

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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

## Hazardous Location, 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 @ ≥ 60% load 100-230V, ≥ 85% load 277V
Inrush Current:	<20.0 Amps max @ 230 Vac, cold start 25°C
Input Current:	0.40 Amps typical @ 120Vac, 60Hz, Full Load
Maximum Power:	40W
Current Regulation:	± 3% Over input line variation
Load Regulation:	±4%
THD:	≤ 20% @ ≥ 60% load 100-230V, ≥ 80% load 277V
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
Impact Resistance:	1g/s
MTBF:	482,000 Hrs @ full load, 40°C per MIL-217F Notice 2
Weight:	12.9 oz (364 g)

• Total Power: 40 Watts

• Input Voltage: 100-277 Vac Nom.

- UL Dry & Damp Location Rated
- IP66
- · High Power Factor
- Constant Current & Constant Voltage with Isolation
- Black Magic Thermal Advantage™ Plastic Housing
- UL Type HL, with V5A Case
- Rated for Hazardous Locations

#### **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 for additional specifications.

#### 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	Current Out (mA ±3%)	Voltage Out, Range (Vdc)	Power Out Max (W)	Typical Effic (%)
LED40W-130-C0300-HL-XY	300	44-130	40	87
LED40W-114-C0350-HL-XY	350	38-114	40	86
LED40W-100-C0400-HL-XY	400	33-100	40	86
LED40W-089-C0450-HL-XY	450	30-89	40	86
LED40W-072-C0550-HL-XY	550	24-72	40	85
LED40W-054-C0700-HL-XY	700	18-54	38	85
LED40W-048-C0830-HL-XY	830	16-48	40	85
LED40W-045-C0900-HL-XY	900	16-45	40	85
LED40W-040-C1000-HL-XY	1000	13-40	40	85
LED40W-036-C1100-HL-XY	1100	12-36	40	85
LED40W-030-C1400-HL-XY	1400	10-30	42	85
LED40W-024-C1670-HL-XY	1670	8-24	40	85
LED40W-022-C1820-HL-XY	1820	7-22	40	85
LED40W-018-C2220-HL-XY	2200	6-18	40	84
LED40W-015-C2680-HL-XY	2680	5-15	40	84
LED40W-013-C3080-HL-XY	3080	4-13	40	84
LED40W-012-C3330-HL-XY	3330	4-12	40	83
LED40W-010-C4000-HL-XY	4000	3-10	40	83
LED40W-009-C4450-HL-XY	4450	3-9	40	82

#### Constant Voltage Models

Constant voltage Models							
Model	Voltage Out (Vdc ±5%)	Current Out Range (mA)	Power Out Max (W)	Typical Effic (%)			
LED40W-009-HL-X	9	1113-4450	40	87			
LED40W-010-HL-X	10	1000-4000	40	86			
LED40W-012-HL-X	12	825-3330	40	86			
LED40W-013-HL-X	13	770-3080	40	86			
LED40W-015-HL-X	15	670-2680	40	85			
LED40W-018-HL-X	18	550-2200	40	85			
LED40W-022-HL-X	22	455-1820	40	85			
LED40W-024-HL-X	24	418-1670	40	85			
LED40W-030-HL-X	30	350-1400	42	85			
LED40W-036-HL-X	36	275-1100	40	85			
LED40W-040-HL-X	40	250-1000	40	85			
LED40W-045-HL-X	45	225-900	40	85			
LED40W-048-HL-X	48	208-830	40	85			
LED40W-054-HL-X	54	175-700	38	84			
LED40W-072-HL-X	72	138-550	40	84			
LED40W-089-HL-X	89	113-450	40	84			
LED40W-100-HL-X	100	100-400	40	83			
LED40W-114-HL-X	114	75-350	40	83			
LED40W-130-HL-X	130	75-300	40	82			

Class 2: US/Canada

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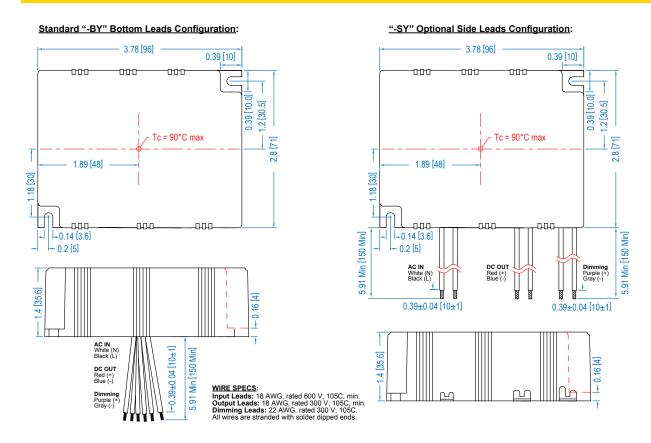


# **LED-40W-HL Series**

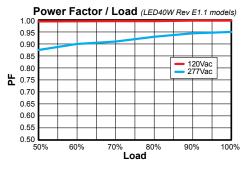


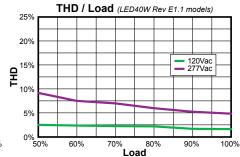
### Hazardous Location Switch Mode LED Drivers

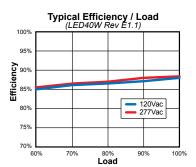
### **Dimensions**



### **Power Characteristics**







Lifetime / Case Temperature									
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Lifetime (KHrs)	60								
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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
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### **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.



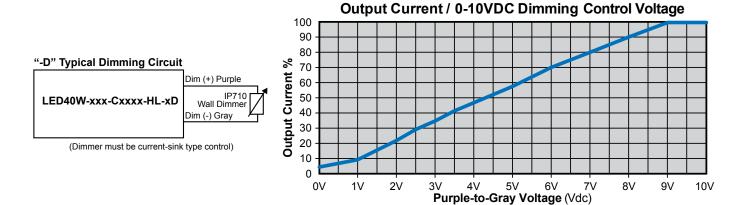
# **LED-40W-HL Series**



### Hazardous Location Switch Mode LED Drivers

### "-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



#### **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.