

Features

Regulated Converters

- Compact AC-DC Power Supply
- 15 Watt PCB Mount Package
- Universal Input Voltage Range
- 3000VAC Isolation
- Low Output Ripple and Noise
- Short Circuit Protected
- UL Certified, CE Marked

Description

Compact UL certified switching AC/DC power module for PCB, screw-terminal connection or DIN-rail mounting.

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max. Capacitive Load
RAC15-05SA	90-264	5	3000	74	31000µF
RAC15-12SA	90-264	12	1250	79	4500µF
RAC15-15SA	90-264	15	1000	78	2700µF
RAC15-24SA	90-264	24	625	80	900µF
RAC15-05DA	90-264	±5	±1500	76	±13500µF
RAC15-12DA	90-264	±12	±650	79	±2700µF
RAC15-15DA	90-264	±15	±500	77	±1400µF
RAC15-0512TA	90-264	5/±12	2000/±200	73	14000/±900µF
RAC15-0515TA	90-264	5/±15	2000/±150	73	14000/±680µF

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

*add suffix "-ST" for screw terminal module e.g. RAC15-05DA-ST, RAC10-0512TA-E-ST

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

Input Voltage Range	90-264VAC or 120-370VDC	
Rated Power	15 Watts max.	
Input Frequency Range (for AC Input)	47-440Hz	
Input Current (full load)	115VAC/230VAC	310mA / 170mA max.
No Load Power Consumption	115VAC/230VAC	1.37W max.
Inrush Current (<2ms)	115VAC	10A max. (-E = 23A max.)
	230VAC	20A max. (-E = 46A max.)
Leakage Current	0.75mA max.	
Output Voltage Accuracy (Full load)	±2%	
Line Voltage Regul. (low line, high line at full load)	Single, Dual	±0.5% typ.
	Triple	±1%/±5% typ.
Load Voltage Regulation (5% to 100% full load)	Single	±0.5% typ.
	Dual	±3% typ.
	Triple	±2%/±5% typ.
Output Ripple and Noise (20MHz limited)	Noise	0.5% Vout + 50mVp-p max.
	Ripple	<0.2% Vout + 40mVp-p max.
Operating Frequency	100kHz typ.	
Efficiency at Full Load	see table	
RMS Isolation Voltage (input to output)	3kVAC / 1 minute	
Temperature Coefficient	±0.02%/°C typ.	
Isolation Resistance	100 MΩ max.	
Short Circuit Protection	Hiccup, Automatic Restart	
Operating Temperature Range *	Standard	-25°C to +70°C
(free air convection, with derating)	Suffix -E	-40°C to +70°C
Storage Temperature Range	-40°C to +85°C	
Humidity	95% RH max.	
Case Material	Epoxy with Fibreglass (UL94V-0)	
Package Weight	114g	
Packing Quantity	3 pcs (-ST Version: 1 pc)	
EMC	EN 55022 Class B / EN 55024	
MTBF (+25°C)	using MIL-HDBK-217F	200 x 10 ³ hours

* Start up only is guaranteed at temperatures down to -25°C. Other specifications may not be met.

POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

15 Watt Single/Dual & Triple Output

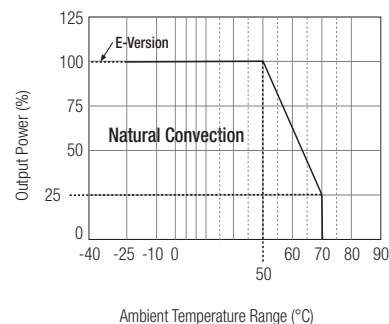


E196683

UL-60950-1 Certified

RAC15-A

Derating-Graph (Ambient Temperature)



