

Features

Adapter Board

- Up to 488VAC input voltage range
- 9A current rating for up 90°C air temperature
- UL Listed components used
- Stable solderability by secure packaging
- Clearances for operating altitude up to 5000m



RAC-ADAPT-ST-1

Adapter Board for RECOM AC/DC converters

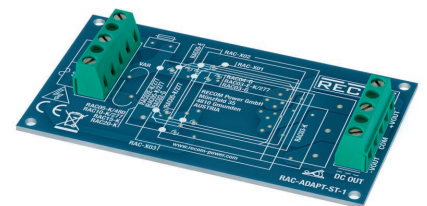


Description

The RAC-ADAPT-ST-1 is an adapter board which allows many of RECOM's latest AC-DC products in the range of 1 to 20 Watts of output power to be fitted with screw terminals for easy connection. Although RECOM's AC-DC modules come equipped with integrated fuses and already meet high immunity levels, space on the board is provided for optional MOV and fusing if preferred. The product comes in a sealed package with a drying agent to ensure long term solderability. Wide input voltage and wide ambient operating temperature ratings of the design and appropriate clearance make it an easy-to-use board for short run or low-volume production and prototyping as well as for evaluation purposes.

Compatible converters

Converter Series	Input Voltage Range [VAC]	nom. Output Voltages [VDC]	Internal Fuse	Converter Link
RAC01-GA	85-264	5, 12	fusible resistor	RAC01-GA.pdf
RAC01-GB	85-264	3.3, 5, 12, 24	fusible resistor	RAC01-GB.pdf
RAC02-GA	85-264	3.3, 5, 12, 15, 24	fusible resistor	RAC02-GA.pdf
RAC02-GB	85-264	3.3, 5, 12, 15, 24	fusible resistor	RAC02-GB.pdf
RAC03-K	85-264	3.3, 5, 12, 15, 18, 24	fusible resistor	RAC03-K.pdf
RAC03-GA	85-264	3.3, 5, 12, 15, 24	T1A	RAC03-GA.pdf
RAC03-GB	85-264	3.3, 5, 9, 12, 15, 24	T1A	RAC03-GB.pdf
RAC04-GA	85-305	3.3, 5, 9, 12, 15, 24	T1A	RAC04-GA.pdf
RAC04-GB	85-264	3.3, 5, 9, 12, 15, 24	T1A	RAC04-GB.pdf
RAC3.5-K/277	85-305	3.3, 5, 12, 15, 24	T1A	RAC3.5-K/277.pdf
RAC05-K/277	85-305	3.3, 5, 12, 15, 24	T1A	RAC05-K/277.pdf
RAC05-K/480	85-528	5, 12	fusible resistor	RAC05-K/480.pdf
RAC10-K/277	85-305	3.3, 5, 12, 15, 24, ± 12 , ± 15	T2A	RAC10-K/277.pdf
RAC15-K	85-264	5, 12, 15, 24	T3.15A	RAC15-K.pdf
RAC20-K	85-264	5, 12, 15, 24, 48, ± 12 , ± 15	T3.15A	RAC20-K.pdf



ELECTRICAL CHARACTERISTICS

Parameter	Condition	Min.	Typ.	Max.
Absolute Maximum Input Voltage	3000m			488VAC 690VDC
	5000m			329VAC 465VDC
Input Current	$T_{AMB} = 90^{\circ}\text{C}$			9A
Input Fuse Placeholder ⁽¹⁾	5.08mm pitch package for radial leaded fuse with hole size 0.9mm			
Varistor Placeholder ⁽²⁾	7.5mm/3.5mm pitch			

Notes:

- Note1: Refer to local safety regulations if input over-current protection is also required
RECOM suggests: Littlefuse 369 series
- Note2: If Varistor is installed, input fuse is always mandatory
RECOM suggests: EPCOS S14 series

