E-Dimming D Driver

<u> HBP-100-24A</u> E-Dimming 0/I-I0V DRIVER

Design and Quality EASEIC of USA

SPEC SHEET



100W 24V 4.20A 0/1-10V Dim HBP HBP-100-24A 69210012





SELV IP67 RoHS

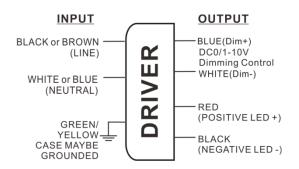
Features

- 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 | 7500 | 0.97 | | <20% | | | |
| 230 | 100 | 18-24 | 4.20 | 90.0 | Life-75℃ UL-85℃ | 0.51 | 116.4 | <20% | >0.96 | 2.64/1.20 | UL damp and dry |
| 277 | | | | 91.0 | OL-63 C | 0.42 | | <20% | | | damp and dry |



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Electrical Specifications

| - | | | | | | | |
|---------------------------------|--|---|--|--|--|--|--|
| Ordering Information | | | | | | | |
| Туре | HBP-100-24A | | | | | | |
| Order Code | 69210012 | | | | | | |
| Full product name | E-Dimming 100W 24 | E-Dimming 100W 24V 4.20A 0/1-10V Dim HBP | | | | | |
| Input Information | | | | | | | |
| Line Voltage | 100-277Vac_rms | 100-277Vac_rms | | | | | |
| Line Current | 0.97A@120VAC | 0.97A@120VAC | | | | | |
| Line Frequency | 50/60Hz | 50/60Hz | | | | | |
| Min, Mains Voltage operational | 90[min] | 90[min] | | | | | |
| Max, Mains Voltage operational | 305[max] | | | | | | |
| THD(total) | <20% | | | | | | |
| Power Factor(PF) | | | | | | | |
| Inrush Current(Typ.) | Cold Start 65A(twidt | Cold Start 65A(twidth=270us measured at 50% Ipeak) at 230VAC | | | | | |
| Leakage Current(Typ.) | <0.75mA/230VAC | <0.75mA/230VAC | | | | | |
| Output Information | | | | | | | |
| Output voltage | 18V to 24V | 18V to 24V | | | | | |
| Output Constant Current | 4.20A | 4.20A | | | | | |
| 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 electropacitor connected at the end of the output connector. | | | | | |
| Protections | | Over Current, Over Voltage, | | | | | |
| | Short Circuit and Open Circuit Protection for LED+ and LED- | | | | | | |
| Ambient Temp Range | | -40 °C to +70 °C, 20-95% RH non-condensing | | | | | |
| Max Case Temperature(Tc) | 75 ℃ for Life & 85 ℃ | 75℃ for Life & 85℃ for UL Safety | | | | | |
| Features | | | | | | | |
| Dimming Interface | 0-10V(1-10V) Dimmii | 0-10V(1-10V) Dimming 10V PWM Signal Dimming | | | | | |
| | Resistance Dimming | | | | | | |
| 0-10V Dimming Specifications | 250uA source curren | 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 | UL damp and dry | | | | | |
| Agency Approbations | | 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 | | | | | |
| | | | | | | | |

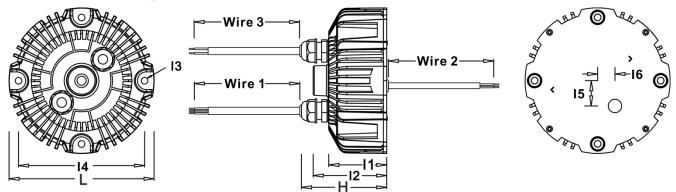




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Mechanical Specifications

Mechanical Drawing



Dimensions

| | In. | mm |
|----------------------------|------|--------|
| Case Length(L) | 5.1 | ⊄ 130 |
| Case Height(H) | 3.1 | 78.7 |
| Mounting Holes(II) | 2.1 | 53.5 |
| Mounting Holes(I2) | 2.7 | 67.9 |
| Mounting Holes(I3) | 0.24 | ¢6.0 |
| Mounting Holes(I4) | 4.6 | 116.3 |
| 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 to LED) | 11.8 | 300±20 |
| SJTW 14 AWG x 2C | | |
| Overall Length | 5.1 | ⊄ 130 |