

LED-40W-HL-HV Series

Hazardous Location, High Voltage Input
LED Drivers



Electrical Specifications

Input Voltage Range:	347-480 Vac Nom. (312-528 V Min/Max)
Frequency:	50/60 Hz Nom. (47-63 Hz Min/Max)
Power Factor:	>0.90 @ >60% load 347V, >80% load 480V
Inrush Current:	<30.0 Amps max @ 480Vac, full load, cold start 25°C
Input Current (Max):	0.15 Amps typical @ 347Vac, 60 Hz, full load
Maximum Power:	40W
Current Accuracy:	± 3% Over input line variation
THD:	≤20% @ any load, 347V/480V
Leakage Current:	600 µA Typical
Hold Up Time:	Half Cycle
Load Regulation:	± 4%

Protections

Over-voltage	Over-Voltage, 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 @ 40°C:	482,000 Hours at full load, per MIL-217F Notice 2
EMC:	FCC 47CFR Part 15 Class A compliant
Weight:	12.9 oz (364 g)

- Constant Current & Constant Voltage with Isolation
- Total Power: 40 Watts
- Input Voltage: 347-480 Vac Nom.
- UL Dry & Damp Location Rated
- IP66
- High Power Factor
- UL Type HL, with VSA Case and internal thermal protection
- Rated for Hazardous Locations
- Black Magic Thermal Advantage™ Plastic Housing

Ordering Options:

- D: Dimmable model dims 100-10%. Two extra wires on the output side: +Purple/-Gray. It offers 0-10V & Resistance dimming, compatible with most quality 0-10V dimmers. See page 3.

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 A
EN6100-4-5	3KV L-N, 8/20 µsec Surge Protection

Constant Current Models

Model	Output Current (mA ±5%)	Output Voltage Range (Vdc)	Max Output Power (W)	Typical Efficiency
LED40W-130-C0300-HL-XY-HV	300	44-130	39.0	86%
LED40W-114-C0350-HL-XY-HV	350	38-114	39.9	86%
LED40W-100-C0400-HL-XY-HV	400	33-100	40	85%
LED40W-089-C0450-HL-XY-HV	450	30-89	40	85%
LED40W-072-C0550-HL-XY-HV	550	24-72	39.6	84%
LED40W-057-C0700-HL-XY-HV	700	20-57	40	83%
LED40W-048-C0830-HL-XY-HV	830	16-48	39.8	83%
LED40W-045-C0900-HL-XY-HV	900	16-45	40	83%
LED40W-040-C1000-HL-XY-HV	1000	13-40	40	82%
LED40W-036-C1100-HL-XY-HV	1100	12-36	39.6	82%
LED40W-030-C1400-HL-XY-HV	1400	10-30	42	82%
LED40W-024-C1670-HL-XY-HV	1670	8-24	40	82%
LED40W-022-C1820-HL-XY-HV	1820	7-22	40	82%
LED40W-018-C2200-HL-XY-HV	2200	6-18	39.6	81%
LED40W-015-C2680-HL-XY-HV	2680	5-15	40	81%
LED40W-013-C3080-HL-XY-HV	3080	4-13	40	81%
LED40W-012-C3330-HL-XY-HV	3330	4-12	40	81%
LED40W-010-C4000-HL-XY-HV	4000	3-10	40	81%
LED40W-009-C4450-HL-XY-HV	4450	3-9	40	80%

- X indicates lead options. B for bottom leads, S for side leads.
- Y indicates dimming options are available. See options. Blank = fixed current output

Constant Voltage Models

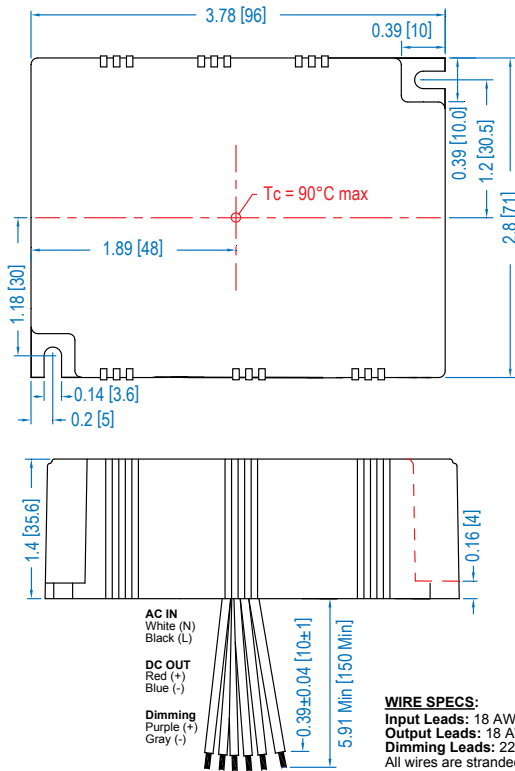
Model	Output Voltage (Vdc ±5%)	Output Current Range (mA)	Max Output Power (W)	Typical Efficiency
LED40W-009-HL-X-HV	9	1113-4450	40	82%
LED40W-010-HL-X-HV	10	1000-4000	40	83%
LED40W-012-HL-X-HV	12	825-3330	40	83%
LED40W-013-HL-X-HV	13	770-3080	40	84%
LED40W-015-HL-X-HV	15	670-2680	40	84%
LED40W-018-HL-X-HV	18	550-2200	39.6	84%
LED40W-022-HL-X-HV	22	455-1820	40	85%
LED40W-024-HL-X-HV	24	418-1670	40	85%
LED40W-030-HL-X-HV	30	350-1400	42	85%
LED40W-036-HL-X-HV	36	275-1100	39.6	85%
LED40W-040-HL-X-HV	40	250-1000	40	85%
LED40W-045-HL-X-HV	45	225-900	40	85%
LED40W-048-HL-X-HV	48	208-830	39.8	85%
LED40W-057-HL-X-HV	57	175-700	40	85%
LED40W-072-HL-X-HV	72	138-550	39.6	85%
LED40W-089-HL-X-HV	89	113-450	40	86%
LED40W-100-HL-X-HV	100	100-400	40	86%
LED40W-114-HL-X-HV	114	75-350	39.9	86%
LED40W-130-HL-X-HV	130	75-300	39.0	87%

