

# **GLC40 Commercial**

# 40 WATT GLOBAL PERFORMANCE LOW COST SWITCHERS

# **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 (single output models)
- RoHS Compliant (with G suffix)
- 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 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  $\pm 40\%$  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 1 A 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, mode. Measured with noise probe 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 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 Setting

Factory set on standard units with fixed resistors for added reliability. 3.3 V unit has voltage adjustment pot.

#### Efficiency

70% typical depending on model.

#### Turn-on Time

Less than 1 second at 120 Vac, 25  $^{\circ}\text{C}$  (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**

 $0.03\%/^{\circ}C$  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 GLC40 models are approved to UL1950, CSA-C22.2 No. 234 Level 3, IEC950 and EN60950. Class I input.

All specifications are typical at nominal input, full load at 25°C unless otherwise stated

Commercial Model	Output No.	Output	Output Minimum	Output Maximum	V 1 OVP Set	Noise P-P	Total Regulation
GLC40AG	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%
GLC40BG	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%
GLC40DG	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%
GLC40-3.3G	1	3.3 V	0 A	8 A	4.2 ± 0.6 V	33 mV	2%
GLC40-5G	1	5 V	0 A	8 A	6.2 ± 0.6 V	50 mV	2%
GLC40-9G	1	9 V	0 A	4.4 A	11 ±0.9 V	90 mV	2%
GLC40-12G	1	12 V	0 A	3.3 A	14 ± 1.1 V	120 mV	2%
GLC40-13.8G	1	13.8 V	0 A	2.9 A	17.7 +/- 1.5 V	138 mV	2%
GLC40-15G	1	15 V	0 A	2.7 A	18.5 ± 1.5 V	150 mV	2%
GLC40-24G	1	24 V	0 A	1.7 A	28.5 ± 2.5 V	240 mV	2%
GLC40-28G	1	28 V	0 A	1.4 A	34 ± 2.8 V	280 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 (1)

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		

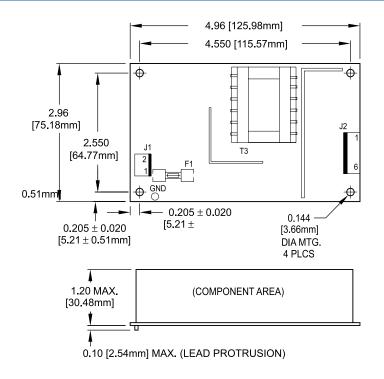
MATING CONNECTORS AMP P/N

HOUSING CONTACT INPUT 640250-3 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]

OUTPUT 640250-6 770476-1 X.XXX=0.010 [0.25mm]



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