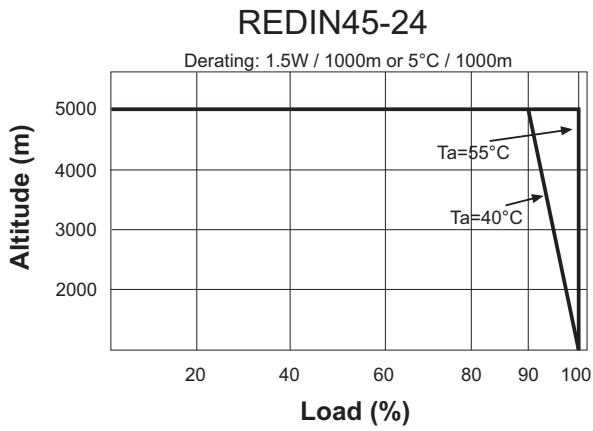
**Specifications: (measured at TA: 25°C, 230VAC, rated Load)**

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 to 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		10-55Hz, 2G 10min / 1 cycle, period for 60 Min.
Shock	3 times each axis	10G / 11ms, along X, Y and Z axis
Altitude		5000m max.
Weight		307g
Packing (LxWxH) / Carton		115 x 55 x99mm
Dimensions	(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 <sup>3</sup> hours
Design Lifetime	Ta= +40°C	87.6 X 10 <sup>3</sup> 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
<b>Certifications:</b>	UL General Safety	UL508 UL60950-1
	IEC General Safety	IEC60950-1

**Notes:**

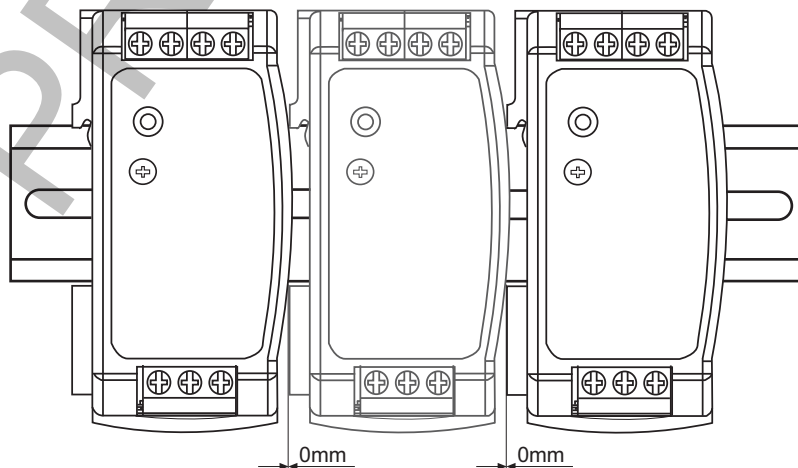
1. Ripple and Noise measured @ 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1µF & 47µF parallel capacitor.
2. Length of Start-up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the Start-up time.
3. Dynamic Load Regulation + E-Cap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

