

## 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 <sup>3</sup> 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

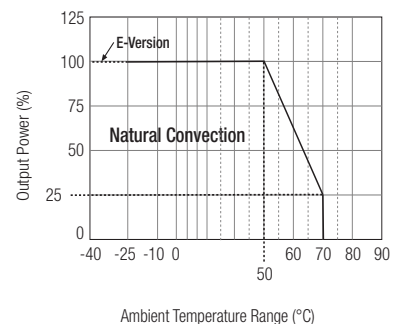


**UL-60950-1 Certified**

## RAC15-A

## Derating-Graph

(Ambient Temperature)



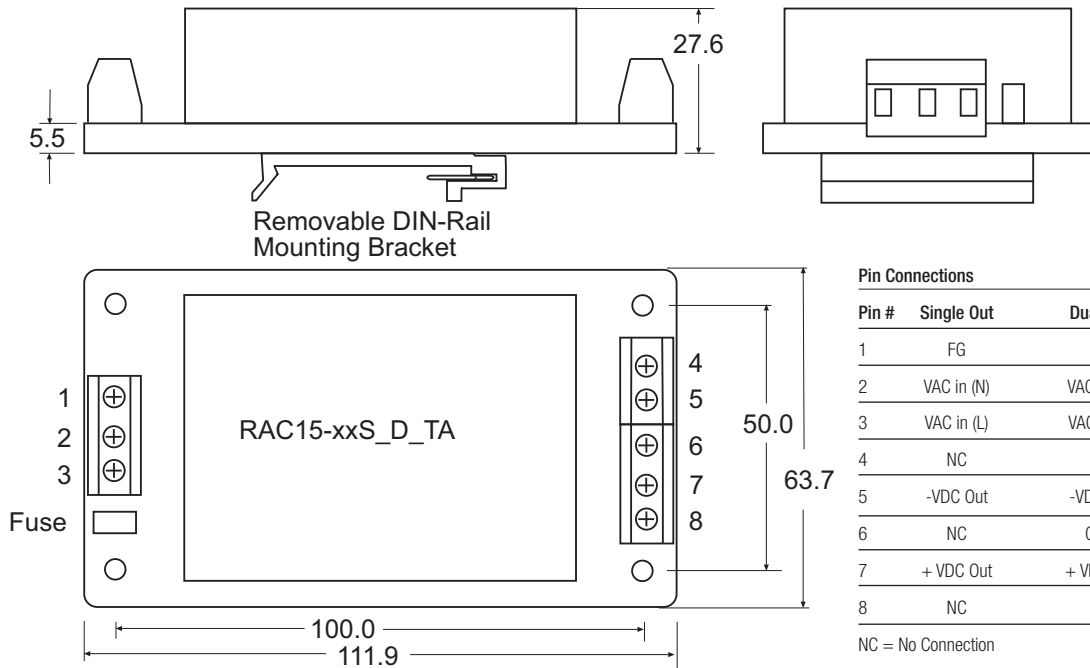
Refer to Application Notes

# POWERLINE

AC/DC-Converter

# RAC15-S\_D\_TA Series

## Screw Terminal Module Option (suffix -ST)

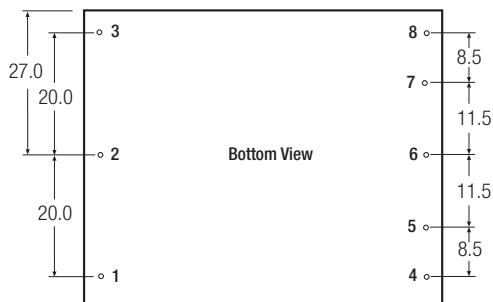
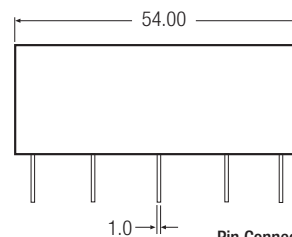
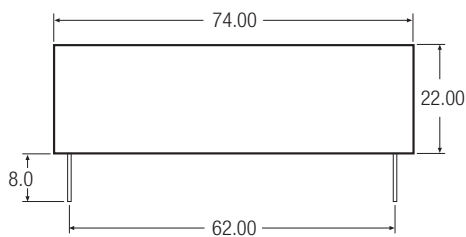


### Pin Connections

Pin #	Single Out	Dual Out	Triple Out
1	FG	FG	FG
2	VAC in (N)	VAC in (N)	VAC in (N)
3	VAC in (L)	VAC in (L)	VAC in (L)
4	NC	NC	-VDC Out
5	-VDC Out	-VDC Out	Com
6	NC	Com	+ VDC Out
7	+ VDC Out	+ VDC Out	+ 5V Rtn (Com)
8	NC	NC	+ 5V Out

NC = No Connection

## Standard Package Style and Pinning



### Pin Connections

Pin #	Single Out	Dual Out	Triple Out
1	FG	FG	FG
2	VAC in (N)	VAC in (N)	VAC in (N)
3	VAC in (L)	VAC in (L)	VAC in (L)
4	No Pin	No Pin	-VDC Out
5	-VDC Out	-VDC Out	Com
6	No Pin	Com	+ VDC Out
7	+ VDC Out	+ VDC Out	+ 5V Rtn (Com)
8	No Pin	No Pin	+ 5V Out

XX.X ± 0.5 mm  
XX.XX ± 0.25 mm

## Standard Application Circuit

Suggested fuse rating

2A Slow Blow

