

Features

- Built-in active PFC
- Efficiency up to 88%
- Isolated output 3kVAC / 1 minute
- SCP, OLP protection
- Operating temperature range -20°C to +60°C
- Universal input 90-264VAC / 120VDC-370VDC

Regulated Converter



RACG100

100 Watt Single Output



EN60950 certified
 CAN/CSA-C22.2 No. 60950 certified
 UL No. 60950 certified
 EN55032 compliant
 EN55024 compliant

Description

These industrial grade power supplies have been designed to give many years of trouble-free life. Despite their low cost, they use high grade electrolytic capacitors and are certified to heavy industry performance levels, working reliably over an extended temperature and world-wide input voltage range. The RACG series are more compact than the standard industry size, yet offer higher performance with full output protection (SCP, OLP), active power factor correction and improved input surge, hold-up time and efficiency ratings. The power supplies can be mounted horizontally or vertically and are fully certified to CE, UL and Class B EMC standards. Typical uses are industrial, commercial and high reliability applications. The RACG series come with a 3 year warranty.

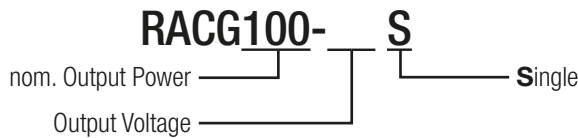
Selection Guide

Part Number	Input Voltage Range [VAC]	Input Current max. [A]	nom. Output Voltage [VDC]	Adj. Output Voltage ⁽¹⁾ [VDC]	Output Current max. [A]	Efficiency typ. ⁽²⁾ [%]
RACG100-05S	90-264	1.5	5	3.3-5.5	20	84
RACG100-12S	90-264	1.5	12	10-15	8.5	87
RACG100-24S	90-264	1.5	24	21-27	4.5	88
RACG100-48S	90-264	1.5	48	43.2-52.8	2.2	88

Notes:

- Note1: For detail information please refer to graph on page PA-2
 Note2: Efficiency is tested at 230VAC and full load at +25°C ambient

Model Numbering



Ordering Examples:

RACG100-12S	100 Watt	12Vout	Single Output
RACG100-48S	100 Watt	48Vout	Single Output

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

BASIC CHARACTERISTICS					
Parameter	Condition		Min.	Typ.	Max.
Input Voltage Range ⁽³⁾	nom. Vin = 230VDC		90VAC 120VDC		264VAC 370VDC
Inrush Current	cold start at +25°C	115VAC 230VAC			30A 50A
No load Power Consumption				3W	
Input Frequency Range			47Hz		63Hz
Minimum Load				0%	
Power Factor	115VAC 230VAC			0.98 0.93	
Set-up Time	115VAC 230VAC				4s 2s
Hold-up Time	230VAC			20ms	

continued on next page

Specifications (measured at Ta= 25°C, nominal input voltage (115/230VAC), full load and after warm-up)

BASIC CHARACTERISTICS

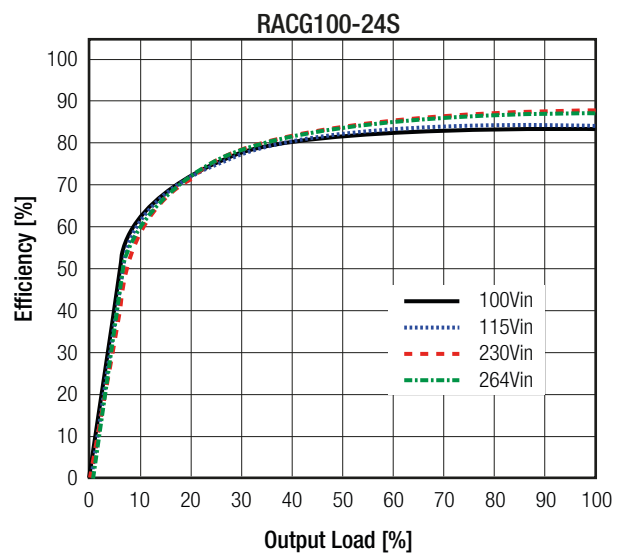
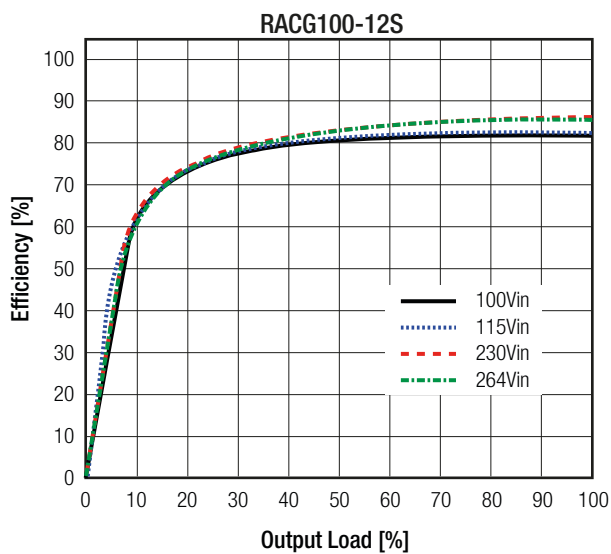
Parameter	Condition		Min.	Typ.	Max.
Output Voltage Adjustability				±10%	
Output Ripple and Noise ⁽⁴⁾	0°C to +60°C	all		150mVp-p	
	-20°C to 0°C	5, 12, 24Vout		150mVp-p	
		48Vout		200mVp-p	

Notes:

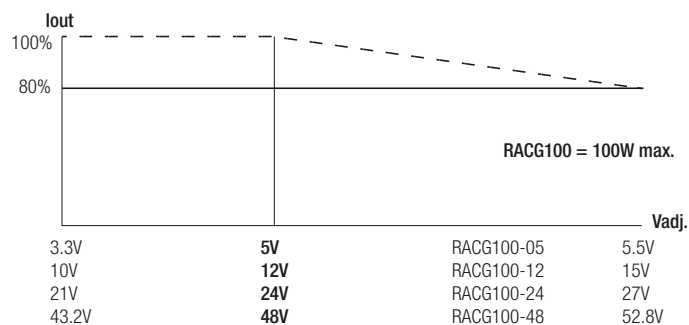
Note3: The products were submitted for safety files at AC-Input operation

Note4: Measured @ 20MHz Bandwidth with a 0.1µF parallel capacitor

Efficiency vs. Load



Output Voltage Adjustability Derating



REGULATIONS

Parameter	Condition	Value
Output Accuracy	5Vout, 12Vout	±2.0% max.
	24Vout, 48Vout	±1.0% max.
Line Regulation	low line to high line, full load	±0.5% max.
Load Regulation	5Vout, 12Vout	2.0% max.
	24Vout, 48Vout	1.0% max.