DIMENSION AND PHYSICAL CHARACTERISTICS

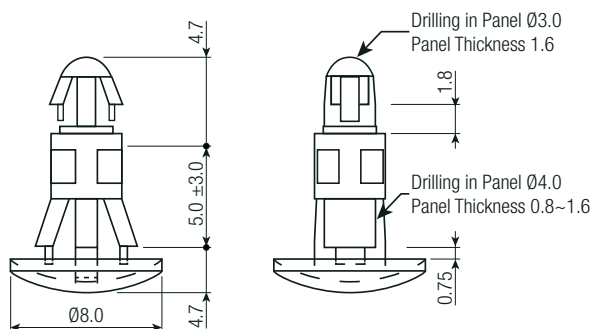
Dimension Drawing (mm)



Output Screw Terminal

Snap-on stop spacer suggestion (Model: Wuerth 709440800)

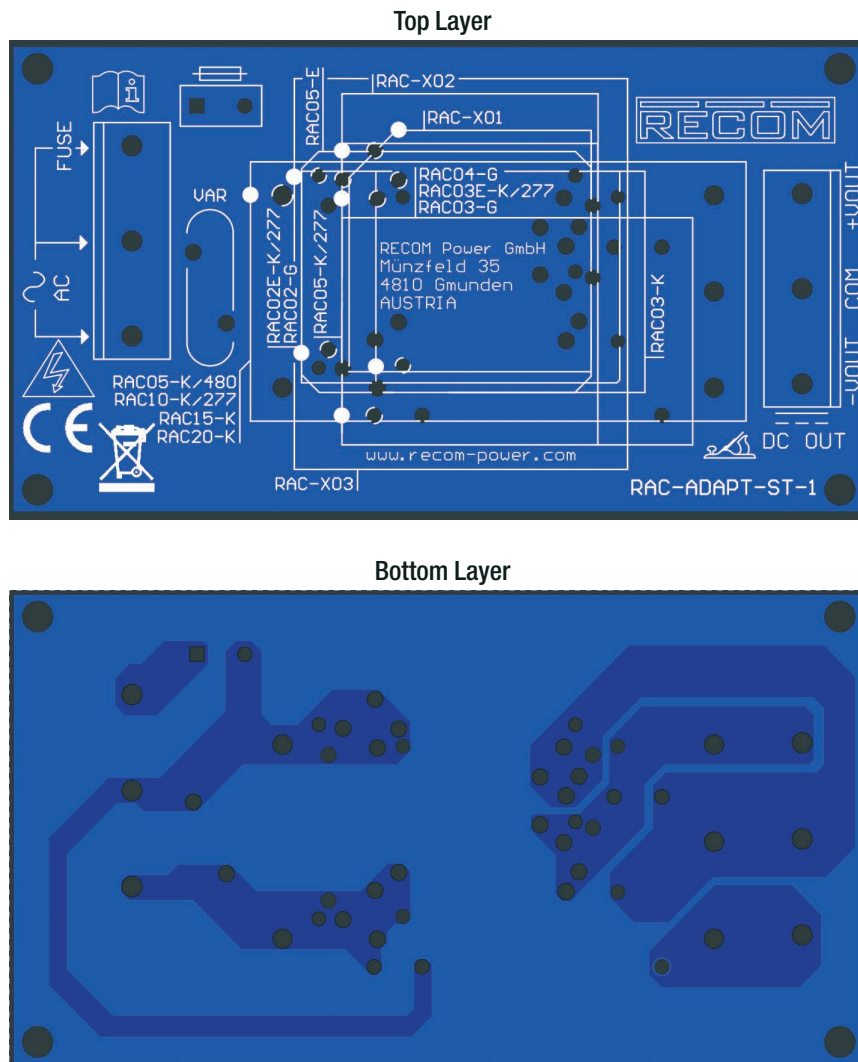
Note3: If spacers are needed, RECOM suggests to use Wuerth 70944xx00 series or similar)



Specifications (measured @ $T_a = 25^\circ\text{C}$, nom. V_{in} , full load and after warm-up unless otherwise stated)

