

GLG-100 series

100W Single Output Switching Power Supply with PFC Function



■ Features:

- CV + CV mode power supply
- Built-in active PFC function, PFC > 0.95
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- 100% full load burn-in test
- Built-in potentiometers to adjust output voltage and current
- IP65 design

□ Ⓢ CE IP65 SELV ELECTRICAL SPECIFICATION

MODEL	GLG-100-12A	GLG-100-24A
OUTPUT		
RATED VOLTAGE	12V	24V
CONSTANT CURRENT REGION [2]	6 ÷ 12V	12 ÷ 24V
RATED CURRENT	8.5A	4.2A
RATED POWER	102W	100.8W
OUTPUT VOLTAGE ADJUSTMENT RANGE – VR U_{out}Adj	10 ÷ 13V	20 ÷ 26V
OUTPUT CURRENT ADJUSTMENT RANGE – VR I_{out}Adj	4.5 ÷ 8.5A	2.2 ÷ 4.2A
RIPPLE % NOISE (max.) [3]	250mV _{p-p}	250mV _{p-p}
TOLERANCE [4]	±3%	
LINE REGULATION	±1%	
LOAD REGULATION	±2%	
SETUP, RISE TIME [5]	1300ms, 80ms / 230VAC; 2500ms, 80ms / 115VAC	
HOLDUP TIME (typ.)	40ms / 115VAC, 40ms / 230VAC	
INPUT		
VOLTAGE RANGE	90 ÷ 264VAC	
FREQUENCY RANGE	47 ÷ 63Hz	
EFFICIENCY (typ.)	88%	88%
AC CURRENT (typ.)	1.6A/115VAC, 1A / 230VAC	
POWER FACTOR	PF > 0.95 / 230VAC; PF > 0.98 / 115VAC	
INRUSH CURRENT (typ.)	75A / 230VAC	
LEAKAGE CURRENT(max.)	1mA / 240VAC	
PROTECTIONS		
SHORT-CIRCUIT	Type: hiccup mode, auto-recovery.	
OVER CURRENT	Range: 95 ÷ 110% rated current	
	Type: constant current limiting, auto-recovery.	
OVER VOLTAGE	16 ÷ 22V	33 ÷ 40V
	Type: shut down output voltage. Re-power on to recovery.	
OVER TEMPERATURE	Range: 140°C ± 10°C(detect on main IC).	
	Type: shut down output voltage. Auto-recovery after temperature goes down.	

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WORKING ENVIRONMENT

WORKING TEMPERATURE	-30°C ÷ 70°C (Refer to Derating Curve)
WORKING HUMIDITY	20 ÷ 95% RH non-condensing
STORAGE TEMPERATURE AND HUMIDITY	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing
TEMPERATURE COEFFICIENT	± 0.03% / °C (0°C ÷ 50°C)
VIBRATION	10 ÷ 500Hz, 5G, 10min / cycle, period for 60min. each along X, Y, Z axes

