



D10CC150HV10F

1050mA LED Driver

- High Range Input Voltage 347 – 480 Vac
- 0-10V Dimming to 10%
- Thermal Foldback Control



Performance

| | |
|-----------------------|----------------------|
| Input Voltage | 347 ~ 480 Vac ± 10% |
| Input Current Max | 0.48 /347V 0.34/480V |
| Input Power Max | 165W /347V 164W/480V |
| Input Frequency | 50 - 60 (Hz) |
| Power Factor | > 0.95 |
| THD max | < 20 % |
| Output Voltage | 50V-143V |
| Output Current | 105-1050mA |
| Output Power | 150W Max |
| Line Regulation | ±1 % |
| Load Regulation | ±3 % |
| Output Current Ripple | <10% |
| Inrush Current | 347V: 59.2A / 97uS |
| Peak / >50% Duration | 480V: 74A / 79uS |

- * Refer to charts for additional information
- Harmonic Emissions comply with ANSI C82.77
- Inrush current complies with NEMA 410

Environmental

| | |
|-------------------------------|---|
| EMI and RFI | Meets FCC part 15 (Class A) Non-Consumer Limits |
| Minimum Operating Temperature | -40°C (-40°F) |
| Storage Temperature | -40°C to 85°C |
| Temperature | (-40°F to 185°F) |
| tc | 85°C (185°F) max |
| Location Rating | UL Dry & Damp, Type HL |
| Transient Protection | IEEE C62.41 6kV** |

**Driver uses MOVs for transient protection. Refer to application note EVD07 at www.unvlt.com for additional information on Hi-Pot Testing.

Physical

| | |
|----------------------------|--------------------|
| Length | 9.50 in (241.3 mm) |
| Width | 2.40 in (61.0 mm) |
| Height | 1.55 in (39.4 mm) |
| Mounting Length | 8.89 in (225.8 mm) |
| Weight (lbs) | 2.6 |
| Lead Lengths | |
| Blk, Wht, Blk/Wht, Blu/Wht | 11.5 +/- 1.0 in |
| Red(+), Blue(-), Gry, Prp | 11.5 +/- 1.0 in |

Lead-wires are 18 AWG 105°C /600V solid copper.

Protection

Over voltage, Overload and short circuit, over temp.

Safety:

UL 8750 & CSA 250.13

Ordering Information

| Order Number | Description | Qty/Carton |
|-------------------|------------------|------------|
| D10CC150HV10F20KC | Standard Product | 10 |
| D10CC150HV10FR00C | Rated IP66 | 10 |

Wiring Diagram:



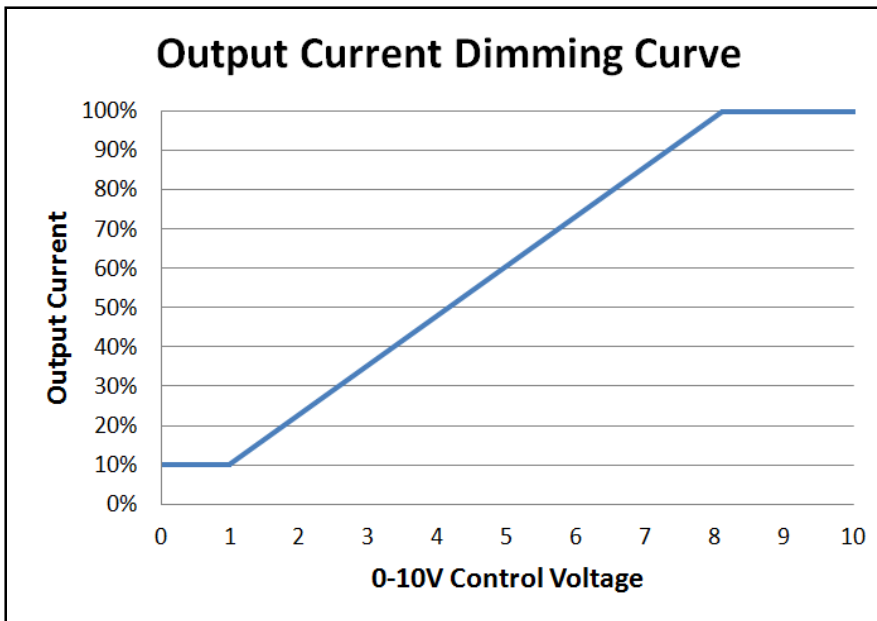
- **NOTE:** Unused Black/White and Blue/White leads must be individually capped off when thermal foldback control is not used.



