

D700C120UVT-Vx



700mA LED Driver

- 120W Output
- 0-10V Dimming w/ Tunable Output
- 12V Power source for Active cooling device
- Thermal Foldback Control

Performance	
Input Voltage	120 ~ 277 Vac
Input Current Max	1.14 /120V 0.49/277V
Input Power Max	136W
Input Frequency	50 - 60 (Hz)
Power Factor	> 0.95
THD max	< 20 %
Output Voltage	60 - 172V
Output Current	21mA - 700mA
Output Power	120W Max
Line Regulation	±3 %
Load Regulation	±5 %
Output Current Ripple	<xx%
Inrush Current	120V: 32A / 165uS
Peak / >50% Duration	277V: 37A / 155uS

*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	75°C (167°F) max
Location Rating	UL Dry & Damp
Transient Protection	IEEE C62.41 2.5kV

Physical	
Overall Length -VJ/-VN	5.02 in (127.5 mm)
Width	3.62 in (92.0 mm)
Height	1.57 in (39.9 mm)
Weight	20 oz.
Lead Lengths	
Blk, Wht, Purple, Gray	8 in
Red(+), Blue(-)	8 in
Orange, Yellow/Black, Black/Wht, Blue/Wht	8 in

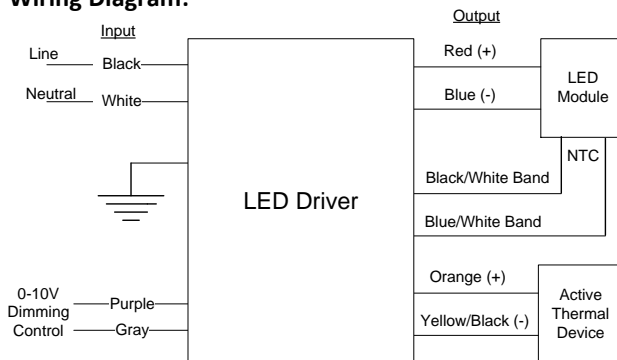
Lead-wires are 18 AWG 105°C /600V solid copper.

Protection: Over voltage, Overload and short circuit, over temp.
Safety: UL 8750 & CSA 250.13

Ordering Information

Order Number	Description	Qty/Carton
D700C120UVT-VN	No Mounting Feet	10
D700C120UVT-VJ	J-Box Stud Mount	10

Wiring Diagram:



Active Thermal Device Power Source

• Orange & Yellow/Black leads are for a 12V, 280mA max Active cooling device (ex: Nuventix Synjet downlight LED Cooler)



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Programmable Tuned Output Settings

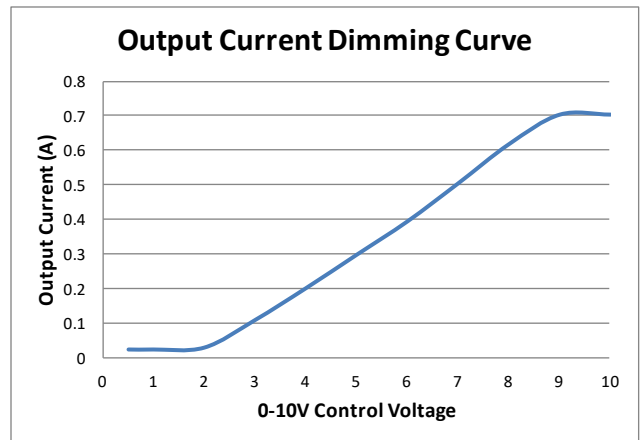
- This Everline LED Driver can be configured to set its current output to a selected fraction of their maximum rated design level. This function is called tuning (or also high-end trim) and it can be implemented with the LDTC01A using the Selector rotary switches. Tuning assignments are stored in driver 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.
- Refer to application note EVD06 at www.unvlt.com for additional information.

SET Value	Output Current (A)	SET Value	Output Current (A)	SET Value	Output Current (A)
100	0.700	80	0.534	60	0.384
99	0.690	79	0.526	59	0.376
98	0.681	78	0.518	58	0.369
97	0.673	77	0.510	57	0.362
96	0.665	76	0.503	56	0.355
95	0.656	75	0.495	55	0.348
94	0.648	74	0.487	54	0.341
93	0.639	73	0.480	53	0.334
92	0.631	72	0.472	52	0.327
91	0.623	71	0.465	51	0.321
90	0.614	70	0.457	50	0.314
89	0.606	69	0.449	49	0.307
88	0.598	68	0.442	48	0.300
87	0.590	67	0.435	47	0.293
86	0.582	66	0.427	46	0.287
85	0.574	65	0.420	45	0.280
84	0.566	64	0.413	44	0.274
83	0.558	63	0.405	43	0.267
82	0.550	62	0.398	42	0.260
81	0.542	61	0.391	41	0.254
				40	0.247

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
- Driver protected if line voltage is applied.
- 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 250uA for control needs.

