

GPV-18 series

18W Constant Voltage Switching Power Supply



■ Features:

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



t_c: 80°C

t_a: 50°C CONSTANT VOLTAGE

SELV



ELECTRICAL SPECIFICATION

| MODEL | GPV-18-12 | GPV-18-24 | | | | |
|------------------------------------|--|----------------------|-----|-----|-----|-----|
| OUTPUT | | | | | | |
| RATED VOLTAGE | 12V | 24V | | | | |
| RATED CURRENT | 1.5A | 0.75A | | | | |
| CURRENT RANGE | 0 ÷ 1.5A | 0 ÷ 0.75A | | | | |
| RATED POWER | 18W | 18W | | | | |
| LINE REGULATION | ± 1% | | | | | |
| LOAD REGULATION | ± 2% | | | | | |
| TOLERANCE [3] | ± 3% | | | | | |
| RIPPLE & NOISE (max.) [2] | 200mV _{p-p} | 400mV _{p-p} | | | | |
| SETUP, RISE TIME [4] | 500ms, 25ms / 230VAC at full load | | | | | |
| HOLD UP TIME (typ.) | 30ms / 230VAC at full load | | | | | |
| INPUT | | | | | | |
| VOLTAGE RANGE | 180 ÷ 264VAC; 253 ÷ 370VDC | | | | | |
| FREQUENCY RANGE | 47 ÷ 63Hz | | | | | |
| EFFICIENCY (typ.) | 80% | 82% | | | | |
| AC CURRENT (typ.) | 0.2A / 230VAC | | | | | |
| INRUSH CURRENT (typ.) | 35A / 230VAC; T _{WIDTH} = 180µs | | | | | |
| Max. No. of PSU on Circuit Breaker | B10 | B16 | C10 | C16 | D10 | D16 |
| | 14 | 20 | 18 | 28 | 20 | 32 |
| LEAKAGE CURRENT (max.) | 0.25mA / 240VAC | | | | | |

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PROTECTIONS

| | |
|----------------------|---|
| OVER CURRENT | Range: 110% ÷ 150% rated current Type: hiccup mode, auto-recovery. |
| SHORT CIRCUIT | Type: hiccup mode, 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 | -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 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 | 70 000 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 | 0.15kg; 100pcs./ctn; ctn weight and dimensions: 13.5kg; 34.5 x 29 x 23.5cm |

EAN Code



5 902135 147405



5 902135 147412

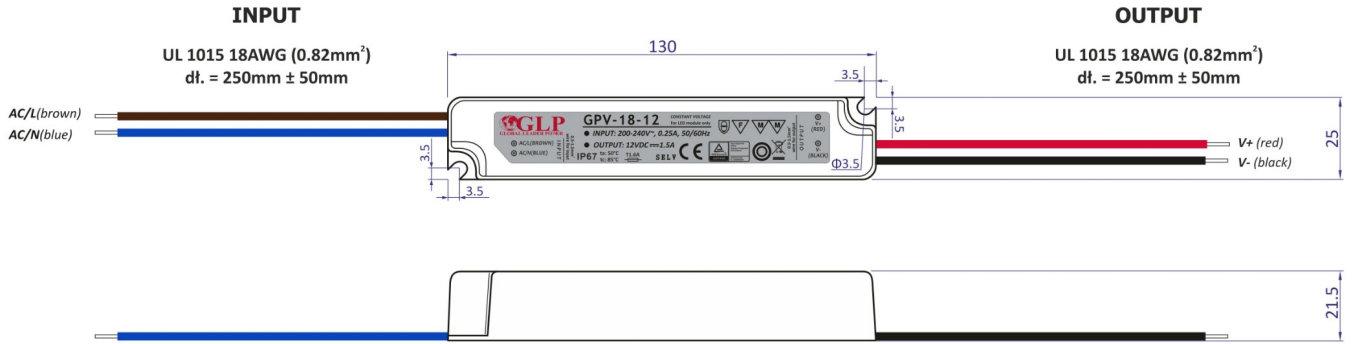
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation 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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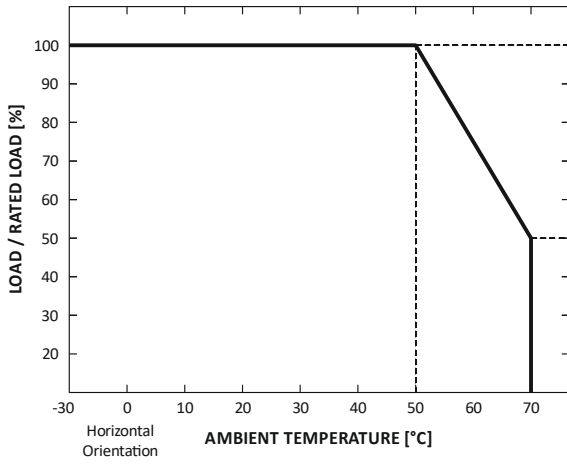
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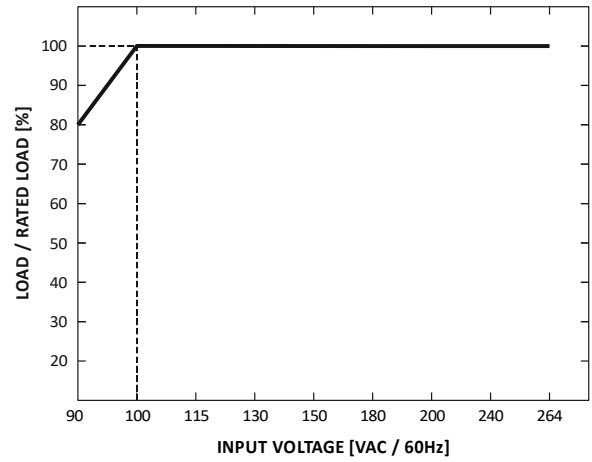
MECHANICAL SPECIFICATION



DERATING CURVE



STATIC CHARACTERISTIC



LIFETIME vs. AMBIENT TEMPERATURE CURVE