Application and operation performance specification information subject to change without notification.



0-10V Dimming



0-10V Analog Dimming Interface

- Analog 0 to 10 vDC Voltage Control
- Use Violet (+) & Gray (-) for connection to 0-10vDC.
- 10v = maximum output, 0v = minimum output
- Wiring Violet & Gray together provides min. light output.
- Capping Violet & Gray separately provides 100% light output.
- 0-10V interface can be wired as Class 1 or Class 2 Circuit.
- Driver will source a maximum of 200uA for control needs.
- Controller must sink current from the 0-10V control leads.



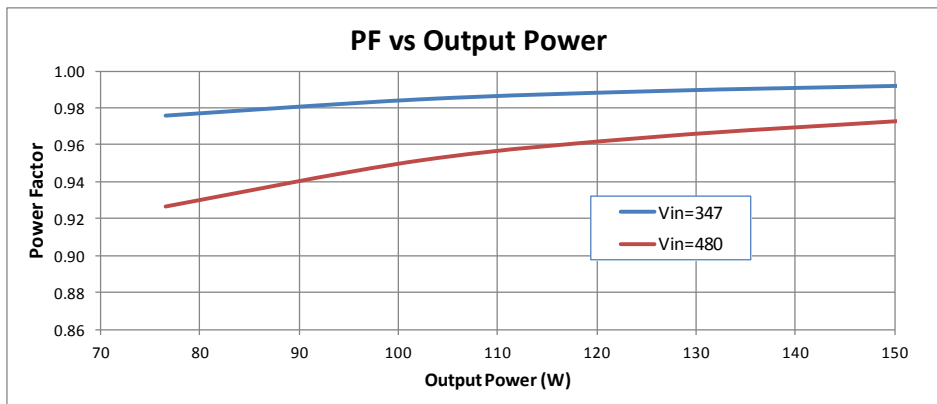
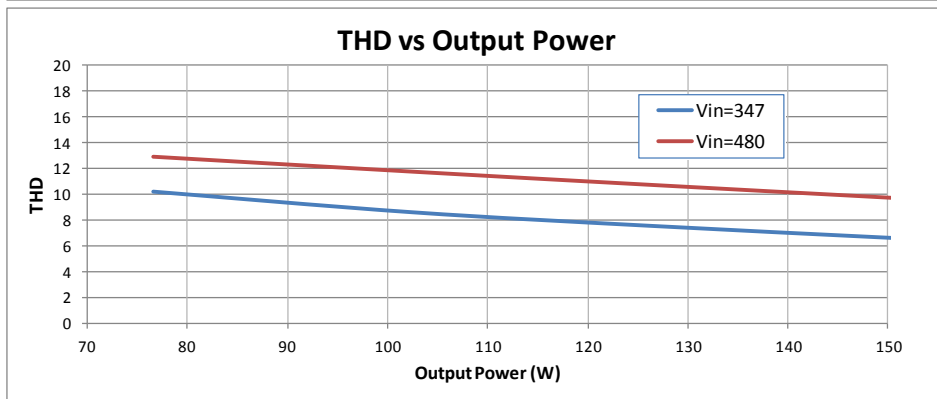
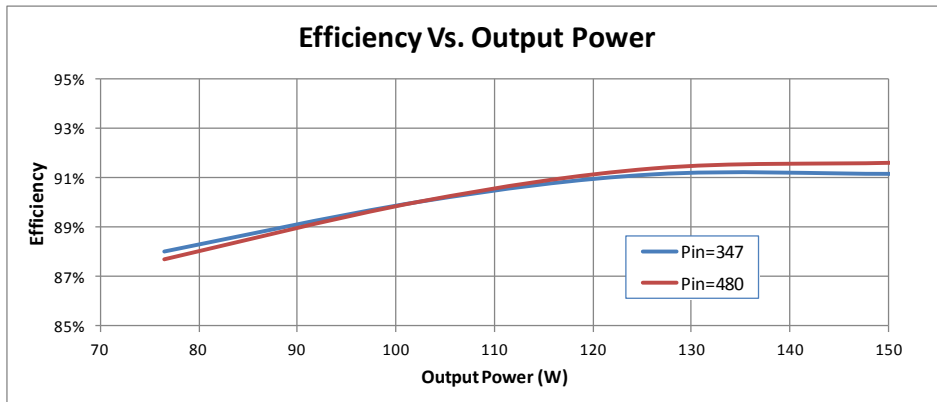
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Performance: Efficiency, THD, & Power Factor

Typical performance measurements are shown. The charts are to be used as a guideline and not for specification use.



