

Rev 8-24-2017

LED-12W Series

Switch Mode LED Driver



Electrical Specifications

| Input Voltage Range: | 100-277 Vac Nom. (90-305 V Min/Max) |
|----------------------|--|
| Input Over-Voltage: | Can endure 320Vac for 48 Hrs, 350Vac for 2 Hrs |
| Frequency: | 50/60 Hz Nom. (47-63 Hz Min/Max) |
| Power Factor: | >0.90 @ 120V, >0.70 @ 277V |
| Inrush Current: | <10.0 Amps max @ 230 Vac, cold start 25°C |
| Input Current: | 0.12 Amps max at 120 Vac |
| Maximum Power: | 12W |
| Line Regulation: | ± 3% (when applicable) |
| Load Regulation: | ± 4% |
| THD: | ≤ 20% @ 120 Vac, ≤ 35% @ 277 Vac |
| Leakage Current: | 300 μA Typical |
| Hold Up Time: | Half Cycle |
| | |

Protections

| Over-voltage | Output |
|---------------|---------------|
| Over-current | Output |
| Short Circuit | Auto Recovery |

Environmental Specifications

| Max Case Life Temp: <i>(5 year warranty)</i> | 64°C |
|---|---|
| Maximum Case Temp (UL): | 80°C |
| Minimum Starting Temp: | -30°C |
| Storage Temperature: | -40°C to +85°C |
| Humidity: | 5% to 95% |
| Cooling: | Convection |
| Vibration Frequency: | 5 to 55 Hz/2g, 30 minutes |
| Sound Rating: | Class A |
| MTBF: | >550,000 Hours @ full load & 40°C ambient conditions per MIL-217F Notice 2 |
| EMC: | Compliant to CISPR 22 Class B, CISPR 14-1 Class B, GB4343 1-2003, GB17625.1-2003 |
| Weight: | 4.5 oz. (128 g) |

Total Power: 12 Watts

- Input Voltage: 100-277 Vac Nom.
- UL Dry & Damp Location Rated
- High Power Factor
- Constant Current & Constant Voltage with Isolation
- Black Magic Thermal Advantage[™] Plastic Housing
- UL Sign Components Manual (S.A.M. Models)



Constant Current Models

| Model | Output Current (mA ±3%) | Output Voltage Range (Vdc) | Max. Output Power (W) | Typical Efficiency |
|-----------------|----------------------------|-------------------------------|--------------------------|-----------------------|
| LED12W-48-C0250 | 250 | 24-48 | 12 | 80% |
| LED12W-36-C0250 | 250 | 18-36 | 9 | 77% |
| LED12W-36-C0350 | 350 | 18-36 | 12.6 | 80% |
| LED12W-24-C0350 | 350 | 12-24 | 8.2 | 78% |
| LED12W-24-C0500 | 500 | 12-24 | 12 | 78% |
| LED12W-16-C0700 | 700 | 8-16 | 11.2 | 78% |
| LED12W-16-C0800 | 800 | 8-16 | 12.8 | 78% |
| LED12W-12-C1000 | 1000 | 6-12 | 12 | 77% |

Constant Voltage Models

Safety Cert.

| Output Voltage (Vdc ±5%) | Output Current Range (mA) | Max. Output Power (W) | Typical Efficiency |
|-----------------------------|-----------------------------------|--|--|
| 12 | 250-1000 | 12 | 77% |
| 16 | 200-800 | 12.8 | 78% |
| 24 | 125-500 | 12 | 78% |
| 36 | 88-350 | 12.6 | 80% |
| 48 | 63-250 | 12 | 80% |
| | (Vdc ±5%) 12 16 24 36 | (Vdc ±5%) Range (mA) 12 250-1000 16 200-800 24 125-500 36 88-350 | (Vdc ±5%) Range (mA) Power (W) 12 250-1000 12 16 200-800 12.8 24 125-500 12 36 88-350 12.6 |

Indicates S.A.M. Class 2: US/Canada

| UL/CUL | UL8750 |
|--------------------|--|
| CSA | 22.2 |
| CE | EN61347 |
| EMC Standard | Notes |
| EN61000-3-2 | |
| EN61000-3-3 | Class C |
| FCC, 47CFR Part 15 | Class B |
| EN6100-4-5 | 2KV L-N, 8/20 µsec Surge Protection |

Standard

Note:

LED drivers are designed and intended to operate LED loads only. Non-LED loading may be outside the specified design limits of our LED drivers, and therefore cannot be covered by any warranty. If you desire to use our LED drivers to operate non-LED loads please contact us to discuss compatibility.

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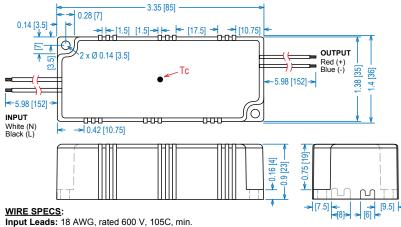
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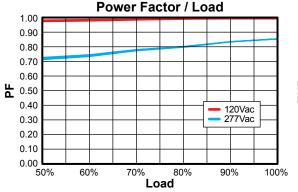


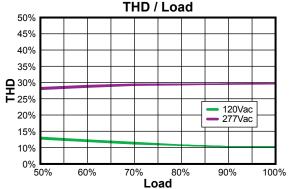
Dimensions

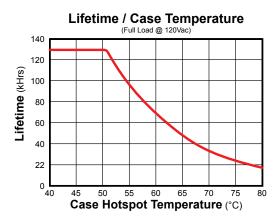


Input Leads: 18 AWG, rated 600 V, 105C, min. Output Leads: 18 AWG, rated 300 V, 105C, min. All wires are stranded with solder dipped ends.

Power Characteristics







Note: The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the chances of a failure to function. Other electrical, mechanical and environmental factors affect driver lifetime but are not represented in this calculation.

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