
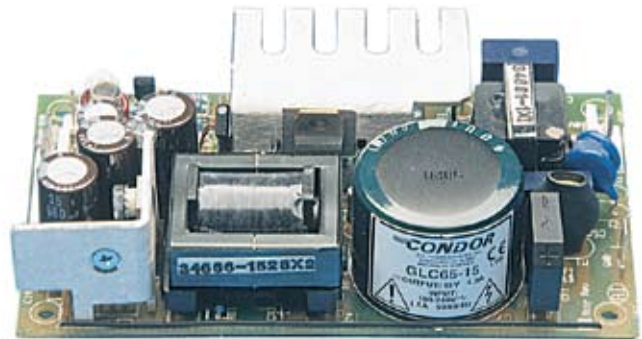


GLOBAL PERFORMANCE SWITCHERS

FEATURES:

- 4.1 W/in³
- Compact (3.0" x 5.0" x 1.06")
- Ultra-high efficiency (up to 94%) using patented technology
- Meets harmonic requirements of IEC1000-3-2, Class A
- Conducted EMI exceeds FCC Class B and CISPR 22 Class B (Commercial models) and CISPR 11 Class B (Medical models)
- 2-year warranty
- Exempt from line harmonics standard EN61000-3-2
- Commercial Approved to UL1950, IEC950, EN60950, CSA22.2 No. 950
- Medical Approved to UL2601, EN60601, CSA22.2 No. 601.1
- Multiple output versions also available
- RoHS models available (G suffix)
-  marked to LVD

SPECIFICATIONS

| Ac Input 90-264 Vac, 47-63 Hz single phase. | Inrush Current Inrush is limited by internal thermistor. The inrush at 240 Vac, averaged over the first ac half-cycle under cold start conditions will not exceed 37A. | | | | | | | | | | | | | | |
|--|--|--------------------|------------------|---------------------------|------------------------------|---------------------------|------------------------------|------------------|-------------------------------------|-------------------------|------------------------|------------------------|--------------------------|----------------------|------------------------------------|
| Input Current Maximum input current at minimum output voltage and output overload will be less than 1.7 A. Meets input current harmonic requirements of IEC1000-3-2. | EMI/EMC Compliance All models include built-in EMI filtering to meet the following emissions requirements: | | | | | | | | | | | | | | |
| Output Power Normal continuous output power is 65 W, 75 W peak for 60 s. The 3.3 Vdc unit is 36.3 W and the 5 Vdc unit is 55 W continuous. | <table border="1"> <thead> <tr> <th>EMI SPECIFICATIONS</th> <th>COMPLIANCE LEVEL</th> </tr> </thead> <tbody> <tr> <td>Conducted Emissions GLC65</td> <td>EN55022 Class B; FCC Class B</td> </tr> <tr> <td>Conducted Emissions GLM65</td> <td>EN55011 Class B; FCC Class B</td> </tr> <tr> <td>Static Discharge</td> <td>EN61000-4-2, 6 kV contact, 8 kV air</td> </tr> <tr> <td>RF Field Susceptibility</td> <td>EN61000-4-3, 3 V/meter</td> </tr> <tr> <td>Fast Transients/Bursts</td> <td>EN61000-4-4, 2 kV, 5 kHz</td> </tr> <tr> <td>Surge Susceptibility</td> <td>EN61000-4-5, 1 kV diff., 2 kV com.</td> </tr> </tbody> </table> | EMI SPECIFICATIONS | COMPLIANCE LEVEL | Conducted Emissions GLC65 | EN55022 Class B; FCC Class B | Conducted Emissions GLM65 | EN55011 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. |
| EMI SPECIFICATIONS | COMPLIANCE LEVEL | | | | | | | | | | | | | | |
| Conducted Emissions GLC65 | EN55022 Class B; FCC Class B | | | | | | | | | | | | | | |
| Conducted Emissions GLM65 | EN55011 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. | | | | | | | | | | | | | | |
| Hold-Up Time 20 ms from loss of ac input at 65 W load, from 120 Vac input. | Commercial Leakage Current Under normal conditions, leakage current is 425 μ A with 132 Vac @ 60 Hz input. | | | | | | | | | | | | | | |
| Overload Protection Fully protected against short circuit and output overload. Short circuit protection is cycling type power limit. | Commercial Safety All GLC models are approved to UL1950, CSA22.2 No. 950, IEC950 and EN60950. | | | | | | | | | | | | | | |
| Output Noise 0.5% rms, 1% pk-pk, 20 MHz bandwidth, differential mode. Measured with scope probe directly across output terminals of the power supply with load terminated with 0.1 μ F capacitor. | Medical Leakage Current The maximum leakage current under single-fault conditions (254 Vac @ 50 Hz) is 120 μ A. Under normal conditions, leakage current is 31 μ A with 132 Vac @ 60 Hz input. | | | | | | | | | | | | | | |
| Transient Response Main output: 500 μ s typical response time for return to within 0.5% of final value for a 50% load step within the regulation limits of minimum and maximum load, $\Delta i/\Delta t < 0.2$ A/ μ s. Maximum voltage deviation is 3.5%. Startup/shut-down overshoot less than 3%. | Medical Safety All GLM models are approved to UL2601, CSA22.2 No. 601, IEC601-1 and EN60601. Consult factory for approval status. | | | | | | | | | | | | | | |
| Voltage Adjustment Adjustable potentiometer capable of $\pm 5\%$ change from nominal setting. | Temperature Coefficient: 0.03% $^{\circ}$ C typical on all outputs. | | | | | | | | | | | | | | |
| Efficiency 82 to 94% minimum at full rated load, nominal input voltage, depending on model. | Remote Sense Provided as standard feature on all models. Includes open sense protection. | | | | | | | | | | | | | | |
| Minimum Load No minimum load required. | | | | | | | | | | | | | | | |

