

# LED-60W Series

Fixed Output and Dimmable  
Switch Mode LED Drivers



### 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 @ full load, 100V through 277V
Inrush Current:	<30.0 Amps max @ 230 Vac, cold start 25°C
Input Current (Max):	0.90 Amps max
Maximum Power:	60W
Current Accuracy:	± 1% Over input line variation
Load Regulation:	± 3%
THD:	≤ 20% @ full load
Leakage Current:	400 µA Typical
Hold Up Time:	Half Cycle

### Protections

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

### Environmental Specifications

Maximum Case Temp.	90°C
Minimum Starting Temp:	-30°C
UL Type TL Rating:	Class 2: 90/54°C; Non-Class 2: 90/51°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:	418,000 Hours at full load and 40°C ambient conditions per MIL-217F Notice 2
EMC:	FCC 47CFR Part 15 Class B compliant

- Total Power: 60 Watts
- Input Voltage: 100-277 Vac Nom.
- UL Dry & Damp Location Rated
- IP66
- High Power Factor
- UL Type HL Rated for Hazardous Locations
- UL Sign Components Manual (S.A.M. Models)

#### Ordering Options:

-D: 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.

Safety Cert.	Standard
UL/CUL	UL8750 & CAN/CSA-22.2
CE	EN 61347
EMC Standard	Notes
FCC, 47CFR Part 15	Class B
EN 61000-3-2	
EN 61000-3-3	Class C
EN 61000-4-5	2 kV/4 kV 8/20µsec



## Constant Current & Constant Voltage with Isolation Black Magic Thermal Advantage™ Aluminum Housing

### Constant Current Models

Model	Output Current (mA ±3%)	Output Voltage Range (Vdc)	Max. Output Power (W)	Typical Efficiency
LED60W-170-C0350-XX	350	56-170	59.5	92%
LED60W-134-C0450-XX	450	44-134	60	92%
LED60W-086-C0700-XX	700	28-86	60	92%
LED60W-058-C1050-XX	1050	19-58	60	91%
LED60W-048-C1250-XX	1250	16-48	60	91%
LED60W-043-C1400-XX	1400	14-43	60	91%
LED60W-036-C1670-XX	1670	12-36	60	91%
LED60W-027-C2300-XX	2300	9-27	60	90%
LED60W-024-C2500-XX	2500	8-24	60	90%
LED60W-022-C2720-XX	2720	7-22	59.8	89%
LED60W-020-C3000-XX	3000	7-20	60	89%
LED60W-018-C3330-XX	3330	6-18	59.9	88%
LED60W-015-C4000-XX	4000	5-15	60	87%
LED60W-012-C5000-XX	5000	4-12	60	87%

-XX indicates dimming options are available. See options at left. Blank = fixed current output

### Constant Voltage Models

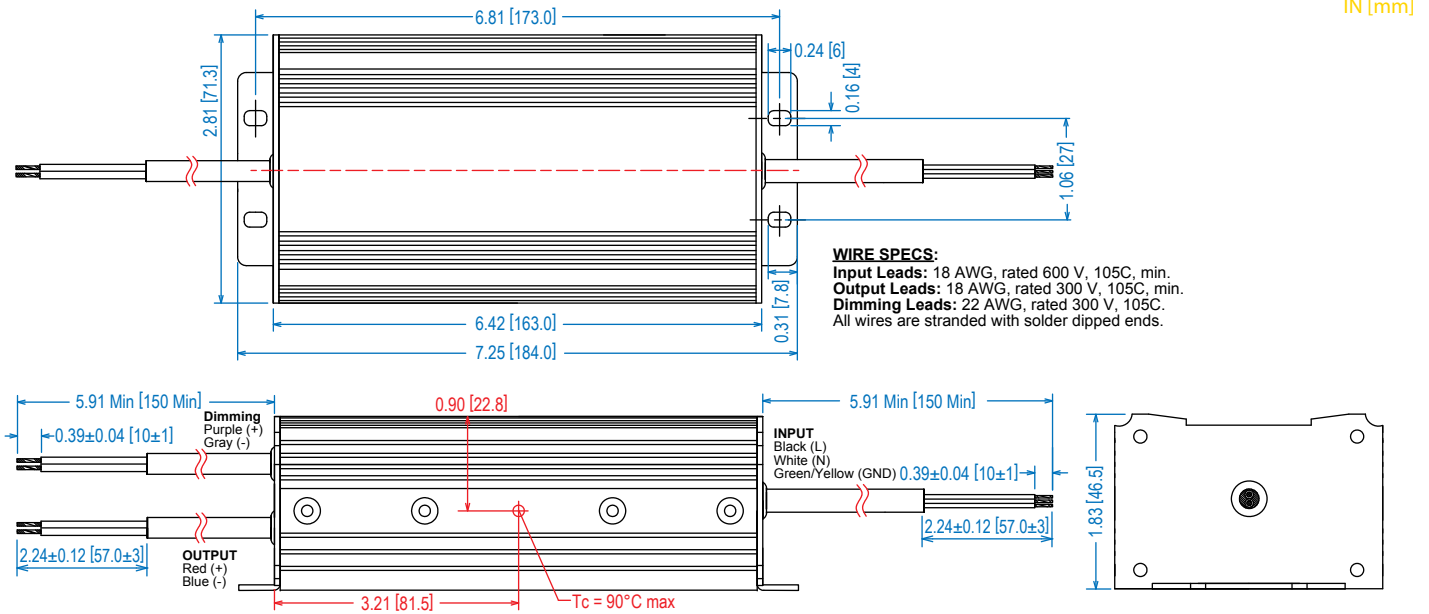
Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max. Output Power (W)	Typical Efficiency
LED60W-012	12	1250-5000	60	87%
LED60W-015	15	1000-4000	60	87%
LED60W-018	18	833-3300	59.9	88%
LED60W-020	20	750-3000	60	89%
LED60W-022	22	680-2720	59.8	89%
LED60W-024	24	625-2500	60	90%
LED60W-027	27	575-2300	60	90%
LED60W-036	36	418-1670	60	91%
LED60W-043	43	350-1400	60	91%
LED60W-048	48	313-1250	60	91%
LED60W-058	58	263-1050	60	91%
LED60W-086	86	175-700	60	92%
LED60W-134	134	113-450	60	92%
LED60W-170	170	88-350	59.5	92%

• Indicates S.A.M.

