

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

# GLG-100 series

100W Single Output Switching Power Supply with PFC Function



## WORKING ENVIRONMENT

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

## SAFETY AND EMC REGULATIONS

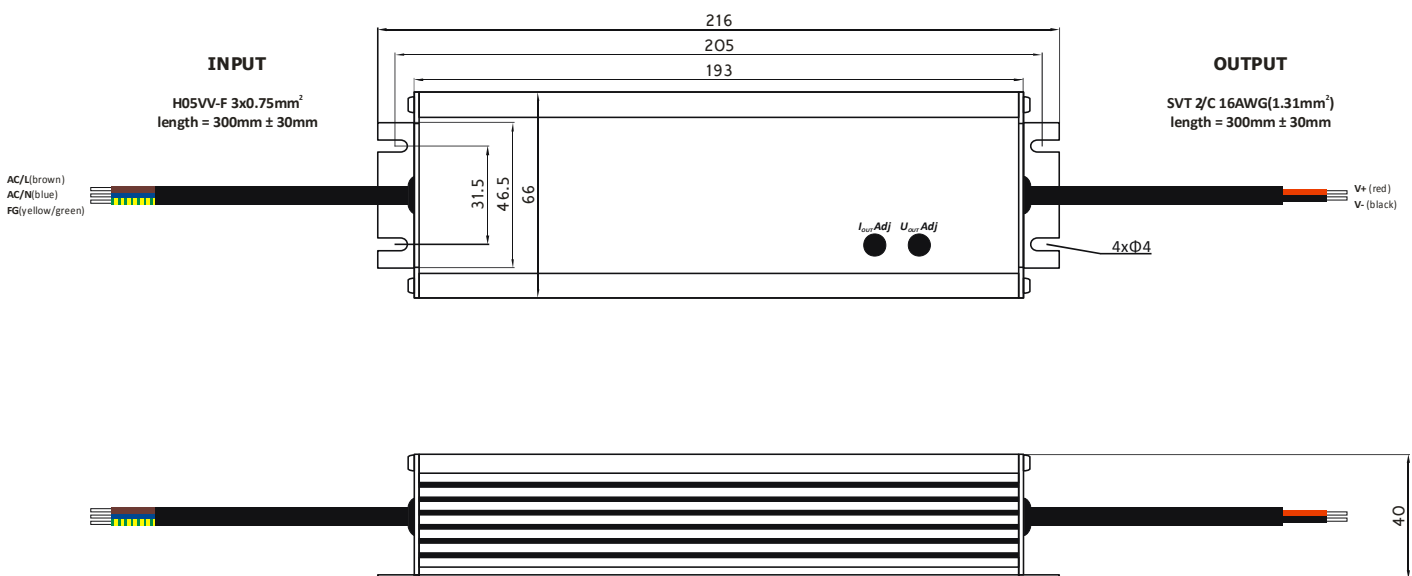
<b>SAFETY STANDARDS</b>	Compliance to EN61347-1, EN61347-2-13, IP65
<b>WITHSTAND VOLTAGE</b>	I-P/O-P: 3kVAC; I-P/GND: 2kVAC; O-P/GND: 0.5kVAC
<b>ISOLATION RESISTANCE</b>	I-P/O-P, I-P/GND, O-P/GND: 100MΩ/500VDC/25°C/70%
<b>EMC EMISSION</b>	Compliance to EN55015
<b>EMC IMMUNITY</b>	Compliance to EN61547;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

## OTHERS

<b>DIMENSIONS</b>	216 x 66 x 40mm
<b>WEIGHT AND PACKING</b>	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

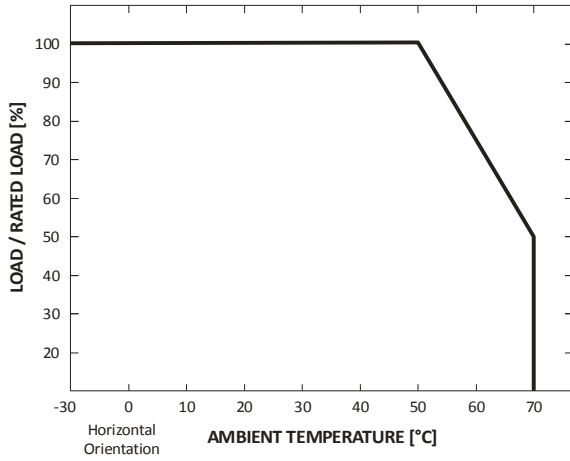


# GLG-100 series

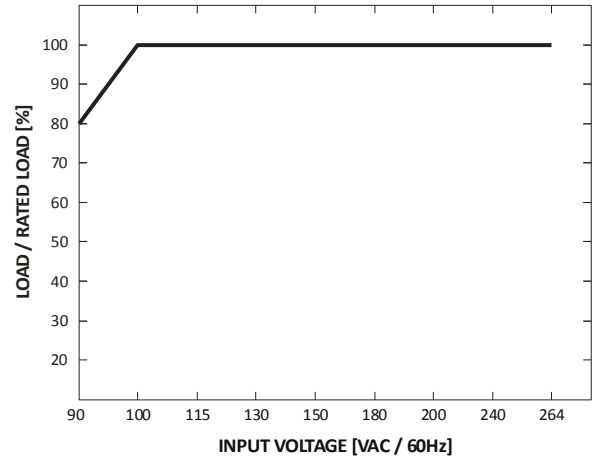
100W Single Output Switching Power Supply with PFC Function



## DERATING CURVE



## STATIC CHARACTERISTIC



## CONSTANT VOLTAGE + CONSTANT CURRENT MODE OPERATION

