GLC40 Commercial

40 Watt Global Performance Switchers



FEATURES:

- · Cost-effective power source
- Universal input 90-264 Vac
- · 2-year warranty
- · Single and multiple outputs
- · Overload and overvoltage protection
- · Built-in EMI filter
- UL1950, CSA-C22.2 No. 234 Level 3, IEC950 and EN60950
- · Operation at no-load
- (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 1.3 A.

Output Power

Normal continuous output power is 40 W for unrestricted natural convection cooling, 45 W peak for 60 seconds. During peak load conditions output regulation may exceed total regulation and noise limits.

Output Regulation

Regulation for multiple-output models measured by ±40% load change from 60% rated load with all other outputs at 60% full rated load and a line voltage change from low line to high line. Initial set tolerance is measured with all outputs at 60% of full rated load. Output voltage V1 requires 20% load for proper regulation of multiple-output models. Regulation for single-output models measured by changing from 5% to 50% load or 50% load to full load in either direction.

Power Limit

Factory set to begin power limiting at approximately 55 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: $500~\mu s$ typical response time for return to within 0.5% of final value for a 50% load step change, $\Delta i/\Delta t < 0.2~A/\mu s$. Maximum voltage deviation is 3.5%. Startup/shutdown overshoot less than 3%.

Overvoltage Protection

Built in on $\overline{V}1$ 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.

Efficiency

70% typical depending on model.

Turn-on Time

Less than 1 second at 120 Vac, 25°C (inversely proportional to input voltage and thermistor temperature).

Input Protection

Internal ac fuse provided on all units. Designed to blow only if a catastrophic failure occurs in the unit. Fuse does not blow on overload or short circuit.

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.

Temperature Coefficient

0.03%/°C typical on all outputs.

EMI/EMC Compliance

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

EMI SPECIFICATIONS COMPLIANCE LEVEL

Conducted Emissions EN55022 Class A; FCC Class A 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.

Safety

All GLC models are approved to UL1950, CSA-C22.2 No. 234 Level 3, IEC950 and EN60950.



GLC40 Commercial 40 Watt Multiple Output

Commercial Model	Output No.	Output	Output Minimum	Output Maximum	V1 OVP Set	Noise P-P	Total Regulation
GLC40A	1	+5.1 V	1 A	3 A	+6.2 ± 0.6 V	50 mV	2%
	2	+12 V	0 A	2 A		120 mV	6%
	3	-12 V	0 A	0.4 A		120 mV	5%
GLC40B	1	+5.1 V	1 A	3 A	+6.2 ± 0.6 V	50 mV	2%
	2	+15 V	0 A	1.5 A		150 mV	6%
	3	-15 V	0 A	0.4 A		150 mV	5%
GLC40D	1	+5 V	1 A	3 A	+6.2 ± 0.6 V	50 mV	2%
	2	+24 V	0 A	1 A		240 mV	6%
	3	-12 V	0 A	0.4 A		120 mV	5%
GLC40-3.3	1	3.3 V	0 A	8 A	+4.2 ± 0.6 V	33 mV	2%
GLC40-5	1	5 V	0 A	8 A	+6.2 ± 0.6 V	50 mV	2%
GLC40-12	1	12 V	0 A	3.3 A	+14 ± 1.1 V	120 mV	2%
GLC40-15	1	15 V	0 A	2.7 A	+18.5 ± 1.5 V	150 mV	2%
GLC40-24	1	24 V	0 A	1.7 A	+28.5 ± 2.5 V	240 mV	2%
GLC40-28	1	28 V	0 A	1.4 A	+34 ± 2.8 V	280 mV	2%
GLC40-48	1	48 V	0 A	0.83 A	+55 ± 4.0 V	480 mV	2%

GLC40 MECHANICAL SPECIFICATIONS

J1 CONNECTOR: AMP P/N 640445-3

W/CENTER PIN REMOVED,

0.156 [3.96mm] CTR HEADER

J2 CONNECTOR: AMP P/N 640445-6,

0.156 [3.96mm] CTR HEADER

INPUT: J1 PIN 1) AC LINE

PIN 2) AC NEUTRAL GND

OUTPUT:

J2	MULTI OUTPUT MODELS	SINGLE OUTPUT MODELS
PIN 1	OUTPUT #2	OUTPUT #1
PIN 2	OUTPUT #1	OUTPUT #1
PIN 3	OUTPUT #1	OUTPUT #1
PIN 4	COMMON	COMMON
PIN 5	COMMON	COMMON
PIN 6	OUTPUT #3	COMMON

MATING CONNECTORS AMP P/N

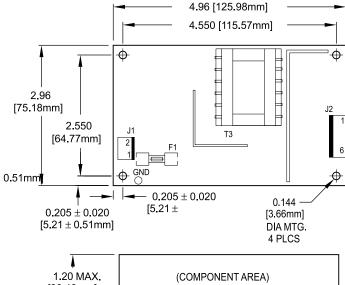
CONTACT HOUSING **INPUT** 640250-3 770476-1 OUTPUT 640250-6 770476-1

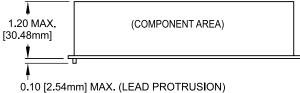
NOTE: 5A MAXIMUM RECOMMENDED CURRENT PER CONNECTOR PIN

OPTIONAL ENCLOSURE (P/N 08-30466-1040) WEIGHT: 1.0 LBS MAX. [0.45 kg MAX.]

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 g²/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.