

Features

Regulated Converters

- Universal Input 80-264VAC or 115-370VDC
- Operating Temperature Range of -25°C to +85°C
- Isolated Output 3kVAC / 1 min
- Short Circuit and Overcurrent Protection
- Low Output Ripple & Noise
- Low Cost AC/DC Power Supply
- EN, UL and CE certified

Description

The ultra-compact wired RAC04-C/W modules are available with output voltages of 3.3, 5, 9, 12, 15, and 24V, and the input-to-output isolation is approximately 3kVAC/1min. With a standby consumption of 100mW typical, the mini power supplies are particularly suitable for energy-saving sleep mode and standby applications. Because of its compact design (height <17 mm), it is a versatile solution for home automation and other similar applications. Complete with an integrated input filter, the series has enhanced EMI performance and complies with EN55022, class B. The mini power supplies are also protected against short circuit with fully automatic restart after the error has been solved. The converters are EN/UL60950-1 certified and come complete with a 3 year warranty.

Selection Guide

Part Number	Input Voltage (VAC)	Output Voltage (VDC)	Output Current max. (mA)	Efficiency Typ. (%)	Capacitive Load max.
RAC04-3.3SC/W	80-264	3.3	1200	67	3000µF
RAC04-05SC/W	80-264	5	800	72	1600µF
RAC04-09SC/W	80-264	9	444	76	850µF
RAC04-12SC/W	80-264	12	333	77	150µF
RAC04-15SC/W	80-264	15	267	77	100µF
RAC04-24SC/W	80-264	24	167	79	82µF

Specifications

 (measured at TA 25°C, nominal input voltage, full load after warm-up)

Input Voltage Range (with Derating)	80-264VAC or 115-370VDC	
Input Frequency (for AC Input)	47-63Hz	
Input Current (Full Load)	115VAC / 230VAC	110mA / 72mA max.
Inrush Current	115VAC / 230VAC	30A / 60A max.
No Load Power Consumption	80-264VAC	100mW typ. / 200mW max.
Output Voltage (Vout nom.)	3.3V-24V	
Output Current Range	167mA - 1200mA	
Rated Output Power	4W max.	
Output Voltage Tolerance	±2% typ. / ±5% max.	
Minimum Load	0%	
Output Ripple & Noise (Full Load)	115VAC / 230VAC @ 20MHz limited	200mVp-p max.
Line Voltage Regulation	LL-HL at full Load	±0.5% typ. / ±1% max.
Load Voltage Regulation	10%-100% Load	±1.5% typ. / ±5% max.
Over Load Protection	105% - 155%	
Over Voltage Category	OVC II	
Leakage Current	0.85µA max.	
Operating Frequency	Full Load	40kHz typ.
Isolation Voltage	Input-Output	3kVAC / 1 minute
Isolation Resistance	Input-Output	1GΩ min.
Isolation Capacitance	Input-Output	1000pF typ.
Short Circuit Protection	Hiccup, Auto Restart	
Operating Temperature Range	natural convection, without derating natural air convection, with derating	-20°C to +60°C -25°C to +85°C
Storage Temperature Range	-40°C to +100°C	
Case Material	UL94V-0 black plastic	
Potting Material	Silicone	
Relative Humidity	95% RH max.	
Package Weight	32g typ.	

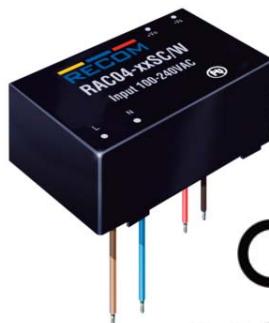
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POWERLINE

AC/DC-Converter
with 3 year Warranty

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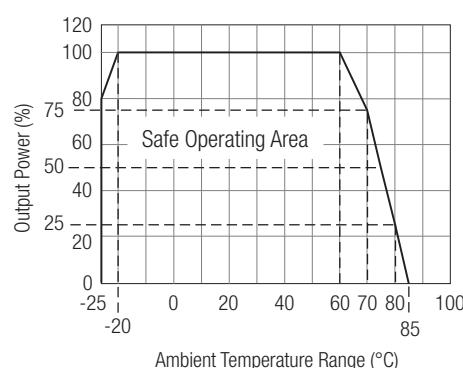
4 Watt Single Output



**EN-60950-1 Certified
IEC-60950-1 Certified
UL-60950-1 Certified**

RAC04-C/W

Derating-Graph (Ambient Temperature)