INSTALLATION AND APPLICATION

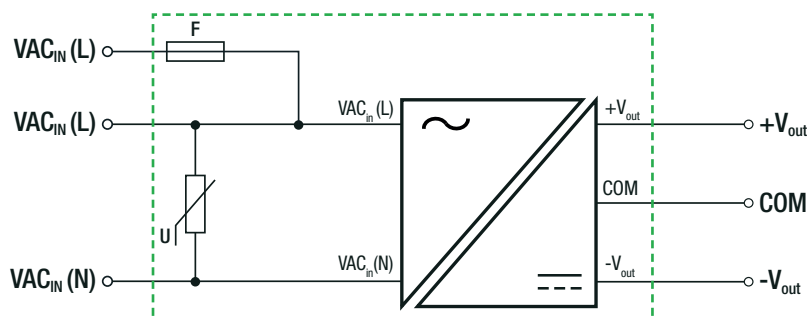
Layout



Notes:

Note4: User must ensure adequate isolation between bottom of RAC-ADAPT-ST-1 board and any conductive surfaces

Schematic

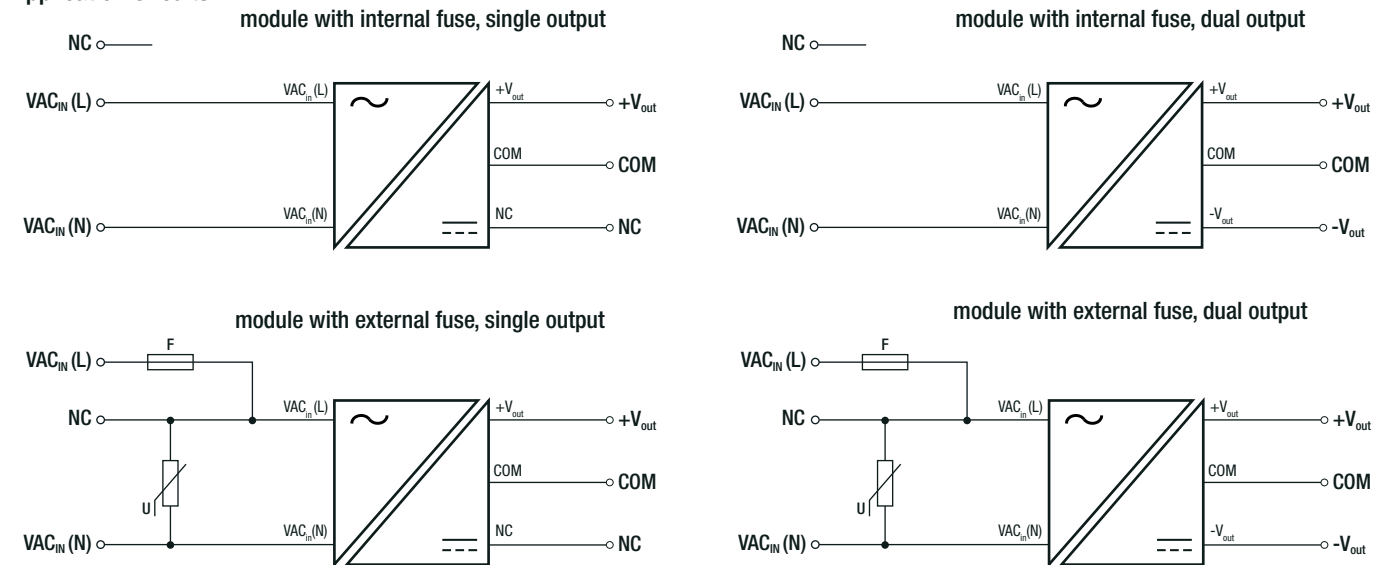


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Specifications (measured @ $T_a = 25^\circ\text{C}$, nom. V_{in} , full load and after warm-up unless otherwise stated)

INSTALLATION AND APPLICATION

Application Circuits



Note: The usage of a cable strain relief is strongly recommended.

PACKAGING INFORMATION

Parameter	Type	Value
Packaging Dimension (LxWxH)	moisture barrier bag	155.0 x 125.0 x 22.0mm
Packaging Quantity		1pcs
Storage Temperature Range		-30°C to +90°C

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