

GLC40 GLOBAL LOW-COST SWITCHERS



SPECIFICATIONS:

AC Input

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

Input Current

Maximum input current at 120Vac, 60Hz with full rated output load not to exceed 1.3A.

Output Power

Normal continuous output power is 40W for unrestricted natural convection cooling, 45W 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 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 55W. Fully protected against short circuit and output overload. Short circuit protection is cycling type power limit.

Output Noise

0.5% RMS, 1% Pk-Pk, 20MHz bandwidth, differential mode. Measured with noise probe directly across output terminals of the power supply.

Transient Response

Main Output: 500 μ Sec typical response time for return to within 0.5% of final value for a 50% load step change, $Di/Dt < 0.2A/\mu$ Sec. 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 50mSec.

Voltage Adjust

Factory set on standard unit; however, optional potentiometer adjusts voltage from 4.7V to OVP point (6.2V nominal) on the +5V output. See Output Rating Chart for additional notes and conditions.

Reverse Voltage Protection

All outputs protected against inadvertent application of reverse voltage up to 1 times rated current of the reversed output.

Efficiency

70% depending on model.

Turn-on Time

Less than 1 second at 120Vac, 25°C (inversely proportional to input

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
- UL, CSA and IEC approvals
- Operation at no-load
- marked to LVD

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 37A.

Temperature Coefficient

0.03%/°C typical on all outputs.

Environmental

Designed for 0 to 50°C operation at full rated output power; derate output current and total output power by 2.5% per °C above 50°C. See Environmental and Packaging Specifications (p. 11) for additional information.

EMI/EMC Compliance

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

EMI SPECIFICATIONS	COMPLIANCE LEVEL
Conducted Emissions	EN55022 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.

Safety

All GLC models are approved to UL1950, CSA22.2 No. 234 Level 3, IEC950 and EN60950.

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

	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

INPUT	HOUSING	CONTACT
OUTPUT	640250-3	770522-1

OUTPUT 640250-6 770522-1

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]

