

Electrical Specifications

LED-40W-HV Series

High Voltage Input Switch Mode LED Drivers













Constant Current Models

Model	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max Output Power (W)	Typical Efficiency
LED40W-130-C0300-XX-HV	300	44-130	39.0	87%
LED40W-114-C0350-XX-HV	350	38-114	39.9	86%
LED40W-100-C0400-XX-HV	400	33-100	40	86%
LED40W-089-C0450-XX-HV	450	30-89	40	86%
LED40W-072-C0550-XX-HV	550	24-72	39.6	85%
LED40W-057-C0700-XX-HV	700	20-57	40	85%
LED40W-048-C0830-XX-HV	830	16-48	39.8	85%
LED40W-045-C0900-XX-HV	900	16-45	40	85%
LED40W-040-C1000-XX-HV	1000	13-40	40	85%
LED40W-036-C1100-XX-HV	1100	12-36	39.6	85%
LED40W-030-C1400-XX-HV	1400	10-30	42	85%
LED40W-024-C1670-XX-HV	1670	8-24	40	85%
LED40W-022-C1820-XX-HV	1820	7-22	40	85%
LED40W-018-C2200-XX-HV	2200	6-18	39.6	84%
LED40W-015-C2680-XX-HV	2680	5-15	40	84%
LED40W-013-C3080-XX-HV	3080	4-13	40	84%
LED40W-012-C3330-XX-HV	3330	4-12	40	83%
LED40W-010-C4000-XX-HV	4000	3-10	40	83%
LED40W-009-C4450-XX-HV	4450	3-9	40	82%

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

Constant Voltage Models

Output Voltage (Vdc ±5%)	Output Current	May Output	Max
(VUC ±370)	Range (mA)	Power (W)	Efficiency
9	1113-4450	40	80%
10	1000-4000	40	81%
12	825-3330	40	81%
13	770-3080	40	81%
15	670-2680	40	81%
18	550-2200	39.6	81%
22	455-1820	40	82%
24	418-1670	40	82%
30	350-1400	42	82%
36	275-1100	39.6	82%
40	250-1000	40	82%
45	225-900	40	83%
48	208-830	39.8	83%
57	175-700	40	83%
72	138-550	39.6	84%
89	113-450	40	85%
100	100-400	40	85%
114	75-350	39.9	86%
130	75-300	39.0	86%
	10 12 13 15 18 22 24 30 36 40 45 48 57 72 89 100	10 1000-4000 12 825-3330 13 770-3080 15 670-2680 18 550-2200 22 455-1820 24 418-1670 30 350-1400 36 275-1100 40 250-1000 45 225-900 48 208-830 57 175-700 72 138-550 89 113-450 100 100-400 114 75-350	10 1000-4000 40 12 825-3330 40 13 770-3080 40 15 670-2680 40 18 550-2200 39.6 22 455-1820 40 24 418-1670 40 30 350-1400 42 36 275-1100 39.6 40 250-1000 40 45 225-900 40 48 208-830 39.8 57 175-700 40 72 138-550 39.6 89 113-450 40 100 100-400 40 114 75-350 39.9

Class 2: US/Canada







Hold Up Time: **Protections**

Input Voltage Range:

Frequency:

Power Factor:

Inrush Current:

Input Current:

Maximum Power: **Current Accuracy:**

Load Regulation:

Leakage Current:

THD:

Overveltage	Output	
Over-voltage	Output	
Over-current	Output	
Short Circuit	Auto Recovery	

600 μA Typical

Half Cycle

start 25°C

40W

± 4%

347-480 Vac Nom. (312-528 V Min/Max)

>0.90 @ >60% load 347V, >80% load 480V

<30.0 Amps max @ 480Vac, full load, cold

0.15 Amps typical @ 347Vac, 60 Hz, full load

50/60 Hz Nom. (47-63 Hz Min/Max)

± 3% Over input line variation

≤ 20% @ any load, 347V/480V

Environmental Specifications		
Max Case Life Temp: (5 year warranty)	75°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	
Impact Resistance:	1g/s	
MTBF @ 40°C:	482,000 Hours at full load, per MIL-217F Notice 2	
EMC:	FCC 47CFR Part 15 Class A compliant	
Weight:	11 oz. (311 g)	

• Total Power: 40 Watts

• Input Voltage: 347-480 Vac Nom.

• UL Dry & Damp Location Rated

• IP66 & NEMA4

High Power Factor

• Constant Current & Constant Voltage with Isolation

Black Magic Thermal Advantage™ Plastic Housing

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.

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.

© 2017 Thomas Research Products. Specifications subject to change without notice.

Pg 1 of 3



LED-40W-HV Series

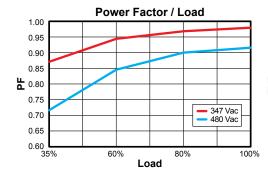


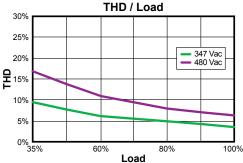
High Voltage Input Switch Mode LED Drivers

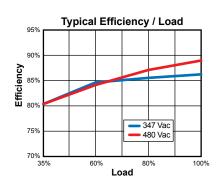
Dimensions

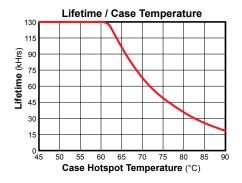
5.91 Min [150 Min] 0.39 ± 0.04 [10.0±1] 1.18 [30.0] 1.26 [32.0] - 0.16 [4.0] - 0.2 [5.0] .89 [48.0] 3.78 [96.0] Tc = 90°C max 0.39 10.0] 0.39 [10.0] 0.39 ± 0.04 [10.0±1] -0.16[4.0]1.20 [30.5] 2.80 [71.0] WIRE SPECS: 5.91 Min [150 Min] Input Leads: 18 AWG, rated 600 V, 105C, min.
Output Leads: 18 AWG, rated 300 V, 105C, min.
Dimming Leads: 22 AWG, rated 300 V, 105C.
All wires are stranded with solder dipped ends. IN Imm

Power Characteristics









Safety Cert.	Standard
UL/CUL	UL8750
CSA	22.2
CE	EN61347
EMC Standard	Notes
EN55015	
EN61000-3-2	> 80% Rated Power
EN61000-3-3	Class C
FCC, 47CFR Part 15	Class B
EN6100-4-5	3KV 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.

UL Conditions of Acceptability

See website for additional information

 $@\ 2017\ Thomas\ Research\ Products.\ Specifications\ subject\ to\ change\ without\ notice.$

Pg 2 of 3



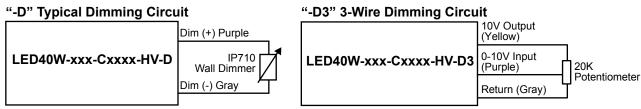
LED-40W-HV Series



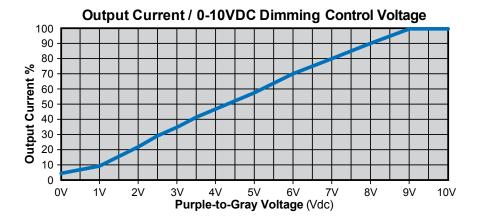
High Voltage Input Switch Mode LED Drivers

"-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 (+) Purple Wire	-2.0 V		+15 V
Source Current out of Aux Yellow Wire			10mA



(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.