

## 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  $\pm 10\%$ , 50/60 Hz
- Constant Current Output (Tolerance:  $\pm 5\%$ )
- 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"  $\pm 0.1$ "
- Width (W): 1.7"  $\pm 0.1$ "
- Height (H): 1.2"  $\pm 0.1$ "
- Weight: 1.4 lbs
- Black / White Wire (L): 12"  $\pm 0.5$ "
- Red / Blue Wire (L): 12"  $\pm 0.5$ "
- Purple / Pink Wire (L): 12"  $\pm 0.5$ "
- 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.

Model Name	Output				Internal Surge Protection	Input Current (A)max	Inrush Current A(pk)
	Voltage (VDC)	Current (mA)	Power (W)	No Load Volt <sub>max</sub> (VDC)			
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:
  - Ambient temperature: -20°C to 55°C. 100% rated power at 55°C.
  - Class P
  - Relative Humidity: 5 to 95%, non-condensing
  - 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:**
  - >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:**
  - 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**
  - UL 8750 - LED equipment for use in lighting product
  - CSA C22.2 No 250.13-12 – LED equipment for lighting applications

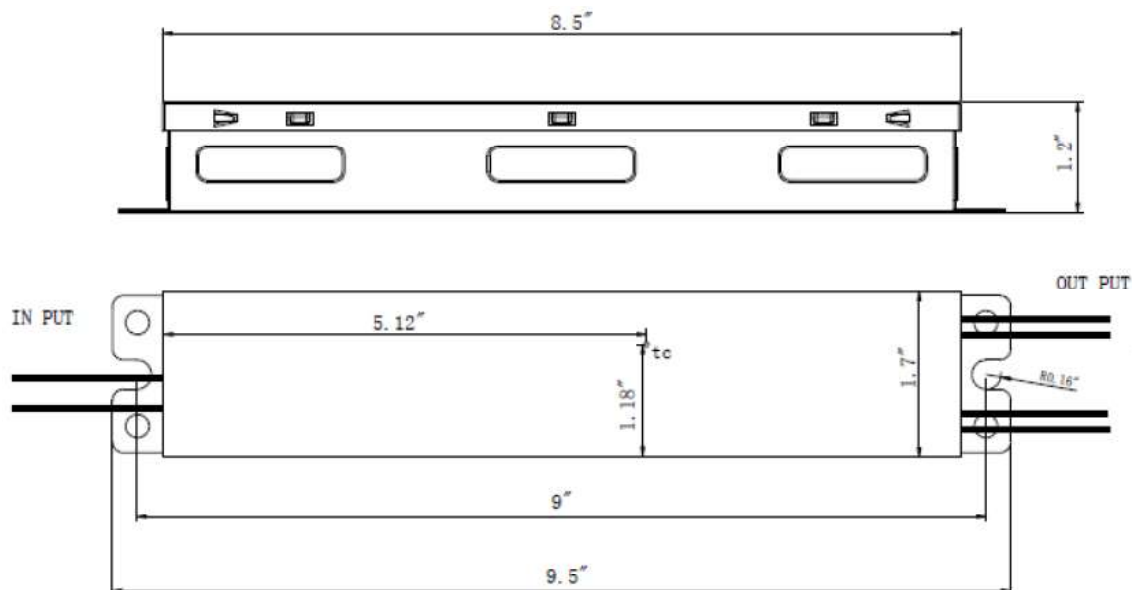
## Dimming Methods

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

## Mechanical

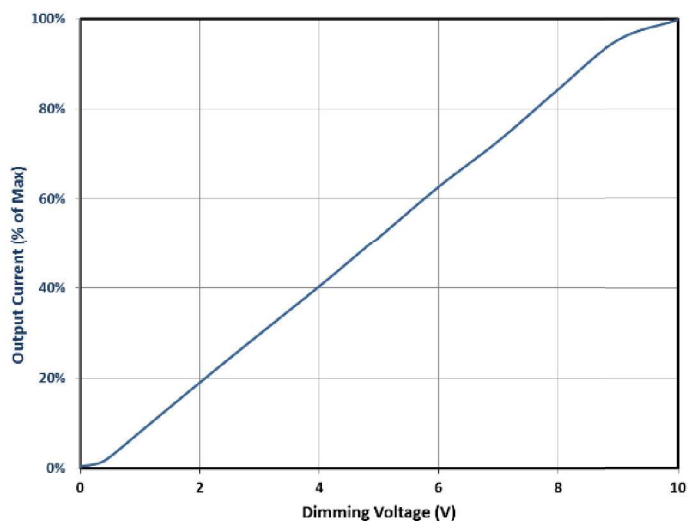
- **Materials**
  - Metal case
  - All material to be ROHS compliant to Directive 2011/65/EU and (EU)2015/863.
  - Input: Black & White: 12in, 18 AWG 105°C 600V
  - Output: Red & Blue: 12in, 18 AWG 105°C 600V
  - Dimming: Purple & Pink (or Gray): 12in, 18 AWG 105°C 600V

## Physical Dimensions:



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

## 0–10V Dimming Curve



## Driver Lifetime Vs. Case Temperature

