Features

Regulated Converters

- Compact AC-DC Power Supplu
- 10 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 Guid	le				
Part Number	Input Range (VAC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max. Capacitive Load
RAC10-3.3SA	90-264	3.3	3000	65	70000µF
RAC10-05SA	90-264	E(5)	2000 =	VD1E[35000μF
RAC10-12SA	90-264	12	833	76	11000µF
RAC10-15SA	90-264	15	R 666	75	7000μF
RAC10-24SA	90-264	24	426	76	2300µF
RAC10-05DA	90-264	±5 D	5±800-1	15 73	±22000μF
RAC10-12DA	90-264	±12	±380	75	±3000µF
RAC10-15DA	90-264	±15	±300	74	±2000µF

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

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) 115VAC/230VAC 200mA / 130mA max. No Load Power Consumption 115VAC/230VAC 1.65W max. 115VAC 10A max. (-E = 23A max.)Inrush Current (<2ms) 230VAC 20A max. (-E = 46A max.)0.75mA max. Leakage Current Output Voltage Accuracy (Full load) Line Voltage Regulation (low line, high line at full load) ±0.3% typ. Load Voltage Regulation (5% to 100% full load) $\pm 0.5\%$ 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 / 1minute Temperature Coefficient ±0.02%/°C typ. Isolation Resistance $100~\text{M}\Omega$ min. **Short Circuit Protection** Hiccup, Automatic Restart -25°C to +70°C **Operating Temperature Range** Standard -40°C to +70°C (free air convection, with derating) Suffix -E Storage Temperature Range -40°C to +85°C Humidity 95% RH max. Case Material Epoxy with Fibreglass (UL94V-0) Package Weight Packing Quantity 5 pcs (-ST Version: 1 pc) **EMC** EN 55022 Class B / EN 50082-1 MTBF (+25°C) using MIL-HDBK-217F 250 x 103 hours

POWERLINE

AC/DC-Converter with 3 year Warranty



10 Watt Single/Dual Output





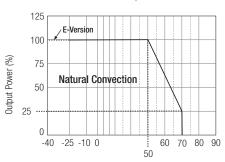


UL-60950-1 Certified

RAC10-A

Derating-Graph

(Ambient Temperature)



Ambient Temperature Range (°C)

Refer to Application Notes

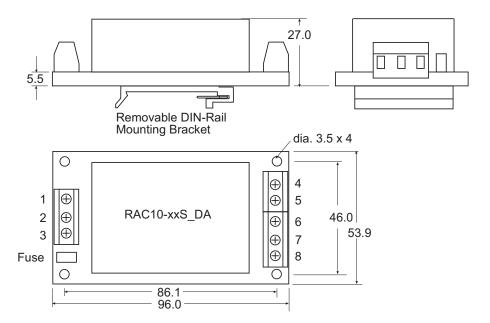
^{*}add suffix "-ST" for screw terminal module e.g. RAC10-05SA-ST, RAC010-05DA-E-ST

POWERLINE

AC/DC-Converter

RAC10-S_DA Series

Screw Terminal Module Option (suffix -ST)



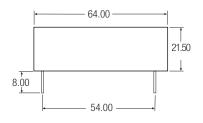
Pin #	Single Out	Dual Out	
1	FG	FG	
2	VAC in (N)	VAC in (N)	
	1401 41	14101 41	

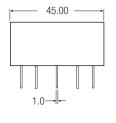
Pin Connections

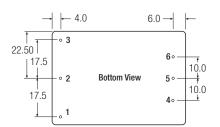
2	VAC in (N)	VAC in (N)
3	VAC in (L)	VAC in (L)
4	NC	NC
5	-VDC out	-VDC out
6	NC	Com
7	+VDC out	+VDC out
8	NC	NC

 $NC = No \ Connrction$

Standard Package Style and Pinning







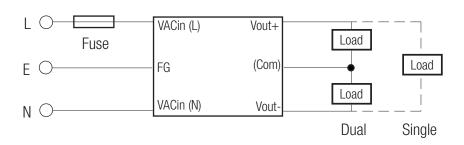
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Pin #	Single Out	Dual Out		
1	FG	FG		
2	VAC in (N)	VAC in (N)		
3	VAC in (L)	VAC in (L)		
4	-VDC out	-VDC out		
5	No Pin	Com		
6	+VDC out	+VDC out		

 $\begin{array}{ll} \text{XX.X} & \pm~0.5~\text{mm} \\ \text{XX.XX} & \pm~0.25~\text{mm} \end{array}$

Pin Connections

Standard Application Circuit

Suggested fuse rating 2A Slow Blow



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