



# D14CC180UNVPWX12-F



## 1400mA Programmable LED Driver

- 180W constant current output with 0-10V dimming
- Full featured programmability with 12Vdc 200mA auxiliary output
- Low standby power (<0.5W) in dim-to-off state

### Performance

Input Voltage	120 ~ 277 Vac
Input Current Max	1.77A / 120V 0.75A / 277V
Input Power Max	200W
Input Frequency	50 - 60 (Hz)
Power Factor	> 0.95 @ max load
THD max	< 20 % @ max load
Output Voltage (Refer to Driver Operating Range)	80V to 128V @ 1.40 Amps 80V to 192V @ 0.94 Amps
Max. Output Current	1400mA
Min. Dimming Current	40mA
Output Power	180W
Standby Power	< 0.5W @ 120Vac < 0.5W @ 277Vac
Line Regulation	±3 %
Load Regulation	±5 %
Output Current Ripple	<10% (Pk-Pk/avg)
Inrush Current* Peak / >10% Duration	120V: 43A / 184uS 277V: 99A / 182uS

\* source impedance per NEMA 410

### Protection

Over Voltage, Under Voltage, Short Circuit, Over Temp

### Safety:

UL 8750 & CSA 250.13  
UL Class P



### Auxiliary Output

Output Power	2.4W
Output Voltage	12Vdc
Output Current	200 mA

### Physical

Length	9.50 in
Width	2.38 in
Height	1.58 in
Mounting Length	8.90 in
Weight (lbs)	2.6 lbs
Lead Lengths (+/- 1 in)	
Blk, Wht, Purple, Gray	11.5 in
Red(+), Blue(-), Orange, Yellow/Black	11.5 in

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

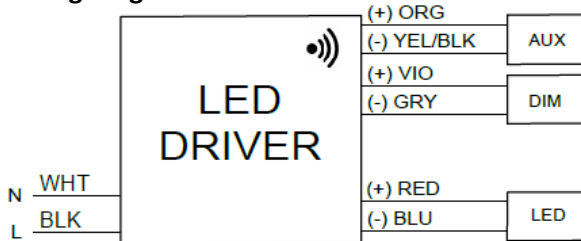
### Environmental

EMI and RFI	Meets FCC part 15 (Class A) Non-Consumer Limits
Sound Rating	Class A
Operating Temperature	-40°C to 55°C (-40°F to 131°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Warranty Tc	85°C max for 50k Hr Life
Location Rating	UL Dry & Damp, Type HL
IP Rating	IP66
Transient Protection	IEEE C62.41 6kV**

\*\*Driver uses MOVs for transient protection.

Refer to application note EVD07 at [www.unvlt.com](http://www.unvlt.com) for additional information on Hi-Pot Testing.

### Wiring Diagram:



- **NOTE:** Unused Orange and Yellow/Black leads must be individually capped off when auxiliary output power is not used.

