

60W 12V POWER SUPPLY

PS12-60W-GN-B / 28000509B CLASS 2

Product Description:

- Constant voltage LED power supply
- Universal input voltage range, 100-277 VAC
- Connection cable with stripped cable end (length approx. 19.7 in. / 500 mm)
- Failure rate at 0.27% per 1000 hours
- Polarity identifiers, secondary + red / black
- White finish
- Nominal lifetime 70,000 h (at 230Vac, full load, Tc: 176° F/80° C)

0.88 lb (0.4 kg)

22.05 lb (10 kg)

194° F (90° C)

12.5 V

90 W

0-5A

13.12 V

16.34 x 12.8 x 6.69 in. 415 x 325 x 170 mm

- 7-year guarantee (for Tc: 176° F/80° C)
- Suitable for emergency installation according EN 50172

Properties:

- Low-profile design
- Low power loss
- Short-circuit shutdown feature w/ automatic restart
- OVP, OCP, OTP and surge protection
- SELV
- IP68
- Encapsulated metal casing

Canada Ca

ORDERING GUIDE

Weight per pc.

Carton Weight

Carton Dimensions

Max. Casing Temp Tc

Output Current Range

Max. Output Voltage

Output Voltage

Max. Input Power

SPECIFIC TECHNICAL DATA

STANDARD COMPLIANCE

| Туре | PS12-60W-GN-B | Safety | Safety Standards |
|------------------|---------------|----------------|----------------------------------|
| Article Number | 28000509B | Certifications | UL879, CLASS2, CE, RoHS, FCC, MM |
| Packaging Carton | 25 pc(s). | | |

TECHNICAL DATA

| Rated Supply Voltage | 100 - 277V AC |
|---|---|
| Input Voltage, AC | 90 - 305V AC |
| Input Voltage, DC | 200-240V DC |
| Max. Input Current | 0.9 A @ 100V AC |
| Input Frequency Range | 47 - 63 Hz |
| Efficiency (at 230 V, 50 Hz, full load) | > 85% |
| λ (at 230 V, 50 Hz, full load) | > 0.95 |
| THD | < 20% |
| Output Voltage Tolerance | ± 5 % |
| Output Power (ta ≤ 60°C) | 60 W |
| Output Power Range | 0 - 60 W |
| No Load Power | > 0.5 W |
| Inrush Current | < 60 A |
| Turn On Time (Output) | ≤ 3 s |
| Hold on Time at Power Failure (Output) | 10 ms |
| Ambient Temperature Ta | -40° - +140° F (-40 ~ +60° C) |
| Storage Temperature T_S | -40° - +176° F (-40 ~ +80° C) |
| Dimensions (L x W x H) | 10.16 x 1.3 x 0.86 in. (258 x 33 x 218 mm) |

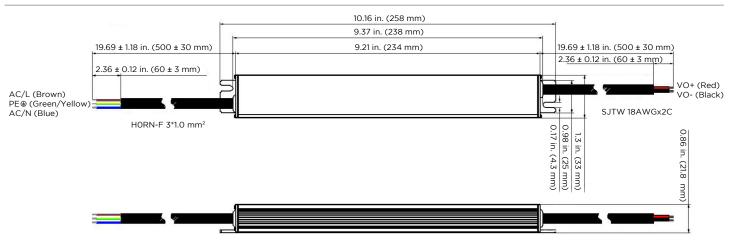
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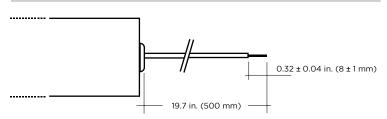
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DIMENSION DRAWINGS



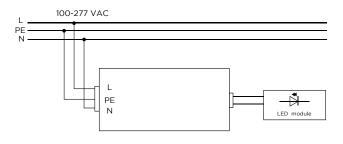
NOTE: To prevent exposure to the maximum allowable temperatures for these drivers, the suggested installation spacing between drivers is at least 4 in. (101.6 mm) side-to-side when the distance to the sidewall and top of the enclosure is 2 in. (50.8 mm). When the distance to the sidewall and top of the enclosure is 6 in. (152.4 mm), maintain at least 2 in. (50.8 mm) side-to-side spacing between drivers. Drivers should be placed at a minimum of 1 in. (25.4 mm) apart when arranging them end-to-end regardless of the enclosure size.

CONNECTION



| Primary Cable | | | Secondary Cable | |
|---------------|------|--------------|-----------------|-------|
| L | Ν | PE | + | - |
| brown | blue | green/yellow | red | black |

WIRING DIAGRAM



Installation instructions

The switching of LEDs on secondary side is not permitted. A proper functioning of the LCU in combination with third party dimming devices (e.g. PWM) cannot be guaranteed.

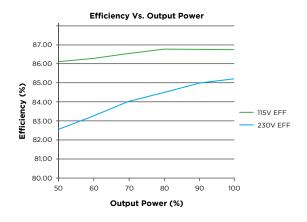
| DRIVER REMOTE DISTANCES | | | | | | |
|-------------------------------|---------------|--------|--|--|--|--|
| Wattages | PS12-60W-GN-B | | | | | |
| Wire Gauge | Feet | Meters | | | | |
| 24 AWG / 0.20 mm ² | 2.48 | 0.758 | | | | |
| 22 AWG / 0.33 mm ² | 4.21 | 1.282 | | | | |
| 20 AWG / 0.52 mm ² | 6.43 | 1.961 | | | | |
| 18 AWG / 0.82 mm² | 10.41 | 3.175 | | | | |
| 16 AWG / 1.31 mm ² | 16.82 | 5.128 | | | | |
| 14 AWG / 2.08 mm ² | 26.67 | 8.130 | | | | |
| 12 AWG / 3.31 mm ² | 42.05 | 12.821 | | | | |
| 10 AWG / 5.26 mm ² | 66.26 | 20.202 | | | | |
| 8 AWG / 8.37 mm ² | 104.13 | 31.746 | | | | |
| | | | | | | |

NOTE: Calculations include a standard 10% buffer

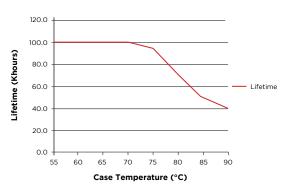


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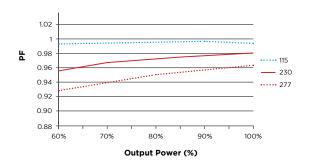
PERFORMANCE CURVE



Lifetime Vs. Case Temperature



PF Vs. Output Power

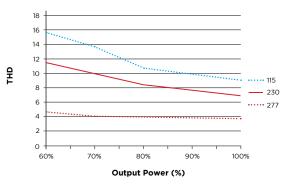


Output Power Vs. Input Voltage

120 100 Output Power (%) 80 60 - 230V - 115V 40 20 0 0 10 20 30 40 50 60 70 Ambient Temperature (°C)

Output Power Vs. Ambient Temperature

THD Vs. Output Power





100

90

80

70

60

50

90

100

115

130

180

Input Voltage (Aac)

Output Power (%)

The maximum case temperature Tc shall not exceed 194 °F (90°C) when used in end product.

305

230V

115V

- These products are intended to be connect to a max. 20A branch circuit.
- These products are intended for use in dry and damp locations.

230

277

Required spacing between power supply according to UL48.