Output power based on maximum rated output current and varying load voltages.



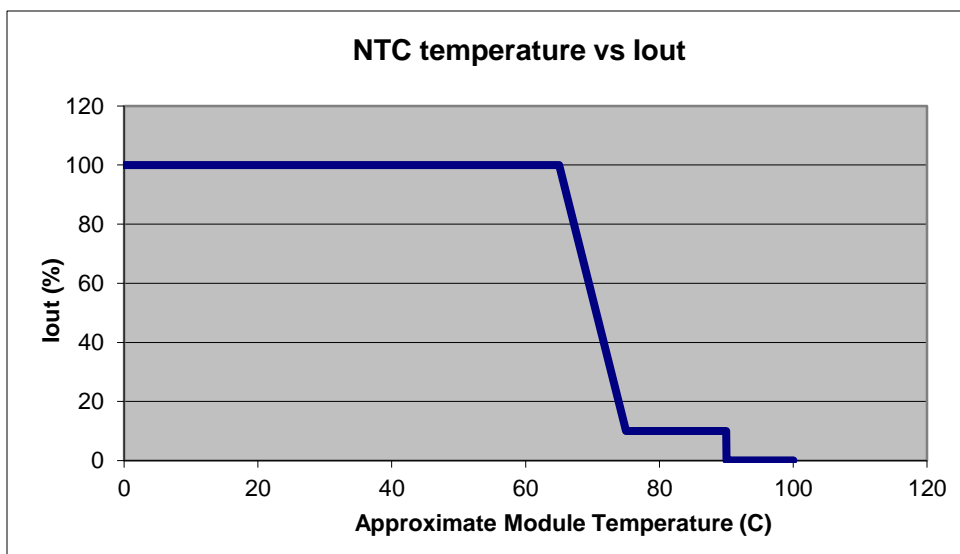
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Module Thermal Foldback Protection

Thermal Foldback Control

- Luminaire temperature monitoring/protection
- LED Driver reduces output current for external thermal protection if an NTC (Negative Thermal Coefficient) is connected to the Black/White and Blue/White leads.
- **NOTE:** Unused Black/White and Blue/White leads must be individually capped off when thermal foldback control is not used.
- See application note on www.unvlt.com for more information.



(Example with the Murata NTC p/n NCP18XV103J03RB)