### Ordering Information

Order Number	Description	Qty/Carton
D14CC180UNVPWX12-F010C	1400mA 180W	10



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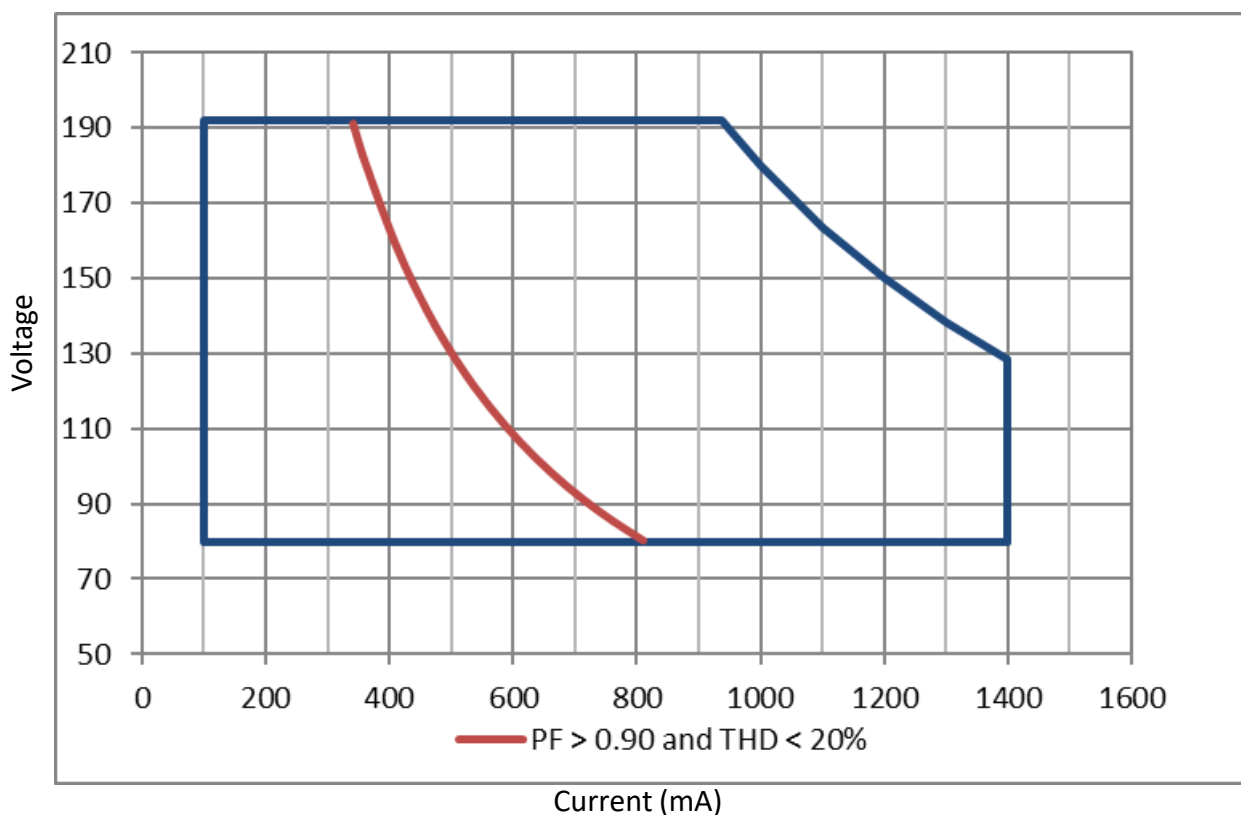
# D14CC180UNVPWX12-F

Programmable Features
Output Current
Minimum Dimming Level
Dim-to-Off
Dimming Curve (Linear, Linear Soft Start, Logarithmic)
Lumen Maintenance
Thermal Overload

Programming System	
Software	EVERset Programming Software
Hardware	LDPC000A Configuration Tool
Driver Interface	Wireless via RFID

\*Refer to application notes EVD10, EVD11 and EVD15 at [www.unvlt.com](http://www.unvlt.com) for additional information on programmable features.

## Driver Operating Range:

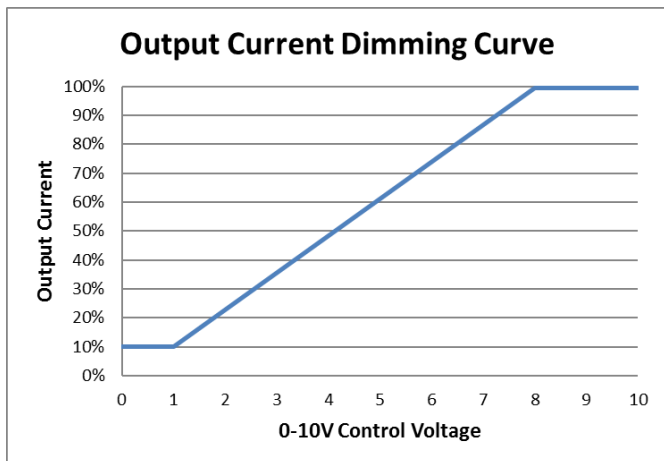


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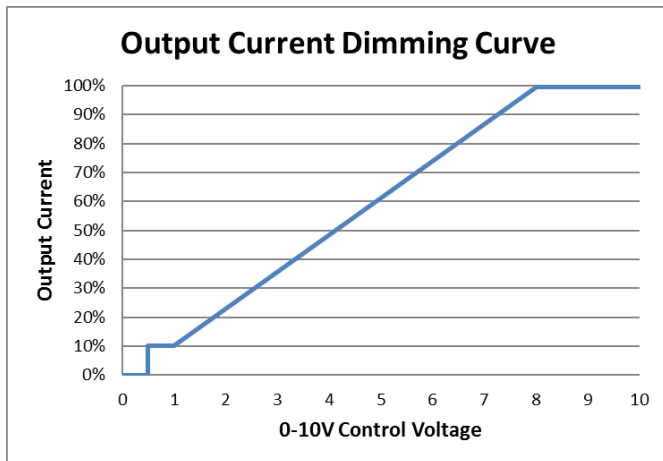


## 0-10V Dimming

### Linear Dimming to 10%



### Linear Dimming w/ Dim-to-Off



\* Driver ships with Dim-to-Off disabled. Dim-to-Off must be enabled through the EVERset programming software.

