

# GECA40

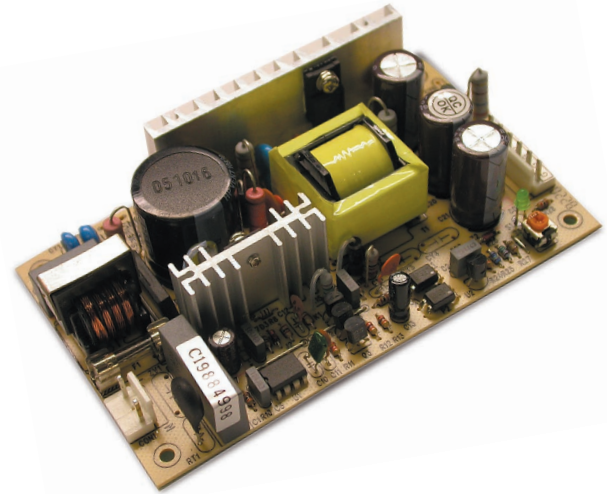
## 40 Watt Series



**Commercial Wide-Range Input**

**2 Year Warranty**

- Wide-Range AC Input 90-264 VAC
- Industry Standard Footprint - 3"x 5"x 1.25"
- Conducted EMI Exceeds FCC Class B and CISPR 22 Class B
- Single and Multiple Outputs
- Approved to UL60950-1: 2003, CSA-22.2 No. 60950-1-03, IEC and EN60950-1
- CB Report Available
- RoHS Compliant
- CE Marked to LVD



**CONDOR**

### Specifications

Unless otherwise noted, all parameters are nominal values measured at 120 VAC @25°C and 0-95% relative humidity, non-condensing. For limits at unusual operating conditions, consult factory.

**AC Input**

Universal Input 90-264 VAC, 47-63 Hz single phase.

**Input Current**

Maximum input current at 120 VAC, 60 Hz with full rated output load:  
Multiple models 1.7 A, Single models 1.0 A.

**Hold-Up Time**

10 ms minimum with 40 W load, nominal line (120 VAC).

**Output Power**

40 W continuous, 45 W peak. Peak ratings are for 60 s maximum duration, 10% duty cycle. During peak load condition, output regulation may exceed total regulation limits.

**Overload Protection**

Fully protected against short circuit and output overload. Short circuit protection is cycling type power limit on V1 and V2, foldback type on V3.

**Overvoltage Protection**

On V1 is 120% to 160%. See chart.

**Efficiency**

75 to 80% at full rated load, nominal input voltage, depending on model and load distribution.

**Turn-on Time**

Less than 2 seconds.

**Input Protection**

Internal AC fuse provided. Designed to blow only if a catastrophic failure occurs in the unit. Fuse does not blow on overload or short circuit.

**Inrush Current**

Inrush is limited by internal thermistors. Inrush at 240 VAC under cold start conditions will not exceed 37A.

**Temperature Coefficient**

0.03%/°C typical on all outputs.

**Temperature Range**

Designed for 0 to 45°C operation at full rated output power; derate output current and total output power by 2.5% per °C above 45°C.

**Output Noise**

0.5% rms, 1% pk-pk typical (see chart), 20 MHz bandwidth, differential mode. Measured with noise probe directly across output terminals of the power supply with load terminated with 0.1 µF capacitor.

**Transient Response**

Main output—500 µs typical response time for return to within 0.5% of final value for a 50% load step change.  $\Delta i / \Delta t < 0.2 \text{ A}/\mu\text{s}$ . Maximum voltage deviation is 3.5%. Startup/ shutdown overshoot less than 3%.

**Switching Frequency**

70 kHz +/-10 kHz.

**Voltage Adjustment**

Provided on V1. Adjustable voltages are preset at factory. Outputs are capable of minimum +/- 5% change from nominal setting. Multiple output models - V2 voltage will track V1 adjustment.

**EMI/EMC Compliance**

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

**EMI SPECIFICATIONS**

Conducted Emissions  
Static Discharge  
RF Field Susceptibility  
Fast Transients/Bursts  
Surge Susceptibility

**COMPLIANCE LEVEL**

EN55022 Class B; FCC Class B  
EN61000-4-2, Level 3  
EN61000-4-3, Level 3  
EN61000-4-4, Level 3  
EN61000-4-5, Level 3

**Safety Approvals**

SL Power Electronics, Corp. declares under our sole responsibility that all GECA models are in conformity with the applicable requirements of EN60950 following the provisions of the Low Voltage Directive 73/23/EEC.

All GECA models are approved to UL60950-1: 2003, CSA-22.2 No. 60950-1-03, IEC and EN60950-1

**MTBF**

120kHrs.

