

GPV-200 series

200W Constant Voltage Switching Power Supply



■ Features:

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

ta: 50°C
tc: 80°C

CONSTANT VOLTAGE SELV



⊙ ELECTRICAL SPECIFICATION

| MODEL | GPV-200-12 | GPV-200-24 | | | | |
|------------------------------------|--|------------|-----|-----|-----|-----|
| OUTPUT | | | | | | |
| RATED VOLTAGE | 12V | 24V | | | | |
| RATED CURRENT | 16A | 8.3A | | | | |
| CURRENT RANGE | 0 ÷ 16A | 0 ÷ 8.3A | | | | |
| RATED POWER | 192W | 199.2W | | | | |
| LINE REGULATION | ± 1% | | | | | |
| LOAD REGULATION | ± 2% | | | | | |
| TOLERANCE [3] | ± 5% | | | | | |
| RIPPLE & NOISE (max.) [2] | 500mV _{p-p} | | | | | |
| SETUP, RISE TIME [4] | 1000ms, 50ms / 230VAC at full load | | | | | |
| HOLD UP TIME (typ.) | 40ms / 230VAC at full load | | | | | |
| INPUT | | | | | | |
| VOLTAGE RANGE | 200 ÷ 264VAC | | | | | |
| FREQUENCY RANGE | 47 ÷ 63Hz | | | | | |
| EFFICIENCY (typ.) | 87% | 90% | | | | |
| AC CURRENT (typ.) | 2.6A / 230VAC | | | | | |
| INRUSH CURRENT (typ.) | 30A / 230VAC; T _{WIDTH} (czas do półszczytu) = 1800μs | | | | | |
| Max. No. of PSU on Circuit Breaker | B10 | B16 | C10 | C16 | D10 | D16 |
| | 1 | 1 | 1 | 2 | 1 | 2 |
| LEAKAGE CURRENT (max.) | 0.25mA / 240VAC | | | | | |

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PROTECTIONS

| | | |
|-------------------------|---------------------------------------|---|
| OVER CURRENT | Range: 110% ÷ 150% rated current | Type: constant current limiting to 60% rated voltage next fold forward mode (current rises, voltage drops) next hiccup mode. Recovers automatically after fault condition is removed. |
| | Type: hiccup mode, auto-recovery. | |
| SHORT CIRCUIT | Type: hiccup mode, auto-recovery. | |
| OVER VOLTAGE | 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 ÷ 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, 5G, 12min / cycle, period for 72min. each along X, Y, Z axes |

SAFETY AND EMC REGULATIONS

| | |
|-----------------------------|---|
| SAFETY STANDARDS | Compliance TUV EN 61347-1, TUV EN 61347-2-13, 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; EN61000-4-2, -3, -4, -5, -6, -8, -11 |
| HARMONIC CURRENT | Compliance to EN61000-3-3; EN61000-3-2 |

OTHERS

| | | |
|---------------------------|--|--|
| DIMENSIONS | 205 x 70 x 45mm (L x W x H) | |
| WEIGHT AND PACKING | 1.2kg; 15pcs./ctn; ctn weight and dimensions: 18.5kg; 45.5 x 29.5 x 19cm | |
| EAN Code | | |