### 0-10V Analog Dimming Interface

- Analog 0 to 10 Vdc Voltage Control
- Use Violet (+) & Gray (-) for connection to 0-10 Vdc.
- 10V = maximum output
- 0V = dim-to-off or programmed minimum dimming level
- 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 165uA for control needs.
- Controller must sink current from the 0-10V control leads.

### Programmable Dimming Features

Feature	Range	Factory Default
Maximum Output Current	100 - 1400mA	default = 1400mA
Minimum Dimming Level	40 - 700mA	default = 140mA
Dimming Curve	(Linear, Linear Soft Start, Logarithmic w/ factor 1 to 7)	default = Linear
Dimming Control Voltage Range		
Max Bright Control Voltage	7 - 9Vdc	default = 8Vdc
Min Dim Level Control Voltage	1 - 3Vdc	default = 1Vdc
Dim-to-Off	0.1 - 1.7Vdc; 0 = disabled	default = 0Vdc

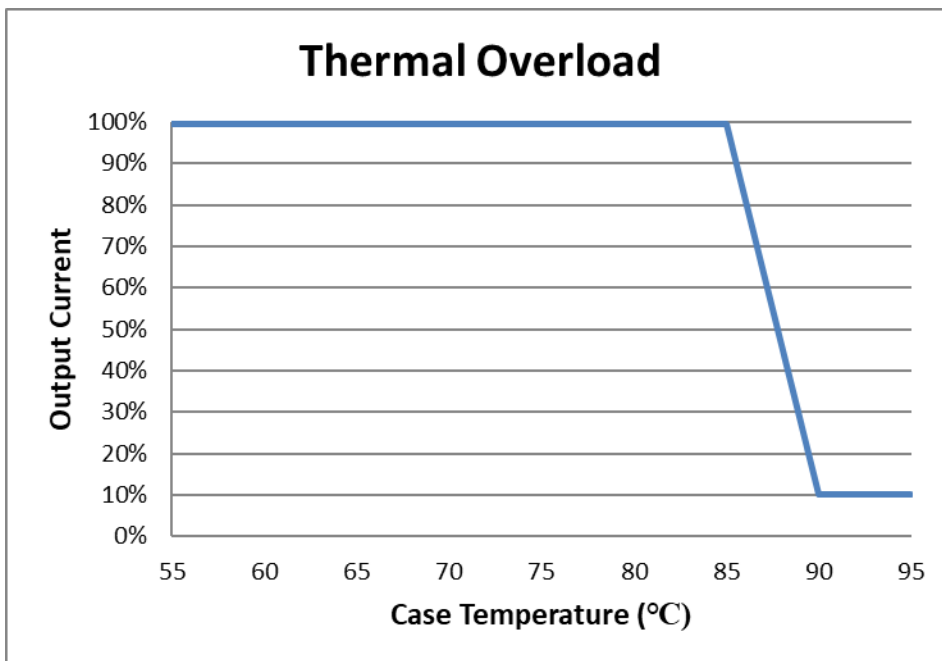
\* Refer to application note EVD10 at [www.unvlt.com](http://www.unvlt.com) for additional information on programmable dimming features.



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## Driver Thermal Overload Foldback



Example with the Output Current set to 1400mA, Starting Temperature set to 85°C, Ending Temperature set to 90°C and Ending Output Current set to 140mA (10%).

Programmable Thermal Overload		
Feature	Range	Factory Default
Starting Temperature	25 - 89°C	default = disabled
Ending Temperature	26 - 90°C	default = disabled
Ending Output Current	40 - 1400mA	default = disabled

\*Refer to application note EVD15 at [www.unvlt.com](http://www.unvlt.com) for additional information on Programmable Thermal Overload.



