D10CC150HVT-F

1050mA LED Driver w/ Tuning

- 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 Peak / >50% Duration	347V: 59.2A / 97uS 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 (-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
D10CC150HVT-F20KC	Standard Product	10
D10CC150HVT-FR00C	Rated IP66	10

*Consult Factory for Tuning ordering information

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.

Programmable Tuned Output Settings

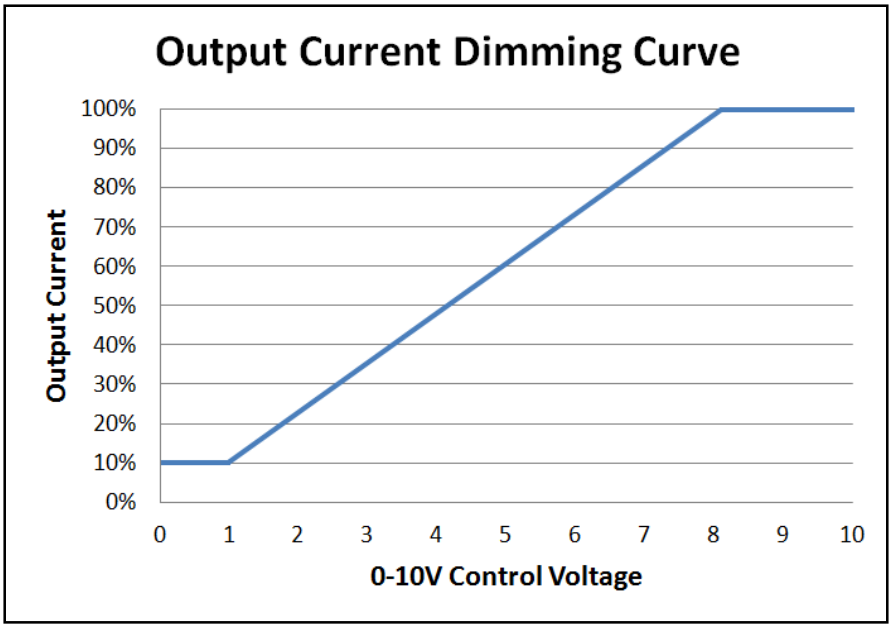
- This Everline LED Driver can be configured to set its current output to a selected fraction of their maximum rated design level. This function is called tuning (or also high-end trim) and it can be implemented with the LDTC01A using the Selector rotary switches. Tuning assignments are stored in driver memory and are not lost when power is removed. All factory produced drivers are tuned to maximum output unless otherwise noted on the label.
- Tuning SET Levels are listed in the table to the right. The SET Level corresponds to an associated Output Current value.
- Tuned output tolerance of ± 5%.
- Refer to application note EVD06 at www.unvlt.com for additional information.

Set Value	Output Current (A)
100	1.050
99	1.039
98	1.028
97	1.016
96	1.005
95	0.994
94	0.983
93	0.972
92	0.960
91	0.949
90	0.938
89	0.927
88	0.916
87	0.905
86	0.894
85	0.883
84	0.872
83	0.862
82	0.851
81	0.840

Set Value	Output Current (A)
80	0.829
79	0.818
78	0.808
77	0.797
76	0.786
75	0.775
74	0.765
73	0.754
72	0.743
71	0.733
70	0.722
69	0.711
68	0.701
67	0.690
66	0.680
65	0.669
64	0.659
63	0.648
62	0.638
61	0.627

Set Value	Output Current (A)
60	0.617
59	0.606
58	0.596
57	0.585
56	0.575
55	0.564
54	0.554
53	0.544
52	0.533
51	0.523
50	0.512
49	0.502
48	0.492
47	0.481
46	0.471
45	0.460
44	0.450
43	0.440
42	0.429
41	0.419
40	0.409