# GECA40

## 40 Watt Series

### Commercial Wide-Range Input

Commercial Model	Output No.	Output (V)	Current Minimum	Current Maximum	Line Regulation	Load Regulation	V1 OVP Set Point	Ripple & Noise(P-P)
GECA40AG	V1	+5 V	0.35 A	3.5 A	+/-0.5%	+/-3%	6.6 +/-0.9 V	50 mV
	V2	+12 V	0 A	2 A	+/-1%	+/-10%		120 mV
	V3	-12 V	0 A	0.3 A	+/-1%	+/-5%		120 mV
GECA40BG	V1	+5 V	0.35 A	3.5 A	+/-0.5%	+/-3%	6.6 +/-0.9 V	50 mV
	V2	+12V	0 A	2 A	+/-1%	+/-10%		120 mV
	V3	-5 V	0 A	0.3 A	+/-1%	+/-5%		50 mV
GECA40HG	V1	+3.3 V	0.4 A	4 A	+/-0.5%	+/-3%	4.4 +/-0.6 V	50 mV
	V2	+12 V	0 A	2 A	+/-1%	+/-10%		120 mV
	V3	-12 V	0 A	0.3 A	+/-1%	+/-5%		120 mV
GECA40DG	V1	+5 V	0.35 A	3.5 A	+/-0.5%	+/-3%	6.6 +/-0.9 V	50 mV
	V2	+24 V	0 A	1.2 A	+/-1%	+/-10%		240 mV
	V3	-12 V	0 A	0.3 A	+/-1%	+/-5%		120 mV
GECA40-5G	V1	5 V	0 A	7 A	+/-0.5%	+/-3%	7.0 +/-1.0 V	50 mV
GECA40-12G	V1	12 V	0 A	3.3 A	+/-0.5%	+/-3%	16.8 +/-2.4 V	120 mV
GECA40-15G	V1	15 V	0 A	2.7 A	+/-0.5%	+/-3%	21.0 +/-3.0 V	150 mV
GECA40-24G	V1	24 V	0 A	1.7 A	+/-0.5%	+/-3%	33.6 +/-4.8 V	240 mV

### Environmental Specifications

ENVIRONMENT	OPERATING	NON-OPERATING
Temperature (A)	0 to 45°C	-40 to +85°C
Humidity (A)	20 to 90% RH	10 to 95% RH
Shock (B)	20 g <sub>pk</sub>	40 g <sub>pk</sub>
Altitude	-500 to 10,000 ft	-500 to 40,000 ft
Vibration (C)	1.5 g <sub>rms</sub> 0.0032 g <sup>2</sup> /Hz	5 g <sub>rms</sub> 0.026 g <sup>2</sup> /Hz

A. Units should be allowed to warm up/operate under non-condensing conditions before application of power.

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 1 hr./axis non-operating.

### GECA40 Series Mechanical Specifications

#### CON 1:

MOLEX P/N 26-60-4030, w/center PIN Removed  
0.156 [3.96 mm] CTR Header

#### CON 2:

MOLEX P/N 26-60-4060, 0.156 [3.96 mm] CTR Header

#### Input J1

PIN 1) AC Line  
PIN 3) AC Neutral

#### Output J2

	Multiple Output Models	Single Output Models
PIN 1)	Output 2	Output 1
PIN 2)	Common	Output 1
PIN 3)	Common	Output 1
PIN 4)	Output 1	Common
PIN 5)	Output 1	Common
PIN 6)	Output 3	Common

#### Mating Connector MOLEX

	Housing P/N	Contacts P/N
Input	09-50-3031	08-52-0072
Output	09-50-3061	08-52-0072

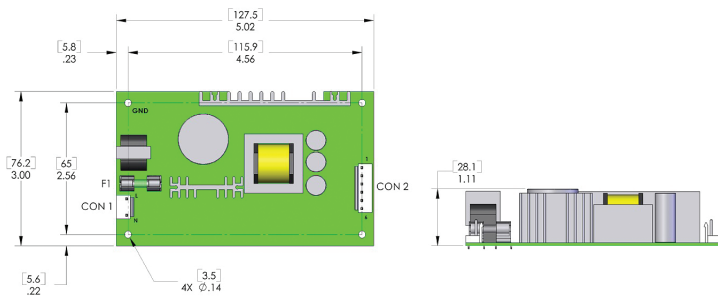
Note: 5A maximum recommended current per Connector PIN

#### Weight

1.0 lbs Max [0.45 kg Max.]

#### Tolerance

X.XX=0.030  
X.XXX=0.010 [0.mm]



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