Features

Regulated Converters

Connector Set available

- Class II Power Supply
- Universal Input Voltage Range
- compact 4" x 2" size
- 3kVAC Isolation
- OCP, OVP, SCP
- Standby Power ErP conform (<0.5W)

Description

The RAC60/OF series offers compact AC/DC open frame power supplies with universal AC input (90-264VAC) and fully protected DC outputs which are trimmable to compensate for voltage drops on the output connections. The power supplies are CB, UL, and CE certified and ErP conform. Uses include industry controls, test and measurement systems and energy efficient products.

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| Part Number | Input Range (VAC) | Output Voltage (VDC) | Output Current Range (A) | Voltage Ajd. Range * (V) | Output Power (W) | Efficiency typ. % | v Max. Capacitive Load |
|----------------|-------------------------|----------------------------|--------------------------------|--------------------------------|------------------------|-------------------------|------------------------------|
| RAC60-05S/0F | 90-264 | 5 | 0-10 | 4.5-5.5 | 50 | 80 | 18800µF |
| RAC60-12S/OF | 90-264 | 12 | 0-5 | 10-13 | 60 | 83 | 18800µF |
| RAC60-15S/OF | 90-264 | 15 | 0-4 | 13.5-18 | 60 | 84 | 12700µF |
| RAC60-24S/OF | 90-264 | 24 | 0-2.5 | 22-27 | 60 | 85 | 4700µF |

* refer to "Package Style and Pinning"

Specifications (typical at 25°C and 230VAC)

| Rated Power | | |
|--|-----------------------|------------------------------------|
| | | 60 Watts max. |
| Input Frequency Range (for AC Input) | | 47-63Hz |
| Operating Frequency | | 65kHz typ. |
| Input Current (full load) | 115VAC | 1.5A max. |
| | 230VAC | 1A max. |
| Inrush Current (Cold Start) | 115VAC | 30A typ. |
| | 230VAC | 60A typ. |
| No Load Power Consumption | | <0.5W |
| Start-up Time (at cold first start) | 115VAC/230VAC | 500ms |
| Rise Time | Full Load | <30ms |
| Hold Time | 115VAC, Full Load | 13ms typ. |
| | 230VAC, Full Load | 60ms typ. |
| Leakage Current | 240VAC | <0.75mA |
| Output Voltage Accuracy | 24VDC | ±1% |
| (includes Line-, Load-regulation and Set-up Tolerance | e) 05, 12, 15VDC | ±2% |
| Output Ripple and Noise (20MHz limited) | 5VDC | 80mVp-p max. |
| | 12VDC | 120mVp-p max. |
| | 15VDC | 150mVp-p max. |
| (measured with $0.1 \mu F \& 47 \mu F$ parallel capacitor) | 24VDC | 200mVp-p max. |
| Isolation Voltage | I/P to O/P | 3kVAC / 1 minute |
| | I/P to FG | 1.5kVAC / 1 minute |
| | O/P to FG | 0.5kVAC / 1 minute |
| Isolation Resistance | 500VDC | 100 MΩ |
| Short Circuit Protection | | Hiccup Mode, Automatic Restart |
| Over Voltage Protection | 5VDC | 5.75-6.5VDC |
| | 12VDC | 13.5-15VDC |
| | 15VDC | 16.9-18.75VDC |
| Latch Mode, re-power on to recover | 24VDC | 27-30VDC |
| Over Load Protection 115-1 | 50% rated output powe | er, Hiccup Mode, Automatic Restart |

POWERLINE AC/DC-Converter with 3 year Warranty

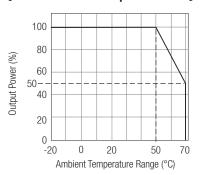


60 Watt Open Frame Single Output





Derating-Graph (Ambient Temperature)



Refer to Application Notes

continued on next page

POWERLINE

AC/DC-Converter

RAC60-xx/OF Series

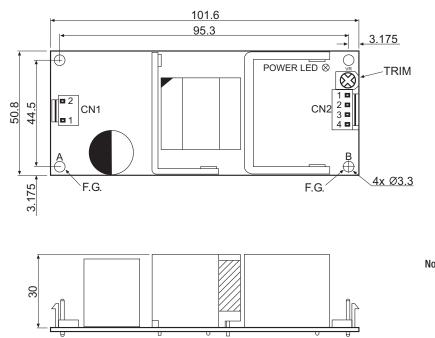
| Specifications (typical at 25°C and 23 | BOVAC) | | |
|--|--------------------------------|-------------------------------|---|
| Operating Temperature Range | Full Load withou | t derating | -20°C to +50°C |
| | with derating | | -20°C to +70°C |
| Storage Temperature Range | | | -40°C to +80°C |
| Operation Humidity | non-condensing | | 20% - 90% RH |
| Storage Humidity | | | 10% - 90% RH |
| Vibration | | | 10-500Hz, 2G, 10 Min. along X, Y and Z |
| Weight | | | 145g |
| Dimensions (LxWxH) | | | 101.6 x 50.8 x 30mm |
| Package Quantity | | | 30pcs / carton |
| Package Dimensions Carton (LxWxH) | | | 325 x 270 x 220mm |
| MTBF | (using MIL-HDB | <-217F, 25°C) | >450 x 10 ³ hours |
| Certifications: | | | |
| General Safety | | Report: E196683 | UL-60950-1 2nd |
| IEC/EN General Safety | | Report: PSE103-0658 | IEC/EN-60950-1 2nd |
| EMC | Conducted and Radiated | Report: HA080035-SCCE | EN55022, Class B |
| | Immunity | Report: HA080035-SCCE | EN55024 |
| | | Report: HA080035-SBFD | FCC, Part 15, Class B |
| | Harmonics | Report: HA080035-SCCE | EN61000-3-2 |
| | | | EN61000-3-3 |
| | | | EN61000-4-2, 3, 4, 5, 6, 8, 11, Critertia A |
| | Emission | Report: HA080035-SCCE | EN61000-6-3 |
| ErP | complies to European Directive | e for Energy Related Products | 2004/125/EC |

Notes

RAC60/0F

Note1: Mounting holes A, B must be grounded for EMI (Filter Ground)

Package Style and Pinning



| no mput t | AC Input Connector (CN1): | | | | |
|-----------|---------------------------|----------------|--|--|--|
| Pin# | Terminal | Mating Housing | | | |
| 1 AC/N | WST I39606PS-2 | WST P3-I39606 | | | |
| 2 AC/L | or equivalent | or equivalent | | | |

| DC Output Connector (CN2): | | | | |
|----------------------------|----------------|----------------|--|--|
| Pin# | Terminal | Mating Housing | | |
| 1,2 V+ | WST I39606PS-2 | WST P4-I39606 | | |
| 3,4 V- | or equivalent | or equivalent | | |

Note: Detail information about the connectors on www.wst.com.tw

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