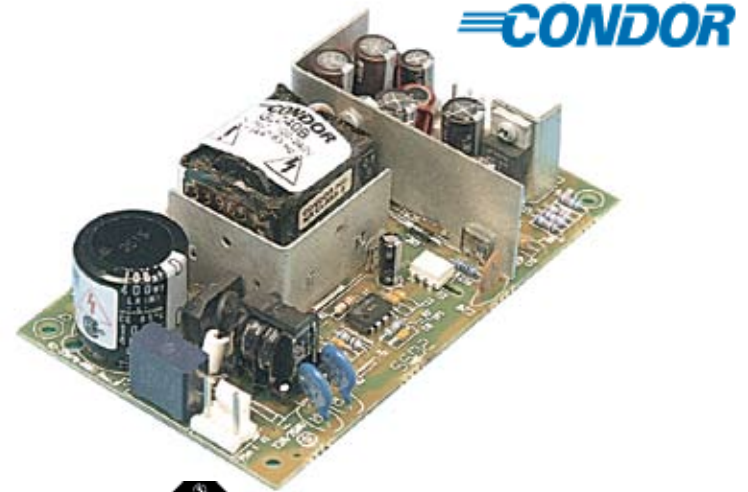


### GLOBAL PERFORMANCE SWITCHERS

#### 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

| <b>Ac Input</b><br>90-264 Vac, 47-63 Hz single phase.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Voltage Setting</b><br>Factory set on standard units with fixed resistors for added reliability. 3.3 V unit has voltage adjustment pot.                                                                                                                                                                                                                                                                                                                                                                                                                                          |                    |                  |                                                                                                                      |                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Input Current</b><br>Maximum input current at 120 Vac, 60 Hz with full rated output load not to exceed 1.3 A.                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Efficiency</b><br>70% typical depending on model.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |                  |                                                                                                                      |                                                                                                                                                                |
| <b>Output Power</b><br>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.                                                                                                                                                                                                                                                                                           | <b>Turn-on Time</b><br>Less than 1 second at 120 Vac, 25°C (inversely proportional to input voltage and thermistor temperature).                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |                  |                                                                                                                      |                                                                                                                                                                |
| <b>Output Regulation</b><br>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. | <b>Input Protection</b><br>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.                                                                                                                                                                                                                                                                                                                                                                                             |                    |                  |                                                                                                                      |                                                                                                                                                                |
| <b>Power Limit</b><br>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.                                                                                                                                                                                                                                                                                                                          | <b>Inrush Current</b><br>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.                                                                                                                                                                                                                                                                                                                                                                                                         |                    |                  |                                                                                                                      |                                                                                                                                                                |
| <b>Output Noise</b><br>0.5% rms, 1% pk-pk, 20 MHz bandwidth, mode. Measured with noise probe terminals of the power supply.                                                                                                                                                                                                                                                                                                                                                                                                | <b>Temperature Coefficient</b><br>0.03%/°C typical on all outputs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                    |                  |                                                                                                                      |                                                                                                                                                                |
| <b>Transient Response</b><br>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%.                                                                                                                                                                                                                                                      | <b>EMI/EMC Compliance</b><br>All models include built-in EMI filtering to meet the following emissions requirements:                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |                  |                                                                                                                      |                                                                                                                                                                |
| <b>Overvoltage Protection</b><br>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.                                                                                                                                                                                                                                                                                                                                                         | <table border="1"> <thead> <tr> <th>EMI SPECIFICATIONS</th><th>COMPLIANCE LEVEL</th></tr> </thead> <tbody> <tr> <td>           Conducted Emissions<br/>           Static Discharge<br/>           RF Field Susceptibility<br/>           Fast Transients/Bursts<br/>           Surge Susceptibility         </td><td>           EN55022 Class A; FCC Class A<br/>           EN61000-4-2, 6 kV contact, 8 kV air<br/>           EN61000-4-3, 3 V/meter<br/>           EN61000-4-4, 2 kV, 5 kHz<br/>           EN61000-4-5, 1 kV diff, 2 kV com.         </td></tr> </tbody> </table> | EMI SPECIFICATIONS | COMPLIANCE LEVEL | Conducted Emissions<br>Static Discharge<br>RF Field Susceptibility<br>Fast Transients/Bursts<br>Surge Susceptibility | EN55022 Class A; FCC Class A<br>EN61000-4-2, 6 kV contact, 8 kV air<br>EN61000-4-3, 3 V/meter<br>EN61000-4-4, 2 kV, 5 kHz<br>EN61000-4-5, 1 kV diff, 2 kV com. |
| EMI SPECIFICATIONS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | COMPLIANCE LEVEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |                  |                                                                                                                      |                                                                                                                                                                |
| Conducted Emissions<br>Static Discharge<br>RF Field Susceptibility<br>Fast Transients/Bursts<br>Surge Susceptibility                                                                                                                                                                                                                                                                                                                                                                                                       | EN55022 Class A; FCC Class A<br>EN61000-4-2, 6 kV contact, 8 kV air<br>EN61000-4-3, 3 V/meter<br>EN61000-4-4, 2 kV, 5 kHz<br>EN61000-4-5, 1 kV diff, 2 kV com.                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |                  |                                                                                                                      |                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Safety</b><br>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

OUTPUT:

| J2    | MULTI<br>OUTPUT<br>MODELS | SINGLE<br>OUTPUT<br>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]

