

Features

- Universal AC input (85-264VAC)
- Long 7 year warranty
- Protections: SCP, OVP, OCP, OTP
- 100% full load burn-in test
- DC OK indicator LED with relay contacts
- cooling by free air convection, 5000m operation
- UL, CSA & CE certified with CB report

DIN Rail Series

RECOM AC/DC Converter

REDIN45

45 Watt DIN-Rail Power Supply



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 deliver 60W start-up power. 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 Trimming Voltage [VDC]	Rated Current [A]	Efficiency typ. [%]	Max. Capacitive Load [µF]
REDIN45-12	85-264	12	12-15	3.75	85	18800
REDIN45-24	85-264	24	24-28	1.875	86	4700

Specifications (measured at Ta= 25°C, 230VAC, full load and after warm up)

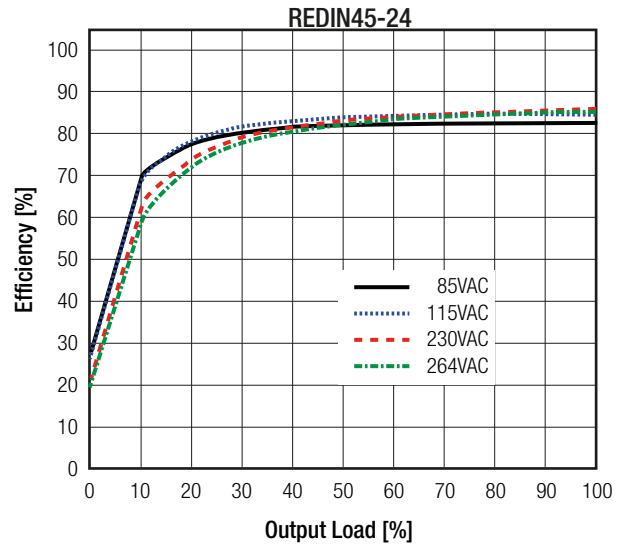
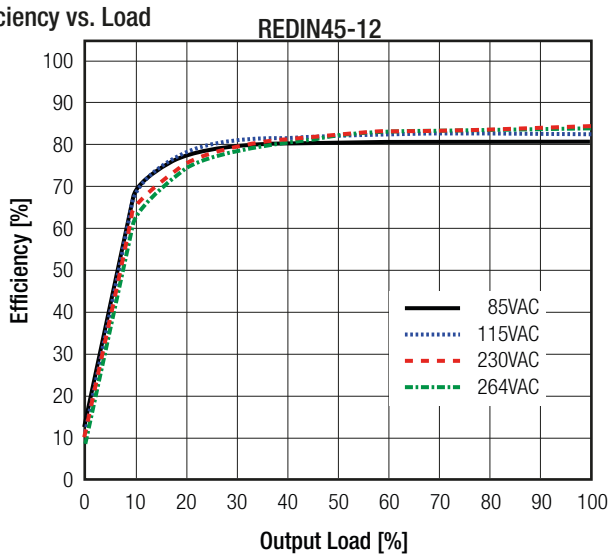
BASIC CHARACTERISTICS				
Parameter	Condition	Min.	Typ.	Max.
Input Voltage Range	all operating conditions	85VAC		264VAC
max. Input Voltage	max. 1 second			300VAC 375VDC
Output Voltage Adjustment (Factory Setting) ⁽¹⁾	12Vout 24Vout		12-15VDC (12V±5%) 24-28VDC (24V±5%)	
Input Current	full load, 115VAC full load, 230VAC			1.35A 0.75A
Inrush Current	cold start at 25°C, 115VAC cold start at 25°C, 230VAC			40A 60A
No Load Power Consumption	standard (with Relay) /NR option (no Relay)			<1000mW <500mW
Start Up time	cold start, 230VAC		500ms	1000ms
Rise time	cold start, 230VAC		20ms	
Hold-up time	full load, 115VAC full load, 230VAC		20ms 50ms	
Input Frequency Range		47Hz		63Hz
Operating Frequency Range			65kHz	
Efficiency		see Selection Guide		
Output Ripple and Noise ⁽²⁾	12Vout 24Vout		60mVp-p 75mVp-p	
Over Load Capability	all operating conditions	140% for 5 seconds max.		
Notes:				
Note1: For more details refer to Vadj. Derating Graph on page PA-2				
Note2: Ripple and Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with 0.1µF & 47µF parallel capacitor				
continued on next page				



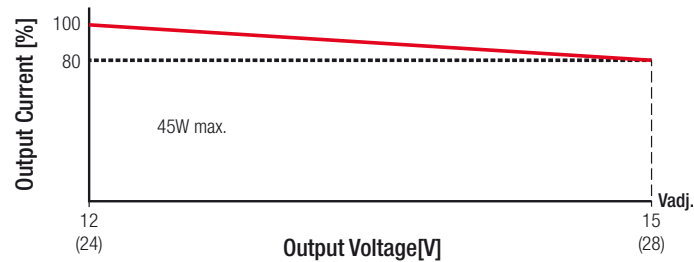
- CB-Report
- UL60950-1 certified
- IEC/EN60950-1 certified
- CSA C22.2 No. 60950-1-07 certified
- UL508 certified
- CAN/CSA-C22.2 No. 107.1-01 certified
- EN55024 certified
- EN55032 certified

Specifications (measured at $T_a = 25^\circ\text{C}$, 230VAC, full load and after warm up)

Efficiency vs. Load



Vadj. Derating



REGULATION

Parameter	Condition	Value
Line Regulation		± 0.1 typ. / $\pm 1\%$ max.
Load Regulation		0.1 typ. / 1% max.
Transient Response ⁽³⁾	12Vout (step load change: 1.875A - 3.75A) 24Vout (step load change: 0.937A - 1.875A)	$\pm 5\%$ typ. $\pm 5\%$ typ.
Dwell Time		100Hz & 1kHz 50% duty
Slew Rate		0.5A / μs

Notes:

Note3: Transienst Response + E-CAP loading 3300 μF . Other specs with resistive load only

PROTECTION

Parameter	Condition	Value	
Input Fuse		T2.5A, slow blow type	
Short Circuit Protection (SCP)		auto-recovery after fault condition, Hiccup Mode	
Over Voltage Protection (OVP)	12Vout 24Vout	18VDC max., shut-down latch-off o/p voltage, re-power on to recover 35VDC max., shut-down latch-off o/p voltage, re-power on to recover	
Over Voltage Category		OVCII	
Over Current Protection (OCP)		150% typ., auto-recovery after fault condition	
Over Temperature Protection (OTP)	detect on inside ambient	105 $^\circ\text{C} \pm 5\%$, shut-down latch-off o/p voltage, re-power on to recover	
Isolation Voltage	tested for 1 minute	I/P to O/P	3.75kVAC
		I/P to FG	1.88kVAC
		O/P to FG	0.5kVAC

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