## GLOBAL PERFORMANCE SWITCHERS

## Features:

## - Industry's smallest 25 W switcher

- $2.50 \times 4.25 \times 0.86$ "
- Conducted EMI exceeds FCC Class B and CISPR 22 Class B (Commercial models) and CISPR 11 Class B (Medical models)
- Overvoltage protection standard
- Commercial Approved to UL1950, CSA-C22.2 No.950, EN60950
- Medical Approved to UL2601-1, IEC60601-1 EN60601-1 and CSA-C22.2 No. 601-1
- RoHS Compliant (G suffix)
. C $\in$ marked to LVD
=CONDOR
DC Power Supplies



## SPECIFICATIONS

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

## Input Current

Maximum input current at minimum $120 \mathrm{Vac}, 60 \mathrm{~Hz}$ with full rated output load is 0.6 A .

## Hold-up Time

15 ms minimum from loss of ac input at full load, nominal line (120 Vac).

## Output Power

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

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 on the +5.1 V output $(125 \mathrm{~mA})$ 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

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

Transient Response
Main output: $750 \mu$ s 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, $\Delta \mathrm{l} / \Delta \mathrm{t}<0.2 \mathrm{~A} / \mu \mathrm{s}$. Maximum voltage deviation is $3.5 \%$. Startup/shutdown overshoot less than $2 \%$.

Overvoltage Protection
Built in with firing point set per ratings table. OVP firing reduces voltage to less than $50 \%$ of nominal voltage in 50 ms .
Voltage Adjustment
Factory set with fixed resistors to maximize reliability.

## Efficiency

70\% minimum at full rated load, nominal input voltage.
Input Protection
Internal ac fuse provided on all units.

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

Temperature Coefficient
$0.03 \% /{ }^{\circ} \mathrm{C}$ typical on all outputs.
Environmental
Designed for 0 to $50^{\circ} \mathrm{C}$ operation at full rated output power; derate output current and total output power by $2.5 \%$ per ${ }^{\circ} \mathrm{C}$ between $50-70^{\circ} \mathrm{C}$. See Environmental and Packaging Specifications on next page.

## EMI/EMC Compliance

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

| EMI SPECIFICATIONS | COMPLIANCE LEVEL |
| :--- | :--- |
| Conducted Emissions GSC25 | EN55022 Class B; FCC Class B |
| Conducted Emissions GSM25 | EN55011 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. |

Commercial 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, CSA-C22.2 No.950, EN60950.

GSM25 Medical Model Earth Leakage Current
Leakage current measured in the Gnd wire connection when measured per UL2601-1 or IEC60601-1 is as follows:

| Model | Normal <br> Leakage | Fault <br> Leakage | Test <br> Voltage | Test <br> Method |
| :---: | :---: | :---: | :---: | :---: |
| GSM25 | $50 \mu \mathrm{~A}$ | $78 \mu \mathrm{~A}$ | $132 \mathrm{Vca} / 60 \mathrm{~Hz}$ | UL2601-1 |
| GSM25 | $94 \mu \mathrm{~A}$ | $150 \mu \mathrm{~A}$ | $264 \mathrm{Vca} / 50 \mathrm{~Hz}$ | IEC60601-1 |

[^0]| Commercial Model | Medical Model | Output No. | Output | Current | Load Regulation | Initial Setpoint Tolerance | $\begin{aligned} & \text { OVP } \\ & \text { Setting } \end{aligned}$ | Ripple and Noise | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GSC25A | GSM25A | 1 | $+5.1 \mathrm{~V}$ | 2.5 A | 1\% | 1\% | $6.2 \pm 0.6 \mathrm{~V}$ | 1\% | A |
|  |  | 2 | +12 V | 1.5 A | 4\% | 3\% |  | 1\% | A |
|  |  | 3 | -12V | 0.2 A | 1\% | 4\% |  | 1\% | B |
| GSC25B | GSM25B | 1 | $+5 \mathrm{~V}$ | 2.5 A | 1\% | 1\% | $6.2 \pm 0.6 \mathrm{~V}$ | 1\% | A |
|  |  | 2 | +15V | 1.5 A | 4\% | 3\% |  | 1\% | A |
|  |  | 3 | -15V | 0.2 A | 1\% | 4\% |  | 1\% | B |
| GSC25D | GSM25D | 1 | +5.1 V | 2.5 A | 1\% | 1\% | $6.2 \pm 0.6 \mathrm{~V}$ | 1\% | A |
|  |  | 2 | +24V | 1.0 A | 4\% | 3\% |  | 1\% | A |
|  |  | 3 | -12 V | 0.2 A | 1\% | 4\% |  | 1\% | B |

A. To maintain proper regulation on output $2,+5.1 \mathrm{~V}$ current must be at least $1 / 4$ and not greater than 5 times V 2 current. V 1 must be adjusted within $1 \%$ of 5.1 V to maintain full load regulation on V2.
B. Thermal foldback type current limit
C. Add "G" suffix to model number for RoHS compliant model.

