

### **LED-40W Series**

# Fixed Output and Dimmable **Switch Mode LED Drivers**



<b>Electrical Specif</b>	ications
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:	<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
<b>Environmental S</b>	Specifications Specifications
Max Case Life Temp: (5 year warranty)	66°C
Maximum Case Temp (UL):	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:	482,000 Hours at full load and 40°C ambient 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:**

- 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.

#### 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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#### **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	830	16-48	40	86%
LED40W-045-C0900-XX	900	15-45	40	86%
LED40W-040-C1000-XX	1000	13-40	40	85%
LED40W-036-C1100-XX	1100	12-36	40	86%
LED40W-030-C1300-XX	1300	10-30	39.0	86%
LED40W-030-C1400-XX	1400	10-30	42	`85%
LED40W-024-C1300-XX	1300	8-24	31.2	86%
LED40W-024-C1400-XX	1400	8-24	33.6	86%
LED40W-024-C1670-XX	1670	8-24	40	86%
LED40W-022-C1820-XX	1820	7-22	40	86%
LED40W-018-C2220-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**

Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max Output Power (W)	Max Efficiency
LED40W-009	9	1113-4450	40	83%
LED40W-010	10	1000-4000	40	84%
LED40W-012 •	12	833-3330	40	84%
LED40W-013	13	770-3080	40	85%
LED40W-015	15	670-2680	40	85%
LED40W-018	18	550-2200	40	85%
LED40W-022	22	455-1820	40	86%
LED40W-024 •	24	418-1670	40	86%
LED40W-030	30	350-1400	42	85%
LED40W-036	36	275-1100	40	86%
LED40W-040	40	250-100	40	85%
LED40W-045	45	225-900	40	86%
LED40W-048	48	208-830	40	86%
LED40W-054	54	175-700	40	86%
LED40W-089	89	113-450	40	87%
LED40W-100	100	100-400	40	87%
LED40W-114	114	88-350	40	87%

Indicates S.A.M.

Class 2: US/Canada



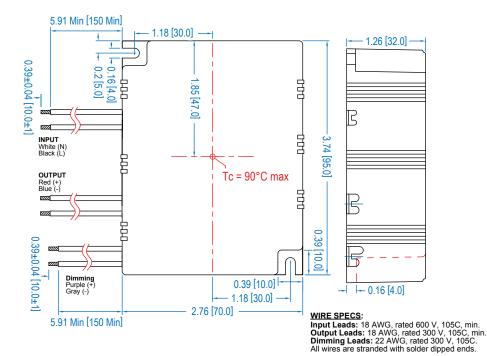
## **LED-40W Series**



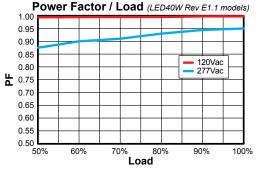
## Fixed Output and Dimmable Switch Mode LED Drivers

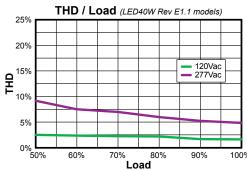
### **Dimensions**

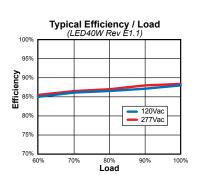
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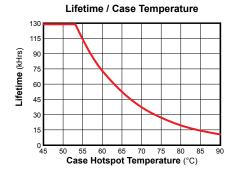


#### **Power Characteristics**









Safety Cert.	Standard
UL/CUL	UL8750
CSA	22.2
CE	EN61347
<b>EMC Standard</b>	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.



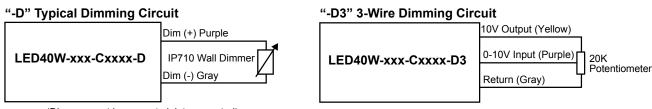
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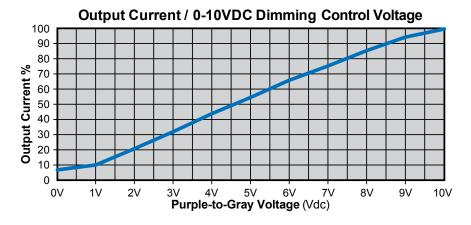
## Fixed Output and Dimmable Switch Mode LED Drivers

### "-D" and "-D3" 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 (+) Yellow Wire	-2.0 V		+15 V
Source Current out of Aux Yellow Wire			10mA



(Dimmer must be current-sink type control)



#### Notes:

- $1. \quad \hbox{D dimmable version comes with an extra two wires on the output side: +Purple/-Gray.}$
- 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.