

# 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. %	Max. Capacitive Load
RAC48-05S/OF	90-264	5	0-8	4.5-5.5	40	79	18800µF
RAC48-12S/OF	90-264	12	0-4	10-13	48	82	18800µF
RAC48-15S/OF	90-264	15	0-3.2	13.5-18	48	84	12700µF
RAC48-24S/OF	90-264	24	0-2	22-27	48	85	4700µF

\* 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	
Rise Time	Full Load	
	<30ms	
Hold Time	115VAC, Full Load	13ms typ.
	230VAC, Full Load	60ms typ.
Leakage Current	240VAC	
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	
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	
Over Load Protection	115-150% rated output power, Hiccup Mode, Automatic Restart	

continued on next page

# POWERLINE

## AC/DC-Converter

with 3 year Warranty

# RECOM

## 48 Watt Open Frame Single Output

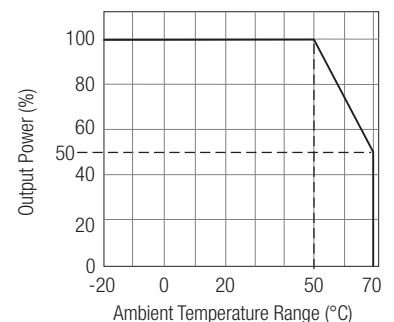


**CB-Report**  
**UL-60950-1 Certified**  
**EN-60950-1 Certified**  
**EN-55022 Certified**  
**EN-55024 Certified**

# 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 with derating	-20°C to +50°C -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 <sup>3</sup> hours

### Certifications:

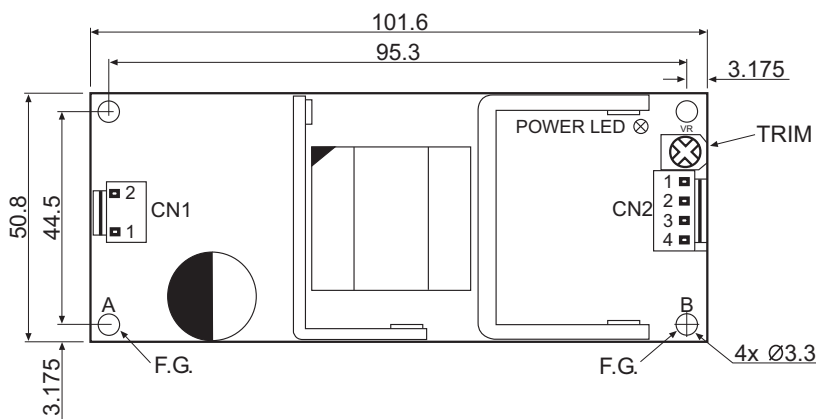
General Safety		Report: E196683	UL-60950-1 2nd
IEC/EN General Safety		Report: PSE103-0658	IEC/EN-60950-1 2nd
EMC	Conducted and Radiated	Report: HA080035-SCCE	EN55022, Class B
	Immunity	Report: HA080035-SCCE	EN55024
	Harmonics	Report: HA080035-SBFD	FCC, Part 15, Class B
		Report: HA080035-SCCE	EN61000-3-2 EN61000-3-3 EN61000-4-2, 3, 4, 5, 6, 8, 11, Criteria A
ErP	Emission	Report: HA080035-SCCE	EN61000-6-3
	complies to European Directive for Energy Related Products		2004/125/EC

### Notes

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

RAC48/OF

### Package Style and Pinning



#### AC Input Connector (CN1):

Pin#	Terminal	Mating Housing
1 AC/N	WST I39606PS-2 or equivalent	WST P3-I39606 or equivalent
2 AC/L		

#### DC Output Connector (CN2):

Pin#	Terminal	Mating Housing
1, 2 V+	WST I39606PS-2 or equivalent	WST P4-I39606 or equivalent
3, 4 V-		

Note: Detail information about the connectors on [www.wst.com.tw](http://www.wst.com.tw)

The product information and specifications are subject to change without prior notice. RECOM products are not authorized for use in safety-critical applications (such as life support) without RECOM's explicit written consent. A safety-critical application is defined as an application where a failure of a RECOM product may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The buyer shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.