

# **LED-40W Series**

Fixed Output and Dimmable Switch Mode LED Drivers



Rev 9-27-2018









### **Constant Current Models**

Model	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max Output Power (W)	Max Efficiency
LED40W-114-C0350-XX	350	38-114	40	87%
LED40W-100-C0400-XX	400	33-100	40	87%
LED40W-089-C0450-XX	450	30-89	40	87%
LED40W-054-C0700-XX	700	18-54	37.8	86%
LED40W-048-C0830-XX		16-48		86%
LED40W-045-C0900-XX				86%
LED40W-040-C1000-XX	1000	13-40	40	85%
LED40W-036-C1100-XX	1100	12-36		86%
LED40W-030-C1300-XX	1300	10-30	39.0	86%
LED40W-030-C1400-XX	1400	10-30	42	`85%
LED40W-024-C1300-XX		8-24		86%
LED40W-024-C1400-XX		8-24	33.6	86%
LED40W-024-C1670-XX	1670	8-24	40	86%
LED40W-022-C1820-XX	1820	7-22		86%
LED40W-018-C2200-XX	2200	6-18	40	85%
LED40W-015-C2680-XX	2680	5-15	40	85%
LED40W-013-C3080-XX	3080	4-13	40	85%
LED40W-012-C3330-XX	3330	4-12	40	84%
LED40W-010-C4000-XX	4000	3-10	40	84%
LED40W-009-C4450-XX	4450	3-9	40	83%

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

#### **Constant Voltage Models**

LED40W-009	9		Power (W)	Efficiency
		1113-4450	40	83%
LED40W-010		1000-4000		84%
LED40W-012 •	12			84%
LED40W-013	13	770-3080	40	85%
LED40W-015		670-2680		85%
LED40W-018		550-2200		85%
LED40W-022		455-1820		86%
LED40W-024 •		418-1670		86%
LED40W-030			42	85%
LED40W-036				86%
LED40W-040				85%
LED40W-045		225-900		86%
LED40W-048	48	208-830	40	86%
LED40W-054		175-700		86%
LED40W-089	89	113-450	40	87%
LED40W-100	100	100-400	40	87%
LED40W-114	114	88-350	40	87%

# 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, I 00V through 277V	
Inrush Current:	<20.0 Amps max @ 230 Vac, cold start 25°C	
Input Current:	0.40 Amps max	
Maximum Power:	40W	
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	Output		
Over-current	Output		
Short Circuit	Auto Recovery		

Short Circuit	Auto Recovery	
Environmental S	pecifications	
Max Case Life Temp: (5 year warranty)	66°C	
Maximum Case Temp (UL):	90℃	
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:	482,000 Hours at full load and 40°C ambien conditions per MIL-217F Notice 2	
EMC:	FCC 47CFR Part 15 Class B compliant	

- Constant Current & Constant Voltage with Isolation
- Black Magic Thermal Advantage™ Plastic Housing
- UL Sign Components Manual (S.A.M. Models)

### **Dimming Option:**

- "-D" 0-10V & Resistance dimmable models include an extra two wires +Purple/-Gray on the output side. "-D" Compatible with most quality 0-10V wall dimmers. See page 3.
- "-D3" 3-wire dimmable model dims 100% to 10%. Three extra wires included on the output side: Yellow/Purple/Gray. This model is suitable for potentiometer dimming. See page 3.

• Indicates S.A.M.

Class 2: US/Canada

#### 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.





# **LED-40W Series**

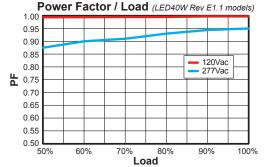
Fixed Output and Dimmable Switch Mode LED Drivers

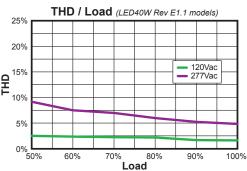


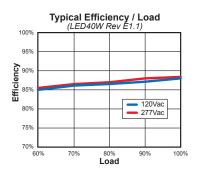
## **Dimensions**

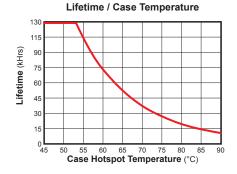
5.91 Min [150 Min] IN [mm] 1.18 [30.0] 1.26 [32.0]  $0.39\pm0.04[10.0\pm1]$ 6 1.85 [47.0] INPUT White (N) Black (L) -3.74 [95.0] OUTPUT Red (+) Blue (-) Tc = 90°C max E 0.39  $0.39\pm0.04$  [ $10.0\pm1$ ] [10.0] 0.39 [10.0] -0.16[4.0]1.18 [30.0] 2.76 [70.0] WIRE SPECS: 5.91 Min [150 Min] Input Leads: 18 AWG, rated 600 V, 105C, min.
Output Leads: 18 AWG, rated 300 V, 105C, min.
Dimming Leads: 22 AWG, rated 300 V, 105C.
All wires are stranded with solder dipped ends.

### Power Characteristics









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

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.





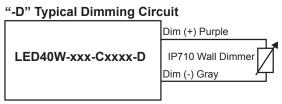
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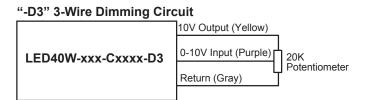


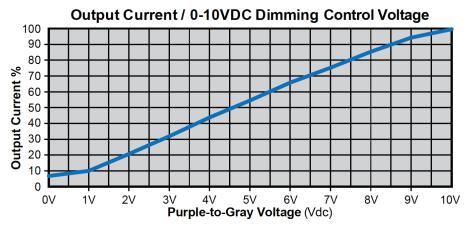
# "-D" and "-D3" Option: 0-10VDC and Resistance Dimming

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0 mA	<u> </u>	2 mA
Absolute Voltage Range on 0-10V (+) Yellow Wire	-2.0 V	<del>_</del> -	+15V
Source Current out of Aux Yellow Wire			I0mA



(Dimmer must be current-sink type control)





### Notes:

- 1. D dimmable version comes with an extra two wires on the output side: +Purple/-Gray.
- 2. Compatible with most 0-10V dimmers. Recommended dimmer is Leviton IP710 or equivalent.
- 3. D & D3 dimmable versions are not intended to dim below about 5% @ 0V or 10% @ 1.0V.
- 4. Output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.

