Features

Regulated Converters

- Connector Set available
- Class II Power Supply
- Universal Input Voltage Range
- compact 4" x 2" size
- 3kVAC Isolation
- OCP, OVP, SCP
- Standby Power ErP conform (<0.5W)

Description

The RAC48/OF series offers compact AC/DC open frame power supplies with universal AC input (90-265VAC) and fully protected DC outputs which are trimmable to compensate for voltage drops on the output connections. The power supplies are CB, UL, and CE certified and ErP conform. Uses include industry controls, test and measurement systems and energy efficient products.

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current Range (A)	Voltage Adj. Range * (V)	Output Power (W)	Efficiency typ. %
RAC48-05S/OF	90-264	5	0-8	4.5-5.5	40	79
RAC48-12S/OF	90-264	12	0-4	10-13	48	82
RAC48-15S/OF	90-264	15	0-3.2	13.5-18	48	84
RAC48-24S/OF	90-264	24	0-2	22-27	48	85

** refer to „Package Style and Pinning"*

Specifications (typical at 25°C and 230VAC)

Input Voltage Range		90-264VAC or 127-370VDC
Rated Power		48 Watts max.
Input Frequency Range (for AC Input)		47-63Hz
Input Current (full load)	115VAC	1.5A max.
	230VAC	1A max.
Inrush Current (Cold Start)	115VAC	30A typ.
	230VAC	60A typ.
No Load Power Consumption		<0.5W
Start-up Time (at cold first start)	115VAC/230VAC	500ms
Rise Time	Full Load	<30ms
Hold Time	115VAC, Full Load	13ms typ.
	230VAC, Full Load	60ms typ.
Leakage Current	240VAC	<0.75mA
Output Voltage Accuracy	24VDC	±1%
(includes Line-, Load-regulation and Set-up Tolerance)	05, 12, 15VDC	±2%
Output Ripple and Noise (20MHz limited)	5VDC	80mVp-p max.
	12VDC	120mVp-p max.
	15VDC	150mVp-p max.
(measured with 0.1µF & 47µF parallel capacitor)	24VDC	200mVp-p max.
Isolation Voltage	I/P to O/P	3kVAC / 1 minute
	I/P to FG	1.5kVAC / 1 minute
	O/P to FG	0.5kVAC / 1 minute
Isolation Resistance	500VDC	100 MΩ
Short Circuit Protection		Hiccup Mode, Automatic Restart
Over Voltage Protection	5VDC	5.75-6.5VDC
	12VDC	13.5-15VDC
	15VDC	16.9-18.75VDC
Latch Mode, re-power on to recover	24VDC	27-30VDC
Over Load Protection	115-150% rated output power, Hiccup Mode, Automatic Restart	

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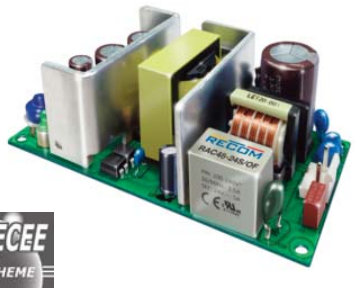
POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

48 Watt Open Frame Single Output



RoHS 2011/65/EU 6/6

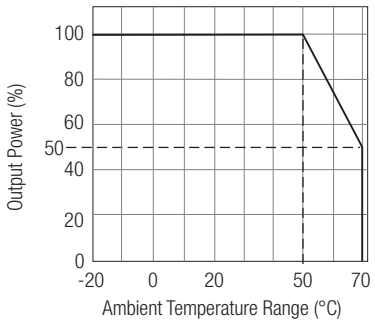
E196683

CB-Report
UL-60950-1 Certified
EN-60950-1 Certified
EN-55022 Certfied
EN-55024 Certified

RAC48/OF

Derating-Graph

(Ambient Temperature)



Refer to Application Notes

POWERLINE
AC/DC-Converter

RAC48-xx/OF Series

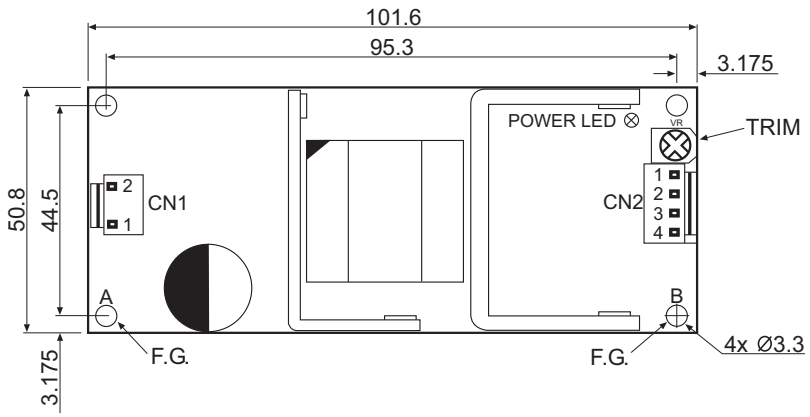
Specifications (typical at 25°C and 230VAC)

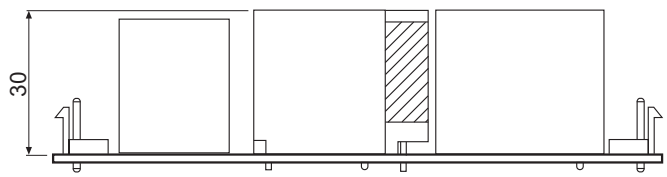
Operating Temperature Range	Full Load without derating		-20°C to +50°C
	with derating		-20°C to +70°C
Storage Temperature Range			-40°C to +80°C
Operation Humidity	non-condensing		20% - 90% RH
Storage Humidity			10% - 90% RH
Vibration			10-500Hz, 2G, 10 Min. along X, Y and Z
Weight			145g
Dimensions (LxWxH)			101.6 x 50.8 x 30mm
Package Quantity			30pcs / carton
Package Dimensions Carton (LxWxH)			325 x 270 x 220mm
MTBF	(using MIL-HDBK-217F, 25°C)		>450 x 10^3 hours
Certifications:			
General Safety		Report: E196683	UL-60950-1 2nd
IEC/EN General Safety		Report: PSE103-0658	IEC/EN-60950-1 2nd
EMC	Conducted and Radiated	Report: HA080035-SCCE	EN55022, Class B
	Immunity	Report: HA080035-SCCE	EN55024
		Report: HA080035-SBFD	FCC, Part 15, Class B
	Harmonics	Report: HA080035-SCCE	EN61000-3-2
			EN61000-3-3
			EN61000-4-2, 3, 4, 5, 6, 8, 11, Critertia A
	Emission	Report: HA080035-SCCE	EN61000-6-3
ErP	complies to European Directive for Energy Related Products		2004/125/EC

Notes

Note1: Mounting holes A, B must be grounded for EMI (Filter Ground).

Package Style and Pinning





AC Input Connector (CN1): WST M3-139606S or equivalent

Pin#	Terminal	Mating Housing
1 AC/N	WST I39606PS-2 or equivalent	WST P3-I39606PS-2 or equivalent
2 AC/L		

DC Output Connector (CN2): WST M4-139606 or equivalent

Pin#	Terminal	Mating Housing
1, 2 V+	WST I39606PS-2 or equivalent	WST P4-I39606PS-2 or equivalent
3, 4 V-		

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.