

GLG-150 series

150W 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

SELV

ELECTRICAL SPECIFICATION

MODEL	GLG-150-12A		GLG-150-24A
OUTPUT			
RATED VOLTAGE	12V		24V
CONSTANT CURRENT REGION [2]	9 ÷ 12V		18 ÷ 24V
RATED CURRENT	12.5A		6.3A
RATED POWER	150W		151.2W
OUTPUT VOLTAGE ADJUSTMENT RANGE – VR $U_{OUT}Adj$	9 ÷ 13V		22 ÷ 27V
OUTPUT CURRENT ADJUSTMENT RANGE – VR $I_{OUT}Adj$	6.5 ÷ 12.5A		3.2 ÷ 6.3A
RIPPLE % NOISE (max.) [3]	150mV _{p-p}		150mV _{p-p}
TOLERANCE [4]	±3%		
LINE REGULATION	±1%		
LOAD REGULATION	±2%		
SETUP, RISE TIME [5]	1300ms, 80ms / 230VAC; 2500ms, 80ms / 115VAC		
HOLDUP TIME (typ.)	20ms / 115VAC, 20ms / 230VAC		
INPUT			
VOLTAGE RANGE	90 ÷ 264VAC		
FREQUENCY RANGE	47 ÷ 63Hz		
EFFICIENCY (typ.)	90%	92%	
AC CURRENT (typ.)	2A/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	14 ÷ 17V	28 ÷ 34V	
	Type: shut down output voltage. Re-power on to recovery.		
OVER TEMPERATURE	Range: 105°C ± 10°C(detect on heat sink of power diodes).		
	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

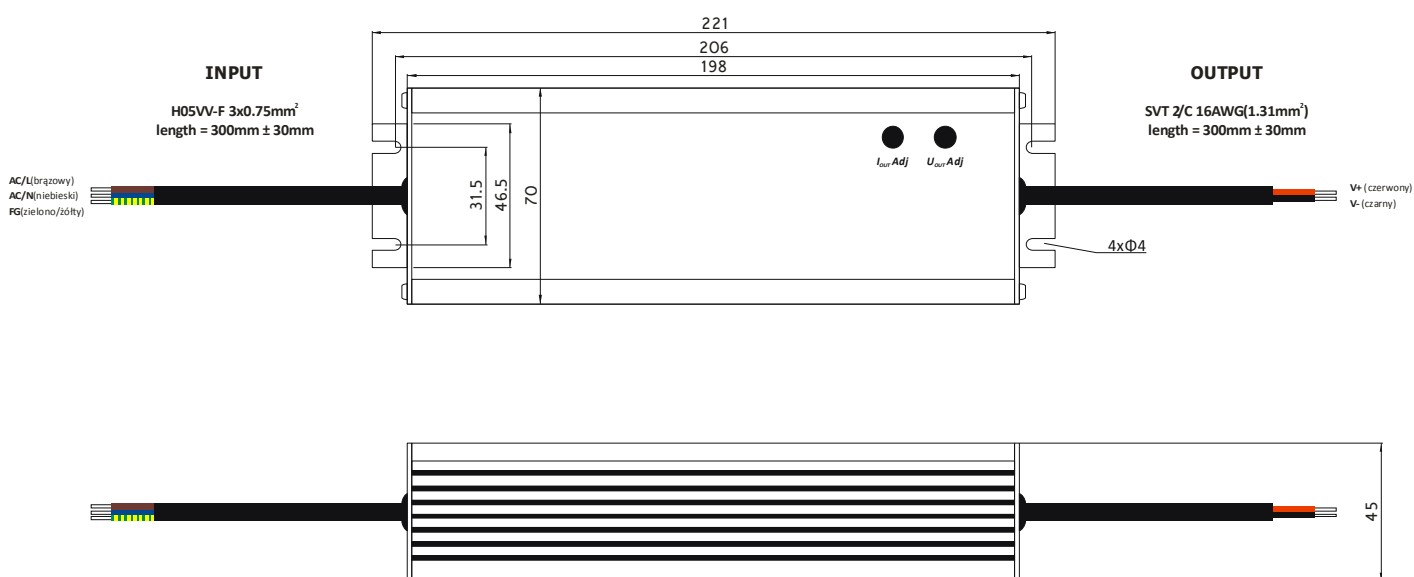
SAFETY STANDARDS	Compliance to EN61347-1, EN61347-2-13, IP65
WITHSTAND VOLTAGE	I-P/O-P: 3kVAC; I-P/GND: 2kVAC; O-P/GND: 0.5kVAC
ISOLATION RESISTANCE	I-P/O-P, I-P/GND, O-P/GND: 100MΩ/500VDC/25°C/70%
EMC EMISSION	Compliance to EN55015
EMC IMMUNITY	Compliance to EN61547; EN55024; EN61000-4-2, -3, -4, -5,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

