



# GSC25 GLOBAL PERFORMANCE SWITCHERS

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## SPECIFICATIONS:

### AC Input

90-264Vac, 47-63Hz single phase.

### Input Current

Maximum input current at minimum 120Vac, 60Hz with full rated output load is 0.6A.

### Hold-up Time

15 mSec minimum from loss of AC input at full load, nominal line (115Vac).

### Output Power

Normal continuous output power is 25W, 28W peak for 60 sec. maximum duration, 10% duty cycle. Factory set to begin power limiting at approximately 30W.

### Output Regulation

Regulation from initial setpoint measured by changing load from 5% load to 50% load or 50% load to full load in either direction. Initial setpoint tolerance is measured at 50% load. A minimum load of 5% of the output current is required to maintain proper regulation.

### Overload Protection

Fully protected against short circuit and output overload. Short circuit protection is cycling type power limit

### Output Noise

0.5% RMS, 1% pk-pk, 20MHz bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply with load terminated with 0.1uF capacitor.

### Transient Response

Main output: 750µSec typical response time for return to within 0.5% of final value for a 50% load step within the regulation limits of minimum and maximum load, dI/dt <0.2A/µSec. Maximum voltage deviation is 3.5%. Startup/shutdown overshoot less than 2%.

### Reverse Voltage Protection

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

### Overvoltage Protection

Built in with firing point set per ratings table. OVP firing reduces voltage to less than 50% of nominal voltage in 50mSec.

### Voltage Adjustment

Factory set with fixed resistors to maximize reliability.

### Efficiency

70% minimum at full rated load, nominal input voltage.

### Turn-on Time

Less than 1 second at 115Vac, 25°C (inversely proportionate to input voltage and thermistor temperature).

## FEATURES:

- Industry's smallest 25W switcher
- 2.50 x 4.00 x 0.86"
- Approved to UL1950, IEC950 and CSA22.2-234 Level 3, EN60950
- EMI FCC Class B, CISPR22B
- Overvoltage protection standard
- For medical version, see p. 80
- **CE** marked to LVD

### Input Protection

Internal AC fuse provided on all units.

### Inrush Current

Inrush is limited by internal thermistor. The inrush at 230Vac, averaged over the first AC half-cycle under cold start conditions will not exceed 32A.

### Temperature Coefficient

0.03%/°C typical on all outputs.

### 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.

### 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, 8 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.

### Earth Leakage Current

Leakage current measured in the Gnd wire connection when measured per UL1950 or UL2601 is as follows:

Normal Leakage	Fault Leakage	Test Voltage	Test Method
175µA	350µA	132Vac/60Hz	UL1950
240µA	400µA	254Vac/50Hz	IEC950

### Safety

Condor D.C. Power Supplies, Inc. declares under our sole responsibility that all GSC models are in conformity with the applicable requirements of EN60950 following the provisions of the Low Voltage Directive 73/23/EEC. All GSC models are approved to UL1950, CSA22.2 No. 234 Level 3, IEC950 and EN60950.



Model	Output No.	Output	Current	Load Regulation	Initial Setpoint Tolerance	OVP Setpoint	Ripple and Noise	Notes
GSC25A	1	+5.1V	2.5A	1%	1%	6.2 ± 0.6V	1%	A
	2	+12V	1.5A	4%	3%			A
	3	-12V	0.2A	1%	4%			B
GSC25B	1	+5.1V	2.5A	1%	1%	6.2 ± 0.6V	1%	A
	2	+15V	1.5A	4%	3%			A
	3	-15V	0.2A	1%	4%			B
GSC25D	1	+5.1V	2.5A	1%	1%	6.2 ± 0.6V	1%	A
	2	+24V	1.0A	4%	3%			A
	3	-12V	0.2A	1%	4%			B

A. To maintain proper regulation on output 2, +5.1V current must be at least 1/4 and not greater than 5 times V2 current. V1 must be adjusted within 1% of 5.1V to maintain full load regulation on V2.

B. Thermal foldback type current limit.

## GSC25 MECHANICAL SPECIFICATIONS:

### INPUT: J1

AMP P/N: 640445-3

W/CENTER PIN REMOVED: 0.156 CTR HEADER

PIN 1 AC LINE  
PIN 2 AC NEUTRAL

### GND

0.250 FASTON TAB

### OUTPUT: J2

AMP P/N: 640445-6

0.156 CTR HEADER

PIN #	OUTPUT
1	OUTPUT #2
2	OUTPUT #1
3	OUTPUT #1
4	COMMON
5	COMMON
6	OUTPUT #3

### MATING CONNECTOR MOLEX P/N'S

	HOUSING	CONTACT
INPUT: J1	09-50-8031	08-50-0189
OUTPUT: J2	09-50-3061	

NOTE: 5A MAXIMUM RECOMMENDED CURRENT PER CONNECTOR PIN.

### TOLERANCES:

X.XX = ± 0.030 (0.76MM)

X.XXX = ± 0.010 (0.25MM)

