



1050mA LED Driver w/ Tuning

- Universal Input Voltage 120 – 277 Vac
- 0-10V Dimming to 10%
- Thermal Foldback Control

Performance

Input Voltage	120 ~ 277 Vac
Input Current Max	1.40 /120V 0.59/277V
Input Power Max	165W /120V 161W/277V
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	120V: 31A / 210uS
Peak / >50% Duration	277V: 74A / 200uS

- * 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
tc	(-40°F to 185°F)
Location Rating	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.universaldouglas.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(-), Pnk*, 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:

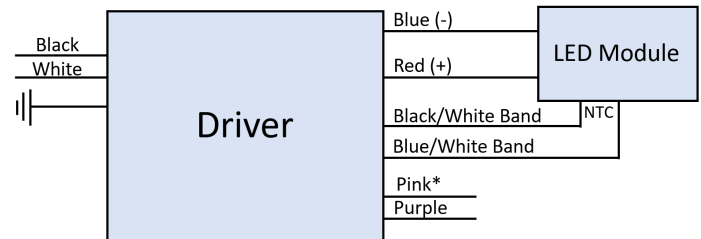
UL 8750 & CSA 250.13
UL Class P

Ordering Information

Order Number	Description	Qty/Carton
D10CC150UVT-F20KC	Standard Product	10
D10CC150UVT-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.

- * **NOTE:** The Gray has been changed to Pink for the negative 0-10V dimming control lead.



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

Programmable Tuned Output Settings

- This Universal Douglas 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 $\pm 5\%$.
- Refer to application note EVD06 at www.universaldouglas.com for additional information.

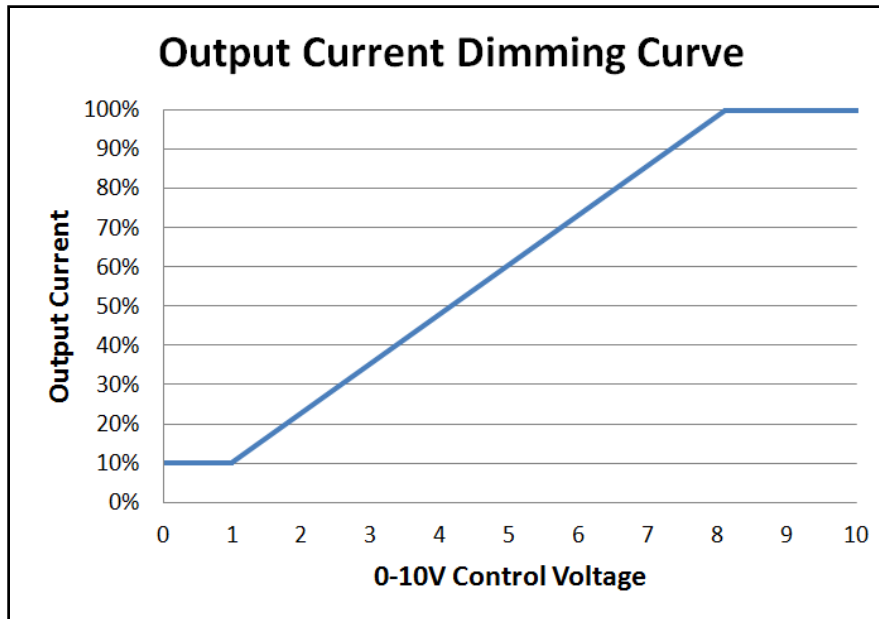
Set Value	Output Current (A)
100	1.050
99	1.035
98	1.020
97	1.005
96	0.990
95	0.975
94	0.960
93	0.946
92	0.931
91	0.917
90	0.903
89	0.888
88	0.874
87	0.860
86	0.847
85	0.833
84	0.819
83	0.806
82	0.792
81	0.779

Set Value	Output Current (A)
80	0.766
79	0.753
78	0.740
77	0.727
76	0.714
75	0.702
74	0.689
73	0.677
72	0.665
71	0.653
70	0.641
69	0.629
68	0.617
67	0.605
66	0.593
65	0.582
64	0.571
63	0.559
62	0.548
61	0.537

Set Value	Output Current (A)
60	0.526
59	0.516
58	0.505
57	0.494
56	0.484
55	0.473
54	0.463
53	0.453
52	0.443
51	0.433
50	0.424
49	0.414
48	0.404
47	0.395
46	0.386
45	0.377
44	0.367
43	0.359
42	0.350
41	0.341
40	0.332

