

GPV-12 series

12W Constant Voltage LED Power Supply



■ Features:

- Constant voltage design
- Universal AC input range
- Protections: Overload / Over voltage / Short circuit / Over Temperature
- Cooling by free air convection
- Isolation class II
- TUV certificate
- IP67 Protection level [5]

tc: 80°C

ta: 50°C CONSTANT VOLTAGE SELV



IP67

© ELECTRICAL SPECIFICATION

MODEL	GPV-12-12			GPV-12-24		
OUTPUT						
Rated Voltage	12V			24V		
Rated Current	1A			0.5A		
Current Range	0 ÷ 1A			0 ÷ 0.5A		
Rated Power	12W					
Line Regulation	± 1%					
Load Regulation	± 2%					
Tolerance [3]	± 5%					
Ripple & Noise (max.) [2]	120mV _{p-p}			120mV _{p-p}		
Setup, Rise Time [4]	500ms, 20ms / 230VAC at full load					
Hold up Time (typ.)	20ms / 230VAC at full load					
INPUT						
Voltage Range	90 ÷ 264VAC; 127 ÷ 370VDC					
Frequency Range	47 ÷ 63Hz					
Efficiency (typ.)	76%			79%		
AC Current (typ.)	0.29A / 115VAC, 0.14A / 230VAC					
Inrush Current (typ.)	6A / 230VAC; T _{WIDTH} (50% peak) = 230μs					
Max. No. Of PSU on Circuit Breaker	B10	B16	C10	C16	D10	D16
	42	68	56	90	64	100
Leakage Current (max.)	0.25mA / 240VAC					

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PROTECTIONS

Overload	Range: 110-160% rated power	
	Type: hiccup mode, auto-recovery.	
Short Circuit	Type: hiccup mode, auto-recovery.	
Over Voltage	Range: 13-20V	Range: 25-36V
	Type: hiccup mode, auto-recovery.	
Over Temperature	140°C±10°C(detect on main control IC)	
	Type: shut-off, auto-recovery.	

WORKING ENVIRONMENT

Working Temperature	-30°C ÷ 70°C (refer to Derating Curve), ta: 50°C; tc: 80°C
Working Humidity	20 ÷ 90% RH non-condensing
Storage Temperature and Humidity	-30°C ÷ 80°C, 10 ÷ 95% RH non-condensing

SAFETY and EMC REGULATIONS

Safety Standards	Compliance to TUV EN 61347-1, TUV EN 61347-2-13, IP67
Withstand Voltage	IN/OUT: 3kVAC
Isolation Resistance	IN/OUT: 100MΩ/500VDC/25°C/70%
EMC Emission	Compliance to EN55015
EMC Immunity	Compliance to EN61547
Harmonic Current	Compliance to EN61000-3-3; EN61000-3-2

OTHERS

Lifetime	50 000 hours at 230VAC input, ambient temperature 25°C, full load
Dimensions	130 x 25 x 21.5mm (L x W x H)
Weight and Packing	130g; 100pcs./ctn; ctn weight and dimensions: 13.5kg; 34.5 x 29 x 23cm

EAN Code



5 901885 208213



5 901885 208220

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation and load regulation.
4. Setup and rise time is measured from 0 to 90% rated output voltage.
5. Suitable for indoor or outdoor use. Please avoid direct exposure to sunlight and immersion in water for over 30 minutes.
6. Power supply is considered as component not indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC Directives.

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© MECHANICAL SPECIFICATION

INPUT

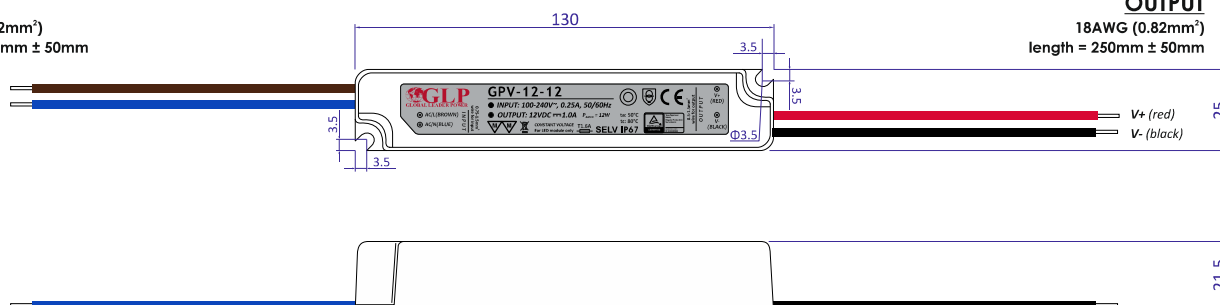
18AWG (0.82mm²)
length = 250mm ± 50mm

AC/L(brown)
AC/N(blue)