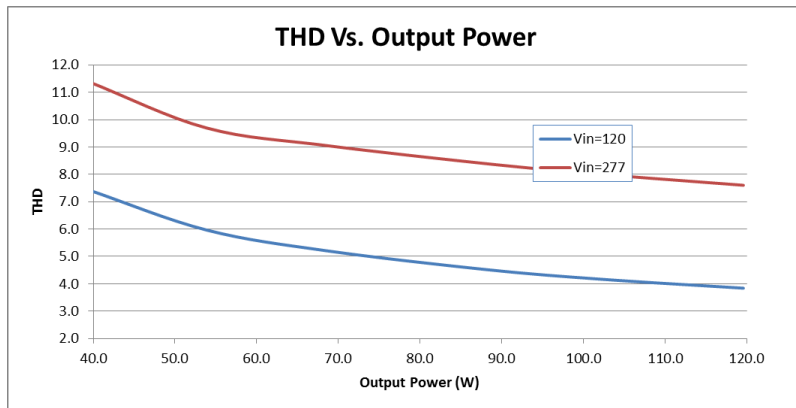
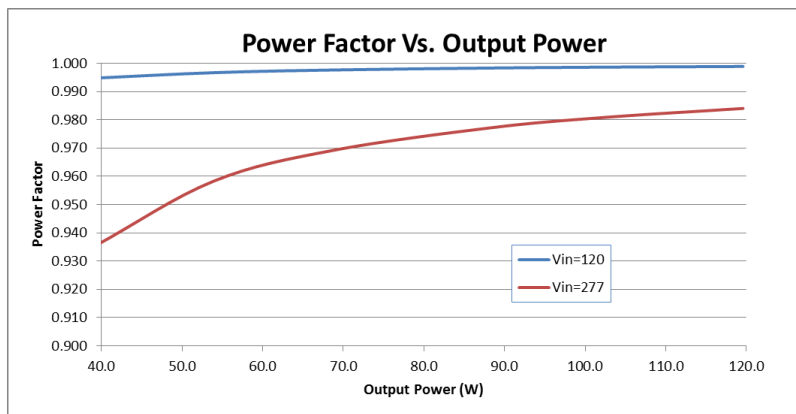
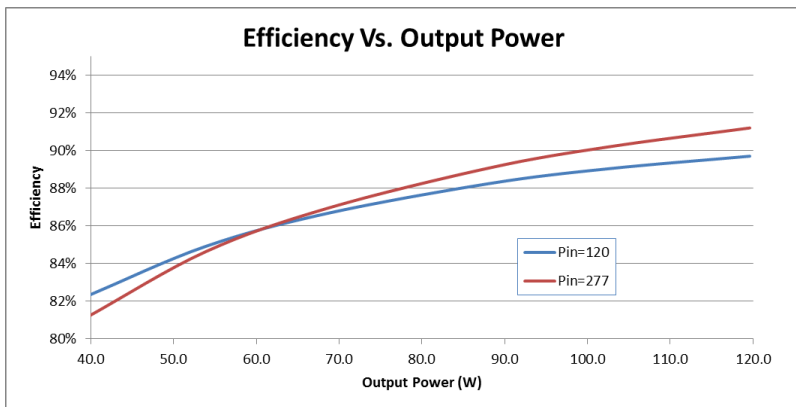


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Performance: Efficiency, THD, & Power Factor

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.



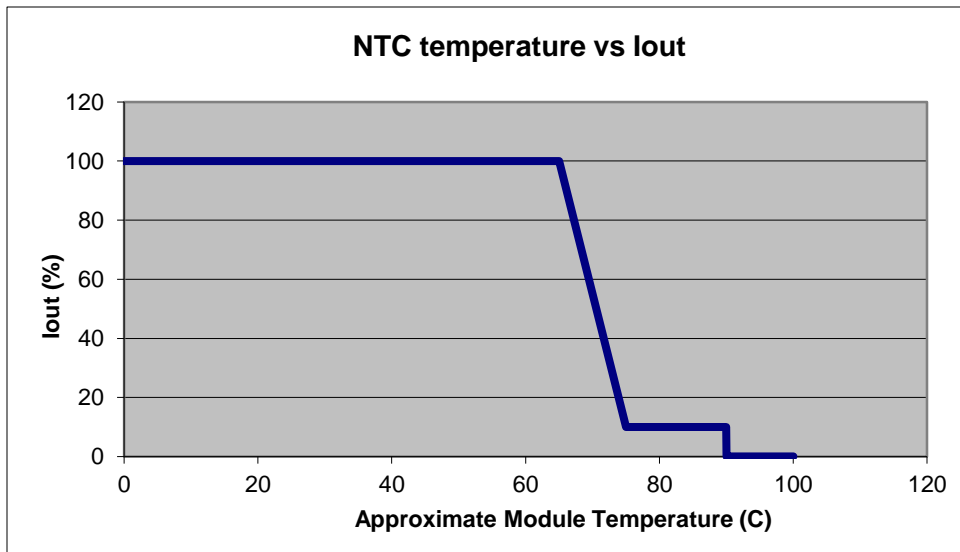
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Module Thermal Foldback Protection

