Features

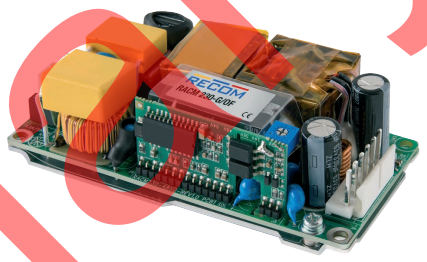
Regulated Converter

- Baseplate cooled, fanless operation
- 230 Watt maximum power
- Universal AC input range (80~264VAC)
- No load power consumption <0.5W
- Wide operating temperature range (-40°C to +80°C)
- Household, ITE and medically 2MOPP certified
- 12VDC fan output on board

RECOM
AC/DC Converter

RACM230-G

230 Watt 4" x 2" Open Frame Single Output



Description

The RACM230-G Series is designed to support continuous output power without fan cooling. The compact 2"x 4" baseplate design enables direct heat dissipation through metal housings in the application. Up to 230 watts are available to drive dynamic loads for several seconds of peak power or with forced air for even longer time frames. A smart fan output is on board as standard. A wide input range of 80 to 264VAC, up to 5000m operating altitude and international safety agency certifications make the series worldwide compliant for medical 2 MOPP, household and industrial ITE applications.

Selection Guide

Part Number	Input Voltage Range [VAC]	Nom. Output Voltage [VDC]	Max. Output Current (1) [A]	Efficiency typ. (3) [%]
RACM230-12SG	80-264	12	19.17 (2)	91
RACM230-24SG	80-264	24	9.58	92
RACM230-36SG	80-264	36	6.39	92
RACM230-48SG	80-264	48	4.80	92
RACM230-54SG	80-264	54	4.26	92

Notes:

Note1: With forced air cooling (2.5m/s) + conduction cooling + refer to "Line Derating"
Note2: Refer to "Peak Load Capability" graph
Note3: Efficiency is tested at nominal input and full load at +25°C ambient

2MOPP

IEC/EN60950-1 (pending)
IEC/EN62368-1 (pending)
IEC/EN60335-1 (pending)
IEC/EN60601-1 (pending)
ANSI/AAMI ES60601-1 (pending)
CSA/CAN 22.2 60950-1-14 (pending)
IEC/EN61558-1 (pending)
IEC/EN61558-2-16 (pending)
EN55032 compliant
EN55024 compliant

Model Numbering

RACM230-

- max. Output Power
- nom. Output Voltage
- **S**ingle

Ordering Examples:

RACM230-24SG 24Vout Single open Frame

Specifications (measured @ Ta= 25°C, rated input, rated load unless otherwise stated)

BASIC CHARACTERISTICS

Parameter	Condition	Min.	Typ.	Max.
Input Voltage Range [5]	nom. Vin= 230VAC	80VAC 120VDC	230VAC	264VAC 370VDC
Input Current	115VAC 230VAC			3A 1.1A
Inrush Current	115VAC 230VAC			40A 60A
No load Power Consumption			300mW	500mW
Input Frequency Range	AC input	47Hz	50Hz	63Hz
Output Voltage Adjustability [6]	12Vout 24Vout 36Vout 48Vout 54Vout	11.4VDC 22.8VDC 34.2VDC 45.6VDC 51.3VDC		12.6VDC 25.2VDC 37.8VDC 50.4VDC 56.0VDC
Minimum Load		0%		
Power Factor	115VAC 230VAC	0.98 0.95	0.99 0.97	
Start-up Time	115/230VAC		0.5s	
Rise Time			10ms	
Hold-up Time	115/230VAC: 230W		8ms	
	115/230VAC: 200W		10ms	
	115/230VAC: 160W		16ms	
	115/230VAC: 130W		25ms	
Output Ripple and Noise [7]	20MHz BW @ +25°C			1% of Vout nom. max.

Notes:

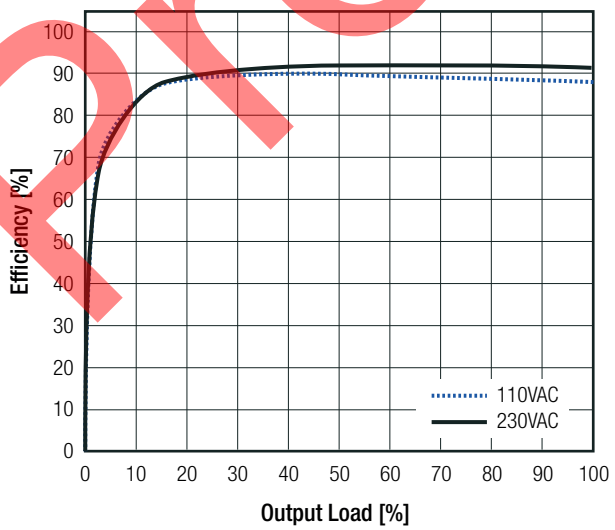
Note5: The products were submitted for safety files at AC-Input operation

Note6: By trimming up, decrease output current to avoid exceeding rated output power
By trimming down, do not exceed maximum continuous output current

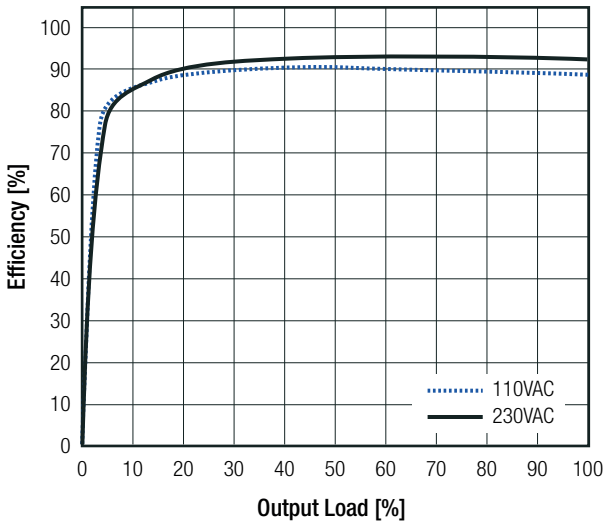
Note7: Measurements are made with a 12“ twisted pair-wire terminated with a 0.1µF and 10µF parallel capacitor

Efficiency vs. Load

RACM230-12SG



others



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