

HLF standard series — Constant Current, Non-Programmable, Dimmable,

Class P, 9.5" long, Indoor LED Drivers



- Class P LED drivers allow OEMs flexibility in their fixture design.
- · Great choice for an end user for field replacement.





## **Electrical Specifications**

Line Voltage: 120-277Vac ±10%, 50/60 Hz

Constant Current Output (Tolerance: ±5%)

Dimming Range: 5% - 100%

Power Factor: >0.9 for 80-100% load condition

THD: <20% for 80-100% load condition

Efficiency: 86% @120V & 88% @277V w/ rated load

Dimming: 0V – 10V Dimmable

### **Physical Parameters**

Overall Length (L): 9.5" ± 0.1" Width (W): 1.7" ± 0.1" 1.2" ± 0.1" Height (H):

Weight: 1.4 lbs Black / White Wire (L): 12" ± 0.5"

Red / Blue Wire (L): 12" ± 0.5"

Purple / Pink Wire (L): 120" ± 0.5"

Lead Wires: 18AWG 105°C 600V

### **Features**

Rugged and durable steel housing

Open Circuit, Short Circuit Protection

Minimum starting temperature: -20°C

Warranty: 5 years

Suitable for use between -20°C (-4°F) to 55°C

(131°F) ambient temperatures

Listings: UL Class 2/Class P

**ROHS** compliant

## Standards & Safety

UL8750 - LED Equipment - Listed

Class 2 Output Rated

FCC Part 15 Class B Sound Rated: A

No PCB's

This product's warranty is based on case temperature, Tc, at 80°C.

	Output				Internal	Input	Inrush
Model Name	Voltage (VDC)	Current (mA)	Power (W)	No Load Volt <sub>max</sub> (VDC)	Surge Protection	Current (A)max	Current A(pk)
HLF096-C1750-054DMVP <sup>†</sup>	32 – 54	1,750	96	59	2.5 kV	0.91	<70A
HLF096-C2450-039DMVP <sup>†</sup>	28 – 39	2,450	96	50	2.5 kV	0.91	<70A
HLF075-C1400-054DMVP <sup>‡</sup>	32 – 54	1,400	75	59	2.0 kV	0.69	<70A
HLF060-C1230-048DMVP <sup>†</sup>	27 – 50	1,225	60	58	2.5 kV	0.55	<30A
HLF050-C1050-048DMVP <sup>†</sup>	31 – 48	1,050	50	58	2.0 kV	0.48	<30A

<sup>†</sup> Sold in package quantity of 20 pcs/carton

<sup>‡</sup> Sold in package quantity of 24 pcs/carton







### **Protections**

#### - Short Circuit Protection:

When operating under any line condition into a short circuit condition for an indefinite period time, the power supply shall be self-recovering when fault condition is removed.

#### Over Current Protection:

When operating under any line condition into any over load condition for an indefinite period of time, the power supply shall be self-recovering when fault condition is removed.

### **Environmental Conditions**

#### - Operating:

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions:

- o Ambient temperature: -20°C to 55°C. 100% rated power at 55°C.
- Class P
- o Relative Humidity: 5 to 95%, non-condensing
- o Cooling: Convection

#### Non-Operating:

The power supply shall be capable of standing the following environmental conditions for extended periods of time, without sustaining electrical or mechanical damage and subsequent deficiencies.

Ambient Temperature: -40° to 85°C

#### Shock and Vibration:

 MIL-STD-810G Shock Method 516.6 procedure IV and Vibration Method 514.6 Procedure 1, Category 4

## Reliability

- MTFB:
  - >300,000 hours calculated to MIL-HDBK217F @ 25°C rated Load
- Product Life:
  - o >5yrs @ Tc = 85°C & Ta=55°C ambient, rated load

### **EMC**

#### Conducted:

FCC Part 15 Class B @ 120V / FCC Part 15 Class A @ 277V

#### Audible Noise:

Class A Sound rating not to exceed 24dBA (audible) when installed in fixture and such fixture is
installed in its normal use. The measurement is to be made from a distance not less than 3 feet.

#### - ESD:

o IEC 61000-4-2 Level 2: 2KV Air and Contact.

#### Input Transient Protection (Surge Protection)

 Product complies with IEEE C.62.41-2002 (seven strikes of a 100 kHz, 2.5kV level for both common mode and differential mode.)





## Safety

- Approval Agencies
  - O UL 8750 LED equipment for use in lighting product
  - o CSA C22.2 No 250.13-12 LED equipment for lighting applications

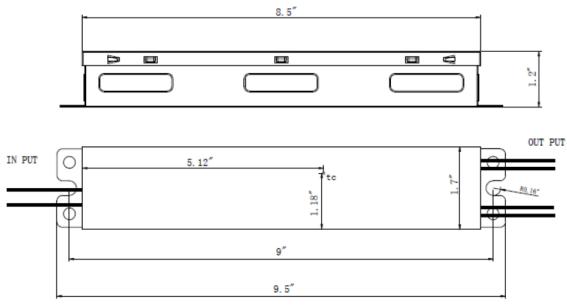
## **Dimming Methods**

- 0-10V Dimming
  - o 0-10V Input Signal
  - o Dimming Range: 10-100%

### Mechanical

- Materials
  - Metal case
  - o All material to be ROHS compliant to Directive 2011/65/EU and (EU)2015/863.
  - o Input: Black & White: 12in, 18 AWG 105°C 600V
  - Output: Red & Blue: 12in, 18 AWG 105°C 600V
  - o Dimming: Purple & Pink (or Gray): 12in, 18 AWG 105°C 600V

## **Physical Dimensions:**



Overall Length ( L ):	9.5" ± 0.1"	Can Length	8.5" ± 0.1"
Width ( W ):	1.7" ± 0.1"	Hole to Hole (L)	9.0" ± 0.1"
Height ( H ):	1.2" ± 0.1"	Hole to Hole (W)	1.1" ± 0.1"
Weight (lbs):	1.38 lbs	Wire Length	11.5" ± 0.5"





# 0-10V Dimming Curve

# **Driver Lifetime Vs. Case Temperature**