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 shorted together when thermal foldback control is not used.
- See application note on www.unvlt.com for more information.



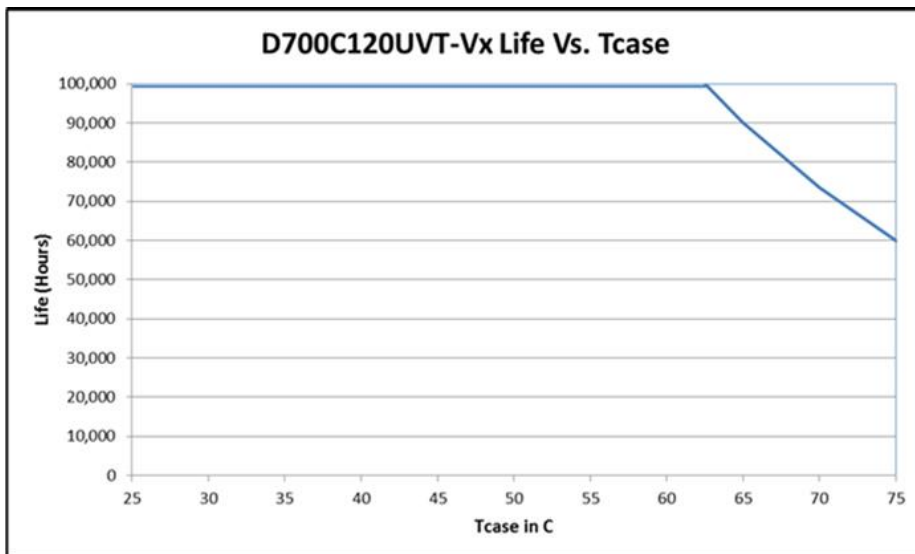
(Example with the Murata NTC p/n NCP18XV103J03RB)



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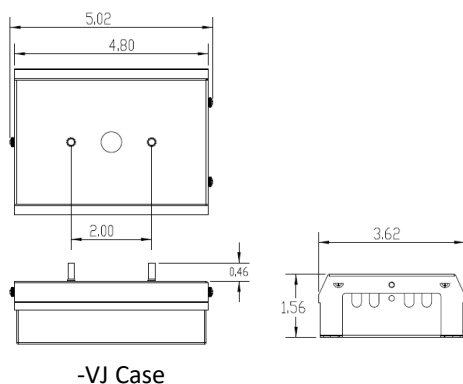


Life vs. Driver Tcase

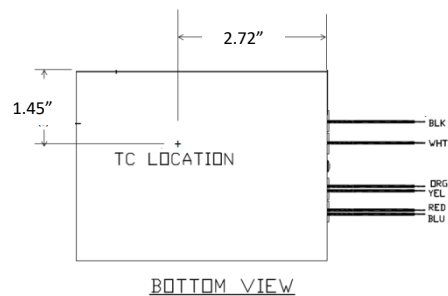


The Data curve provided predicts the LED Driver life based on the case temperature measured at the Tc location identified on the label or specification sheet. The Telecordia SR-332 standard is used to generate the prediction curves.

Dimensional Diagram



Tc Location



For the "N" version, Tc location is on the bottom of the case. For the "J" version with the leads exiting out the bottom, the screw on the side of the case is oriented to the right and the Tc is located on the side with the label.



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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 fan output connection leads 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 Assembly drawing, see Illustration #2, shall not exceed the specified temperatures in the following table:

Model	Max Case Temp (°C)		
	t _c	Ambient @ 120 V	Ambient @ 277 V
D700C120UVT-VF	75°C	41°C	47°C
D700C120UVT-VJ	75°C	41°C	47°C
D700C120UVT-VN	75°C	41°C	47°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” fan output circuit shall be considered.
6. The leads for the connection of the primary (Black-White), the output (Red-Blue), the fan output circuit are R/C (AVLV2/8), 18 AWG, 300 V minimum, 90°C. The suitability of the leads shall be determined in the end-use application.
7. These drivers can be marked Type HL based on drivers being fully potted.

FCC Statement: This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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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