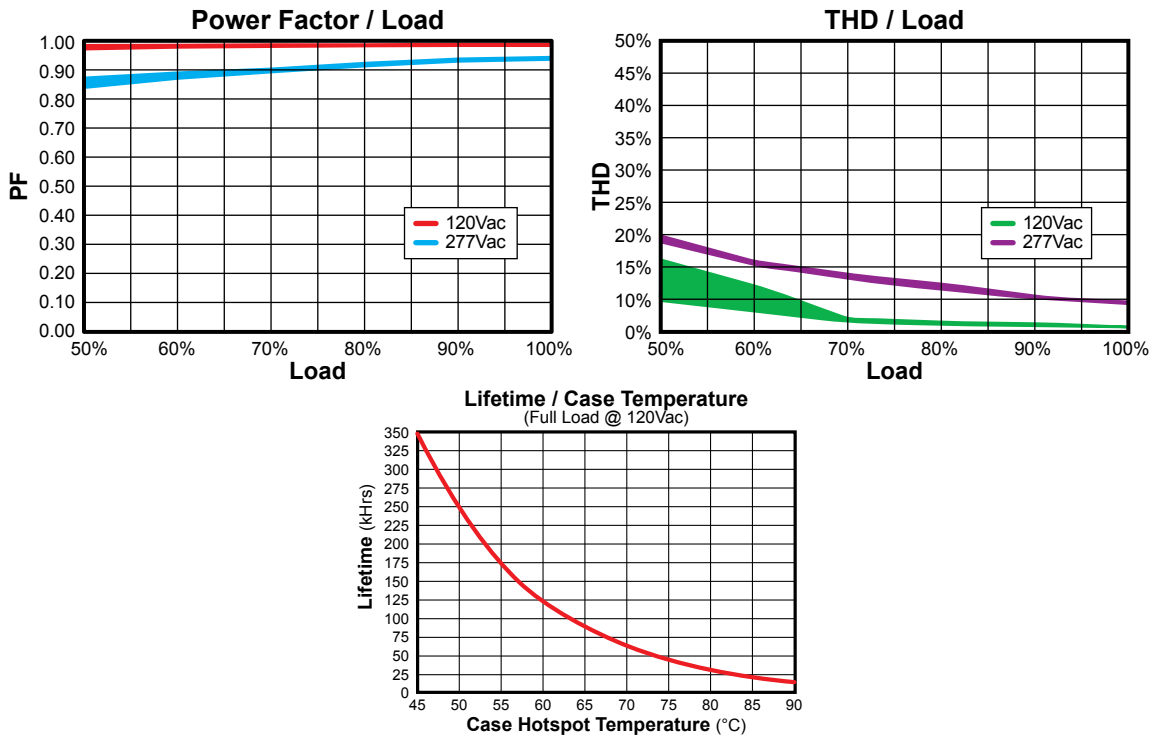
Class 2: US/Canada



## Dimensions



## Power Characteristics



## UL Conditions of Acceptability

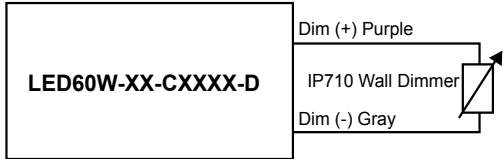
See website for additional information

**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.

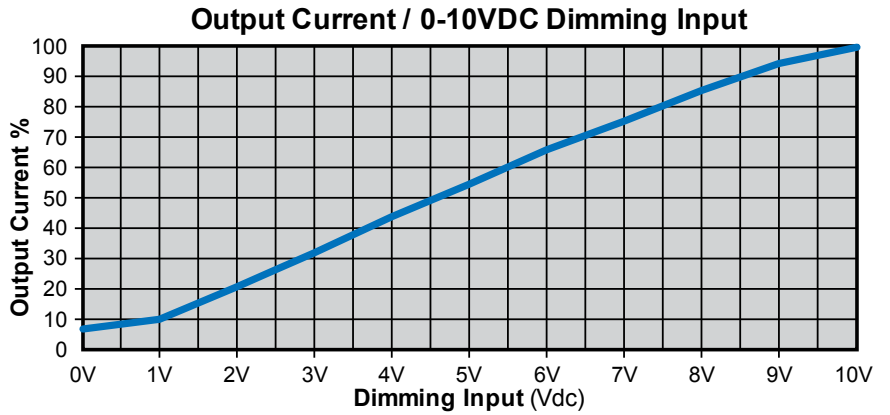
**“-D” Option: 0-10VDC and Resistance Dimming**

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

**Typical Dimming Circuit**



(Dimmer must be current-sink type control)



**Notes:**

1. 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
2. Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent
3. 0-10V dimmable version is not intended to dim below about 5% @ 0V or 10% @ 1.0V
4. 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.