

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)
- 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







ORDERING GUIDE

Type	PS12-60W-GN-B
Article Number	28000509B
Packaging Carton	25 pc(s).
Weight per pc.	0.88 lb (0.4 kg)
Carton Dimensions	16.34 x 12.8 x 6.69 in. 415 x 325 x 170 mm
Carton Weight	22.05 lb (10 kg)

SPECIFIC TECHNICAL DATA

Max. Casing Temp Tc	194° F (90° C)
Output Voltage	12.5 V
Max. Input Power	90 W
Output Current Range	0 - 5 A
Max. Output Voltage	13.12 V

STANDARD COMPLIANCE

Safety	Safety Standards
Certifications	UL879, CLASS2, CE, RoHS, FCC, MM

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)

 ${\it Data\ sheet\ subject\ to\ change\ without\ notice}.$

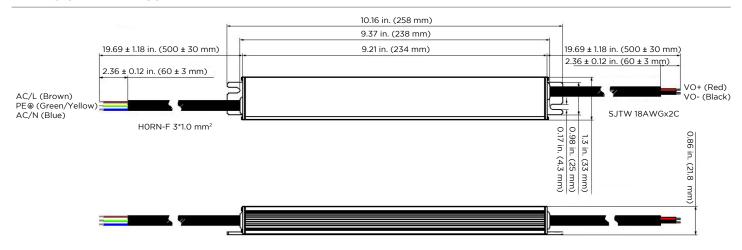
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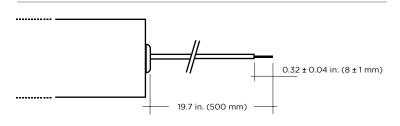
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DIMENSION DRAWINGS



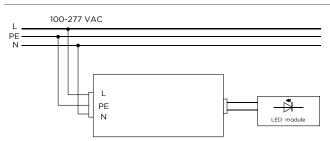
NOTE: To prevent exposure to the maximum allowable temperatures for these drivers, the suggested installation spacing between drivers is at least 4 in. (101.6 mm) side-to-side when the distance to the sidewall and top of the enclosure is 2 in. (50.8 mm). When the distance to the sidewall and top of the 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 mm ²	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

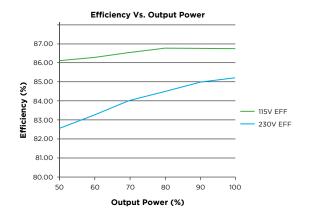
NOTE: Calculations include a standard 10% buffer

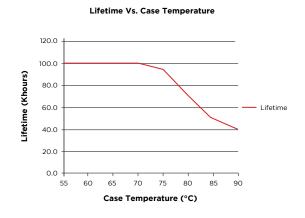


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PERFORMANCE CURVE

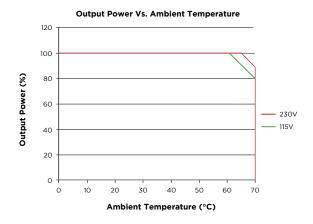


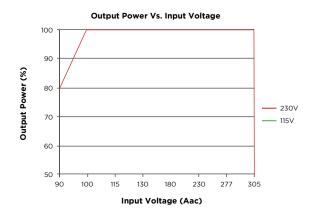


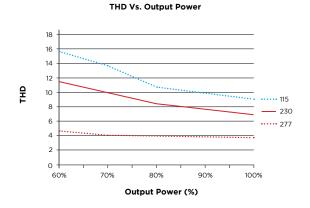
1.02 1 0.98 0.96 0.94 0.92 0.90 0.88 60% 70% 80% 90% 100%

Output Power (%)

PF Vs. Output Power









- . The maximum case temperature Tc shall not exceed 194 °F (90°C) when used in end product.
- 2. These products are intended to be connect to a max. 20A branch circuit.
- These products are intended for use in dry and damp locations.
 - Required spacing between power supply according to UL48.