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0-10V Dimming



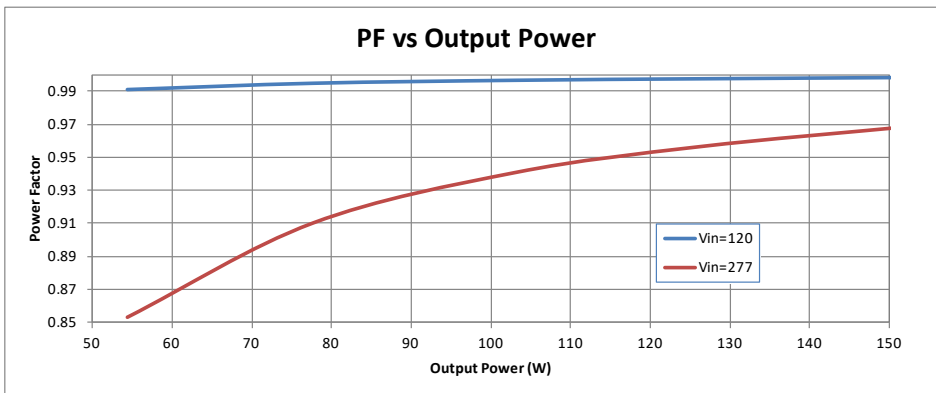
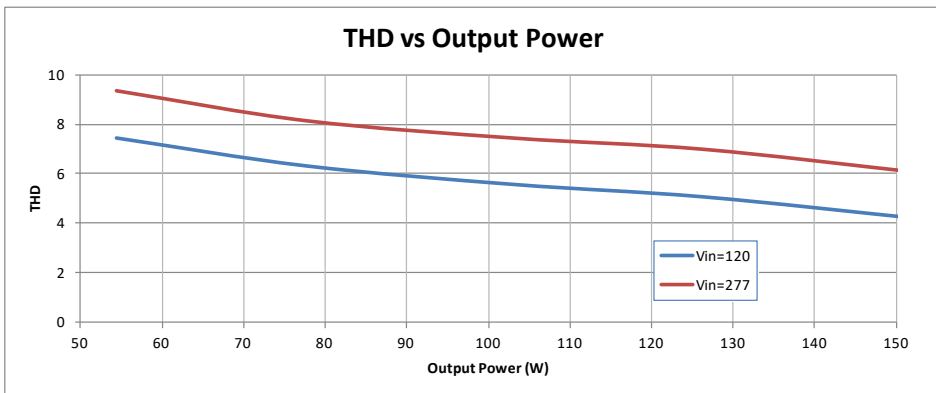
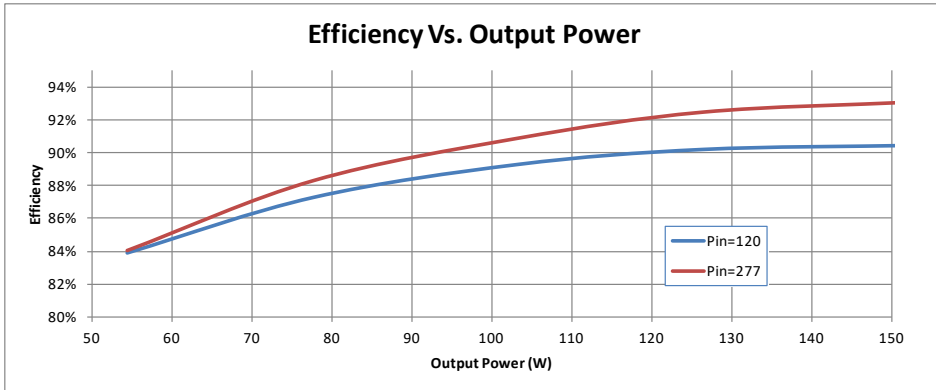
0-10V Analog Dimming Interface

- Analog 0 to 10 vDC Voltage Control
- Use Violet (+) & Pink* (-) for connection to 0-10vDC.
- 10v = maximum output, 0v = minimum output
- Wiring Violet & Pink* together provides min. light output.
- Capping Violet & Pink* 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.