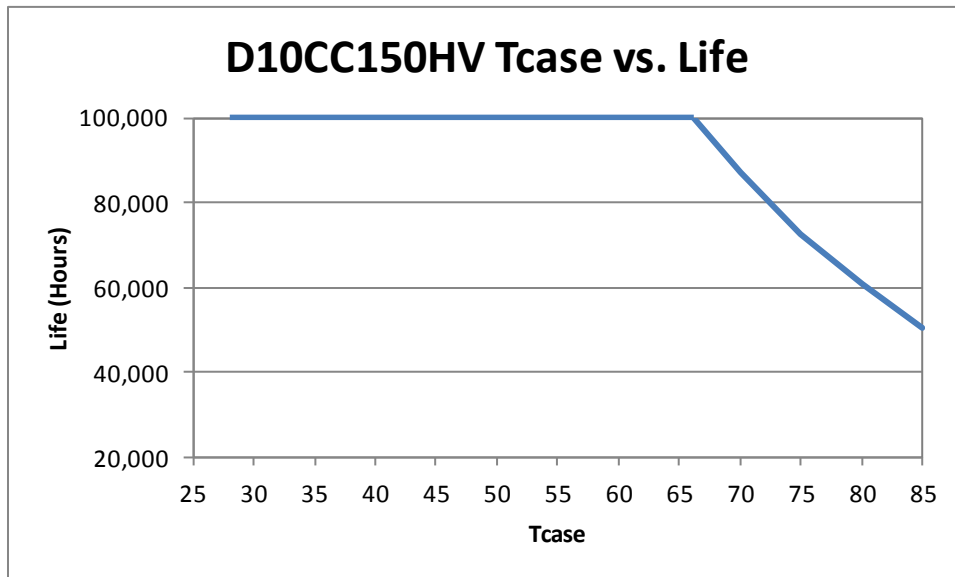


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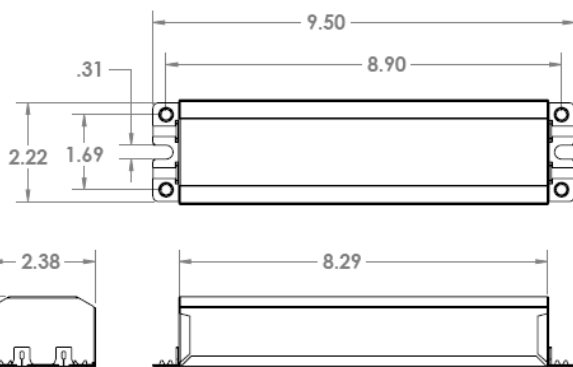
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Life vs. Driver Tcase

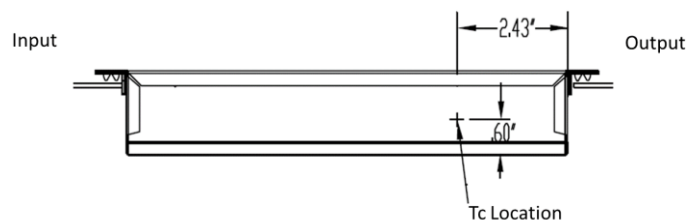


The Data curve provided predicts the LED Driver life based on the case temperature measured at the Tc location identified on the label or specification sheet. The Telecordia SR-332 standard is used to generate the prediction curves.

Dimensional Diagram



Tc Location



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Conditions of Acceptability –

1. The drivers shall be installed in compliance with the applicable requirements of the end-product standard for, mounting, spacing, casualty and segregation
2. The Drivers are suitable for use in “DRY” or “DAMP” locations.
3. The maximum available parameters from the isolated dimming connection leads (0-10 V) were within the maximum allowable limits for Class 2, inherently limited as specified in the UL 1310 standard for Class 2 Power Units, and CAN/CSA C22.2 No. 223 standard for Power Supplies with Extra-Low Voltage Class 2 Outputs.
4. When the drivers are installed in the end-use application, the maximum measured temperature at the “Tc” location indicated on the Marking Label, shall not exceed the specified temperatures in the following table:

| Model | Max Case Temp (°C) | | |
|---------------|--------------------|---|---|
| | t _c | Ambient @ 347 Input Voltage Rating | Ambient @ 480 Input Voltage Rating |
| D10CC150HV10F | 85°C | 50°C | 52°C |

5. The Leakage Current measurements were not performed on this unit. Compliance with leakage current requirements shall be determined in the end-product standard.” And, leakage current available from “User Accessible” dimming circuit shall be considered.
6. The leads for the connection of the primary (Black-White), the output (Red-Blue), the dimming circuit, and the Temperature sense circuit are R/C (AVLV2/8), 18 AWG, 600 V minimum, 90°C. The suitability of the leads shall be determined in the end-use application.
7. The thickness of the sheet steel used for the housing of the drivers is 0.51 mm. However, the housing was subjected to the “MECHANICAL STRENGTH FOR METAL ENCLOSURES TEST” specified in section 8.13 of UL8750 standard and the results of the test were in compliance.
8. These drivers may be provided with an optional temperature sense circuit (Black/White and Blue/White Leads). These leads are intended for connection to LED Array modules provided with temperature sensing circuits for the purpose of dimming the output to levels in accordance to the detected excessive temperature.
9. The temperature sense circuit is considered to be an extension of the secondary circuit and suitability and the reliability of the function of the temperature sense circuit shall be determined in the end-use application.

Warranty:

Universal Lighting Technologies warrants to the purchaser that each power supply will be free from defects in material or workmanship for a period of 5 years from the date of manufacture when properly installed per instructions and under normal operating conditions of use. Call 1-800-225-5278 for technical assistance.



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