Class 2: US/Canada

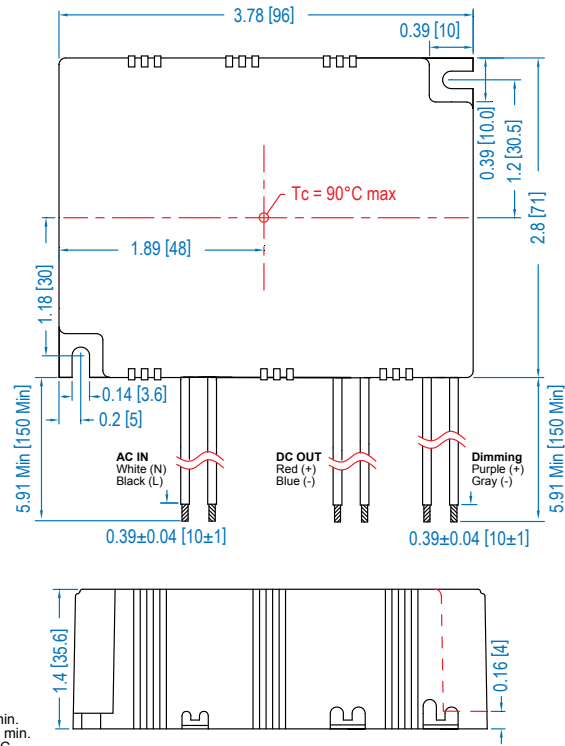


Dimensions

Standard “-BY” Bottom Leads Configuration:

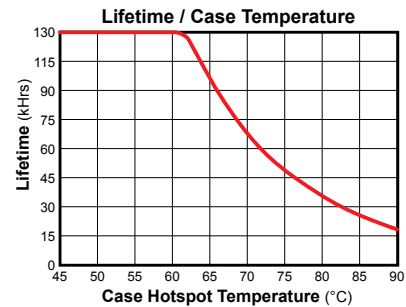
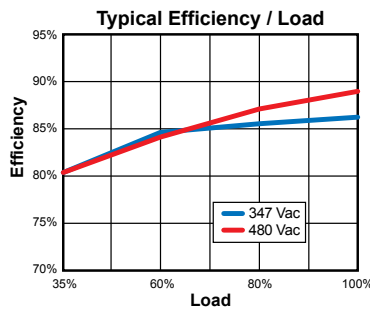
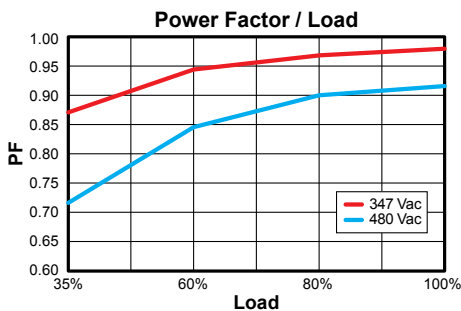


“-SY” Optional Side Leads Configuration:



IN [mm]

Power Characteristics



UL Conditions of Acceptability

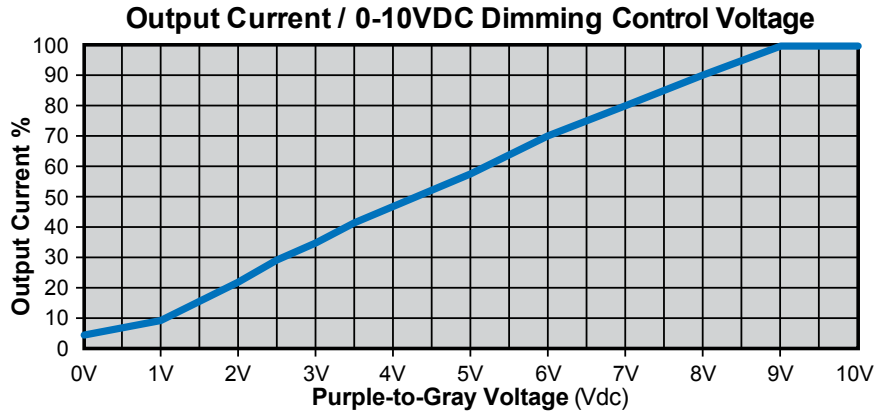
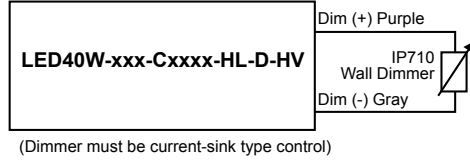
See website for additional information

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

“-D” Typical Dimming Circuit



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.