## GSC25/GSM25 MECHANICAL SPECIFICATIONS

INPUT: J1

| AMP P/N: 640445-3 |  |
| :---: | :---: |
| W/CENTER PIN REMOVED: 0.156 CTR HEADER |  |
| PIN | AC LINE |
| PIN | AC NEUTRAL |
| GND |  |
| 0.250 FASTON AB |  |
| 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 AMP P/N'S

|  | HOUSING | CONTACT |
| :--- | :--- | :--- |
| INPUT J1 | $640250-3$ | $770476-1$ |

OUTPUT J2 640250-6 770476-1
NOTE: 5A MAXIMUM RECOMMENDED CURRENT PER CONNECTOR PIN.


TOLERANCES:
$\mathrm{X} . \mathrm{XX}= \pm 0.030$ ( 0.76 MM )
$X . X X X= \pm 0.010$ ( 0.25 MM )

| ENVIRONMENTAL SPECIFICATIONS | OPERATING | NON-OPERATING |
| :--- | :--- | :--- |
| Temperature (A) | See individual specs. | -40 to $+85^{\circ} \mathrm{C}$ |
| Humidity (A) | 0 to $95 \% \mathrm{RH}$ | 0 to $95 \% \mathrm{RH}$ |
| Shock (B) | $20 \mathrm{~g}_{\mathrm{pk}}$ | $40 \mathrm{~g}_{\mathrm{pk}}$ |
| Altitude | -500 to $10,000 \mathrm{ft}$ | -500 to $40,000 \mathrm{ft}$ |
| Vibration (C) | $1.5 \mathrm{~g}_{\mathrm{rms}} \mathrm{Cl}^{\prime} 0.003 \mathrm{~g}^{2} / \mathrm{Hz}$ | $5 \mathrm{~g}_{\mathrm{rms}} 0.026 \mathrm{~g}^{2} / \mathrm{Hz}$ |

A. Units should be allowed to warm up/operate under non-condensing conditions before application of power.
B. Shock testing-half-sinusoidal, $10 \pm 3 \mathrm{~ms}$ duration, $\pm$ direction, 3 orthogonal axes, total 6 shocks.
C. Random vibration-10 to $2000 \mathrm{~Hz}, 6 \mathrm{~dB} /$ octave roll-off from 350 to $2000 \mathrm{~Hz}, 3$ orthogonal axes. Tested for 10 min ./axis operating and 1 hr ./axis non-operating.

SL Power Electronics Corp. 6050 King Drive, Bldg. A, Ventura, CA 93003, USA. Phone:(805) 4864565 Fax:(805) 4878911 Email: info@slpower.com Rev. 4/22/08. Data Sheet © 2008 SL Power Electronics Corp. The information and specifications contained in this data sheet are believed to be correct at time of publication. However, SL Power Electronics accepts no responsibility for consequences arising from reproduction errors or inaccuracies. Specifications are subject to change without notice.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Switching Power Supplies category:
Click to view products by Condor manufacturer:
Other Similar products are found below :
70841011 73-551-0005 AAD600S-4-OP R22095 HWS50A-5/RA KD0204 9021 S-15F-12 LDIN100150 LPM000-BBAR-01 LPX17S-C EVS57-10R6/R FDC40-24S12 FP80 FRV7000G 2292940370121900 VI-PU22-EXX 40370121910 LDIN5075 432703037161 WRB01XU LPX140-C 08-30466-1040G 09-160CFG 70841004 70841025 VPX3000-CBL-DC LPM000-BBAR-05 LPM000-BBAR-08 LPM124-OUTA1-48 LPM000-BBAR-07 LPM109-OUTA1-10 LPM616-CHAS 08-30466-1055G 08-30466-2175G DMB-EWG TVQF-1219-18S 6504-226-2101 XPFM201A+ MAP80-4000G LFP300F-24-TY SMP21-L20-DC24V-5A VI-MUL-ES 08-30466-0065G CME240P-24 VI-RU031-EWWX 08-30466-0028G S82Y-TS01 LFP300F-24-SNTY


[^0]:    Medical Safety
    Condor D.C. Power Supplies, Inc. declares under our sole responsibility that all GSM models are in conformity with the applicable requirements of UL2601-1 Patient Care Equipment, CSA-C22.2 No.601.1, IEC60601-1, EN 60601-1.

