

# LED-12W Dimming Series

## Switch Mode LED Drivers



### Electrical Specifications

Input Voltage Range:	120-277 Vac Nom. (108-305 V Min/Max)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	>0.90
Inrush Current:	<10.0 Amps max @ 230 Vac, cold start 25°C
Input Current:	0.15 Amps max at 120 Vac
Maximum Power:	12W
Line Regulation:	± 3%
Load Regulation:	± 4%
THD:	≤ 20%
Hold Up Time:	Half Cycle

### Protections

Over-voltage	Output Over-Voltage, Output Over-Current
Short Circuit	Auto Recovery

### Environmental Specifications

Maximum Case Temp.	90°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
Weight:	5.8 oz (164.43 g)

- Total Power: 12 Watts
- Input Voltage: 120-277 Vac Nom.
- UL Dry & Damp Location Rated
- High Power Factor
- UL Type HL Rated for Hazardous Locations
- Constant Current, Dimming with Isolation
- Black Magic Thermal Advantage™ Plastic Housing

### Ordering Options:

-D: **Standard** 0-10V & Resistance dimmable version comes with an extra two wires +Purple/- Gray on the output side. -D 0-10V Dimming is compatible with most quality 0-10V wall dimmers. See page 3 for additional specifications.



### Constant Current Models

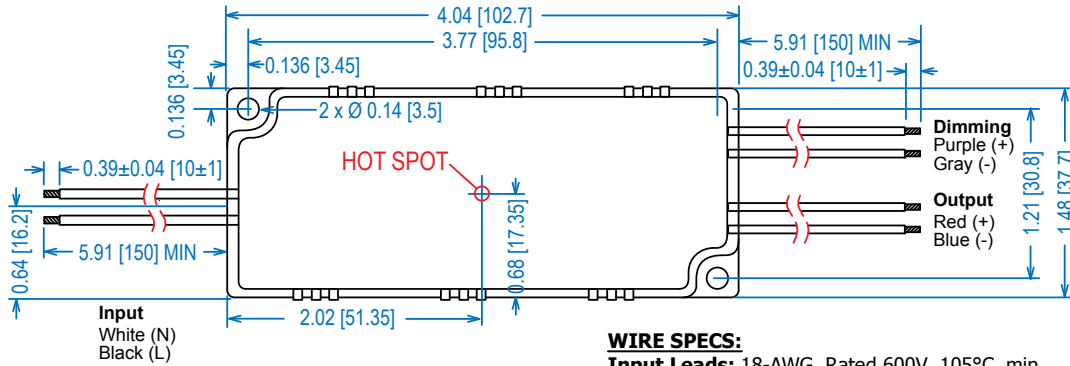
Model	Output Current (mA ±4%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
LED12W-36-C0250-D	250	12-36	9	77%
LED12W-48-C0250-D	250	16-48	12	80%
LED12W-36-C0350-D	350	12-36	12.6	80%
LED12W-24-C0500-D	500	8-24	12	78%
LED12W-16-C0700-D	700	6-16	11.2	78%
LED12W-16-C0800-D	800	6-16	12.8	78%
LED12W-12-C1000-D	1000	4-12	12	77%

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



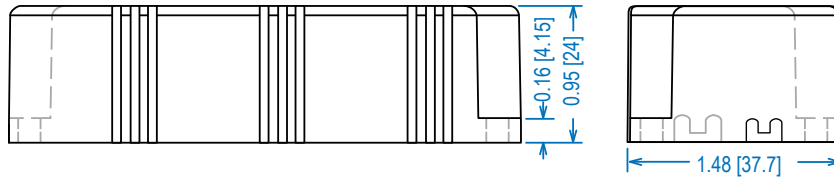
**Dimensions**

IN [mm]