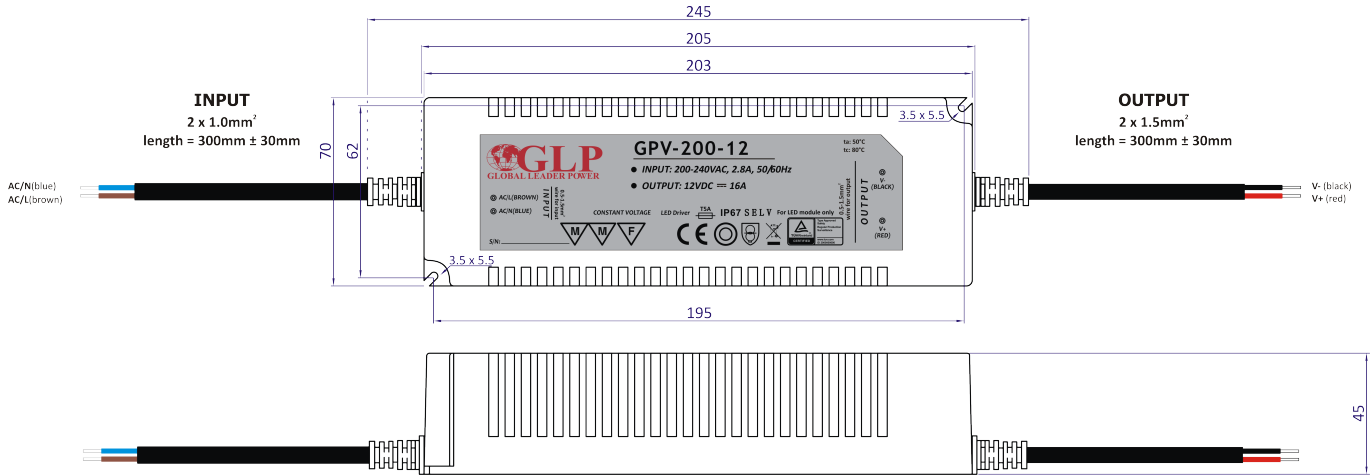
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μF i 47μF parallel capacitor.
3. Tolerance includes set up tolerance, line regulation 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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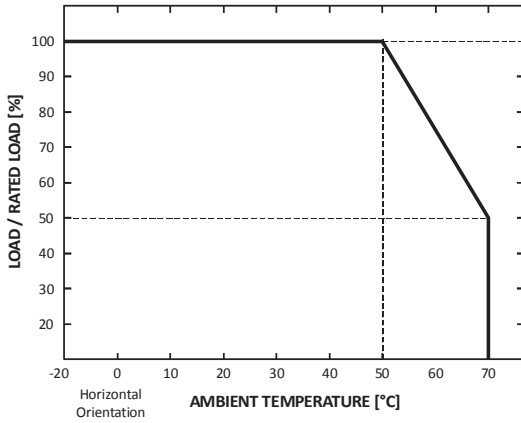
200W Constant Voltage Switching Power Supply



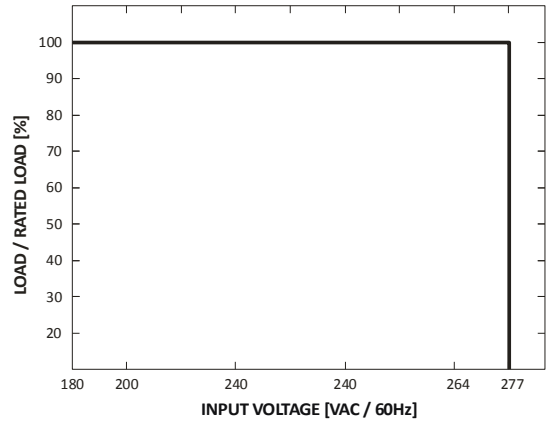
MECHANICAL SPECIFICATION



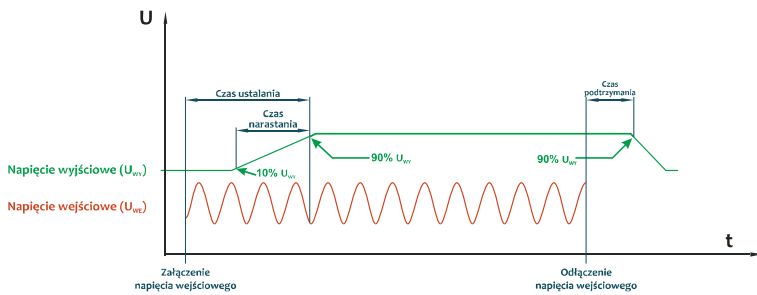
DERATING CURVE



STATIC CHARACTERISTIC



Setup, Rise and Holdup time



Setup time – time required for the output voltage to reach 90% of its set value measured after AC input voltage is powered on.

Rise time – time required for the output voltage to change from 10% to 90% of its set value.

Holdup time – time required for the output voltage to reach 90% of its set value measured after AC input voltage is powered off.

Setup time for GPV-200 series

Rise time for GPV-200 series

Holdup time for GPV-200 series

