

# Features

## Regulated Converters

- AC-DC Power Supply
- 5 Watt PCB Mount Package
- Universal Input Voltage Range
- 3000VAC Isolation
- Low Output Ripple and Noise
- Short Circuit Protected
- UL Approved

### 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 (%)
RAC05-3.3SA	90-264	3.3	1500	62
RAC05-05SA	90-264	5	1000	65
RAC05-12SA	90-264	12	416	70
RAC05-15SA	90-264	15	333	70
RAC05-24SA	90-264	24	200	71
RAC05-05DA	90-264	±5	±500	70
RAC05-12DA	90-264	±12	±200	67
RAC05-15DA	90-264	±15	±160	67

\*add suffix "-E" for extended temperature range, e.g. RAC05-05SA-E

\*add suffix "-ST" for screw terminal module e.g. RAC05-05SA-ST, RAC05-05DA-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	5 Watts max	
Input Frequency Range (for AC Input)	47-440Hz	
Input Current (full load)	115VAC/230VAC	110mA / 70mA max.
No Load Power Consumption	115VAC/230VAC	1.18W max.
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	
RMS Isolation Voltage (input to output)	3kVAC / 1minute	
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	80g	
Packing Quantity	5 pcs (-ST Version: 1 pc)	
EMC	EN 55022 ClassB / EN 50082-1	
MTBF (+25°C)	using MIL-HDBK-217F	300 x 10 <sup>3</sup> hours

# POWERLINE

AC/DC-Converter

with 3 year Warranty

RECOM

## 5 Watt Single/Dual Output

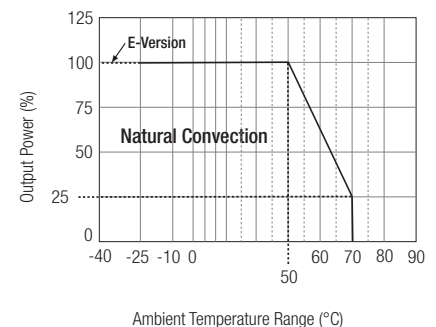


**UL-60950-1 Certified  
E196683**

# RAC05-A

## Derating Graph

(Ambient Temperature)



Please Read Application Notes

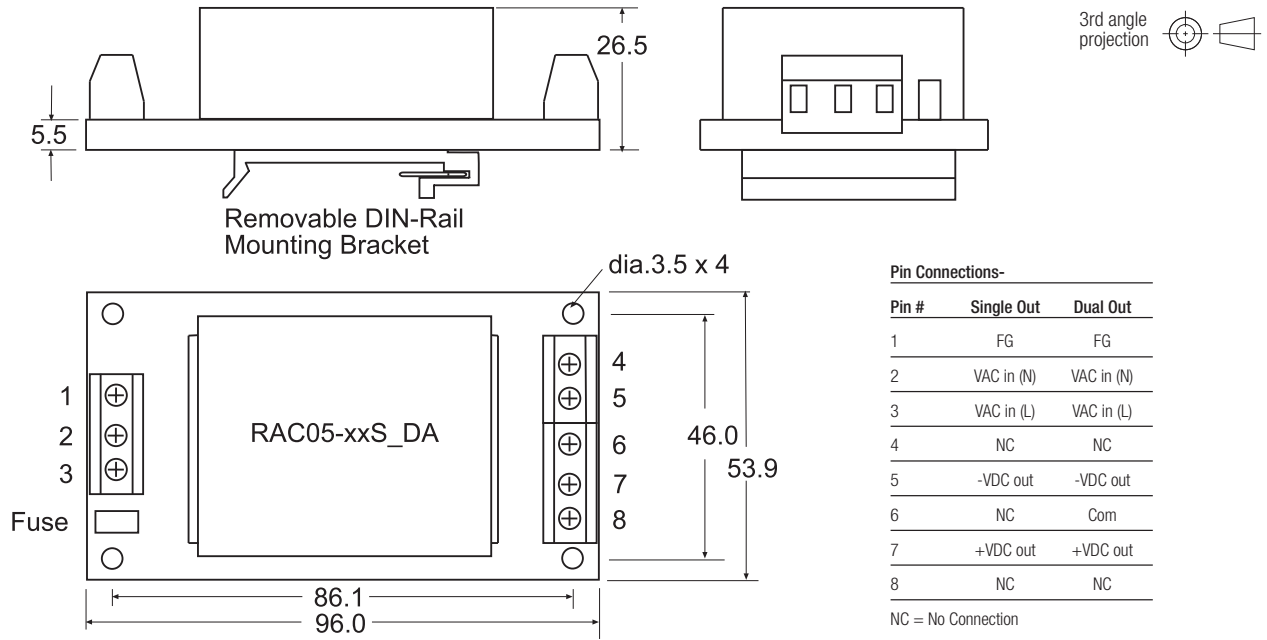
www.recom-electronic.com

# POWERLINE

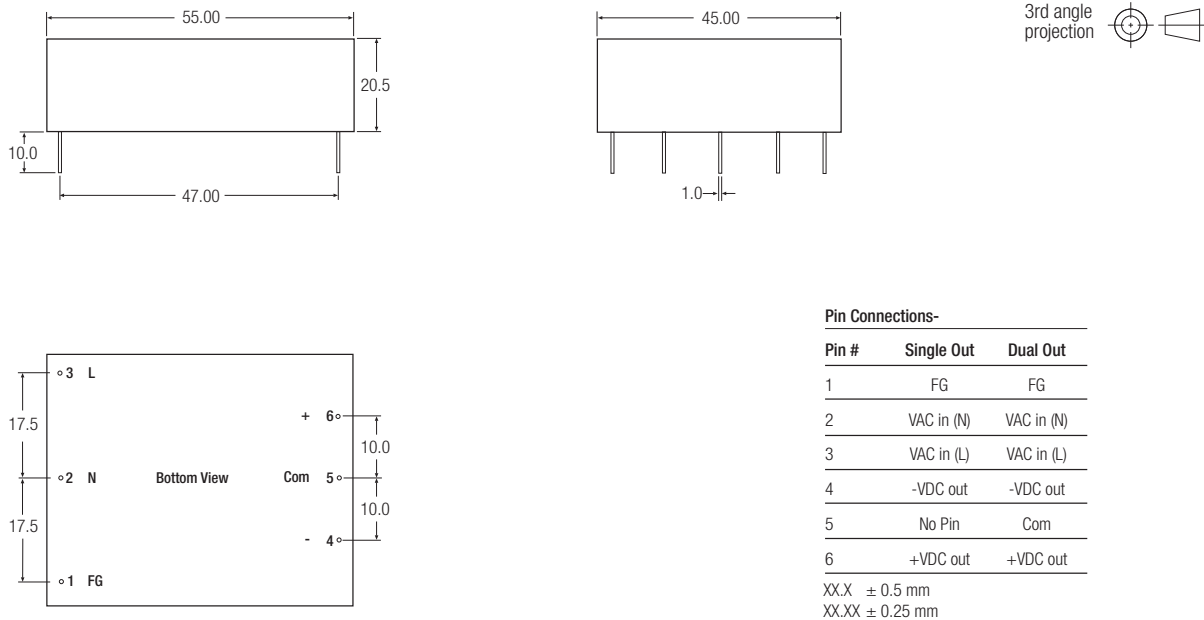
AC/DC-Converter

# RAC05-S\_DA Series

## Screw Terminal Module Option (suffix -ST)



## Standard Package Style and Pinning



RAC05-A

## Standard Application Circuit

Suggested fuse rating  
1A Slow Blow

