Features

Regulated Converter

- Unique, patent-pending design
- Isolated power supply with integrated mains filter
- Packaged inside of line filter case
- Safe, touchable DC outputs
- Easy installation
- Worldwide standard IEC input
- 85-264VAC universal input voltage

RECOM
AC/DC Converter

RAC05-K/C14

5 Watt Single Output

Description

The RAC05-K/C14 is a unique design that combines a mains filter and isolated power supply in the same case as a mains input filter alone, at a cost lower than many mains filters. It fits into a standard IEC "kettle connector" mounting hole, so installation time is only a few seconds. The touchable output spade terminals are safe extra-low voltage (SELV) available in 3.3V, 5V, 12V, 15V and 24V DC output voltages and are protected against short circuits, overload and overvoltage. The metal case offers secure fixing and enhances thermal dissipation allowing an operating temperature from -40°C to +70°C. The RAC05-K/C14 is ideal for powering single board computers such as the Raspberry Pi (including touchscreen), Arduino, BBC Micro:bit, etc.

Selection Guide

Part Number	Input Voltage Range [VAC]	Output Voltage [VDC]	Output Current [mA]	Efficiency typ (1) [%]	Max. Capacitive Load (2) [µF]
RAC05-3.3SK/C14	85-264	3.3	1510	76	6000
RAC05-05SK/C14	85-264	5	1000	80	6000
RAC05-12SK/C14	85-264	12	420	81	1500
RAC05-15SK/C14	85-264	15	333	81	1000
RAC05-24SK/C14	85-264	24	210	84	330

Notes:

Note1: Efficiency is tested at nominal input and full load at +25°C ambient

Note2: Max Cap Load is tested at nominal input and full resisitive load

E224736

UL/IEC/EN62368-1 pending
IEC60950-1 pending
FCC Part 15 certified
ANSI C63.4 certified
IEC/EN61204-3 compliant
EN55032 compliant
EN55024 compliant
CB Report

Model Numbering

RAC05-__ SK/C14

- nom. Output Power
- Output Voltage
- **S**ingle
- C14 input plug (male)

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

BASIC CHARACTERISTICS					
Parameter	**Condition**		**Min.**	**Typ.**	**Max.**
Internal Input Filter					Pi type
Input Voltage Range (3,4)	nom. Vin= 230VAC		85VAC 120VDC	230VAC	264VAC 370VDC
Input Current	115VAC 230VAC				250mA 100mA
Inrush Current	cold start at 25°C	115VAC 230VAC			15A 30A
No Load Power Consumption				75mW	
ErP Standby Mode Conformity (Output Load Capability)	Input Power=	0.5W 1.0W 2.0W			0.3W 0.7W 1.5W
Input Frequency Range	AC Input		47Hz		63Hz
Minimum Load			0%		
Power Factor	115VAC 230VAC		0.6 0.45		
Start-up Time				20ms	
Rise Time					8ms
Hold-up Time	115VAC 230VAC			12ms 60ms	
Internal Operating Frequency					130kHz
Output Ripple and Noise	20MHz BW	3.3Vout, 5Vout others		60mVp-p	 1% of Vout

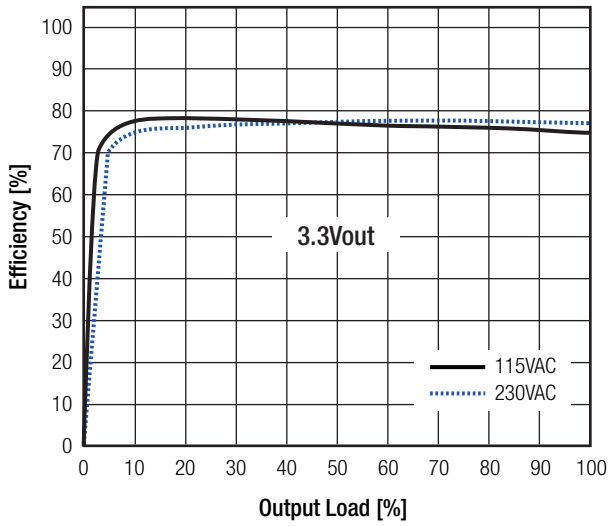
Notes:

Note3: The products were submitted for safety files at AC-Input operation

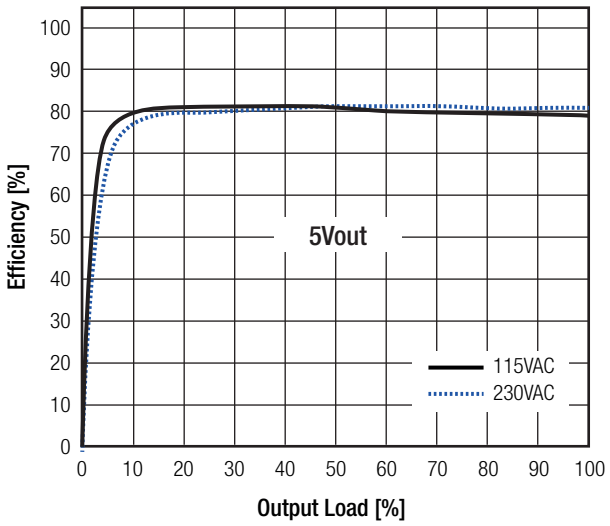
Note4: Refer to line derating graph on page PA-4

Efficiency vs. Load

RAC05-3.3SK/C14



RAC05-05SK/C14



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