

Features

Regulated Converters

- Compact AC-DC Power Supply
- 15 Watt PCB Mount Package
- Universal Input Voltage Range
- 4000VAC Isolation
- Low Output Ripple and Noise
- Short Circuit Protected
- UL-60601 Certified for Medical Applications

Description

Compact switching power module for PCB or DIN-rail mounting with medical certification UL-60601-1.

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
RAC15-3.3SB	85-264	3.3	3000	74
RAC15-05SB	85-264	5	3000	78
RAC15-09SB	85-264	9	1666	79
RAC15-12SB	85-264	12	1250	81
RAC15-15SB	85-264	15	1000	81
RAC15-24SB	85-264	24	625	83
RAC15-05DB	85-264	±5	±1500	78
RAC15-12DB	85-264	±12	±625	80
RAC15-15DB	85-264	±15	±500	81
RAC15-0512TB	85-264	5/±12	+2000/±200	78
RAC15-0515TB	85-264	5/±15	+2000/±150	78

*add suffix "-E" for extended temperature range, e.g. RAC15-05SB-E

*add suffix "-ST" for screw terminal module e.g. RAC15-05SB-ST, RAC15-05DB-ST, RAC15-0512TB-ST

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

Input Voltage Range	90-264VAC or 100-370VDC	
Rated Power	15 Watts max.	
Input Frequency Range (for AC Input)	47-440Hz	
Input Current (full load)	115VAC/230VAC	220mA / 118mA max.
No Load Power Consumption	115VAC/230VAC	590mW max.
Inrush Current (<2ms)	115VAC/230VAC	10A / 20A max.
Leakage Current	115VAC/230VAC	100µA/ 200µA max.
Output Voltage Accuracy (Full load)	Single and Dual ±2% max. Triple ±2% / ±3% max.	
Line Voltage Regulation (low line, high line at full load) - See Note 1	±0.5% max.	
Load Voltage Regulation (10% to 100% symmetric load) - See Note 2	±1% max.	
Output Ripple and Noise - See Note 3	1% Vout max.	
Operating Frequency	132kHz typ.	
Efficiency at Full Load	see table	
RMS Isolation Voltage (input to output)	4kVAC / 1 minute	
Temperature Coefficient	±0.01%/°C typ.	
Over-Current Protection	105% typ.	
Short Circuit Protection	Continuous, Automatic Restart	
Over-Voltage Protection	Zener Diode Clamp	
Over-Temperature Protection	100°C	
Operating Temperature Range (free air convection, with derating)	Standard	-25°C to +70°C
	Suffix -E	-40°C to +70°C
Storage Temperature Range	-40°C to +100°C	

continued on next page

POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

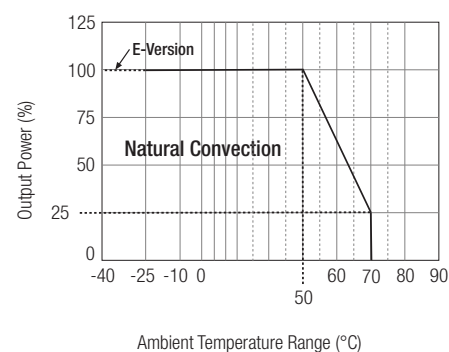
15 Watt Single/Dual & Triple Output



UL-60601-1 Certified
E314885

RAC15-B

Derating Graph (Ambient Temperature)



