

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: (5 year warranty)	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)

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.



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

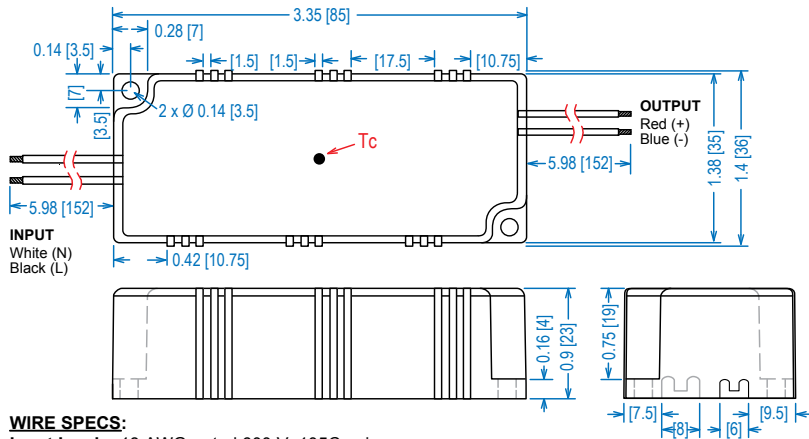
Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
LED12W-12 •	12	250-1000	12	77%
LED12W-16	16	200-800	12.8	78%
LED12W-24 •	24	125-500	12	78%
LED12W-36	36	88-350	12.6	80%
LED12W-48	48	63-250	12	80%

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

Safety Cert.	Standard
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



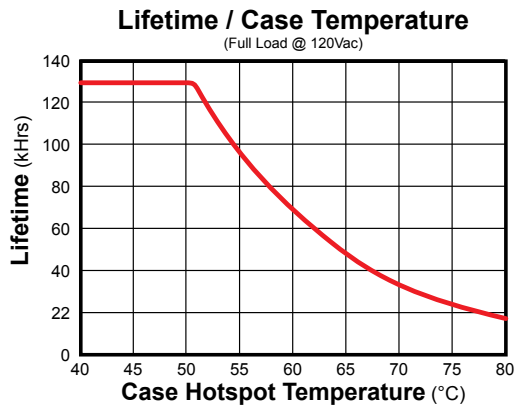
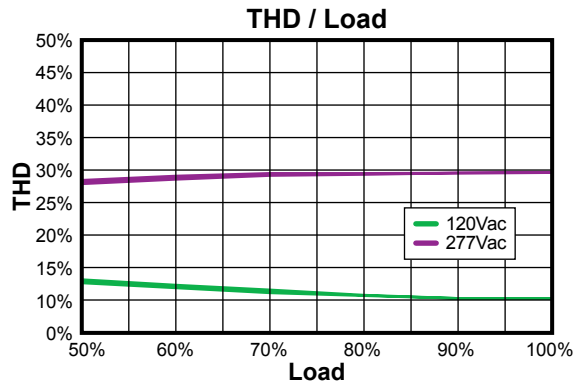
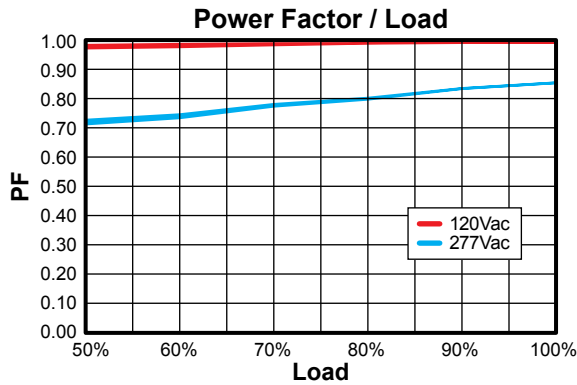
Dimensions



WIRE SPECS:

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.