GPV-20 series

20W Single Output Switching Power Supply

GLP GLOBAL LEADER POWER

■ **Features:**

- Constant voltage design
- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Ovet Temperature
- Cooling by free air convection
- Isolation class II
- Class 2 power unit
- Fully encapsulated with IP67 level [5]

IP67 SELV

ELECTRICAL SPECIFICATION

MODEL	GPV-20-5	GPV-20-12	GPV-20-15	GPV-20-24	GPV-20-36
OUTPUT					
RATED VOLTAGE	5V	12V	15V	24V	36V
RATED CURRENT	3A	2A	1.33A	1A	0.66A
CURRENT RANGE	0 ÷ 3A	0 ÷ 2A	0 ÷ 1.33A	0 ÷ 1A	0 ÷ 0.66A
RATED POWER	15W	24W	24W	24W	24W
LINE REGULATION	± 1%				
LOAD REGULATION	± 2%				
TOLERANCE [3]	± 3%				
RIPPLE & NOISE (max.) [2]	400mV$_{P-P}$	400mV$_{P-P}$	400mV$_{P-P}$	400mV$_{P-P}$	500mV$_{P-P}$
SETUP, RISE TIME [4]	1000ms, 250ms / 115VAC; 500ms, 250ms / 230VAC at full load				
HOLD UP TIME	24ms / 115VAC, 50ms / 230VAC at full load				
INPUT					
VOLTAGE RANGE	90 ÷ 264VAC; 127 ÷ 370VDC				
FREQUENCY RANGE	47 ÷ 63Hz				
EFFICIENCY (typ.)	70%	82%	82%	82%	84%
AC CURRENT (typ.)	0.4A/115VAC, 0.2A / 230VAC	0.6A/115VAC, 0.3A / 230VAC			
INRUSH CURRENT (typ.)	70A / 230VAC, 35A / 115VAC				
LEAKAGE CURRENT (max.)	0.25mA / 240VAC				
PROTECTIONS					
OVER CURRENT	Range: 150 ÷ 200% rated current				
	Type: hiccup mode, auto-recovery.				
SHORT CIRCUIT	Type: hiccup mode, auto-recovery.				
OVER VOLTAGE	8 ÷ 11.5V	13.5 ÷ 18.5V	20 ÷ 24V	27 ÷ 33V	45 ÷ 54V
	Type: hiccup mode, auto-recovery.				
OVER TEMPERATURE	140°C±10°C(detect on main control IC)				
	Type: shut down output voltage. Recovers automatically after temperature goes down.				

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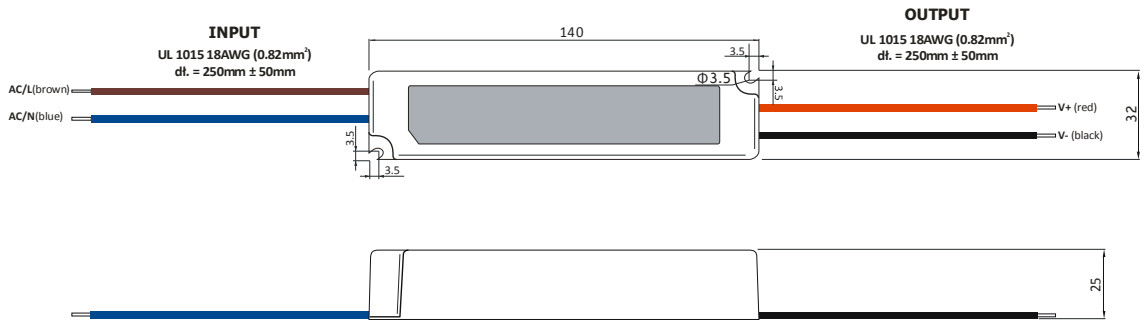
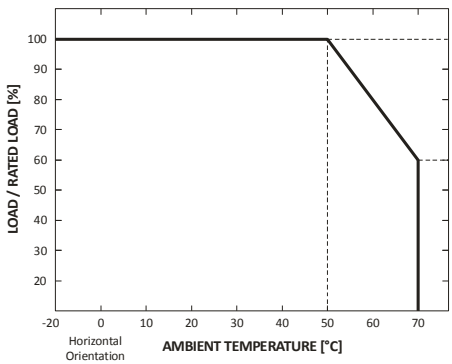
WORKING ENVIRONMENT	
WORKING TEMPERATURE	-20°C ÷ 70°C (Refer to Derating Curve)
WORKING HUMIDITY	20 ÷ 90% RH non-condensing
STORAGE TEMPERATURE AND HUMIDITY	-40°C ÷ 80°C, 10 ÷ 95% RH non-condensing
TEMPERATURE COEFFICIENT	± 0.03% / °C (0°C ÷ 50°C)
VIBRATION	10 ÷ 500Hz, 2G, 10min / cycle, period for 60min. 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	140 x 32 x 25mm (L x W x H)
WEIGHT AND PACKING	0.2kg; 100pcs./box; box weight and dimensions: 20kg; 34.5 x 29 x 23cm

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