

18 Watt Series

CONSTANT CURRENT LED DRIVER

COMPACT PACKAGE



Green Watt Power
Division of Calex Mfg. Co. Inc.

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Description

The GLCA 18 Watt series provides a constant current power supply for use in LED applications. Provides a maximum of 18 watts continuous output with air convection in a compact package.



- Universal AC Input / Full Range (100-305 VAC)
- 100-277 VAC Input for North America
- CSA/UL Approved
- CE Approved
- High Reliability
- Efficiency up to 80%
- Over Voltage Protection
- Short Circuit Protection
- Over Current Protection
- Over Temperature Protection
- Waterproof IP67
- RoHS Compliant
- 5 Year Warranty



Model Selection

Model Number	Output Current	Current Range	Voltage Range
GLCA-0350-18	350 mA	329 - 371 mA	35 - 52 V
GLCA-0500-18	500 mA	470 - 530 mA	28 - 36 V
GLCA-0700-18	700 mA	658 - 742 mA	18 - 30 V

Specifications

Input Parameters			
Input Voltage Range*	MIN	100	VAC
*Designed to optimum performance at 110 and 220 nominal lines	TYP	230	
	MAX	305	
Input Frequency	TYP	47 - 63	Hz
Power Factor 220 VAC Input, Full Load		0.90	
Input Current 110 VAC, Full Load	MAX	0.4	A
220 VAC, Full Load		0.2	
Inrush Current 220 VAC/60Hz, Full Load Cold Start	MAX	30	A

Output Parameters			
Noise & Ripple	MAX	5	%
Total Harmonic Distortion (THD)	MAX	<20	%
Setup Time 220 VAC Input - Full Load	MAX	1.5	s
Rise Time (See Note 4)	MAX	200	ms
Overshoot and Undershoot Response (Power On/Off)	MAX	±10	%

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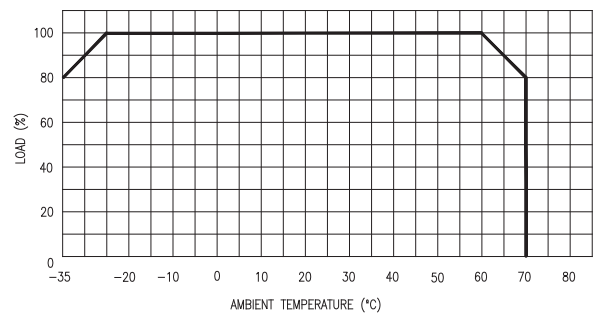


General Specifications			
Short Circuit Protection		Recovers automatically after fault condition is removed	
Withstand Voltage			
Test Method: I/P - O/P		3750 VAC or 5300 VDC 1 MIN. \leq 10 mA	
Withstand Impedance Test Method: I/P - O/P		500 VDC 10M Ω /min (at room temperature)	
Grounded Impedance		25A/3 SEC	
MTBF: (MIL-HDBK-217F 25°C)		\geq 150,000	Hours
Temperature - Operating	MIN	-20	°C
	TYP	25	
	MAX	60	
Temperature - Storage	MIN	-40	°C
	TYP	25	
	MAX	85	
Case Size	3.43" x 1.65" x 1.08" 87mm x 42mm x 28mm		
Unit Weight	0.18Kg		
Agency Approval Depending on Model	CSA File No. 256302 UL8750, 1st ed UL1310, 5th ed. Class 2 CSA C22.2 No. 223-M91 CAN/CSA-c22.2 No. 60950-1-07, ANSI/UL 60950-1 2nd ed. CE Marked		

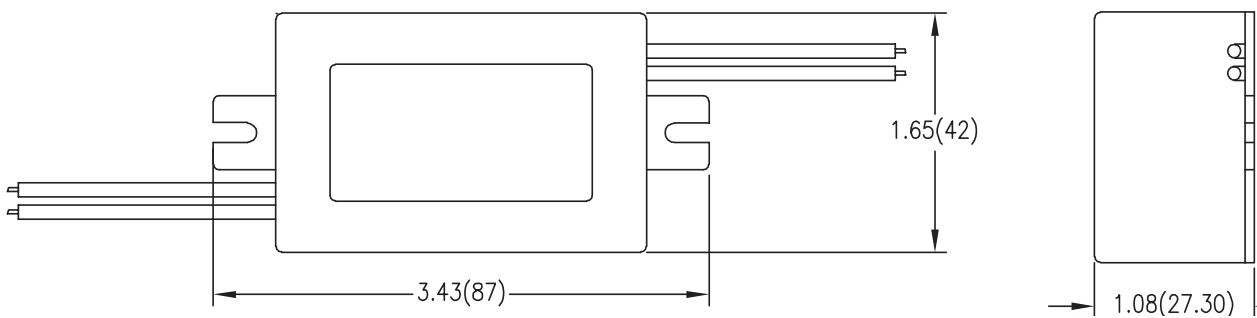
Notes:

- (1) Specifications are subject to change without notice.
- (2) Output Voltage will auto-adjust within the voltage range to provide the constant current as specified.
- (3) DC Output Ripple & Noise Test Conditions: Oscilloscope should be limited at 20 MHz bandwidth. At output terminals with parallel 0.1 μ F ceramic and 22 μ F electrolytic capacitors.
- (4) Rise Time - is change from 10% to 90% of rated load. The output voltages shall rise from 10% to 90% of their output voltage.
- (5) See Green Watt Power website for RoHS statement. www.greenwattpower.com/pdf/rohs.pdf

Derating Curves



Case Specifications



All dimensions are inches (mm)

AC INPUT (Primary)	DC OUTPUT (Secondary)
AC LINE - BROWN	+V OUT - RED
AC NEUTRAL - BLUE	- V OUT - BLACK