Features

Regulated Converters

- 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, 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
RAC10-3.3SA	90-264	3.3	3000	65	70000µF
RAC10-05SA	90-264	5	2000	71	35000µF
RAC10-12SA	90-264	12	833	76	11000µF
RAC10-15SA	90-264	15	666	75	7000µF
RAC10-24SA	90-264	24	426	76	2300µF
RAC10-05DA	90-264	±5	±800	73	±22000µF
RAC10-12DA	90-264	±12	±380	75	±3000µF
RAC10-15DA	90-264	±15	±300	74	±2000µF

NOT RECOMMENDED FOR NEW DESIGNS

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

*add suffix "-ST" for screw terminal module e.g. RAC10-05SA-ST, RAC010-05DA-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)	115VAC/230VAC	200mA / 130mA max.
No Load Power Consumption	115VAC/230VAC	1.65W 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 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)	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 MΩ min.
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		92g
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 10^3 hours

POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

10 Watt Single/Dual Output



RoHS 2011/65/EU 6/6

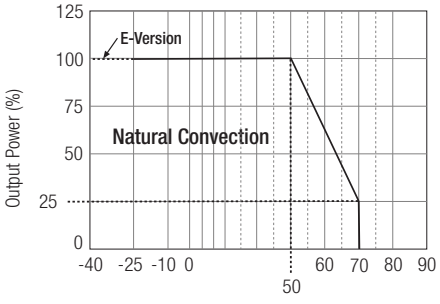
E196683

UL-60950-1 Certified

RAC10-A

Derating-Graph

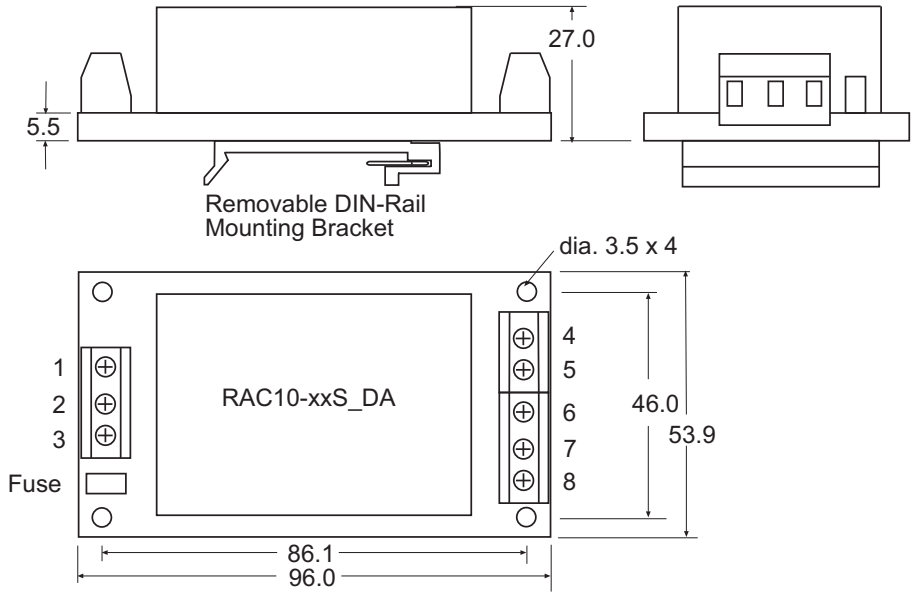
(Ambient Temperature)



Refer to Application Notes

RAC10-S_DA Series

Screw Terminal Module Option (suffix -ST)

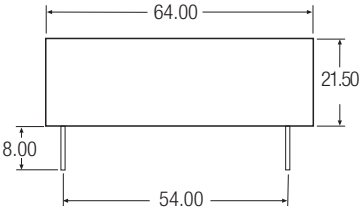


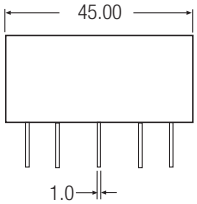
Pin Connections

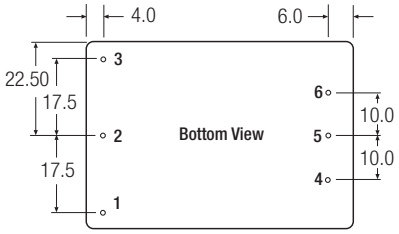
Pin #	Single Out	Dual Out
1	FG	FG
2	VAC in (N)	VAC in (N)
3	VAC in (L)	VAC in (L)
4	NC	NC
5	-VDC out	-VDC out
6	NC	Com
7	+VDC out	+VDC out
8	NC	NC

NC = No Connrction

Standard Package Style and Pinning







Pin Connections

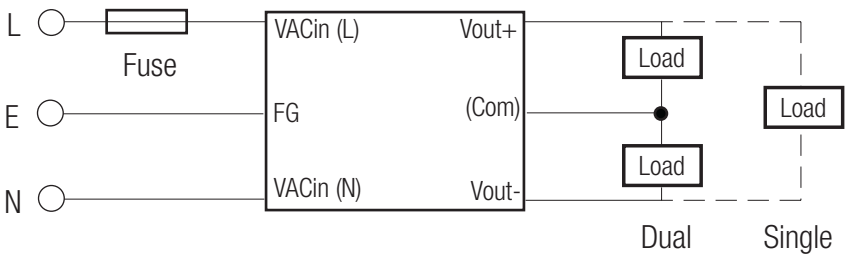
Pin #	Single Out	Dual Out
1	FG	FG
2	VAC in (N)	VAC in (N)
3	VAC in (L)	VAC in (L)
4	-VDC out	-VDC out
5	No Pin	Com
6	+VDC out	+VDC out

XX.X ± 0.5 mm
XX.XX ± 0.25 mm

Standard Application Circuit

Suggested fuse rating

2A Slow Blow



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