



# 700mA 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	165 /347V 164/480V
Input Frequency	50 - 60 (Hz)
Power Factor	> 0.95
THD max	< 20 %
Output Voltage	75V-215V
Output Current	70-700mA
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

<sup>\*</sup> 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	-40°C (-40°F)
Temperature	-40 € (-40 1)
Storage	-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**

<sup>\*\*</sup>Driver uses MOVs for transient protection.

Refer to application note EVD07 at <a href="www.unvlt.com">www.unvlt.com</a> 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

**UL Class P** 

### **Ordering Information**

Order Number	Description	Qty/Carton
D700C150HVT-F20KC	Standard Product	10
D700C150HVT-FR00C	Rated IP66	10

<sup>\*</sup>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.











## **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 <u>www.unvlt.com</u> for additional information.

Set Value         Output Current (A)           100         0.700           99         0.693           98         0.685           97         0.678           96         0.671           95         0.663           94         0.656           93         0.649           92         0.641           91         0.634           90         0.627           89         0.620           88         0.612           87         0.605           86         0.598           85         0.591           84         0.584           83         0.576           82         0.569           81         0.562		
99 0.693 98 0.685 97 0.678 96 0.671 95 0.663 94 0.656 93 0.649 92 0.641 91 0.634 90 0.627 89 0.620 88 0.612 87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569		Current
98	100	0.700
97 0.678 96 0.671 95 0.663 94 0.656 93 0.649 92 0.641 91 0.634 90 0.627 89 0.620 88 0.612 87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	99	0.693
96	98	0.685
95 0.663 94 0.656 93 0.649 92 0.641 91 0.634 90 0.627 89 0.620 88 0.612 87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	97	0.678
94	96	0.671
93	95	0.663
92		0.656
91 0.634 90 0.627 89 0.620 88 0.612 87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	93	0.649
90 0.627 89 0.620 88 0.612 87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	92	0.641
89 0.620 88 0.612 87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	91	0.634
88 0.612 87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	90	0.627
87 0.605 86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	89	0.620
86 0.598 85 0.591 84 0.584 83 0.576 82 0.569	88	0.612
85 0.591 84 0.584 83 0.576 82 0.569		0.605
84 0.584 83 0.576 82 0.569	86	0.598
83 0.576 82 0.569	85	0.591
82 0.569	84	0.584
	83	0.576
81 0.562	82	0.569
	81	0.562

Set Value	Output Current (A)
80	0.555
79	0.548
78	0.541
77	0.534
76	0.527
75	0.519
74	0.512
73	0.505
72	0.498
71	0.491
70	0.484
69	0.477
68	0.470
67	0.463
66	0.456
65	0.449
64	0.442
63	0.435
62	0.428
61	0.421

Output
Current
(A)
0.414
0.407
0.400
0.393
0.386
0.379
0.372
0.366
0.359
0.352
0.345
0.338
0.331
0.324
0.317
0.310
0.303
0.296
0.290
0.283
0.276

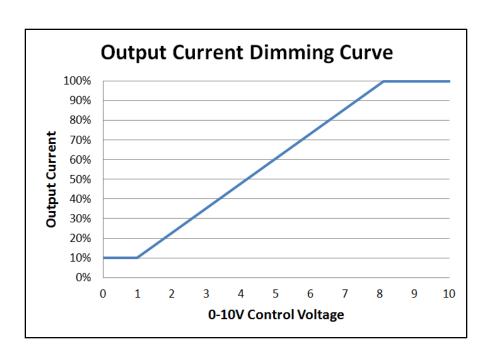








# 0-10V Dimming



### 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.



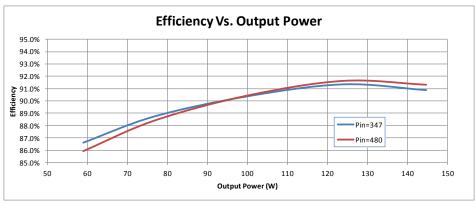


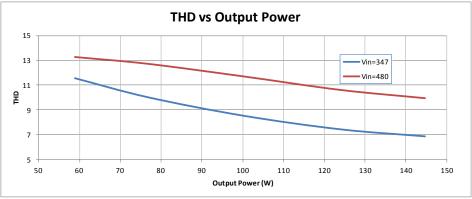


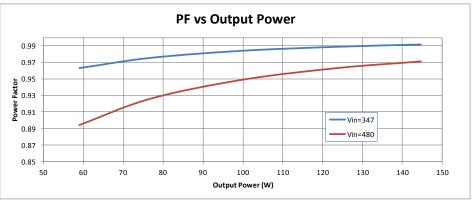


# Performance: Efficiency, THD, & Power Factor

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.





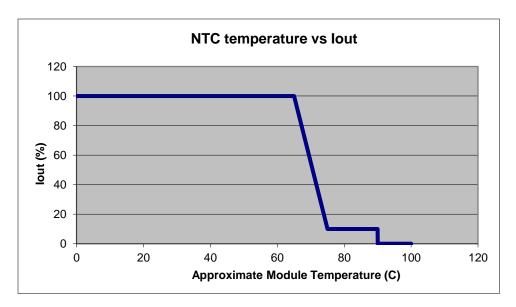




## **Module Thermal Foldback Protection**

#### 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)

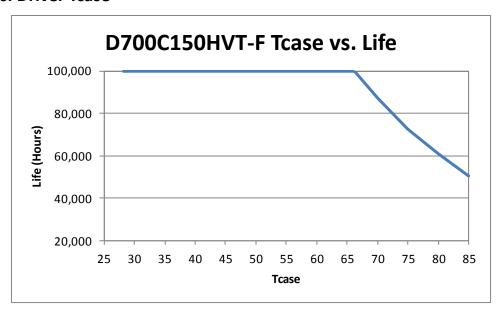






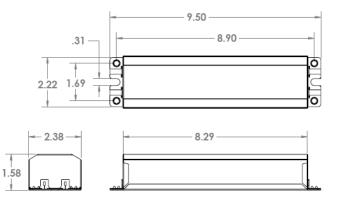


### Life vs. Driver Tcase

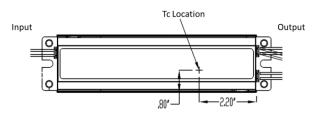


The Data curve provided predicts the LED Driver life based on the case temperature measured at the Tc location identified on the label or specification sheet. The Telecordia SR-332 standard is used to generate the prediction curves.

# **Dimensional Diagram**



## Tc Location



# 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.



