# **Features**

# Regulated Converter

- 30mW max. no load power consumption
- High efficiency up to 80%
- Isolated output 3kVAC / 1 min
- SCP, OVP protection
- Wide operating temperature range: -40°C to +85°C
- Universal input 85-305VAC

### **Description**

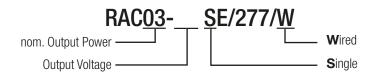
The ultra-compact wired RAC03-SE/277/W modules are available with output voltages of 3.3, 5, 12 and 24V, and the input-to-output isolation is 3kVAC/1min. With a standby consumption of 30mW typical, the mini power supplies are particularly suitable for energy-saving sleep mode and standby applications. 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 <sup>(1)</sup> [%]	Max. Capacitive Load <sup>(2)</sup> [μF]			
RAC03-3.3SE/277/W	100-277	3.3	900	71	22000			
RAC03-05SE/277/W	100-277	5	600	76	7500			
RAC03-12SE/277/W	100-277	12	250	78	1000			
RAC03-24SE/277/W	100-277	24	125	80	200			

### 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:** 

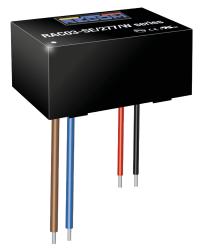
RAC03-05SE/277/W 3 Watt 5Vout Single Output Wired Version RAC03-12SE/277/W 3 Watt 12Vout Single Output Wired Version



### **RAC03-SE/277/W**

# 3 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



# **RAC03-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			70mA 45mA				
Inrush Current c	cold start at +25°C	115VAC 230VAC			15A 30A			
No load Power Consumption	85-305VAC, 47-63Hz				30mW			
Input Frequency Range	AC Input		47Hz		440Hz			
Minimum Load				2%				
Hold-up Time	115VAC 230VAC			15ms 80ms				
Internal Operating Frequency	100% load at nominal Vin			55kHz				
Output Ripple and Noise (4)				200mVp-p				

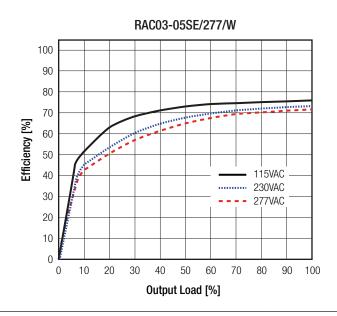
### Notes:

Note3: No line derating required

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% typ. / ±1.5% max.				
Load Regulation	10% 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