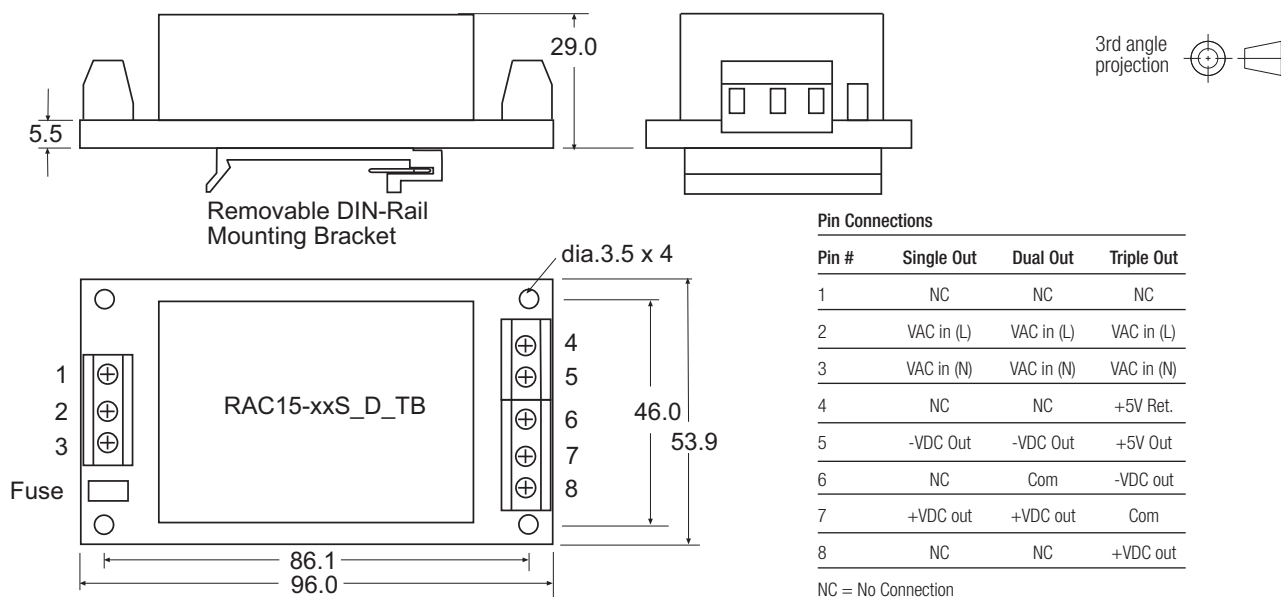
Please Read Application Notes

www.recom-electronic.com

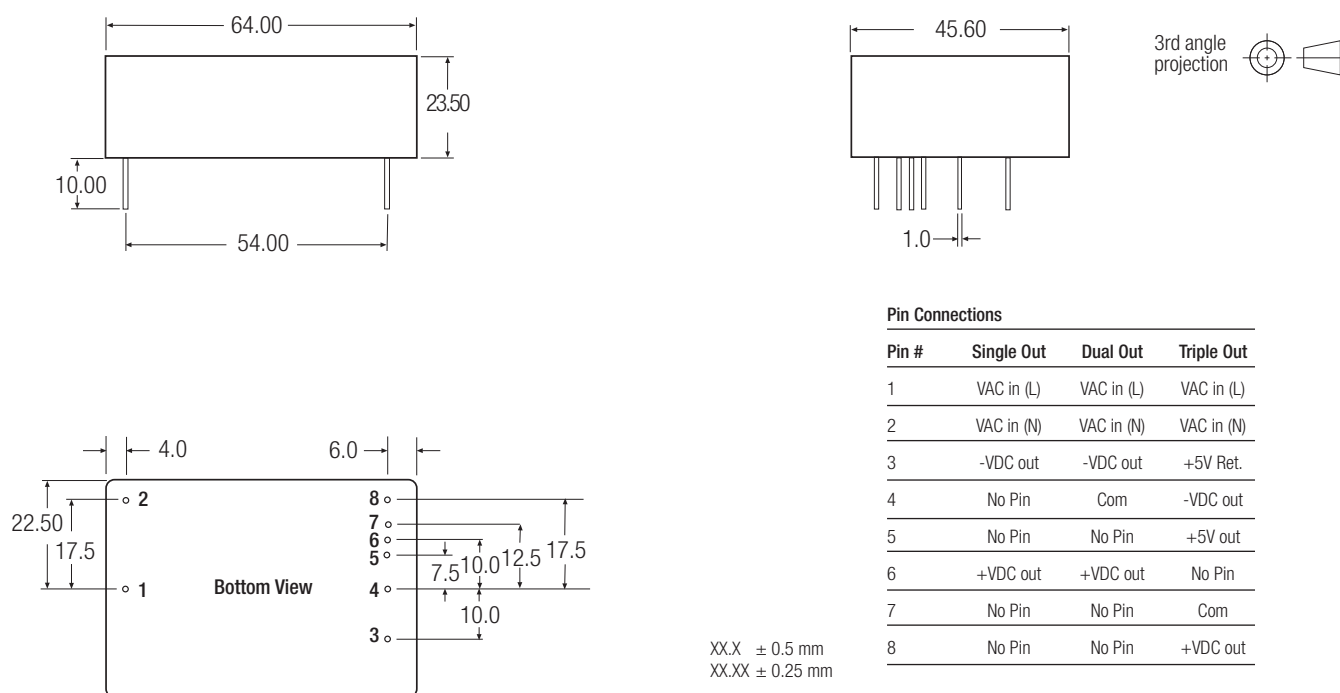
Specifications continued

Case Material	Epoxy with Fibreglass (UL94V-0)	
Package Weight	120g	
Packing Quantity	5 pcs (-ST Version: 1 pc)	
EMC	EN 55011 Class B / EN60601-1-2	
MTBF (+25°C)	using MIL-HDBK-217F	200~400 x 10 ³ hours

Screw Terminal Module Option (suffix -ST)



Package Style and Pinning



Notes

- Note 1: Line Regulation = 2% max. for triple output +Vout and -Vout.
 Note 2: Load Regulation = 5% max. for triple output +Vout and -Vout.
 Note 3: Ripple & Noise measured with 20MHz BW probe and 0.1µF + 47µF capacitors in parallel across the outputs.
 Note 4: Suggested input fuse rating = 2A Slow Blow