0-10V Dimming

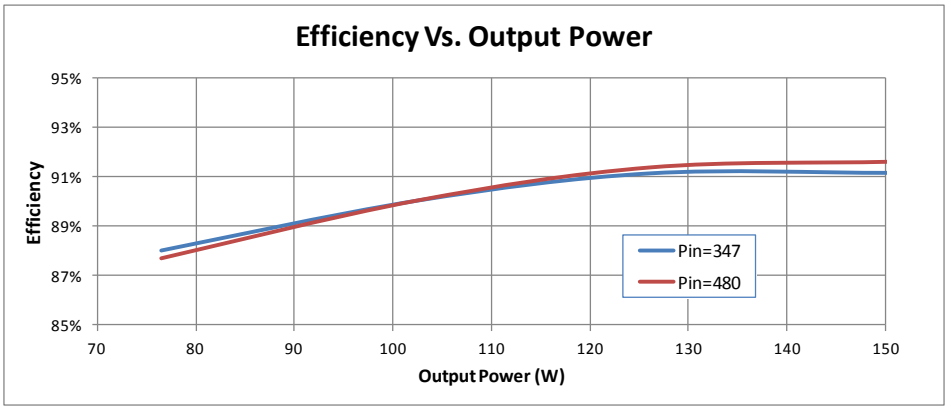


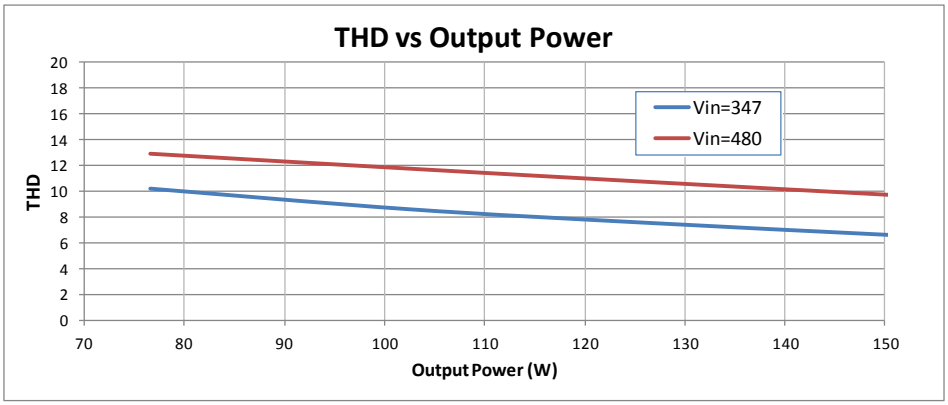
0-10V Analog Dimming Interface

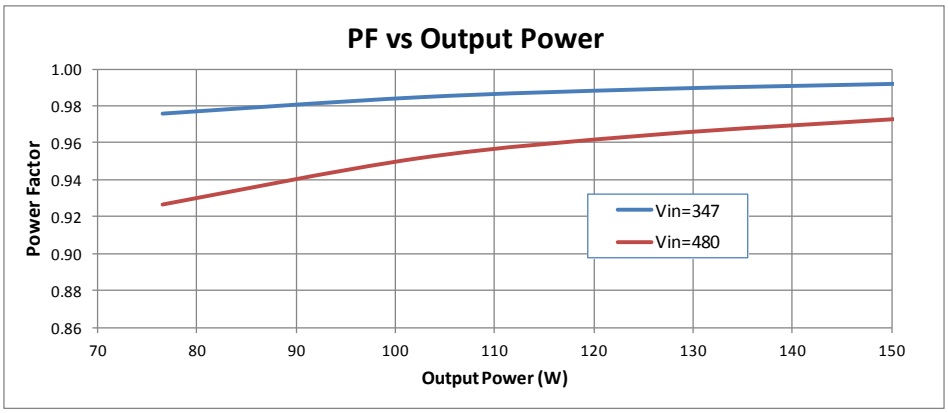
- Analog 0 to 10 vDC Voltage Control
- Use Violet (+) & Gray (-) for connection to 0-10vDC.
- 10v = maximum output, 0v = minimum output
- Wiring Violet & Gray together provides min. light output.
- Capping Violet & Gray separately provides 100% light output.
- 0-10V interface can be wired as Class 1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

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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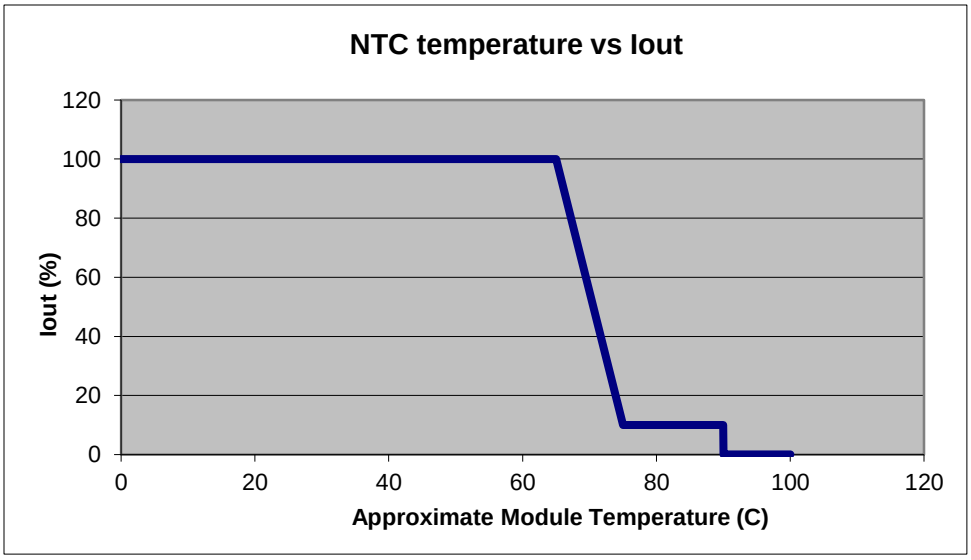
Module Thermal Foldback Protection