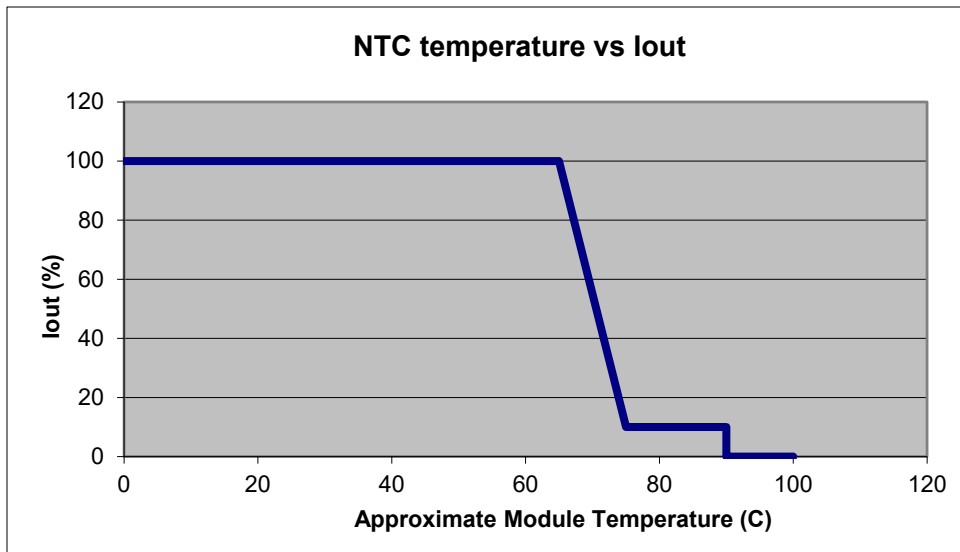
Output power based on maximum rated output current and varying load voltages.

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Module Thermal Foldback Protection

Thermal Foldback Control

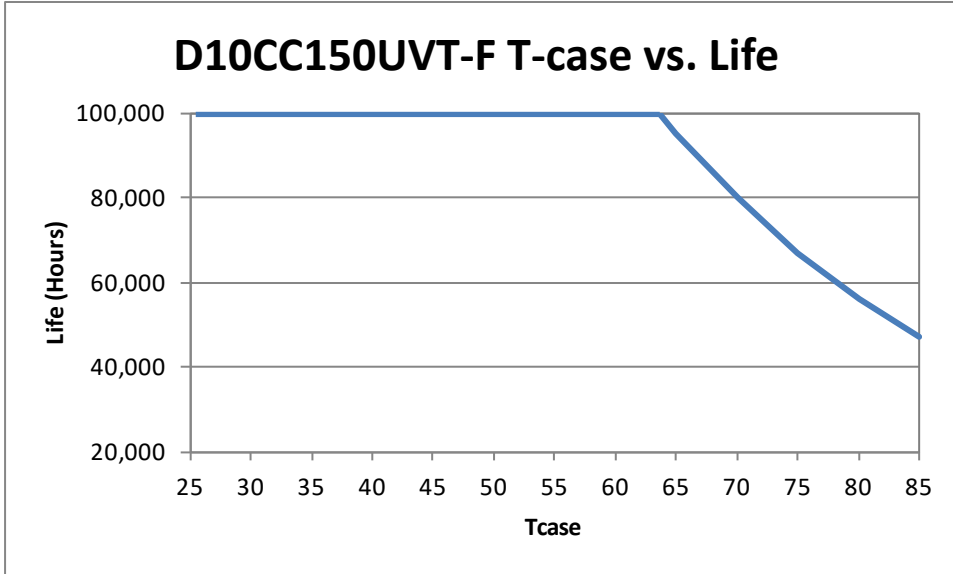
- Luminaire temperature monitoring/protection
- LED Driver reduces output current for external thermal protection if an NTC (Negative Thermal Coefficient) is connected to the Black/White and Blue/White leads.
- **NOTE:** Unused Black/White and Blue/White leads must be individually capped off when thermal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



(Example with the Murata NTC p/n NCP18XV103J03RB)

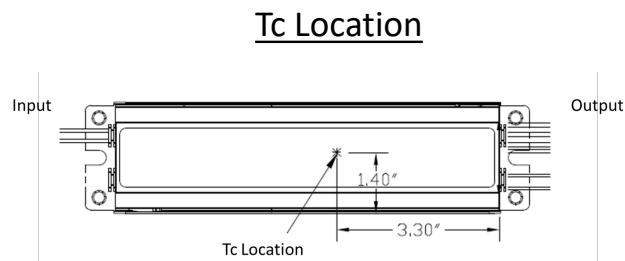
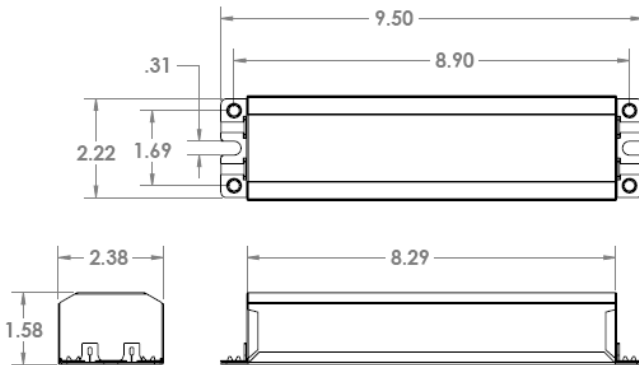
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Life Rating Prediction



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



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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