GLC75 Commercial/GLM75 Medical
75 Watt Multiple Output Global Performance Switchers

FEATURES:

- Cost-effective multiple output power source
- Universal input 90-264 Vac
- 7.00"x 4.25"x 1.30" (Meets 1U height)
- 2-year warranty
- Conducted EMI exceeds FCC Class B and CISPR 22 Class B (Commercial models) and CISPR 11 Class B (Medical models)
- Complies with EN61000-3-2 Class A
- Also available in single output versions
- Commercial UL1950, CSA22.2 No. 234 and IEC950 and EN60950 approvals
- Medical Approved to UL2601-1, IEC601-1 and CSA-C22.2 No. 601.1
- CE marked to LVD

SPECIFICATIONS:

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

Input Current
Maximum input current at 120 Vac, 60 Hz with full rated output load not to exceed 2.3 A.

Output Power
Normal continuous output power is 75 W for unrestricted natural convection cooling. The standard power is 110 W with 26 cfm airflow. During peak load conditions output regulation may exceed total regulation and noise limits.

Output Regulation
Measured by ±40% load change from 60% rated load with all other outputs at 60% rated load and input voltage change from minimum to maximum ratings. Output #1 requires 20% minimum load for proper regulation of other outputs. Initial set tolerance is measured with all outputs at 60% of full rated load. Output #2 requires 0.5 a minimum load for proper regulation.

Overload Protection
Factory set to begin power limiting at approximately 120 W. Fully protected against short circuit and output overload. Short circuit protection is cycling type power limit.

Output Noise
0.5% rms, 1% pk-pk, 20 MHz bandwidth, differential mode. Measured with noise probe directly across output terminals of the power supply.

Transient Response
Main Output: 500µSec 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%.

Overvoltage Protection
Built in on V1 with firing point set per table. OVP firing reduces output #1 and #2 to less than 50% of nominal voltage in 50 ms.

Voltage Adjust
Factory set on standard unit; however, optional potentiometer adjusts voltage from 4.7 V to OVP point (6.2 V nominal) on the +5 V output. Note: Output #1 must not be more than 1% below nominal to achieve full output voltage range on Output #2. Output regulation limits in some models may be exceeded when the main output is adjusted beyond ±1% of nominal voltage. High voltage settings may degrade the reliability of the unit due to excessive power dissipation in some outputs.

Efficiency
68% -78% depending on model and load distribution.

Input Protection
Internal ac fuse provided on all units. Designed to blow only if a catastrophic failure occurs in the unit.

Inrush Current
Inrush limited by internal thermistors. Inrush at 240 Vac, averaged over the first ac half-cycle under cold start conditions will not exceed 37 A.

Hold Up Time
20 ms minimum from loss of ac input power at full load, nominal line (120 Vac).

Temperature Coefficient
0.03%/°C typical on all outputs.

Power Fail
A standard TTL or CMOS compatible output goes low (< 0.5 V) 5ms before output voltage drops more than 4% below nominal voltage upon loss of ac power. Signal is factory set to trip on 84 to 94 Vac brown-out depending upon incoming line impedance and distortion. Other settings are available through adjustment of built-in potentiometer (consult factory for assistance). Output will stay low for 20 ms minimum.

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

EMI SPECIFICATIONS	COMPLIANCE LEVEL
Conducted Emissions-GLC75	EN55022 Class B; FCC Class B
Conducted Emissions-GLM75	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.
Line Frequency Harmonics	EN61000-3-2 Class A

Commercial Safety
All GLC models are approved to UL1950, CSA22.2 No. 234 Level 3, IEC950 and EN60950. Consult factory for approval status.

Medical Leakage Current
70 µA 264 V @ 50 Hz (normal conditions).

Medical Safety
All GLM models are approved to UL2601-1, CSA-C22.2 No. 601.1, IEC601-1 and EN60601. Consult factory for approval status.