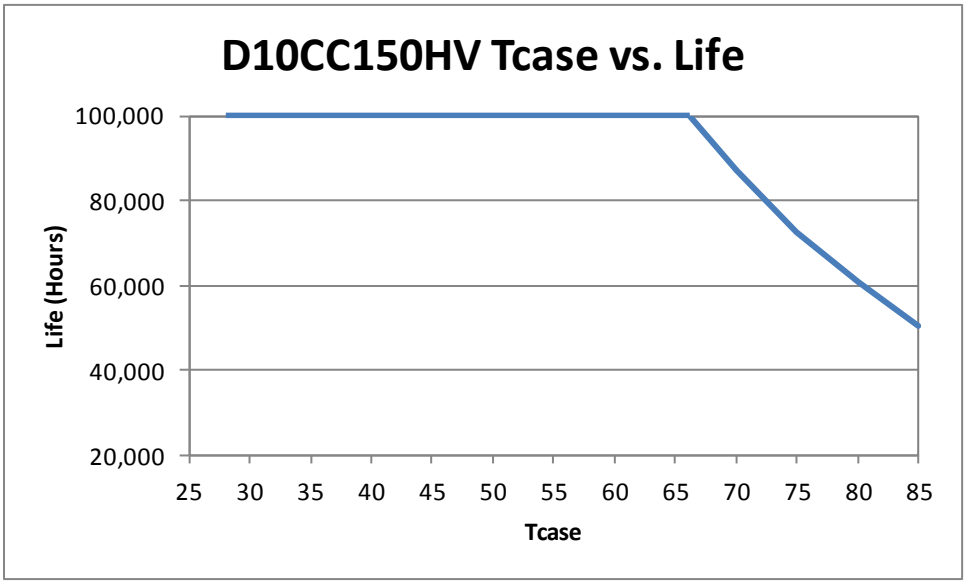
Thermal Foldback Control

- 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.



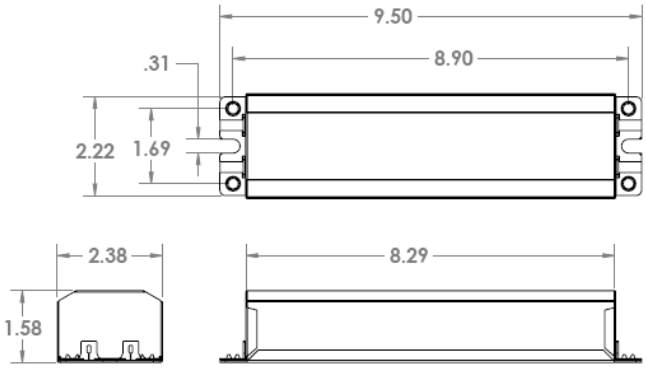
(Example with the Murata NTC p/n NCP18XV103J03RB)

Life vs. Driver Tcase

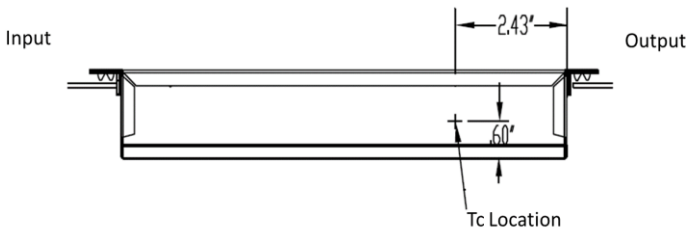


The Data curve provided predicts the LED Driver life based on the case temperature measured at the Tc location identified on the label or specification sheet. The Telecordia SR-332 standard is used to generate the prediction curves.

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)		
	tc	Ambient @ 347 Input Voltage Rating	Ambient @ 480 Input Voltage Rating
D10CC150HVT-F	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, 90ºC. 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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