

GPCP-20 series

20W Single Output Switching Power Supply with PFC Function



■ Features:

- Constant current design
- Built-in active PFC function
- Universal AC input / Full range
- Protections: Short circuit
- Cooling by free air convection
- 100% full load burn-in test
- UL1310 Class 2 power unit, pass LPS, Isolation Class II
- Fully encapsulated with IP67 level

□ IP67 CE LPS

ELECTRICAL SPECIFICATION

| MODEL | GPCP-20-350 | GPCP-20-700 |
|----------------------------------|--|----------------------|
| OUTPUT | | |
| NO OUTPUT DC VOLTAGE | 48V | 30V |
| RATED CURRENT | 350mA | 700mA |
| VOLTAGE RANGE | 12 ÷ 48V | 9÷ 30V |
| RATED POWER | 16.8W | 21W |
| CURRENT ACCURACY | ± 5% | |
| LINE REGULATION | ± 1% | |
| VOLTAGE TOLERANCE [3] | ± 3% | |
| RIPPLE & NOISE (max.) [2] | 200mV _{p-p} | 200mV _{p-p} |
| SETUP, RISE TIME [4] | 500ms, 250ms/230VAC; 500ms, 250ms / 115VAC at full load | |
| HOLD UP TIME (typ.) | 20ms / 115VAC, 38ms / 230VAC at full load | |
| INPUT | | |
| VOLTAGE RANGE | 90 ÷ 264VAC | |
| FREQUENCY RANGE | 47 ÷ 63Hz | |
| EFFICIENCY (typ.) | 80% | 80% |
| AC CURRENT (typ.) | 0.4A/115VAC, 0.2A / 230VAC | |
| POWER FACTOR | PF > 0.85 / 230VAC | |
| INRUSH CURRENT (typ.) | 70A / 230VAC | |
| LEAKAGE CURRENT(max.) | 1mA / 240VAC | |
| PROTECTIONS | | |
| SHORT CIRCUIT | Type: hiccup mode, auto-recovery. | |
| 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, 2G, 10min / cycle, period for 60min. each along X, Y, Z axes | |

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SAFETY & EMC REGULATIONS

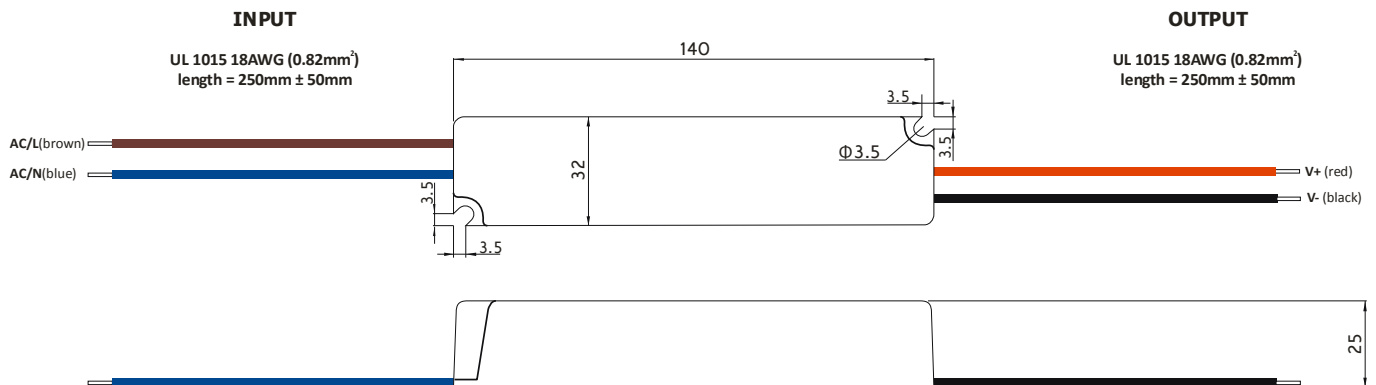
| | |
|-----------------------------|--|
| SAFETY STANDARDS | Compliance to EN61347-1, EN61347-2-13, IP67 |
| WITHSTAND VOLTAGE | I-P/O-P: 3kVAC |
| ISOLATION RESISTANCE | I-P/O-P; O-P/FG; I-P/FG: 100M Ω /500VDC/25°C/70% |
| EMC EMISSION | Compliance to EN55015 |
| EMC IMMUNITY | Compliance to EN61547; EN55024; EN61000-4-2, -3, -4, -5, -6, -8, -11 |
| HARMONIC CURRENT | Compliance to EN61000-3-3; EN61000-3-2 class C (\geq 50% load) |

OTHERS

| | |
|---------------------------|---|
| DIMENSIONS | 140 x 32 x 25mm (dł. x szer. x wys.) |
| WEIGHT AND PACKING | 0.2kg; 100pcs./box; box weight and dimensions: 20kg; 34.5 x 29 x 19.5cm |

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 0.1 μ F i 47 μ F 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. 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-qualified to comply with EMC Directives.

MECHANICAL SPECIFICATION



DERATING CURVE

