

Features

Regulated Converters

Rev. 0

- 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

Description

Compact switching AC/DC power module for PCB, screw-terminal connection or DIN-rail mounting with cUL and UL Safety Approvals

Selection Guide

Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
RAC15-05SA	90-264	5	3000	70
RAC15-12SA	90-264	12	1250	73
RAC15-15SA	90-264	15	1000	73
RAC15-24SA	90-264	24	625	77
RAC15-05DA	90-264	±5	±1500	71
RAC15-12DA	90-264	±12	±650	76
RAC15-15DA	90-264	±15	±500	65
RAC15-0512TA	90-264	5/±12	2000/±200	68
RAC15-0515TA	90-264	5/±15	2000/±150	68

*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)	280mA max. (115VAC) / 170mA max. (230VAC)	
Inrush Current (<2ms)	115VAC 230VAC	10A max. (-E = 23A max.) 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 Triple	±0.5% typ. ±1%/±0.5% typ.
Load Voltage Regulation (5% to 100% full load)	Single, Dual Triple	±0.5% , ±3% typ. ±2%/±5% typ.
Output Ripple and Noise (20MHz limited)	0.5% Vout + 50mVp-p max.	
Operating Frequency	100kHz typ.	
Efficiency at Full Load	see table	
Isolation Voltage (input to output)	3000VAC min.	
Temperature Coefficient	±0.02%/°C typ.	
Isolation Resistance	100 MΩ max.	
Short Circuit Protection	Continuous, Automatic Restart	
Operating Temperature Range (free air convection, with derating)	Standard Suffix -E	-25°C to +70°C -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	140g	
EMC	EN 55022 Class B / EN 55024	
MTBF (+25°C)	using MIL-HDBK-217F	200 x 10 ³ hours

POWERLINE

AC/DC-Converter

RAC15-S_D_TA Series

15 Watt Single, Dual & Triple Output

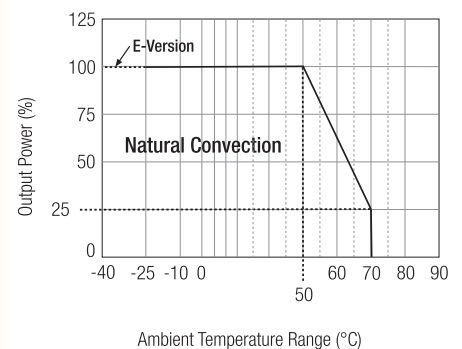


UL-60950-1 Certified

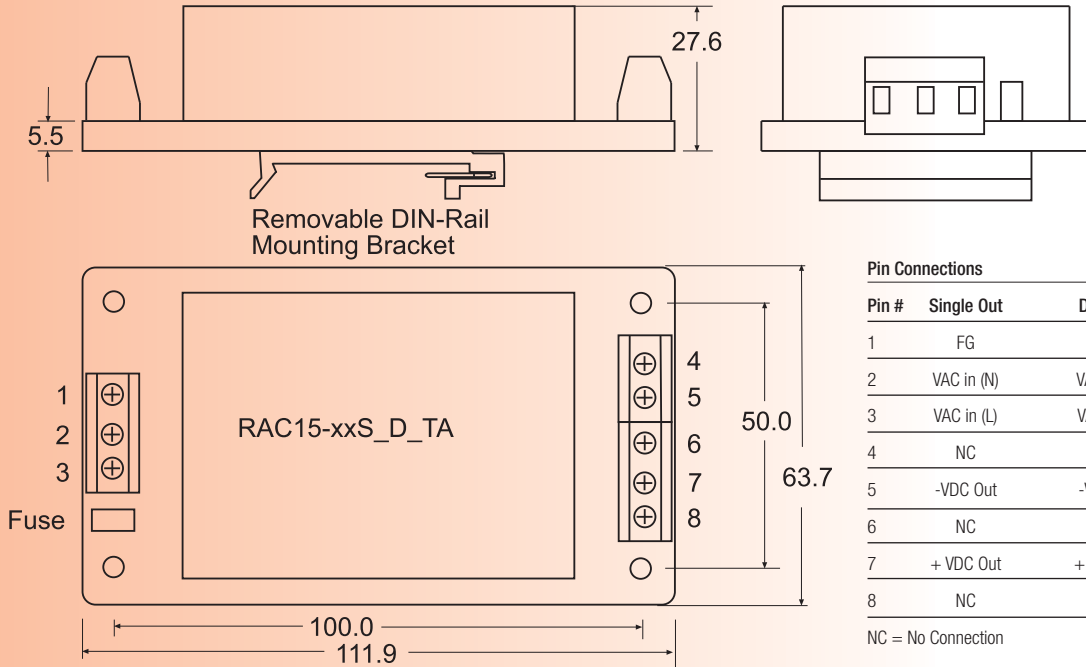
RECOM

Derating Graph

(Ambient Temperature)



Screw Terminal Module Option (suffix -ST)

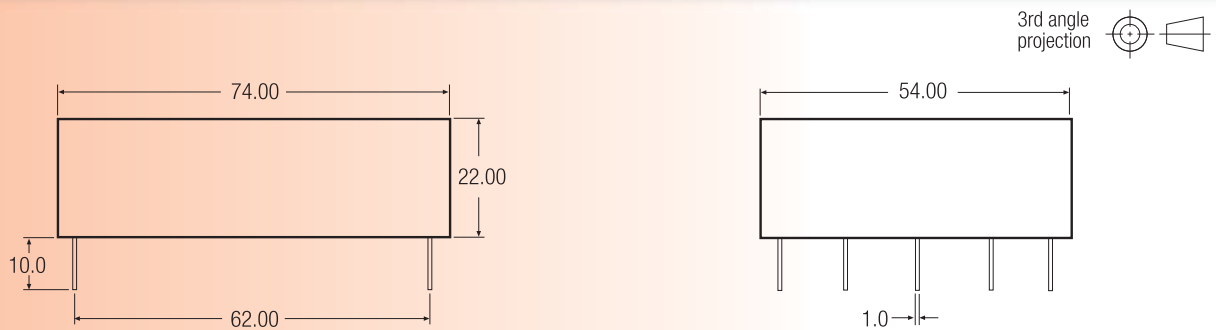


Pin Connections

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

