

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
- -40°C to +85°C operating temperature



RACM40

40 Watt Enclosed & Open Frame Case Style Single Output



Description

The RACM40 is a compact 3" x 2" high efficiency AC/DC power supply with 2xMOPP safety approval for medical applications. These space saving enclosed power supplies have an universal input voltage range (85-264VAC), 4kVAC isolation, require no minimum load and can be used at ambient temperatures of between -40°C and +85°C. The 5V, 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 output voltage can be trimmed over a ±10% range. The RACM40 series is certified to medical safety standard IEC/ES/EN-60601-1 3rd Edition and with less than 75µA leakage current. It has a built-in Class B EMI filter and comes with a 5 year warranty.

Selection Guide

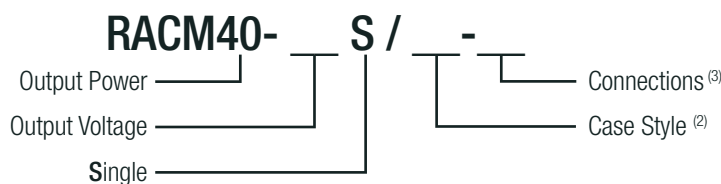
Part Number	Input Voltage Range [VAC]	Output Voltage [VDC]	Output Current [A]	Efficiency typ. [%]	Max. Capacitive Load ⁽¹⁾ [µF]
RACM40-05S ^(1,2)	85-264	5	8.0	90	16000
RACM40-12S ^(1,2)	85-264	12	3.34	92	2785
RACM40-15S ^(1,2)	85-264	15	2.67	92	1780
RACM40-24S ^(1,2)	85-264	24	1.67	92	700
RACM40-48S ^(1,2)	85-264	48	0.84	93	175

Notes:

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



Model Numbering



Notes:

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

Note3: Connections: without suffix, standard connection with connector
with suffix "-ST" connection with screw terminals

Examples:

- RACM40-12S = 12Vout, standard enclosed case
- RACM40-48S/OF = 48Vout, open frame style
- RACM40-15S/OF-ST = 15Vout, open frame style with screw terminal connection

CSA/CAN-C22.2 No 60601-1:14 certified
ANSI/AAMI ES60601-1 certified
EN60601-1-2
CISPR11
FCC Part 15 & 18

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

BASIC CHARACTERISTICS

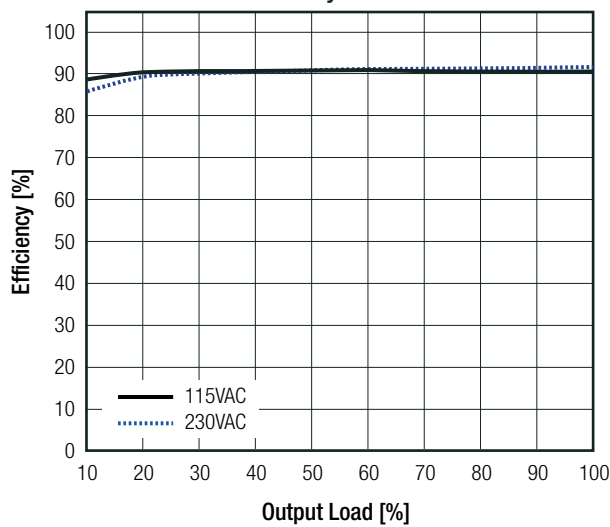
Parameter	Condition	Min.	Typ.	Max.
Input Voltage		85VAC 100VDC ⁽⁴⁾	230VAC	264VAC 370VDC
Input Current	115VAC, full load 230VAC, full load			1.0A 0.5A
Inrush Current	230VAC			60A
No load Power Consumption				0.11W
Input Frequency Range	AC Input		50/60Hz	440Hz ⁽⁴⁾
Output Voltage Trimming	on-board trimpot		±10.0%	
Minimum Load		0%		
Start-up Time				1s
Rise Time			20ms	
Hold up Time	115VAC, full load		25ms	
Internal Operating Frequency	5VDC, 230VAC others, 230VAC		70kHz 120kHz	
Output Ripple and Noise (measured @ 20MHz BW)	5VDC, 12VDC and 15VDC with 10µF/25V MLCC 24VDC, with 1µF/50V MLCC 48VDC, with 0.1µF/100V MLCC		75mVp-p 75mVp-p 150mVp-p	

Notes:

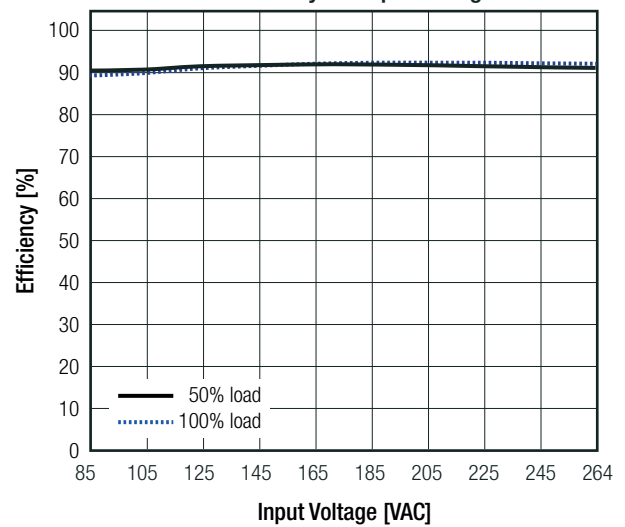
Note4: Confirmed performance, but not covered in certificates. 100V input voltage with derating

RACM40-24S

Efficiency vs. Load



Efficiency vs. Input Voltage



Line Derating

