Features

Regulated Converter

- Long 5 year warranty
- 2MOPP/250VAC
- Suitable for built in Class II applications
- Wide input voltage range (85-264VAC)
- Low leakage current (<75µA)
- 5000m operation
- Active power factor correction
- Connector set available

RECOM
AC/DC Converter

RACM100

100 Watt Enclosed & Open Frame Case Style Single Output

Description

The RACM100 is a compact 3" x 2" high efficiency AC/DC power supply with 2xMOPP 3rd Ed. safety approval for medical applications. The range has now been extended to include open frame models (/OF suffix). Like the original enclosed versions, the RACM100/OF series are space-saving universal input voltage power supplies (85-264VAC), with 4kVAC isolation, PFC, no minimum load and can be used at ambient temperatures of between -25°C and +85°C. The 12V, 15V, 24V or 48V output voltages are fully protected and have tolerances of less than ±0.2% over the entire input voltage range and less than ±0.5% over the entire load range. The RACM100/OF series is certified to medical safety standard IEC/ES/EN-60601-1 3rd Edition and feature BF rated outputs with less than 75µA leakage current. It has a built-in Class B EMI filter and comes with a five year warranty.

Selection Guide

Part Number	Input Voltage Range [VAC]	Output Voltage [VDC]	Output Current [A]	Input Power @ No Load [W]	Efficiency typ. [%]	Max. Capacitive Load (1) [µF]
RACM100-12S (1)	85-264	12	8.34	0.3	91	6950
RACM100-15S (1)	85-264	15	6.67	0.3	92	4450
RACM100-24S (1)	85-264	24	4.17	0.3	92	1750
RACM100-48S (1)	85-264	48	2.09	0.3	91	430

Notes:

Note1: Max Cap Load is tested at minimum input and full resistive load

Model Numbering

RACM100- __ S/ __

- Output Power / Output Voltage
- Case Style (2): **S**ingle

Notes:

Note2: without suffix, standard enclosed case
add suffix "/OF" for open frame style

Examples:

RACM100-12S = 12Vout, standard enclosed case
RACM100-24S/OF = 24Vout, open frame style

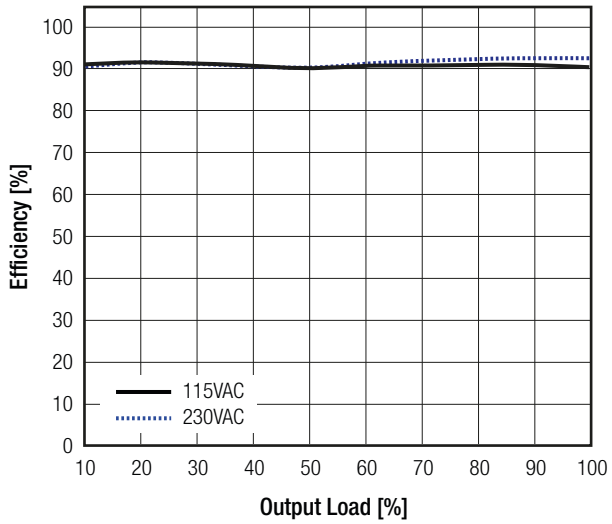
2MOPP
250VAC

IEC/EN60601 certified
ANSI/AAMI ES60601 certified
EN55011 certified
CISPR11
FCC Part 15

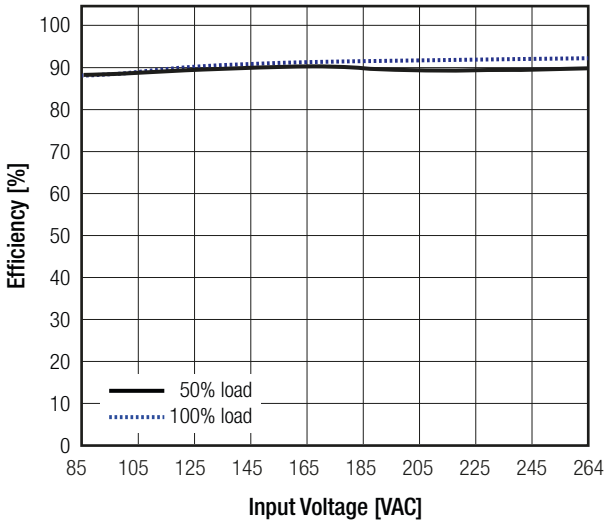
Specifications (measured @ Ta= 25°C, 250VAC, full load and after warm-up)

BASIC CHARACTERISTICS				
Parameter	**Condition**	**Min.**	**Typ.**	**Max.**
Input Voltage		85VAC 120VDC		264VAC 370VDC
Input Current	115VAC, fulll load 230VAC, full load			1.15A 0.55A
Inrush Current	cold start, 230VAC			60A
No load Power Consumption				0.11W
Input Frequency Range	AC Input	47Hz		63Hz
Output Voltage Trimming			±10.0%	
Minimum Load		0%		
Power Factor		0.95		
Start-up Time				1s
Rise Time			20ms	
Hold up Time	115VAC, full load	16ms		
Internal Operating Frequency			60kHz	
Output Ripple and Noise (measured @ 20MHz BW)	12VDC, with 10µF/25V MLCC 15VDC, with 10µF/25V MLCC 24VDC, with 1µF/50V MLCC 48VDC, with 0.1µF/100V MLCC		120mVp-p 150mVp-p 160mVp-p 340mVp-p	

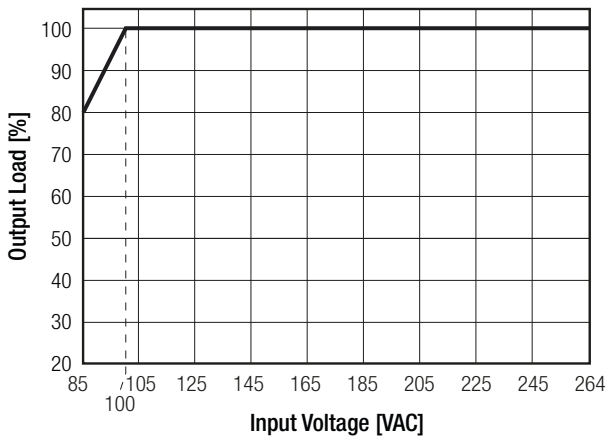
Efficiency vs. Load



Efficiency vs. Input Voltage



Line Derating



Power Factor vs. Load