**Typical Characteristics**



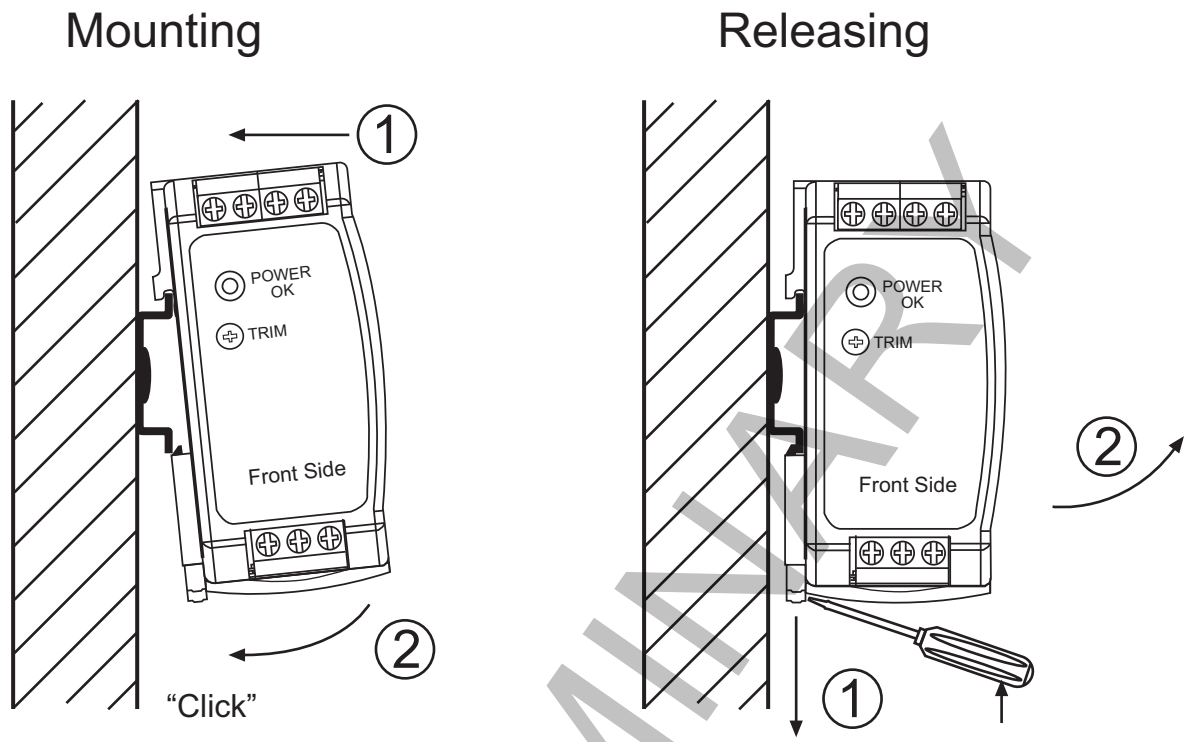
**REDIN45**

**Mounting multiple power supplies**



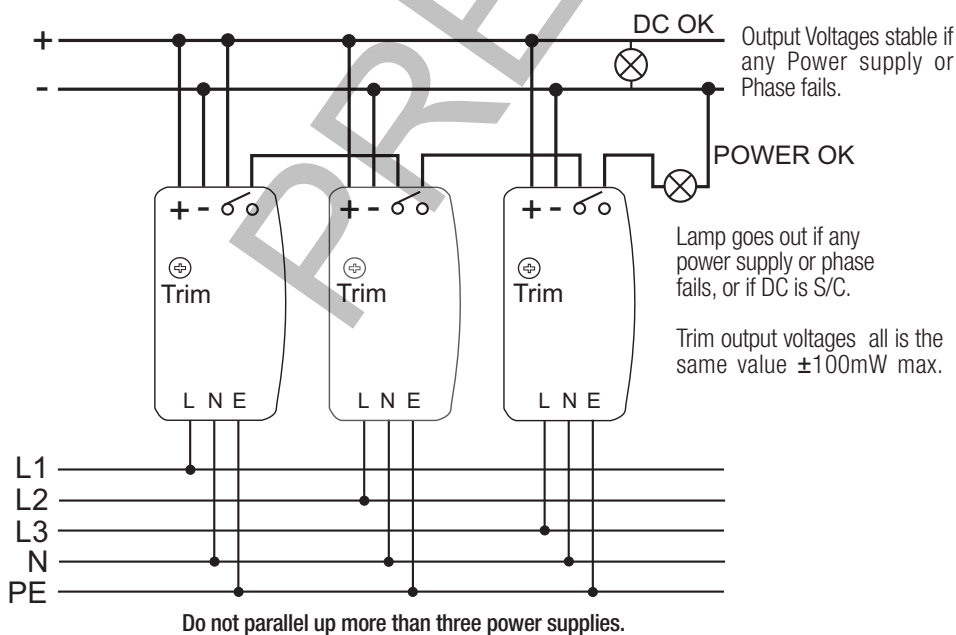
no spacers between  
supplies required

Mounting instruction

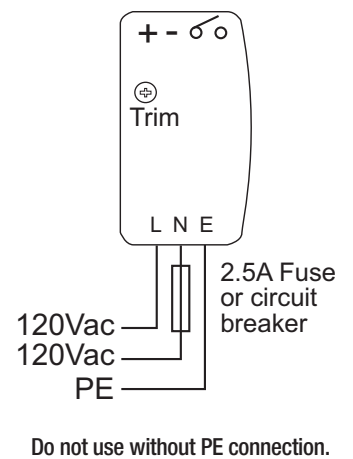


Application Suggestion

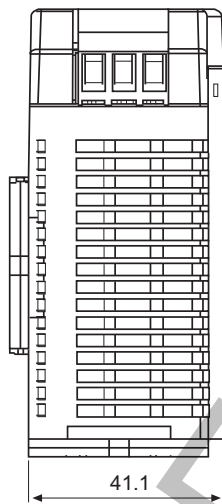
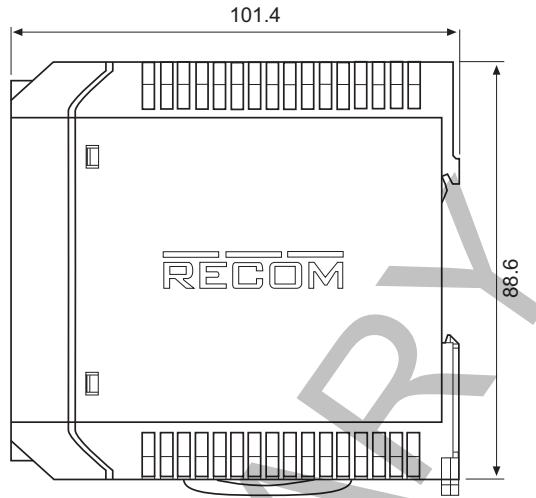
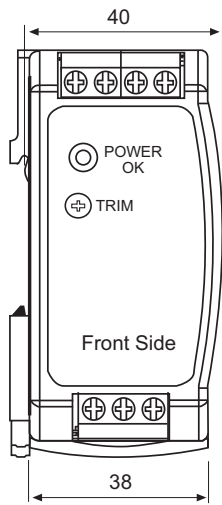
Redundant power supply (75W max.)



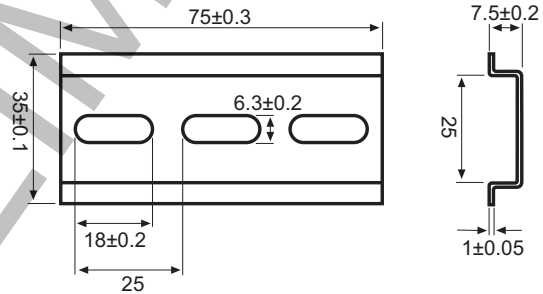
208Vac 2-Phase Operation



