RSC350 RAINBOW SERIES SWITCHERS



FEATURES:

- Automatic line range selection
- Fully regulated and floating outputs
- Modular output configurations
- FCC, CISPR22 Class B
- "Smart Load" feature eliminates minimum load requirements
- For medical version, see p. 116
- 2-year warranty
- CE marked to LVD

SPECIFICATIONS:

AC Input
90-132 and 180-264Vac, 50/60Hz single phase.

Input Current
9/4.5A.

Hold-Up Time
20mSec minimum from loss of AC input at full load, nominal line (115Vac).

Output Power
350W with cover fan option (390W peak).

Overload Protection
Standard on all outputs; revovery automatic.

Overvoltage Protection
Standard on all outputs within ranges below:

OUTPUT	OVP SETTING	V ADJ. RANGE
5V	5.6-6.8V	4.6-5.5V
12V & 15V	18-22V	11.5-15.3V
24V & 28V	29-35V	22.0-30.0V

Efficiency
74% minimum at full load; nominal input voltage.

Turn-on Time
Less than 1 second.

Input Protection
Internal AC fuse provided. Designed to blow only if a catastrophic failure occurs in the unit—fuse does not blow on overload or short circuit.

Inrush Current
60A maximum.

Temperature Coefficient
0.03%/ºC typical on all units.

Environmental
Designed for 0 to 50°C operation at full rated output power; derate output current and total output power by 2.5% per °C above 50°C. See Environmental and Packaging Specifications (p. 11) for additional information.

Power Fail
A TTL signal goes low upon failure, 6mS min. before output drops 5%.

Output Noise
0.5% RMS, 1% Pk-Pk, measured directly across output terminals.

Transient Response
Main output—500 µSec typical response time for return to within 0.5% of final value for a 50% load step change. $\Delta i/\Delta t<0.2A/\mu Sec$. Maximum voltage deviation is 3.5%.

Remote Sense
Standard on main output; will compensate for 0.5V of cabling losses.

Voltage Adjustment
Built-in potentiometers adjust outputs minimum of ±5%.

Reverse Voltage Protection
All outputs protected against inadvertent application of reverse voltage up to 1 times rated current of the reversed output.

Leakage Current
100µA.

EMI/EMC Compliance
All models include built-in EMI filtering to meet the following emissions requirements:

EMI SPECIFICATIONS	COMPLIANCE LEVEL
Conducted Emissions	EN55022 Class B; FCC Class B
Static Discharge	EN61000-4-2, 6 kV contact, 3 kV air
RF Field Susceptibility	EN61000-4-3, 3 V/meter
Fast Transients/Bursts	EN61000-4-4, 2 kV, 5 kHz
Surge Susceptibility	EN61000-4-5, 1 kV diff., 2 kV com.

Safety
Approved to UL1950 (no D3 deviations), CSA22.2 No. 234L6, IEC950 and EN60950.

Vibration
Designed to meet requirements of MIL-STD 810E, Method 514.4 Category 1. This test consists of random vibration at 0.015g/Hz from 5 to 50Hz declining linearly to 0.15g2/Hz in each axis for one hour.

Shock
Designed to meet MIL-STD 810E, Method 516.4. Unpackaged units shall meet the bench handling requirements of Procedure VI for four drops per face.

Model	Main	Aux 1	Aux 2	Aux 3
RSC350BBB	5V @ 40A	12V @ 12A	12V @ 4A	12V @ 4A
RSC350DBB	5V @ 40A	24V @ 6A	12V @ 4A	12V @ 4A
RSC350DAC	5V @ 40A	24V @ 6A	5V @ 4A	15V @ 4A
RSC350BAD	5V @ 40A	12V @ 12A	5V @ 4A	24V @ 2.5A
RSC350BAB	5V @ 40A	12V @ 12A	5V @ 4A	12V @ 4A
RSC352BAB	24V @ 8A	12V @ 12A	5V @ 4A	12V @ 4A
RSC352BAD	24V @ 8A	12V @ 12A	5V @ 4A	24V @ 2.5A
RSC352BBB	24V @ 8A	12V @ 12A	12V @ 4A	12V @ 4A
RSC352DAC	24V @ 8A	24V @ 6A	5V @ 4A	15V @ 4A
RSC352DBB	24V @ 8A	24V @ 6A	12V @ 4A	12V @ 4A

Output configurations:
"A" auxiliary output adjusts from 4.7 to 5.3Vdc—available on Aux 2 only.
"B" auxiliary output adjusts from 11.5 to 15.5Vdc.
"C" same as "B" but factory set at 15Vdc.
"D" auxiliary output adjusts from 23 to 29Vdc—available on Aux 1 & 3.

RSC350 MECHANICAL SPECIFICATIONS:

INPUT: TB1 TERMINAL BLOCK, #6-32 x 0.375"
- PIN 1) AC LINE
- PIN 2) AC NEUTRAL
- PIN 3) CHASSIS GROUND

OUTPUT: BUSSBAR
- +V1 +5V @ 40A
- COMMON +5V RTN

OUTPUT: TB2 TERMINAL BLOCK, #6-32 x 0.375
- PIN 1) AUX #1 (RTN)
- PIN 2) AUX #1 (+)
- PIN 3) AUX #2 (RTN)
- PIN 4) AUX #2 (+)
- PIN 5) AUX #3 (RTN)
- PIN 6) AUX #3 (+)

OUTPUT VOLTAGE ADJUST.:
- R39 OUT 1 V. ADJ.(AUX4)
- R25 OUT 2 V. ADJ.(AUX1)
- R6 OUT 3 V. ADJ.(AUX2)
- R6 OUT 4 V. ADJ.(AUX3)

SIGNALS: J1 AMP P/N 640456-5
- PIN 1) POWER GOOD
- PIN 2) POWER FAIL
- PIN 3) INHIBIT HI
- PIN 4) +SENSE
- PIN 5) -SENSE
- R31 POWER FAIL ADJ.

FAN CONN: AMP P/N 640456-2
- +12V 0-0.5 AMP

WEIGHT: 4.0 LBS. MAX. (1.82 kg MAX.)

TOLERANCES: X.XX=0.030 [0.76mm]
X.XXX=0.010 [0.25mm]

