GPV-100 series

100W Constant Voltage Switching Power Supply

■ Features:

- Constant voltage design
- European AC input range
- Protections: Short circuit / Over current / Over voltage
- Cooling by free air convection
- Isolation class II
- Fully encapsulated with IP67 level [5]
- TUV certificate (only for 12V and 24V)

CONSTANT VOLTAGE SELV IP67

◎ELECTRICAL SPECIFICATION

MODEL	GPV-100-12	GPV-100-15	GPV-100-24	GPV-100-36
OUTPUT				
RATED VOLTAGE	12V	15V	24V	36V
RATED CURRENT	8.3A	6.7A	4.2A	2.8A
CURRENT RANGE	0 ÷ 8.3A	0 ÷ 6.7A	0 ÷ 4.2A	0 ÷ 2.8A
RATED POWER	99.6W	100.5W	100.8W	100.8W
LINE REGULATION	± 1%			
LOAD REGULATION	± 2%			
TOLERANCE [3]	± 3%			
RIPPLE & NOISE (max.) [2]	$200mV_{P-P}$	$200mV_{P-P}$	$200mV_{P-P}$	$250mV_{P-P}$
SETUP, RISE TIME [4]	700ms, 50ms / 230VAC at full load			
HOLD UP TIME (typ.)	40ms / 230VAC at full load			

INPUT						
VOLTAGE RANGE	90 ÷ 264VAC					
FREQUENCY RANGE	47 ÷ 63Hz					
EFFICIENCY (typ.)	85%	86%		88%	88%	
AC CURRENT (typ.)	1.8A / 115VAC, 0.9A / 230VAC					
INRUSH CURRENT (typ.)	35A / 230VAC; T_{WIDTH} = 1200µs					
Max. No. of PSU on Circuit Breaker	B10	B16	C10	C16	D10	D16
	2	3	3	4	3	5
LEAKAGE CURRENT (max.)	0.25mA / 240VAC					

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GLOBAL LEADER POWER

PROTECTIONS

OVER CURRENT	Range: 110% ÷ 150% rated current			
	Type: hiccup mode, auto-recovery.			
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.			
OVER VOLTAGE	Max. 24V	Max. 30V	Max. 48V	Max. 58V
	Type: hiccup mode, auto-recovery.			

WORKING ENVIRONMENT

WORKING TEMPERATURE	-30°C ÷ 70°C (Refer to Derating Curve)
	12V, 15V: ta: 40°C; tc: 80°C; 24V, 36V: ta: 50°C; tc: 90°C
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, 2G, 10min / cycle, period for 72min. each along X, Y, Z axes

SAFETY AND EMC REGULATIONS

SAFETY STANDARDS	Compliance to TUV EN61347-1, EN61347-2-13, IP67
WITHSTAND VOLTAGE	I-P/O-P: 3kVAC
ISOLATION RESISTANCE	I-P/O-P: 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

OTHERS

LIFETIME	40 000 hours at 230VAC input, ambient temperatury 25°C, full load
DIMENSIONS	190 x 52 x 37mm (L x W x H)
WEIGHT AND PACKING	0.6kg; 20pcs./ctn; ctn weight and dimensions: 12.5kg; 23.5 x 25.5 x 24cm
EAN Code	5 901885 208251 · 5 902135 122822 · 5 901885 208268 · 5 902135 112663