GLC75 Commercial/GLM75 Medical 75 Watt Multiple Output

Commercial Model	Medical Model	Output No.	Output	Output Minimum	Output Maximum (A)	Output Maximum (B)	Output Peak	V1 OVP Set	Noise P-P	Regulation
GLC75A	GLM75A	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6 V	50 mV	2%
		2	+12 V	0.5 A	2.5 A	3 A	4 A		120 mV	+10%, -5% (D)
		3	-12 V	0 A	1 A	1 A	1.2 A		120 mV	3%
		4	+12 V	0 A	2.5 A	3 A	4 A		120 mV	2%
GLC75B	GLM75B	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6 V	50 mV	2%
		2	+12 V	0.5 A	2.5 A	3 A	4 A		120 mV	+10%, -5% (D)
		3	-5 V	0 A	1 A	1 A	1.2 A		50 mV	3%
		4	+12 V	0 A	2.5 A	3 A	4 A		120 mV	2%
GLC75C	GLM75C	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6 V	50 mV	2%
		2	+12 V	0.5 A	2.5 A	3 A	4 A		120 mV	+10%, -5% (D)
		3	-15 V	0 A	1 A	1 A	1.2 A		150 mV	3%
		4	+15 V	0 A	2.5 A	3 A	4 A		150 mV	2%
GLC75D	GLM75D	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6 V	50 mV	2%
		2	+24 V	0.5 A	2.5 A	2.5 A	3.5 A		240 mV	+10%, -5% (D)
		3	-12 V	0 A	1 A	1 A	1.2 A		120 mV	3%
		4	+12 V	0 A	2.5 A	3 A	4 A		120 mV	2%
GLC75E	GLM75E	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6 V	50 mV	2%
		2	+24 V	0.5 A	2.5 A	2.5 A	3.5 A		240 mV	+10%, -5% (D)
		3	-15 V	0 A	1 A	1 A	1.2 A		150 mV	3%
		4	+15 V	0 A	2.5 A	3 A	4 A		150 mV	2%
GLC75F	GLM75F	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6 V	50 mV	2%
		2	+15 V	0.5 A	2.5 A	3 A	4 A		150 mV	+10%, -5% (D)
		3	-5 V	0	1 A	1 A	1.2 A		50 mV	3%
		4	-15 V	0	2.5 A	3 A	4 A		150 mV	2%
GLC75H	GLM75H	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6 V	50 mV	2%
		2	+15 V	0.5 A	2.5 A	3 A	4 A		150 mV	+10%, -5% (D)
		3	-15 V	0	1 A	1 A	1.2 A		150 mV	3%
		4	+15 V	0	2.5 A	3 A	4 A		150 mV	2%
GLC75J	GLM75J	1	+5.1 V	1 A	8 A	10A	12 A	6.2 ± 0.6V	50 mV	2%
		2	+12 V	0.5 A	2.5 A	3 A	4 A		120 mV	+10%, -5% (D)
		3	-12 V	0	1 A	1 A	1.2 A		120 mV	3%
		4(C)	5 V	0	2.0 A	3 A	4 A		50 mV	2%
GLC75P	GLM75P	1	+5.1 V	1 A	8 A	10 A	12 A	6.2 ± 0.6V	50 mV	2%
		2	+24 V	0.5 A	4 A	4 A	4.5 A		240 mV	+10%, -5% (D)
		3	-12 V	0 A	1 A	1 A	1.2 A		120 mV	3%
		4	+12 V	0 A	2.5 A	3 A	4 A		120 mV	2%

A. Rating with unrestricted convection cooling. Total power not to exceed 75 W.
B. Rating with 26 cfm forced-air cooling. Total power not to exceed 110 W.
C. Floating fourth output can be referenced as either positive or negative. Connect pin 12 to Return to provide a positive voltage at Pin 13. Connect pin 13 to Return to provide a negative voltage at Pin 12.
D. To maintain these regulations conditions, the +5V current must be at least 1/5 of V2 and not greater than 5 times the V2 current. Requires +5V to be adjusted to within 1% with at least a 1 A load to maintain regulation on this output.