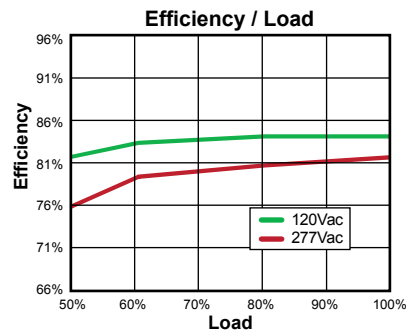
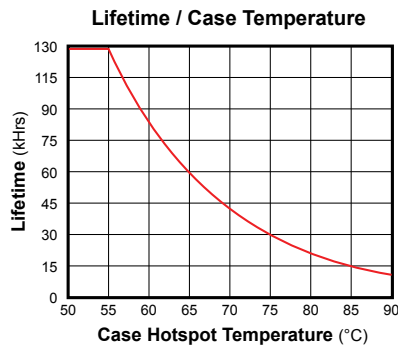
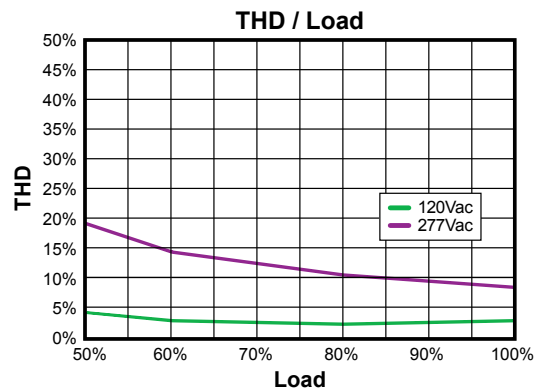
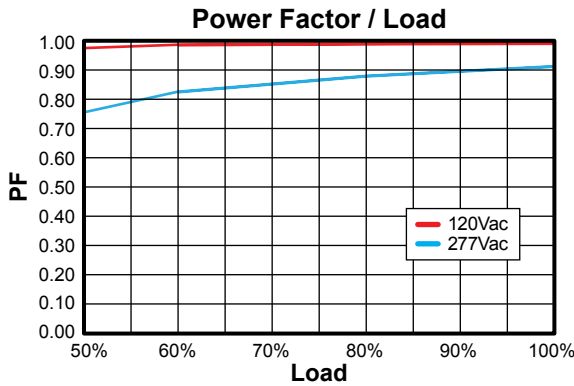


**WIRE SPECS:**

**Input Leads:** 18-AWG, Rated 600V, 105°C, min.  
**Output Leads:** 18-AWG, Rated 600V, 105°C, min.  
**Dimming Leads:** 22-AWG, Rated 600V, 105°C.  
 All wires are stranded with solder dipped ends



**Power Characteristics**

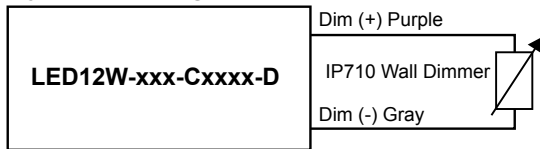


**Note:** The area under the life-temperature curve represents where the driver has highly reliable operation within specification. Driver performance may drift out of published specifications as the hours of operation exceed the curve at a given temperature. Higher operating temperatures increase the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

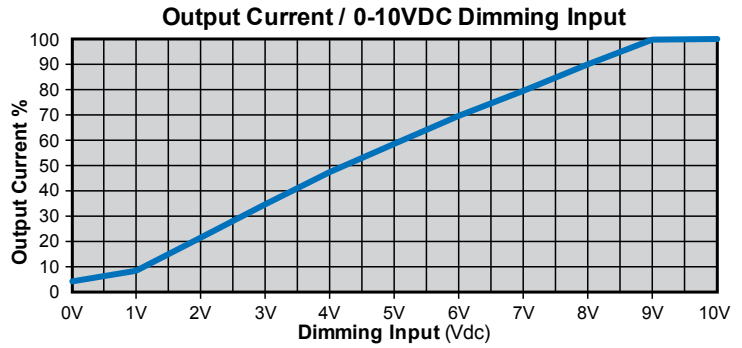
**“-D” Option: 0-10VDC and Resistance Dimming**

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0 mA	—	2mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0 V	—	+15 V

**Typical Dimming Circuit**



(Dimmer must be current-sink type control)



**Notes:**

- 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
- Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent
- 0-10V dimmable version output will be  $\leq 10\%$  @ 0-1.0V
- 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.