

# **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)
- C€ 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°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 GLC40 models are approved to UL1950, CSA-C22.2 No. 234 Level 3, IEC950 and EN60950. Class I input.

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:

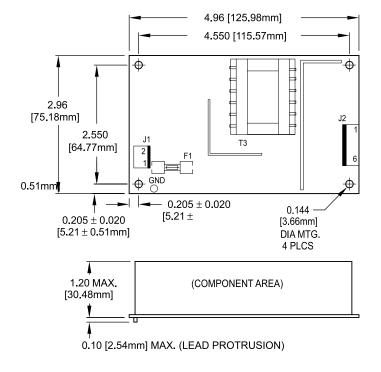
J2	MULTI OUTPUT MODELS	SINGLE OUTPUT MODELS	
PIN 1	OUTPUT #2	OUTPUT #1	
PIN 2	OUTPUT #1	OUTPUT #1	
PIN 3	OUTPUT #1	OUTPUT #1	
PIN 4	COMMON	COMMON	
PIN 5	COMMON	COMMON	
PIN 6	OUTPUT #3	COMMON	

MATING CONNECTORS AMP P/N

HOUSING CONTACT
INPUT 640250-3 770476-1
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]



SL Power Electronics, Inc. 6050 King Drive, Bldg. A, Ventura, CA, 93003, USA. Phone: (805) 486 4565 Fax: (805) 487 8911 Email: info@slpower.com . Rev. 10/09. Data Sheet © 2009 SL Power Electronics, Inc. The information and specifications contained in this data sheet are believed to be correct at time of publication. However, SL Power accepts no responsibility for consequences arising from reproduction errors or inaccuracies. Specifications are subject to change without notice.