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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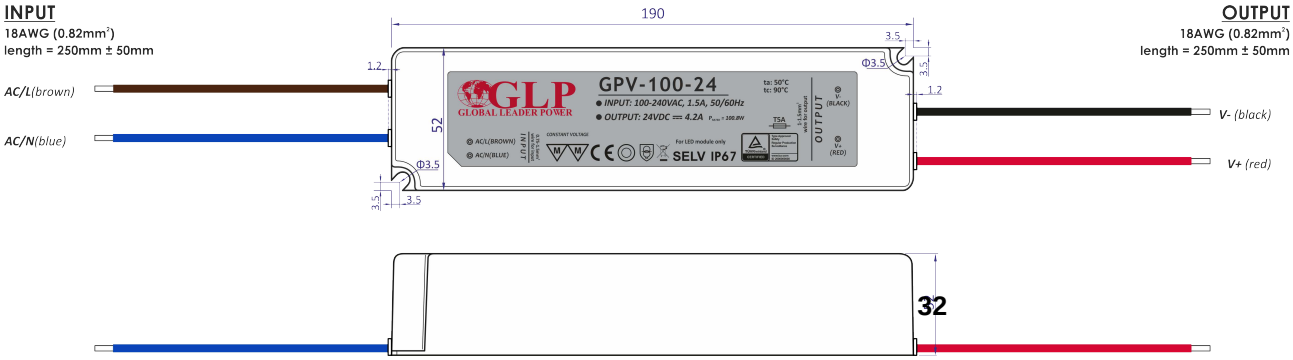
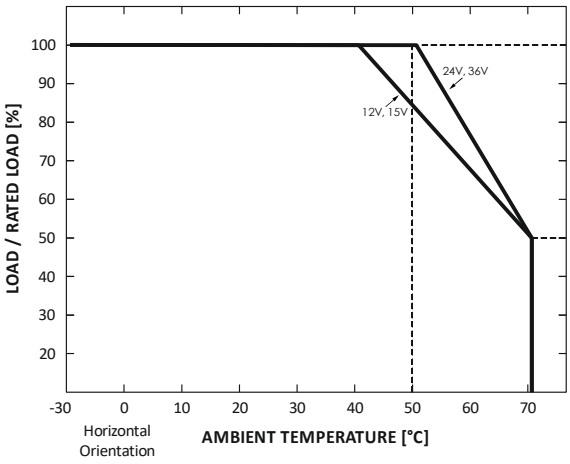
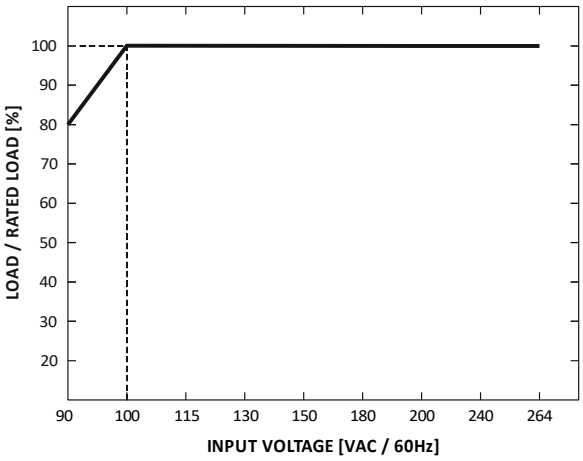
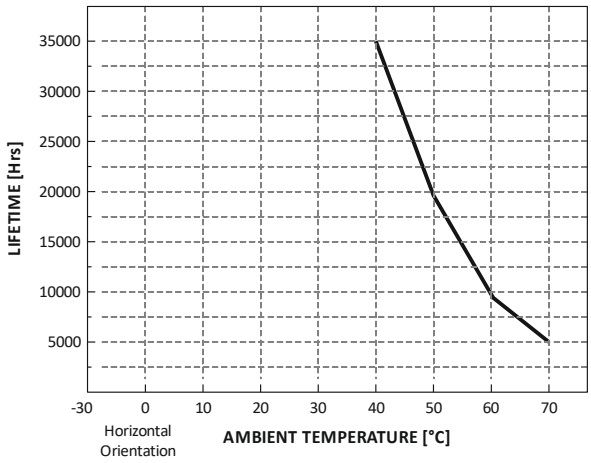
◎MECHANICAL SPECIFICATION



◎DERATING CURVE



◎STATIC CHARACTERISTIC



◎LIFETIME vs. AMBIENT TEMPERATURE CURVE