GLC75/GLM75 MECHANICAL SPECIFICATIONS

INPUT: J1
AMP P/N: 643495-2
0.312 CTRS CONNECTOR, 3 CIRCUIT
PIN 1 AC GROUND
PIN 3 AC NEUTRAL
PIN 5 AC LINE

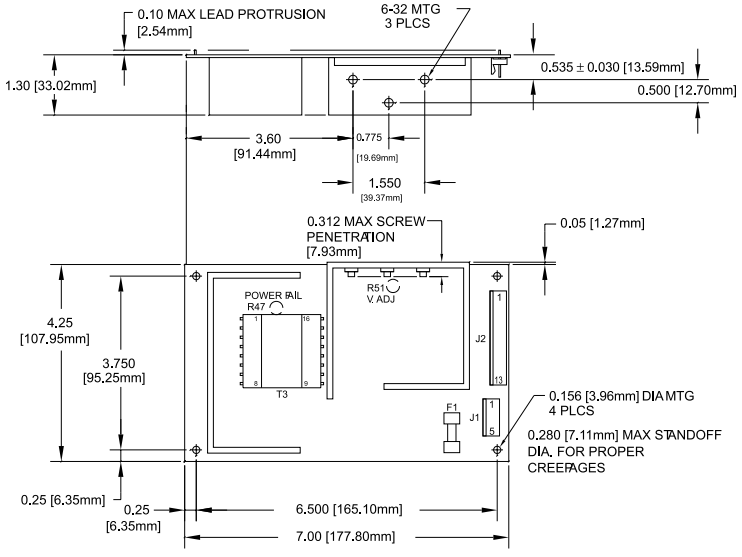
OUTPUT: J2
AMP P/N: 1-640445-3
0.156 CTR HEADER

PIN #	MULTI-OUTPUT MODEL
1	OUTPUT#1
2	OUTPUT #1
3	OUTPUT #1
4	COMMON
5	COMMON
6	COMMON
7	COMMON
8	OUTPUT #2
9	OUTPUT #2
10	POWERFAIL
11	OUTPUT #3
12	COMMON
13	OUTPUT#4

MATING CONNECTOR AMP P/N'S

	HOUSING
INPUT:	640250-5
OUTPUT:	1-640250-3
	CONTACT
INPUT:	770476-1
OUTPUT:	770476-1

NOTE: 5A MAXIMUM RECOMMENDED CURRENT PER CONNECTOR PIN.
WEIGHT 1.2 LBS. MAX. [0.544 kg]
TOLERANCES: X.XX=0.030 [0.76mm]
X.XXX=0.010 [0.25mm]



Environmental Specification	Operating	Non-operating
Temperature (A)	0 to 50°C	-40 to +85°C
Humidity (A)	0 to 95% RH	0 to 95% RH
Shock (B)	20 g_{pk}	40 g_{pk}
Altitude	-500 to 10,000 ft	-500 to 40,000 ft
Vibration (C)	1.5 g_{rms}, 0.003 g^2/Hz	5 g_{rms}, 0.026 g^2/Hz

A. Units should be allowed to warm up/operate under non-condensing conditions before application of power. Derate output current and total output power by 2.5% per °C above 50°C.
B. Random vibration—10 to 2000Hz, 6dB/octave roll-off from 350 to 2000Hz, 3 orthogonal axes. Tested for 10 min./axis operating and 1 hr./axis non-operating.
C. Shock testing—half-sinusoidal, 10 ± 3 ms duration, ± direction, 3 orthogonal axes, total 6 shocks.

CONDOR Condor D.C. Power Supplies, Inc., 2311 Statham Parkway, Oxnard, CA 93033
800-235-5929 • 805-486-4565 • FAX 805-487-8911 • www.condorpower.com