SAFETY AND EMC REGULATIONS

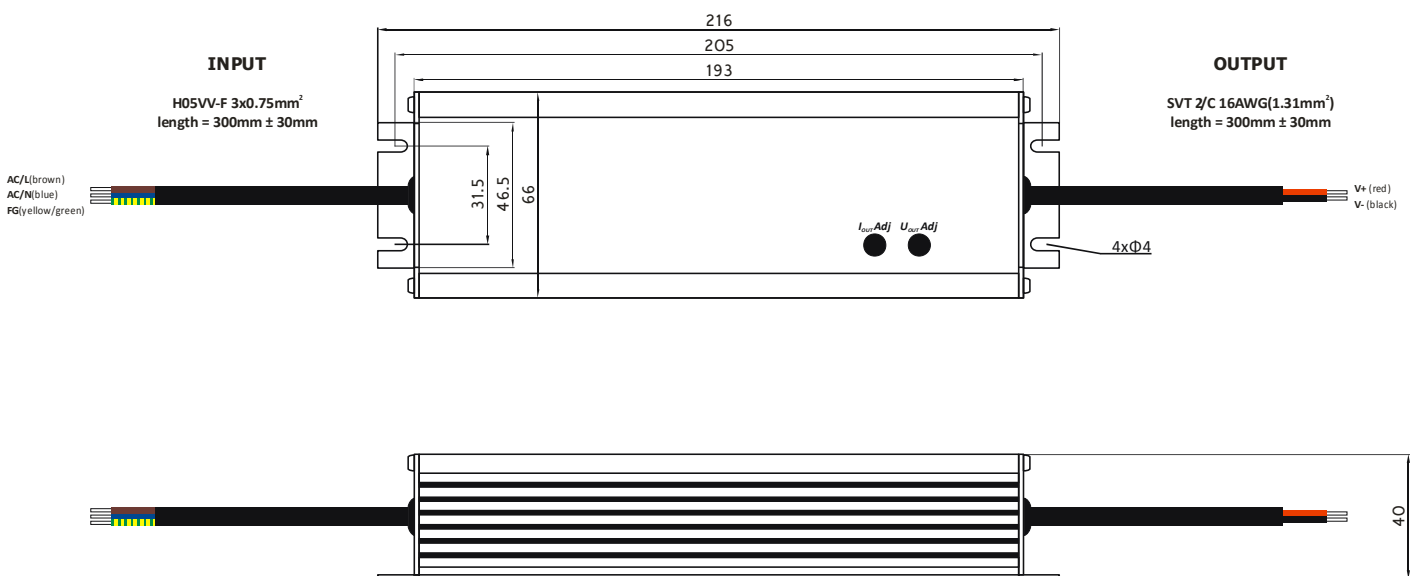
SAFETY STANDARDS	Compliance to EN61347-1, EN61347-2-13, IP65
WITHSTAND VOLTAGE	I-P/O-P: 3kVAC; I-P/GND: 2kVAC; O-P/GND: 0.5kVAC
ISOLATION RESISTANCE	I-P/O-P, I-P/GND, O-P/GND: 100MΩ/500VDC/25°C/70%
EMC EMISSION	Compliance to EN55015
EMC IMMUNITY	Compliance to EN61547; EN55024; EN61000-4-2, -3, -4, -5, -6, -8, -11
HARMONIC CURRENT	Compliance to EN61000-3-3; EN61000-3-2 class C (≥ 50% load)

OTHERS

DIMENSIONS	216 x 66 x 40mm
WEIGHT AND PACKING	0.95kg; 15pcs./box; box weight and dimensions: 14.5kg; 26 x 25 x 25.5cm

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Constant current operation region is within announced range. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
4. Tolerance includes set up tolerance, line regulation and load regulation.
5. Setup and rise time is measured from 0 to 90% rated output voltage.
6. Power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment must be re-qualify to comply with EMC Directives.

MECHANICAL SPECIFICATION

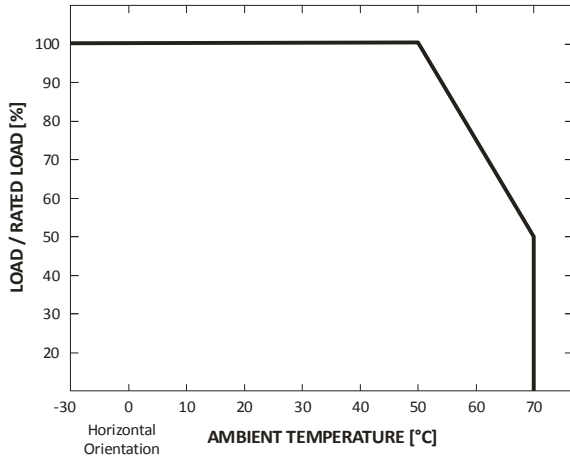


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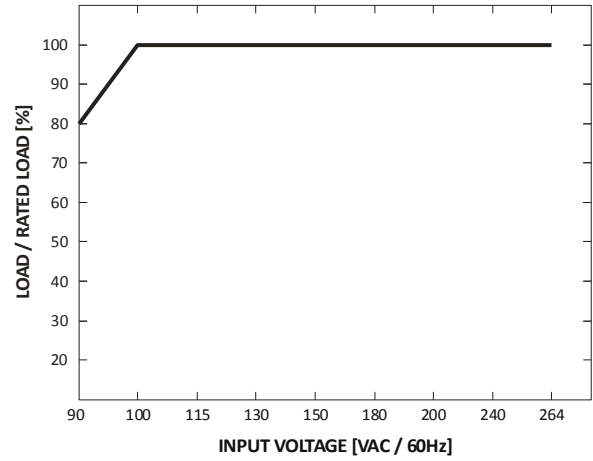
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DERATING CURVE



STATIC CHARACTERISTIC



CONSTANT VOLTAGE + CONSTANT CURRENT MODE OPERATION

