E-Dimming D Driver

<u>HBP-160-48A</u> E-Dimming 0/I-I0V DRIVER

Design and Quality EASEIC of USA

SPEC SHEET



160W 48V 3.30A 0/1-10V Dim HBP HBP-160-48A 69216003





SELV IP67 RoHS

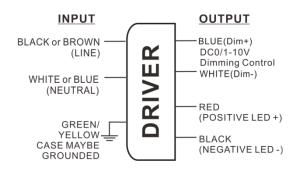
Features

- Universal AC input (90~305Vac)
- Designed for LED lighting applications
- Built-in 3 in 1 dimming function(0/1-10V,PWM or Resistance)
- IP67/IP65 design for indoor or outdoor installations
- These drivers operate to specification under wide temperature and electrical ranges to ensure reliability
- HBP series LED drivers for use in Class I, Division 2 hazardous location luminaires
- Cooling by free air convection
- Suitable for dry, damp, and wet location
- 5 year warranty

Benefits

- Applies to all indoor and outdoor LED lighting
- Helps to maximize energy savings and allows application specific light levels
- Supports majority of available dimming solutions

Wire Diagram



Note:

Install in accordance with National and Local Electrical Codes.

Please pay special attention to wiring installation guidelines,

Wrong wiring will cause damage to the LED driver.

Before connection the power, make sure you have access to the LED load.

Product Data

Input Voltage (Vac)	Output Power (W)	Output Voltage (V)	Output Current (A)	Efficiency @Max Load and 70°C case	Max Case Temp. (°C)	Input Current (Arms)	Max Input Power (W)	THD @Max Load (%)	Power Factor @Max Load	Weight (Lbs/kgs)	Envir. Protection Rating
120				90.0	1.4 75 00	1.54		<20%			
230	160	28-48	3.30	90.0	Life-75℃ UL-85℃	0.80	185.1	<20%	>0.96	3.96/1.80	UL damp and dry
277				91.0	OL-03 C	0.66		<20%			damp and dry



SPEC SHEET

Electrical Specifications

Ordering Information							
Туре	HBP-160-48A	HBP-160-48A					
Order Code	69216003	69216003					
Full product name	E-Dimming 160W 48	E-Dimming 160W 48V 3.30A 0/1-10V Dim HBP					
Input Information							
Line Voltage	100-277Vac_rms	100-277Vac_rms					
Line Current	1.54A@120VAC	1.54A@120VAC 0.80A@230VAC 0.66A@277VAC					
Line Frequency	50/60Hz	50/60Hz					
Min, Mains Voltage operational	90[min]	90[min]					
1/ax, Mains Voltage operational 305[max]							
THD(total)	<20%						
Power Factor(PF)	>0.96						
Inrush Current(Typ.)	Cold Start 65A(twidth	Cold Start 65A(twidth=270us measured at 50% Ipeak) at 230VAC					
Leakage Current(Typ.)							
Output Information							
Output voltage	28V to 48V	28V to 48V					
Output Constant Current	3.30A	3.30A					
Maximum open circuit voltage	<60V						
Output Current Ripple	2% of nominal output voltage (whichever is greater),measured at 20Mhz						
(ripple=peak to peak)		bandwidth with 0.1uf ceramic capacitor in parallel with 10uf electrolytic capacitor connected at the end of the output connector.					
Protections		Over Current, Over Voltage,					
	Short Circuit and Ope	en Circuit Protection for LL	ED+ and LED-				
Ambient Temp Range		-40°C to +70°C, 20-95% RH non-condensing					
Max Case Temperature(Tc)	75℃ for Life & 85℃ f	75°C for Life & 85°C for UL Safety					
Features							
Dimming Interface	0-10V(1-10V) Dimmir	0-10V(1-10V) Dimming 10V PWM Signal Dimming					
	Resistance Dimming						
0-10V Dimming Specifications	250uA source current	250uA source current form driver, See dim curve for detail.					
10V PWM Signal	100Hz-3KHz PWM	I00Hz-3KHz PWM					
Resistance Dimming	100Kohm variable res	100Kohm variable resistance					
Dimming range	10-100%	10-100%					
Environment & Approbation							
Environmental Protection Rating	UL damp and dry						
Agency Approbations	UL8750,UL1310, CSA	UL8750,UL1310, CSA-C22.2 No.250.0-08,ENEC EN61347-1,EN61347-2-13 independent, EN62384,TUV EN60950-1					
Electromagnetic Compliance	FCC Title 47 Part 15 Compliance to EN550 Compliance to EN6	FCC Title 47 Part 15 Class A Compliance to EN55015,EN61000-3-2 Class C(@100% Load);en6100-3-3 Compliance to EN61000-4-2,3,4,5,6,8,11;EN61547,EN55024, light industry level(surge 2KV), criteria A					
Audible noise	1 3 /	<24dB Class A					

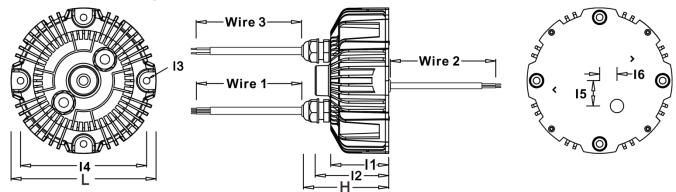




SPEC SHEET

Mechanical Specifications

Mechanical Drawing



Dimensions

	In.	mm
Case Length(L)	6.0	⊄ 152
Case Height(H)	3.2	80.6
Mounting Holes(II)	2.2	56.0
Mounting Holes(I2)	2.8	70.0
Mounting Holes(I3)	0.24	¢6.0
Mounting Holes(I4)	5.2	133
Mounting Holes(I5)	1.1	27.8
Mounting Holes(I6)	0.2	5
Input Wire(Wire I)	11.8	300±20
SJTW 18 AWG x 3C		
Input Wire	11.8	300±20
(Wire3 to Dimming Control)		
SJTW 18 AWG x 2C		
Output Wire(Wire2)	11.8	300±20
SJTW 14 AWG x 2C		
Overall Length	6.0	⊄ 152