

GPV-100 series

100W Single Output Switching Power Supply



■ Features:

- Constant voltage design
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Isolation class II
- Fully encapsulated with IP67 level [5]



(for 12V, 24V)



IP67 SELV

ELECTRICAL SPECIFICATION

MODEL	GPV-100-12	GPV-100-24	GPV-100-36
OUTPUT			
RATED VOLTAGE	12V	24V	36V
RATED CURRENT	8.3A	4.2A	2.8A
CURRENT RANGE	0 ÷ 8.3A	0 ÷ 4.2A	0 ÷ 2.8A
RATED POWER	99.6W	100.8W	100.8W
LINE REGULATION	± 1%		
LOAD REGULATION	± 2%		
TOLERANCE [3]	± 5%		
RIPPLE & NOISE (max.) [2]	200mV _{p-p}	200mV _{p-p}	250mV _{p-p}
SETUP, RISE TIME [4]	1300ms, 80ms / 230VAC; 2500ms, 80ms / 230VAC at full load		
HOLD UP TIME	40ms / 115VAC / 230VAC at full load		
INPUT			
VOLTAGE RANGE	90 ÷ 264VAC; 127 ÷ 370VDC		
FREQUENCY RANGE	47 ÷ 63Hz		
EFFICIENCY (typ.)	87%	88%	88%
AC CURRENT (typ.)	2A/115VAC, 1A / 230VAC		
INRUSH CURRENT (typ.)	75A/ 230VAC		
LEAKAGE CURRENT (max.)	<1mA / 240VAC		
PROTECTIONS			
OVER CURRENT	Range: 150 ÷ 200% rated output current		
	Type: hiccup mode, auto-recovery.		
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.		
OVER VOLTAGE	18 ÷ 22V	28 ÷ 34V	45 ÷ 50V
	Type: hiccup mode, auto-recovery.		
OVER TEMPERATURE	Range: 140°C ± 10°C detect on main control IC		
	Type: shut-off, auto-recovery.		

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WORKING ENVIRONMENT

WORKING TEMPERATURE	-30°C ÷ 70°C (Refer to Derating Curve)
WORKING HUMIDITY	20 ÷ 90% 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, 12min / cycle, period for 72min. each along X, Y, Z axes

SAFETY AND EMC REGULATIONS

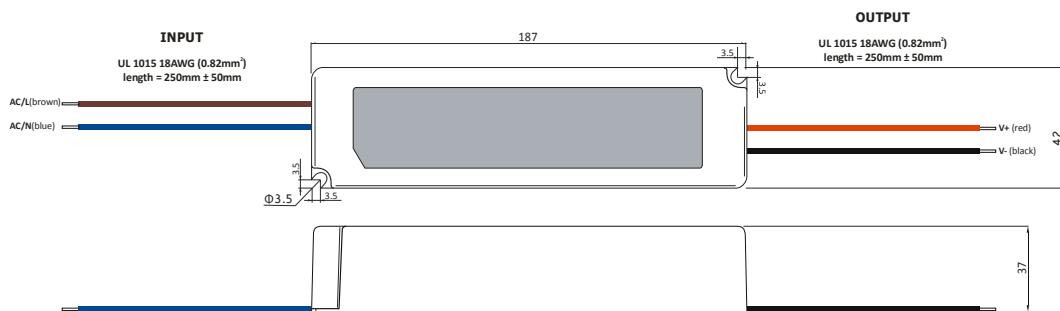
SAFETY STANDARDS	Compliance to EN61347-1, EN61347-2-13, IP67
WITHSTAND VOLTAGE	I-P/O-P: 3kVAC
ISOLATION RESISTANCE	I-P/O-P: 100MΩ/500VDC/25°C/70%
EMC EMISSION	Compliance to EN55015
EMC IMMUNITY	Compliance to EN61547; EN55024; EN61000-4-2, -3, -4, -5, -6, -8, -11
HARMONIC CURRENT	Compliance to EN61000-3-3; EN61000-3-2

OTHERS

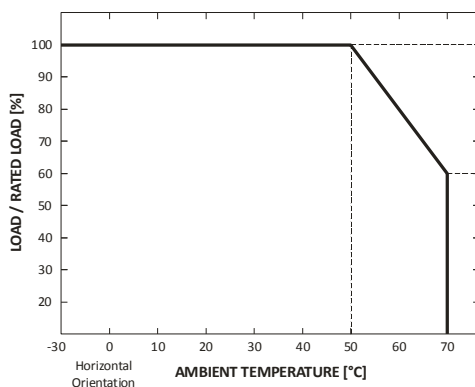
DIMENSIONS	187 x 42 x 33mm (L x W x H)
WEIGHT AND PACKING	0.62kg; 20pcs./CTN; CTN weight and dimensions: 12.5kg; 23.5 x 25.5 x 24cm

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 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



DERATING CURVE



STATIC CHARACTERISTICS

