

Features

Regulated Converters

- AC-DC Power Supply
- 60 Watt PCB Mount Package
- Universal Input Voltage Range
- 4kVAC Isolation RMS
- Low Output Ripple and Noise
- Short Circuit Protected
- Output Trim
- UL Certified, CE Marked

Description

Compact high power switching power module for PCB mounting. This switching converter has an universal AC or DC input voltage range with single high current outputs which are trimmable to compensate for any voltage drops on the output connections. Threaded inserts ensure mechanical fixing.

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Output Power (W)	Efficiency at 230V %	Max Capacitive Load
RAC60-05SB	85-265	5	10000	50	82	80000 μ F
RAC60-09SB	85-265	9	6600	60	84	28000 μ F
RAC60-12SB	85-265	12	5000	60	86	14000 μ F
RAC60-15SB	85-265	15	4000	60	86	12000 μ F
RAC60-24SB	85-265	24	2500	60	86	4000 μ F
RAC60-48SB	85-265	48	1250	60	86	950 μ F

Specifications (typical at 25°C and after warm up time unless otherwise specified)

Input Voltage Range	85-265VAC or 100-370VDC	
Rated Power	60 Watts max.	
Input Frequency Range (for AC Input)	47-63Hz	
Input Current (full load)	115VAC/230VAC	2A/ 1A max.
No Load Power Consumption	115VAC/230VAC	520mW max.
Inrush Current (<2mS)	115VAC/230VAC	30A/ 50A max.
Leakage Current	3.5mA max.	
Output Voltage Accuracy (Full load)	$\pm 2\%$	
Line Voltage Regulation (LL to HL at full load)	Single	$\pm 1\%$ typ.
Load Voltage Regulation (5% to 100% full load)	Single	$\pm 1\%$ typ.
Minimum Load	1%	
Output Noise (20MHz limited)	0.5%Vout + 50mVp-p max	
Output Ripple (20MHz limited)	<0.2%Vout + 40mVp-p max	
Output Trim	$\pm 10\%$	
Operating Frequency	100kHz typ.	
Efficiency at Full Load	see table	
RMS Isolation Voltage (input to output)	4kVAC / 1 minute	
Temperature Coefficient	$\pm 0.02\%/^{\circ}\text{C}$ typ.	
Isolation Resistance	100 MOhm max.	
Short Circuit Protection	Continuous, Hiccup, Automatic Restart	
Over Voltage Category	OVC II	
Operating Temperature Range	free air convection, with derating	-40°C to +70°C
Storage Temperature Range	-40°C to +85°C	
Humidity	95% RH max.	
Case Material	Plastic Resin with Fibreglass (UL94V-0)	
Package Weight	310g	
Packing Quantity	1 pc	
EMC	EN 55011 Class B / EN 55022 Class B / EN 60601-1-2/ EN61000-3-2 -3 EN 55024 / EN61000-4-2 -3 -4 -5 -6 -8 -11	
MTBF (using MIL-HDBK-217F, 25°C)	>130 x 10 ³ hours	

POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

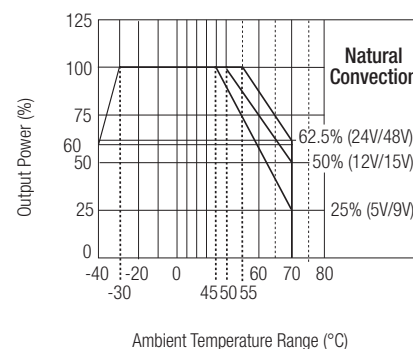
60 Watt Single Output



UL-60950-1 Certified

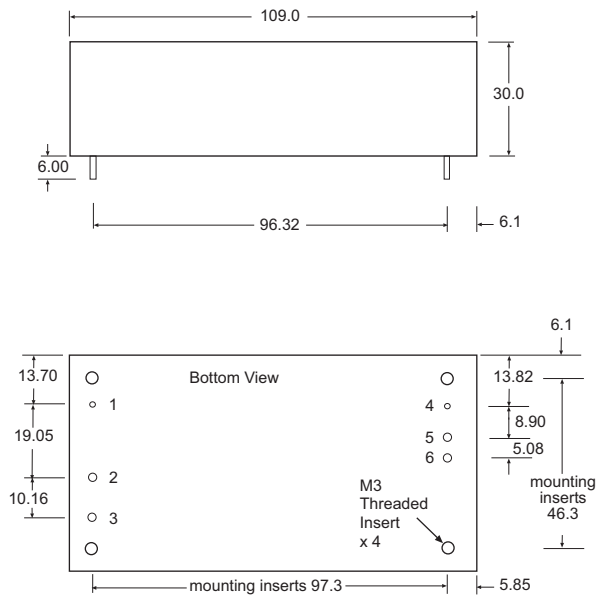
RAC60-B

Derating Graph (Ambient Temperature)



Refer to Application Notes

Package Style and Pinning

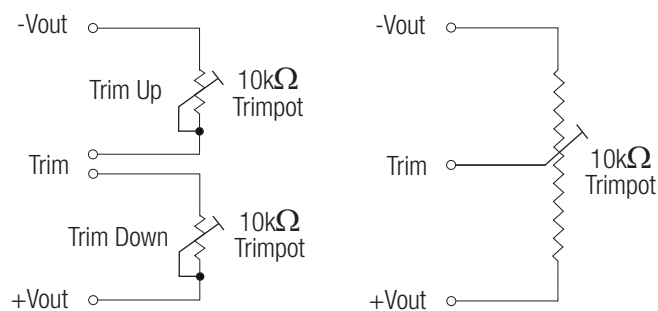


Pin Connections – Single Output

Pin #	Dia.(mm)	Function
1	1.2	FG
2	1.8	VAC in (L)
3	1.8	VAC in (N)
4	1.2	Trim
5	1.8	-VDC Out
6	1.8	+VDC Out

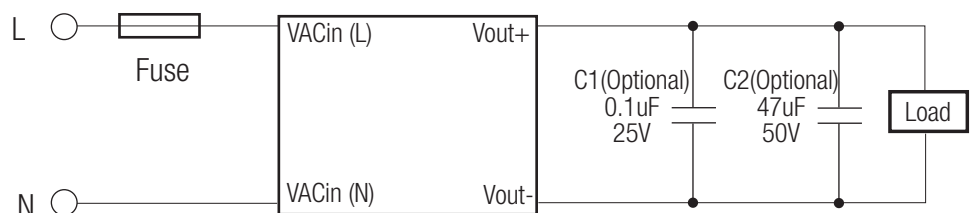
Tolerance ± 0.5 mm

Output Trim Adjustment



Standard Application Circuit

Suggested fuse rating
4A Slow Blow



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