Features

Regulated Converter

- 35mW max. no load power consumption
- Efficiency up to 76%
- Isolated output 3kVAC / 1 minute
- SCP, OVP protection
- Wide operating temperature range: -40°C to +85°C
- Universal input 85-305VAC

Description

The ultra-compact wired RAC02-SE/277/W modules are available with output voltages of 3.3, 5, 12 and 24V, and the input-to-output isolation is 3kVAC/1min. With a standby consumption of 35mW maximum, the mini power supplies are particularly suitable for energy-saving sleep mode and standby applications. Because of its compact design (height <18mm), it is a versatile solution for home automation and other similar applications. Complete with an integrated input filter, the series has enhanced EMI performance and complies with EN55032, class B. The mini power supplies are also protected against short circuit with fully automatic restart after the error has been solved. The converters are EN/UL60950-1 certified and come complete with a 3 year warranty.

Selection Guide								
Part Number	nom. Input Voltage Range [VAC]	Output Voltage [VDC]	Output Current [mA]	Efficiency typ ⁽¹⁾ [%]	Max. Capacitive Load ⁽²⁾ [μF]			
RAC02-3.3SE/277/W	100-277	3.3	600	67	12000			
RAC02-05SE/277/W	100-277	5.0	400	70	5500			
RAC02-12SE/277/W	100-277	12	167	73	500			
RAC02-24SE/277/W	100-277	24	83	76	160			

Notes:

Note1: Efficiency is tested at 230VAC and full load at +25°C ambient Note2: Max Cap Load is tested at nominal input and full resisitive load

Model Numbering



Ordering Examples:

RAC02-05SE/277/W 2 Watt 5Vout Single Output Wired Version RAC02-12SE/277/W 2 Watt 12Vout Single Output Wired Version



RAC02-SE/277/W

2 Watt Single Output



















IEC/EN60950-1 certified CAN/CSA-22.2 No. 60950 certified UL60950-1 certified EN60335-1 certified EN55032 certified EN55024 certified EN55014 certified CB Report



RAC02-SE/277/W

Series

Specifications (measured @ Ta= 25°C, nom. Vin (115/230VAC), full load and after warm-up unless otherwise stated)

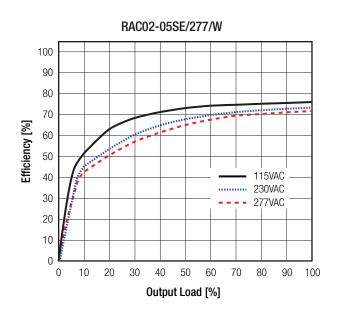
BASIC CHARACTERISTICS							
Parameter	Condition		Min.	Тур.	Max.		
Input Voltage Range (3)	nom. Vin= 230VAC		85VAC 120VDC	277VAC	305VAC 430VDC		
Input Current	115VAC 230VAC			47mA 30mA			
Inrush Current	cold start at +25°C	115VAC 230VAC			15A 30A		
No load Power Consumption	85-305VAC, 47-63Hz				35mW		
Input Frequency Range	AC Input		47Hz		440Hz		
Minimum Load				2%			
Hold-up Time	115VAC		18ms				
Internal Operating Frequency	100% load at nominal Vin			55kHz			
Output Ripple and Noise (4)	3.3Vout 5, 12, 24Vout				300mVp-p 250mVp-p		

Notes:

Note3: The products were submitted for safety files at AC-Input operation

Note4: Ripple and Noise is the maximum peak-to-peak voltage value measured at the output with a 20MHz bandwidth, at rated line voltage at full load. And with a 47µF low-ESR electrolytic capacitor in parallel with a 0.1µF ceramic capacitor across output

Efficiency vs. Load



REGULATIONS					
Parameter	Condition	Value			
Output Voltage Tolerance (5)		±6.0% max.			
Line Regulation	low line to high line, full load	±1.5% max.			
Load Regulation	2% to 100% load	6.0% typ.			

Notes:

Note5: Includes initial voltage accuracy, thermal drift, line regulation and load regulation at rated input voltage and load conditions