



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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 (90-264VAC) 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 | 4.8-5.2 | 40 | 79 | 18800µF |
| RAC48-12S/OF | 90-264 | 12 | 0-4 | 11.4-12.6 | 48 | 82 | 18800µF |
| RAC48-15S/OF | 90-264 | 15 | 0-3.2 | 14.2-16 | 48 | 84 | 12700µF |
| RAC48-24S/OF | 90-264 | 24 | 0-2 | 23-25 | 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 | |
| Operating Frequency | 65kHz typ. | |
| 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 | <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 | |

continued on next page

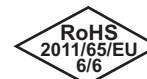
POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

48 Watt Open Frame Single Output

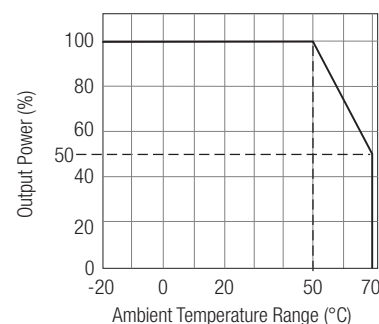


CB-Report
UL-60950-1 Certified
EN-60950-1 Certified
EN-55022 Certified
EN-55024 Certified

RAC48/OF

Derating-Graph

(Ambient Temperature)



POWERLINE

AC/DC-Converter

RAC48-xx/OF Series

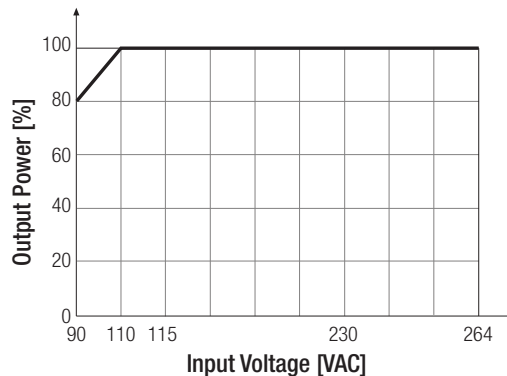
Specifications (typical at 25°C and 230VAC)

| | | |
|-----------------------------------|---|--|
| 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 ³ hours |

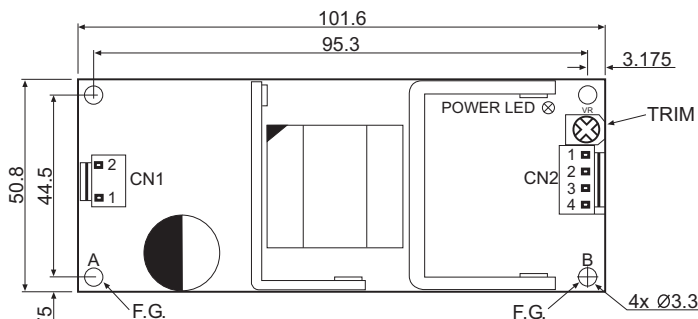
Certifications:

| | | | |
|-----------------------|---------------------------------|-----------------------|--|
| General Safety | | Report: E196683 | UL-60950-1 2nd |
| IEC/EN General Safety | | Report: PSE103-0658 | IEC/EN-60950-1 2nd |
| EMC | Conducted and Radiated Immunity | Report: HA080035-SCCE | EN55022, Class B |
| | | Report: HA080035-SCCE | EN55024 |
| | | Report: HA080035-SBFD | FCC, Part 15, Class B |
| ErP | Harmonics | 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 |
| | | | EN61000-6-3 |
| | | | 2004/125/EC |

Input Voltage vs Load

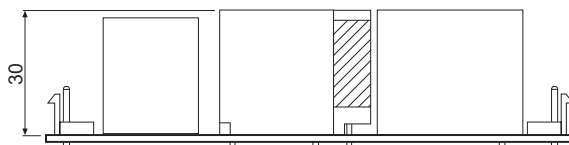


Package Style and Pinning



Notes

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



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

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.