

Features

Regulated Converters

Rev. 0

- Compact AC-DC Power Supply
- 10 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 (%)
RAC10-3.3SA	90-264	3.3	3000	65
RAC10-05SA	90-264	5	2000	71
RAC10-12SA	90-264	12	833	74
RAC10-15SA	90-264	15	666	71
RAC10-24SA	90-264	24	426	74
RAC10-05DA	90-264	±5	±800	71
RAC10-12DA	90-264	±12	±380	75
RAC10-15DA	90-264	±15	±300	72

*add suffix "-E" for extended temperature range, e.g. RAC10-05SA-E

*add suffix "-ST" for screw terminal module e.g. RAC10-05SA-ST, RAC10-05DA-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	10 Watts max.	
Input Frequency Range (for AC Input)	47-440Hz	
Input Current (full load)	200mA max. (115VAC) / 130mA 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 Regulation (low line, high line at full load)	±0.3% typ.	
Load Voltage Regulation (5% to 100% full load)	±0.5% 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 min.	
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	100g	
EMC	EN 55022 Class B / EN 50082-1	
MTBF (+25°C)	using MIL-HDBK-217F	250 x 10 ³ hours

POWERLINE

AC/DC-Converter

RAC10-S_DA Series

10 Watt Single & Dual Output

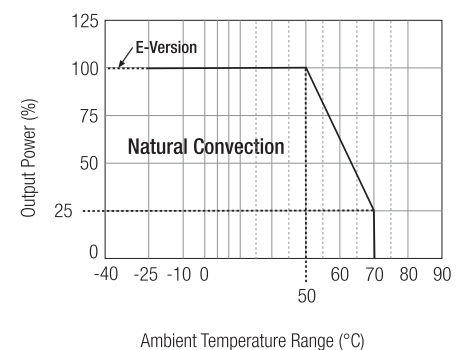


UL-60950-1 Certified

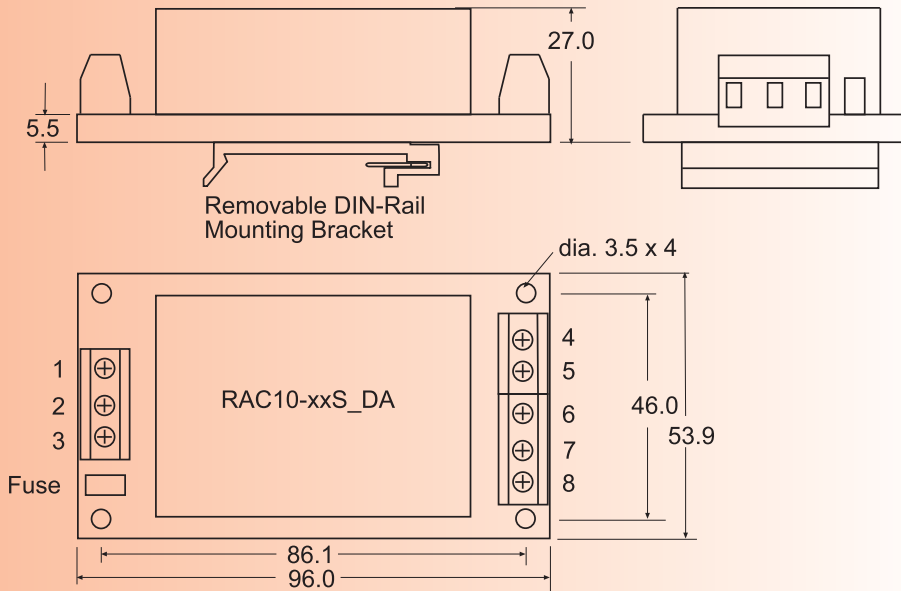


Derating Graph

(Ambient Temperature)



Screw Terminal Module Option (suffix -ST)

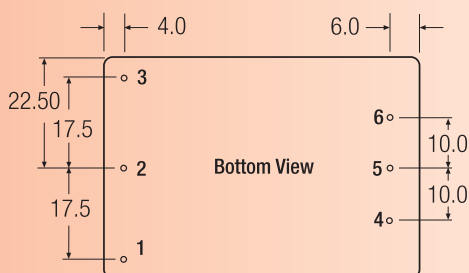
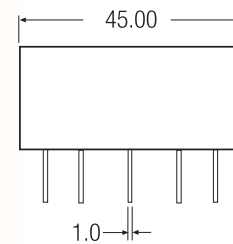
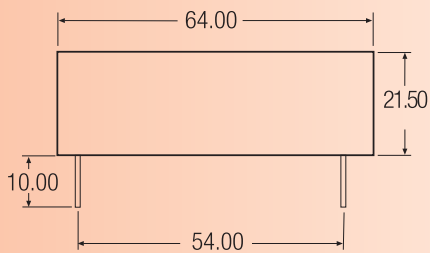


Pin Connections

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

NC = No Connction

Standard Package Style and Pinning



Pin Connections-

Pin #	Single Out	Dual Out
1	FG	FG
2	VAC in (N)	VAC in (N)
3	VAC in (L)	VAC in (L)
4	-VDC out	-VDC out
5	No Pin	Com
6	+VDC out	+VDC out

XX.X ± 0.5 mm
XX.XX ± 0.25 mm