OTHERS

DIMENSIONS	221 x 70 x 45mm
WEIGHT AND PACKING	1.15kg; 15pcs./box; box weight and dimensions: 17.5kg; 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

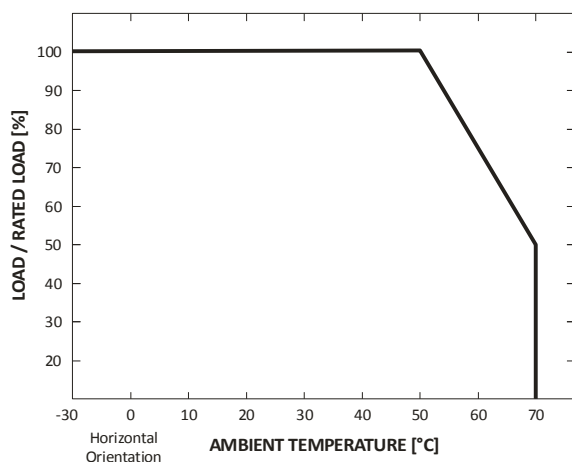


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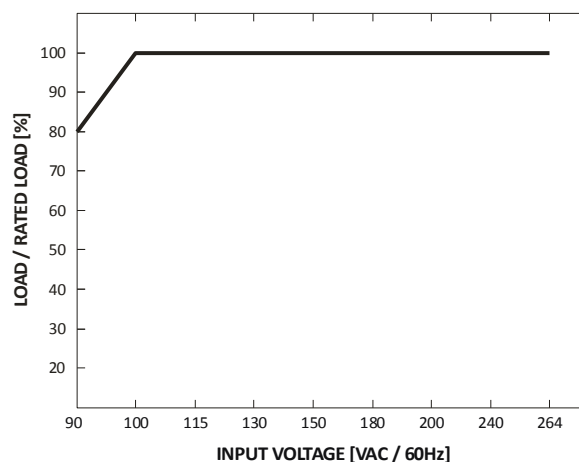
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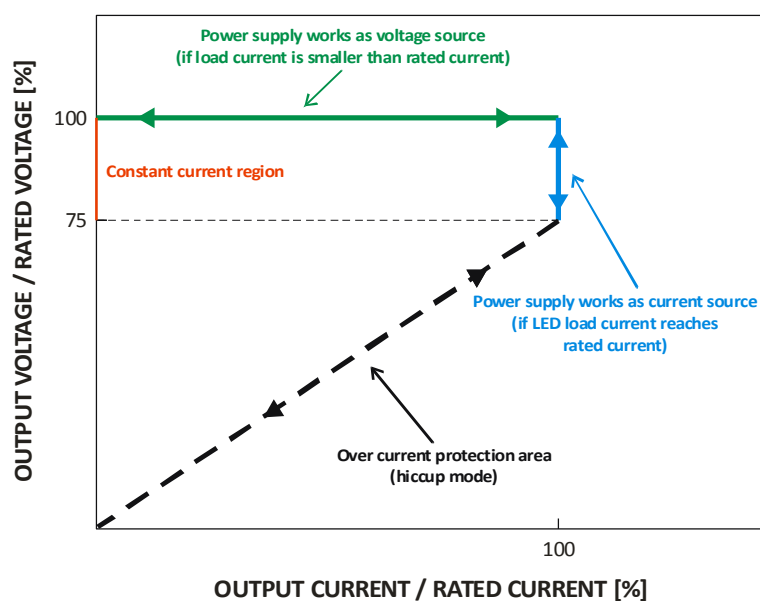
DERATING CURVE



STATIC CHARACTERISTIC



CONSTANT VOLTAGE + CONSTANT CURRENT MODE OPERATION



EU DECLARATION OF CONFORMITY

For the following equipment:

Part No.:	GLG-150-YA (Y = 12, 24)
Batch No.:	GLP17xxxxxxxxxxxxxx

Is herewith confirmed to comply with the requirements set out in the Council Directive, the following standards were applied:

ROHS Directive 2011/65/EU

Low Voltage Directive 2014/35/UE:

Standard	Description
EN 61347-1:2008 + A1:2011 + A2:2013	Lamp controlgear - General and safety requirements.
EN 61347-2-13:2014	Lamp controlgear - Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules

Electromagnetic Compatibility Directive 2014/30/UE:

Standard	Description
EN55015:2013	Conducted emission / Radiated emission
EN61000-3-2:2014	Harmonic current.
EN61000-3-3:2013	Voltage flicker.
EN61547:2009	Electro-magnetic susceptibility.

Power supply is considered as component of final equipment not intended to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-qualified to comply with EMC and LVD Directives.

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NIP 631-24-57-646 REGON 240105606

Company stamp

KIEROWNIK
Działu Technicznego
Lukasz Jaromin

Person signature and stamp