Features

DIN-Rail Series

- 2 and 3-phase operation
- Input voltage range: 320 – 575VAC
- Output trim range: 22.5 – 29.5VDC
- High electrical strength; high reliability
- Permanent overload and short-circuit protection
- Parallel operation capability
- International safety certification listing

RECOM

AC/DC Converter

REDIN480/3AC

480 Watt 3 Phase DIN-Rail Power Supply

5 YEAR Warranty

Description

The REDIN/3AC is a series of rugged DIN rail power supplies for two and three-phase mains operation from 320 to 575Vac without the need of a neutral connection. Four versions with a maximum current limited output deliver 5A, 10A, 20A or 40A without derating up to +55°C. The output can be grounded via a third common output terminal. The LED signal on the front panel indicates that the output voltage remains within the wide adjustable range from 22.5 to 29.5Vdc. The units are covered by international safety certificates and are intended for worldwide use. In power-hungry applications, the units can be connected in parallel with no need for additional components.

Selection Guide

Part Number	nom. Input Voltage Range [VAC]	Output Voltage [VDC]	Output Adjustability [VDC]	Rated Current [A]	Efficiency (1) typ. [%]
REDIN480-24/3AC	400-500	24	22.5-29.5	20	91

Notes:

Note1: Efficiency is tested at nominal input and full load at +25°C ambient

Model Numbering

REDIN480-__/3AC

nom. Output Power — Output Voltage

Specifications (measured @ Ta= 25°C, nom.Vin, full load and after warm-up unless otherwise stated)

BASIC CHARACTERISTICS					
Parameter	**Condition**		**Min.**	**Typ.**	**Max.**
Input Voltage Range	3 phase operation 2 phase operation		320VAC 360VAC	400VAC 400VAC	575VAC 575VAC
Input Current	3 phase operation	400VAC 500VAC		3 x 1100mA 3 x 800mA	
	2 phase operation	400VAC 500VAC		2 x 700mA 2 x 600mA	
Inrush Current					15A
Powerfactor				0.67	
Return Voltage Immunity	24 Vout			35VDC	
No Load Power Consumption					6W
Input Frequency Range	AC Input		45Hz		65Hz
Output Voltage Trimming			22.5VDC		29.5VDC
Minimum Load			0%		
Start-up time	2/3 phase operation, 400VAC				1s
Rise time					2ms
Hold-up time	400VAC 480VAC		17ms 20ms		
Output Ripple & Noise	measured at 20MHz BW				10mVp-p

continued on next page

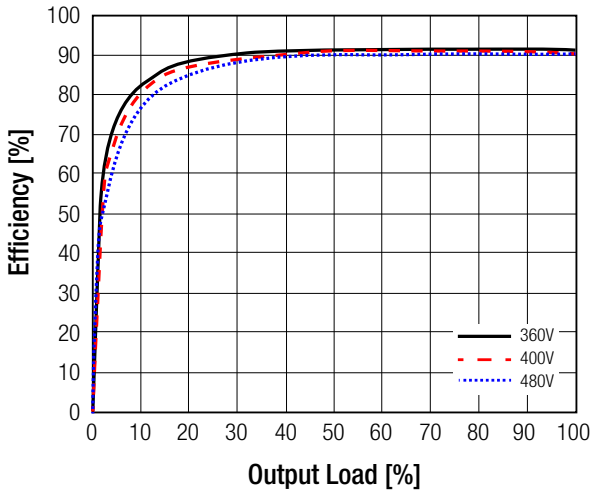
c US E196683

c UL us LISTED E470721

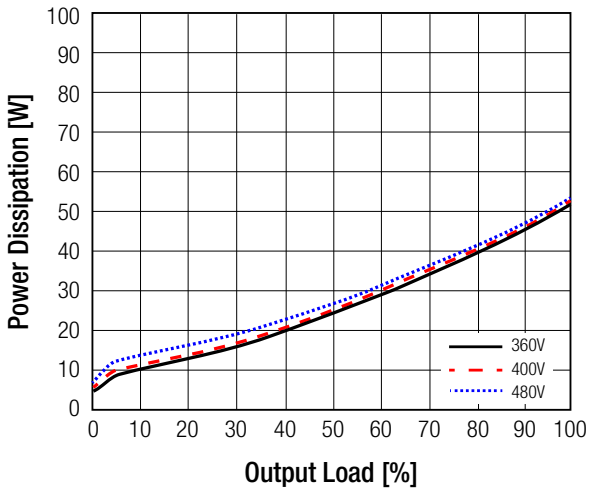
UL60950-1 certified
UL508 certified
EN60950-1 certified
CSA C22.2 No. 60950-01 certified
EN55011 compliant
EN50121-4 compliant
CSA C22.2 No.107 certified
EN61000-6-2 compliant
EN61000-6-3 compliant

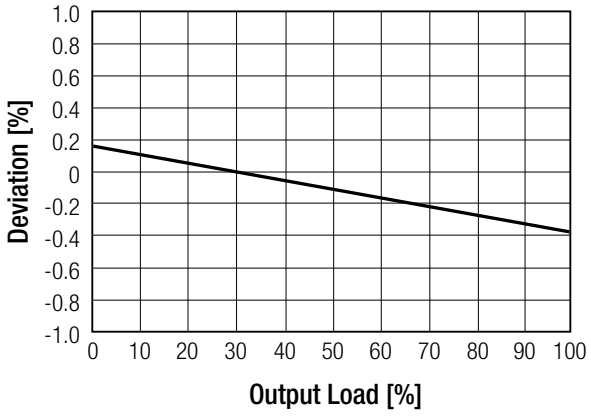
Specifications (measured @ Ta= 25°C, nom.Vin, full load and after warm-up unless otherwise stated)

Efficiency vs. Load @ 3 Phase Operation



Power Dissipation vs. Load @ 3 Phase Operation



REGULATION		
Parameter	**Condition**	**Value**
Output Accuracy		±1.0% max.
Line Regulation	10% change in input voltage	±0.1% typ.
Load Regulation	10% - 100% load	±1.0% typ., ±2.0% max.
Transient Response	25% load step change recovery time	200mV typ. 50ms typ.

Accuracy vs. Load