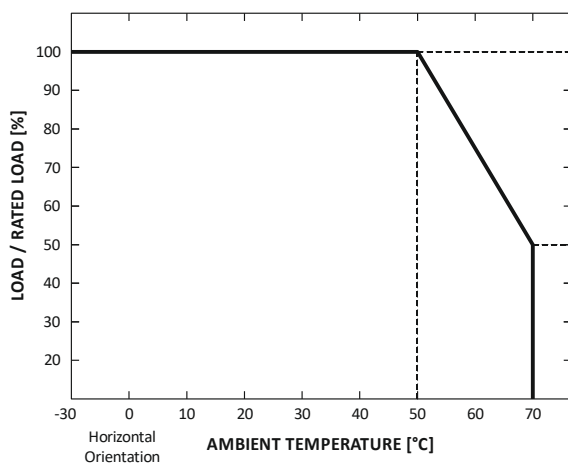
OUTPUT

18AWG (0.82mm²)
length = 250mm ± 50mm

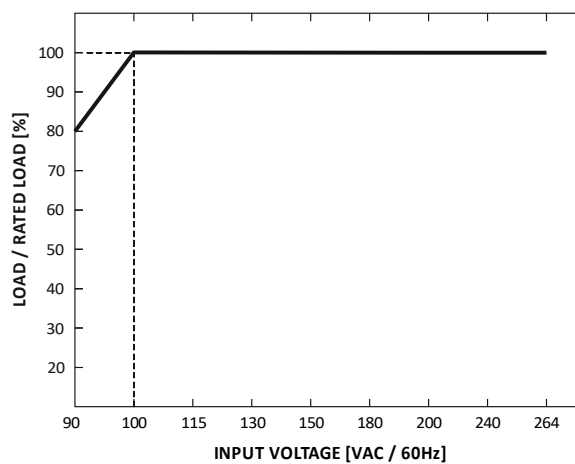
V+ (red)
V- (black)



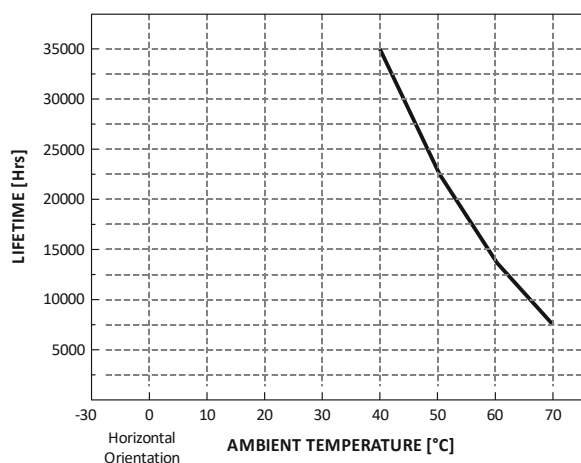
© DERATING CURVE



© STATIC CHARACTERISTIC



© LIFETIME vs. AMBIENT TEMPERATURE CURVE



EU DECLARATION OF CONFORMITY

For the following equipment:

Part No.:	GPV-12-Y (Y = 12, 24)
Batch No.:	GLP19xxxxxxxxxxxxxx

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

ROHS Directives 2011/65/EU, 2015/863/EU, 2017/2102/EU

Low Voltage Directive 2014/35/UE:

Standard	Description
EN 61347-1:2015	Lamp controlgear. General and safety requirements
EN 61347-2-13:2014 + A1:2017	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 + A1:2015	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 indented to apply by end-user. Power supply meets safety and EMC standards however the final equipment with power supply must be re-quality to comply with EMC and LVD Directives.