POWERLINE

AC/DC-Converter

RAC04-xxxxC/W

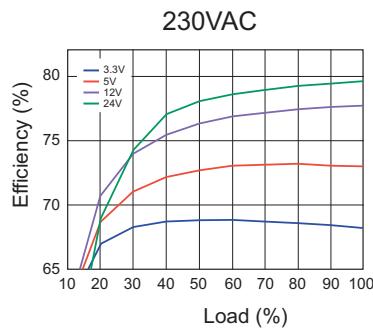
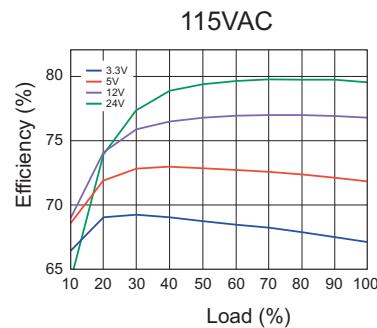
Series

Specifications (measured at TA 25°C, nominal input voltage, full load after warm-up)

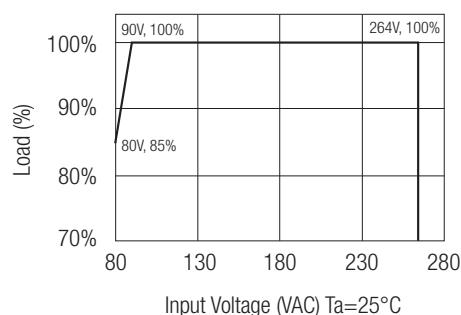
Package Quantity	30pcs
Physical	Dimension (LxWxH)
MTBF	37.80 x 23.90 x 16.40 mm
	115VAC, 25°C
	230VAC, 25°C
	115VAC, 60°C
	230VAC, 25°C
EMC	Conducted and Radiated
	Noise Immunity
Safety Standard	
EN General Safety	Report: SPCLVD1310055-1
IEC General Safety	CB Report: 1311055-CB
UL General Safety	Report Number: E224736-A21
	EN-60950-1, 3rd Edition
	IEC-60950-1 2nd Edition
	UL-60950-1, 2nd Edition
	CSA C22.2 No. 60950-1-07

Typical Characteristic

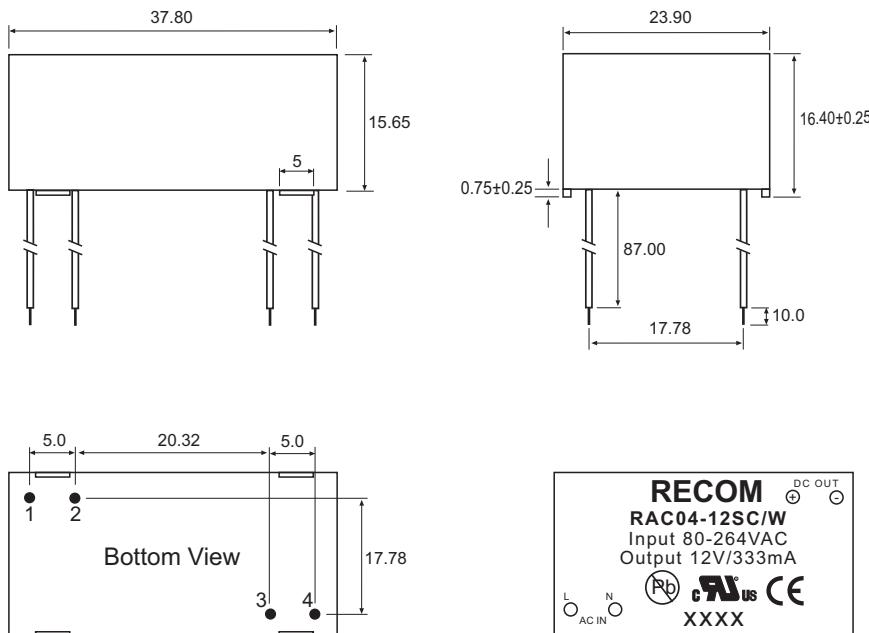
Input Voltage Derating Graph



Efficiency vs Load



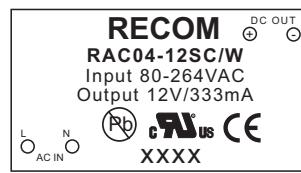
Package Style and Pinning



Wired Connections

Wired Color	Type	Function
1 Brown	UL-1015 AWG#22	VAC in (L)
2 Blue	UL-1015 AWG#22	VAC in (N)
3 Red	UL-1430 AWG#22	+VDC out
4 Black	UL-1430 AWG#22	-VDC out

Case Tolerance ± 0.5 mm
Unless otherwise specified



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