

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	
	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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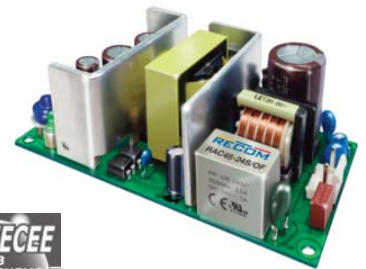
POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

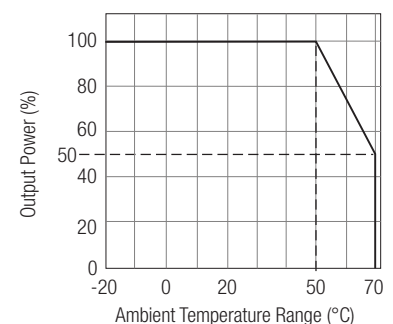
48 Watt Open Frame Single Output



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

RAC48/OF

Derating-Graph (Ambient Temperature)



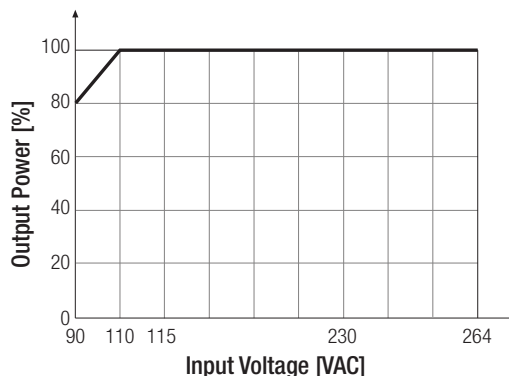
Specifications (typical at 25°C and 230VAC)

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

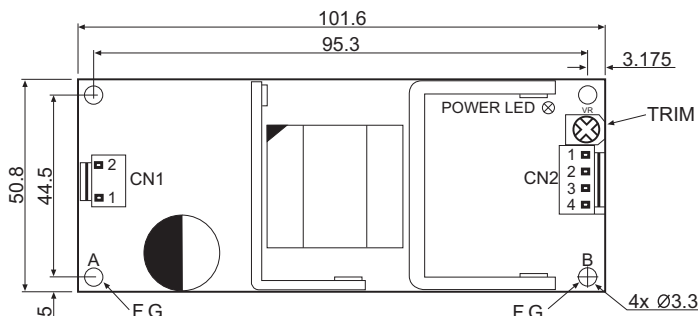
Certifications:

General Safety	Report: E196683	UL-60950-1 2nd
IEC/EN General Safety	Report: PSE103-0658	IEC/EN-60950-1 2nd
EMC	Report: HA080035-SCCE	EN55022, Class B
	Report: HA080035-SCCE	EN55024
	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, Criterita A
		EN61000-6-3
ErP	Emission complies to European Directive for Energy Related Products	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