| Commercial Model | Medical Model | Output | Current | Total Regulation | V1 Adjustment | V1 OVP Setpoint | Ripple and Noise |
|------------------|---------------|--------|----------|------------------|---------------|-----------------|------------------|
| GLC65-5 | GLM65-5 | 5.1 V | 9/11 A * | 2% | ±5% | 6.2 ± 0.6 V | 1% |
| GLC65-12 | GLM65-12 | 12 V | 5.5 A | 2% | ±5% | 14 ± 1.1 V | 1% |
| GLC65-15 | GLM65-15 | 15 V | 4.3 A | 2% | ±5% | 18.5 ± 1.5 V | 1% |
| GLC65-18 | GLM65-18 | 18 V | 3.6 A | 2% | ±5% | 21.7 ± 2.0 V | 1% |
| GLC65-20 | GLM65-20 | 20V | 3.25 A | 2% | ±5% | 24.5 ± 2.2 V | 1% |
| GLC65-24 | GLM65-24 | 24 V | 2.7 A | 2% | ±5% | 28 ± 2.5 V | 1% |
| GLC65-28 | GLM65-28 | 28 V | 2.3 A | 2% | ±5% | 34 ± 2.8 V | 1% |
| GLC65-48 | GLM65-48 | 48 V | 1.35 A | 2% | ±5% | 55 ± 4.0 V | 1% |

- Note:
- * 9 A convection, 11 A with fan cooling

GLC65/GLM65 - SINGLE OUTPUT - MECHANICAL SPECIFICATIONS

INPUT J1:
AMP P/N 640445-3, .156 [3.96mm] CTR,
0.045 [1.14mm] SQUARE PIN HEADER

PIN 3) AC NEUTRAL
PIN 2) NO PIN
PIN 1) AC LINE

OUTPUT J2:
AMP P/N 640445-6, .156 [3.96mm] CTR,
0.045 [1.14mm] SQUARE PIN HEADER

PIN 1-3) OUTPUT
PIN 4-6) COMMON
GND: 0.250" FASTON TAB

SENSE J3:
AMP P/N 640456-2, .100 [2.54mm] CTR,
0.025 [0.64mm] SQUARE PIN HEADER

PIN 1) +SENSE
PIN 2) -SENSE

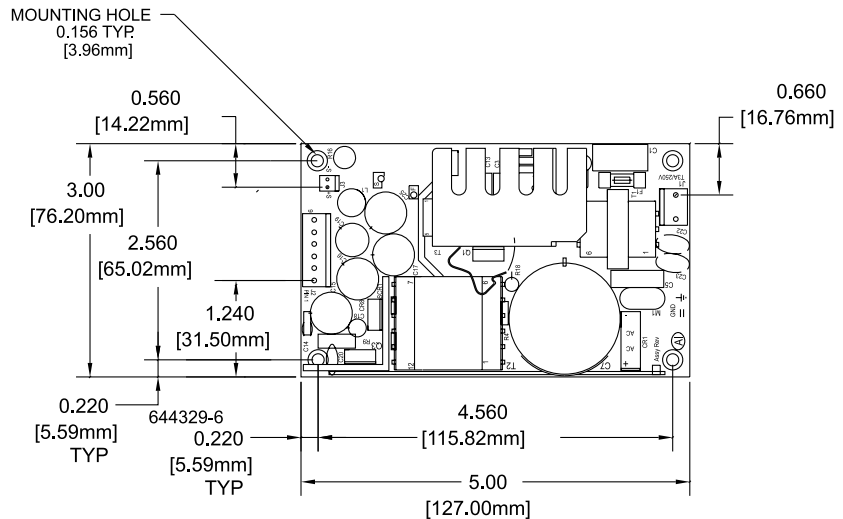
MATING CONNECTORS: AMP P/N

| | HOUSING | CONTACTS |
|--------|----------|----------|
| INPUT | 640250-3 | 770476-1 |
| OUTPUT | 640250-6 | 770476-1 |
| SENSE | 640440-2 | 770476-1 |

NOTE: 5A MAXIMUM RECOMMENDED CURRENT
PER CONNECTOR PIN

WEIGHT: 5 OZ.
[0.142 KG]

TOLERANCES:
X.XX = ± 0.030 (0.76MM)
X.XXX = ± 0.010 (0.25MM)



MAX. COMPONENT HEIGHT 1.20" [30.28mm]
MAX. LEAD PROTRUSION 0.10" [2.54mm]

| ENVIRONMENTAL SPECIFICATIONS | OPERATING | NON-OPERATING |
|------------------------------|---|---|
| Temperature (A) | 0 to 50° | -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 g ² /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. Shock testing—half-sinusoidal, 10 ± 3 ms duration, ± direction, 3 orthogonal axes, total 6 shocks.

C. Random vibration—10 to 2000Hz, 6dB/octave roll-off from 350 to 2000Hz, 3 orthogonal axes. Tested for 10 min./axis operating and 1hr./axis non-operating.