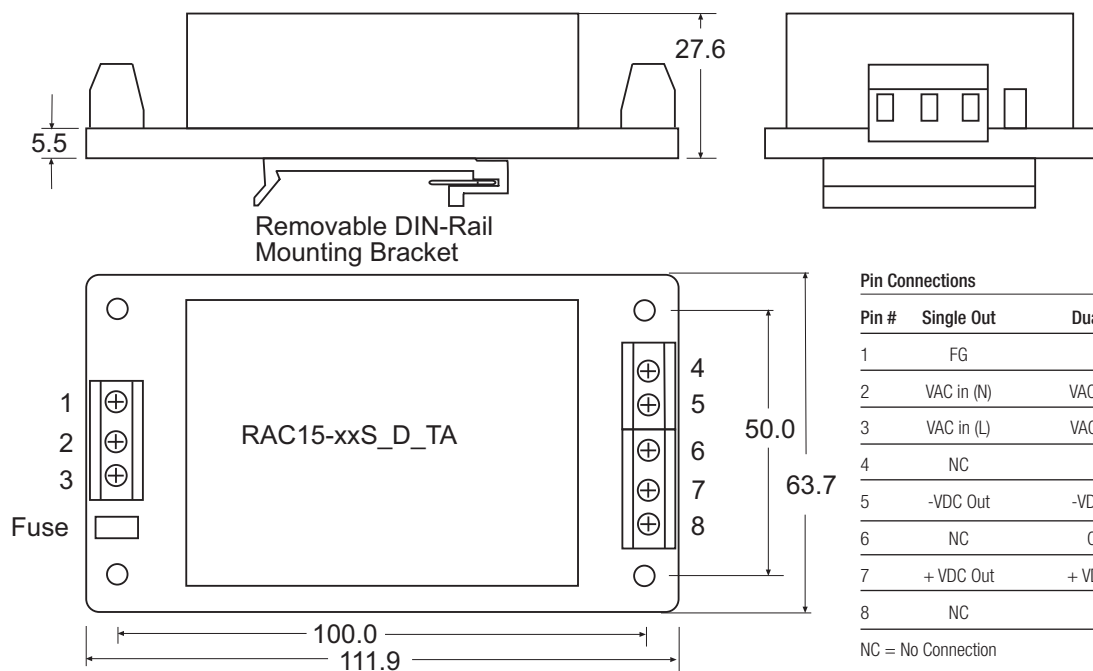
Refer to Application Notes

POWERLINE

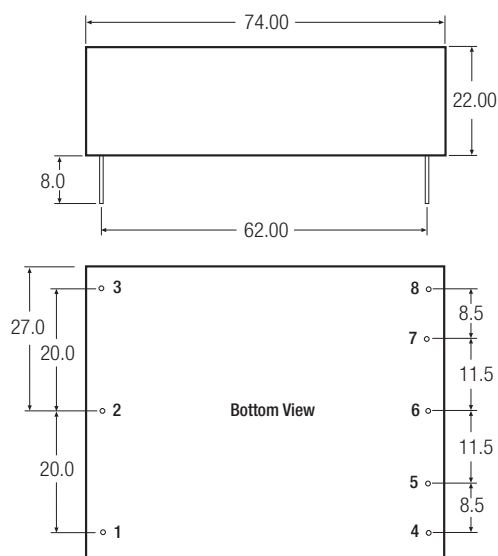
AC/DC-Converter

RAC15-S_D_TA Series

Screw Terminal Module Option (suffix -ST)



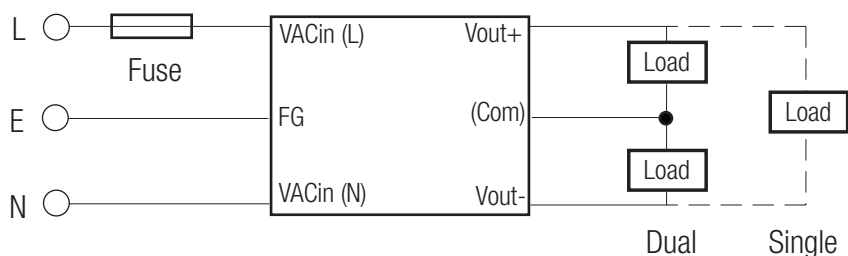
Standard Package Style and Pinning



Standard Application Circuit

Suggested fuse rating

2A Slow Blow



The product information and specifications are subject to change without prior notice. RECOM products are not authorized for use in safety-critical applications (such as life support) without RECOM's explicit written consent. A safety-critical application is defined as an application where a failure of a RECOM product may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The buyer shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.