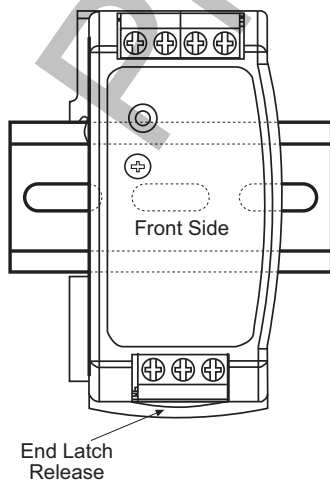
**Mechanical Dimensions**



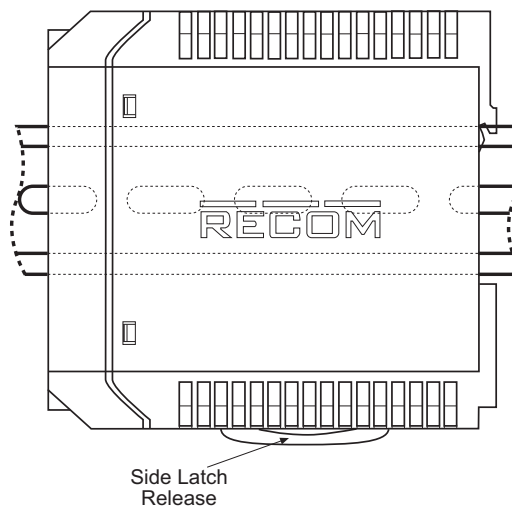
DIN-Rail mounting bracket  
(75mm) included



**END MOUNTING**



**SIDE MOUNTING**



The product information and specifications are subject to change without prior notice. All products are designed for non-safety critical commercial and industrial applications. The Buyer agrees to implement safeguards that anticipate the consequences of any failures that might cause harm, loss of life and/or damage property.