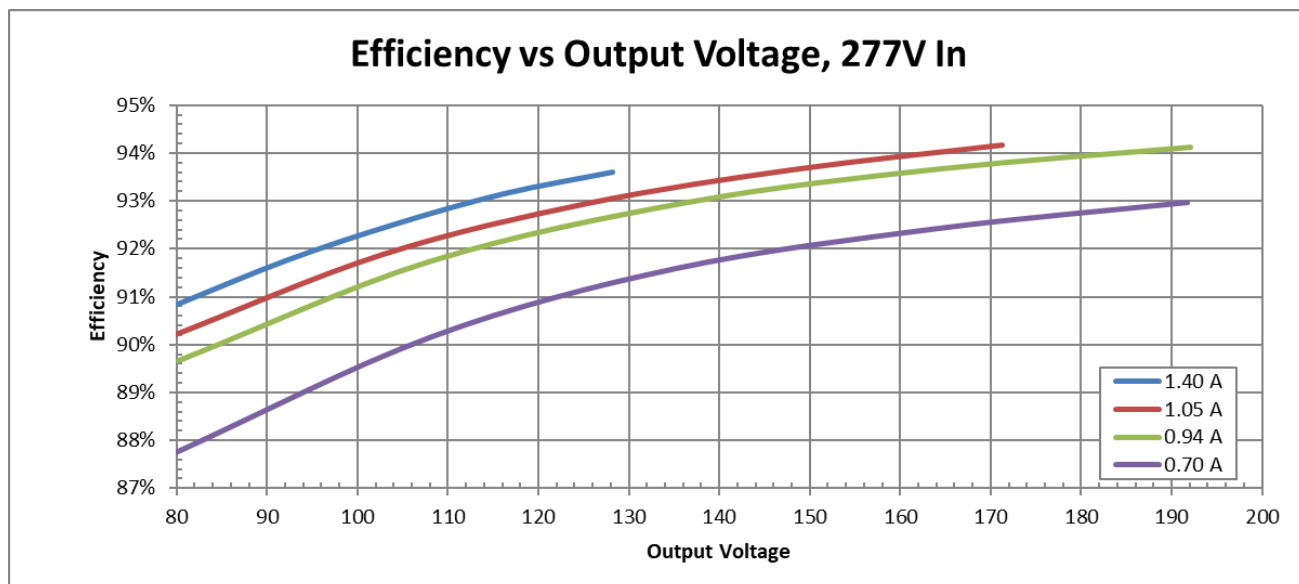
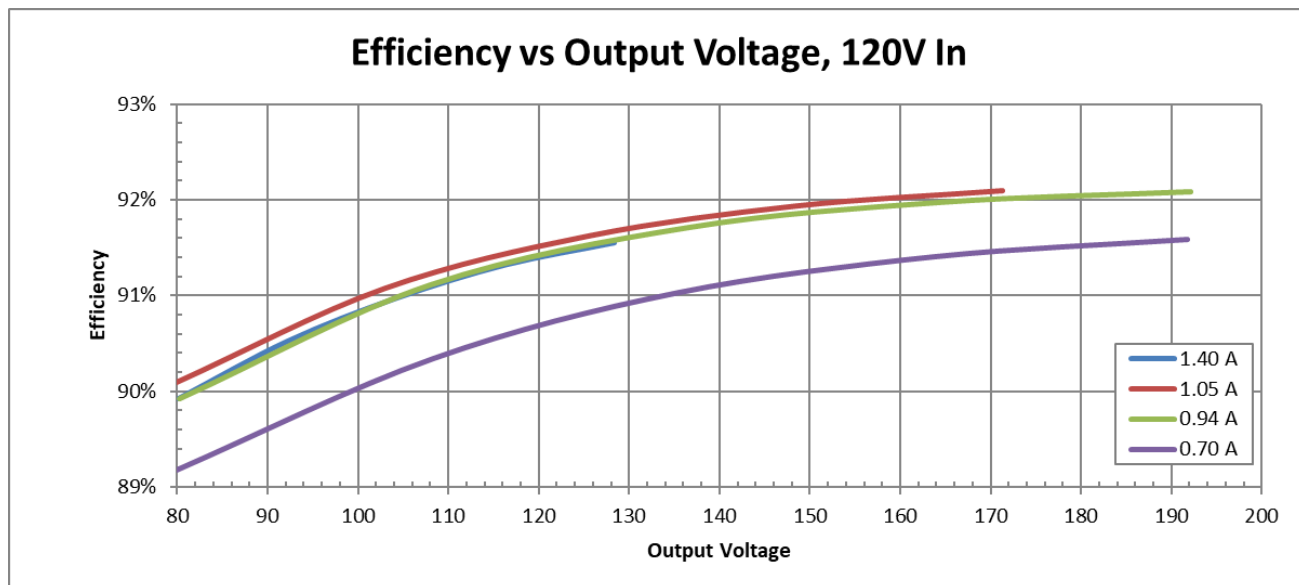
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# D14CC180UNVPWX12-F

## Performance: Efficiency

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



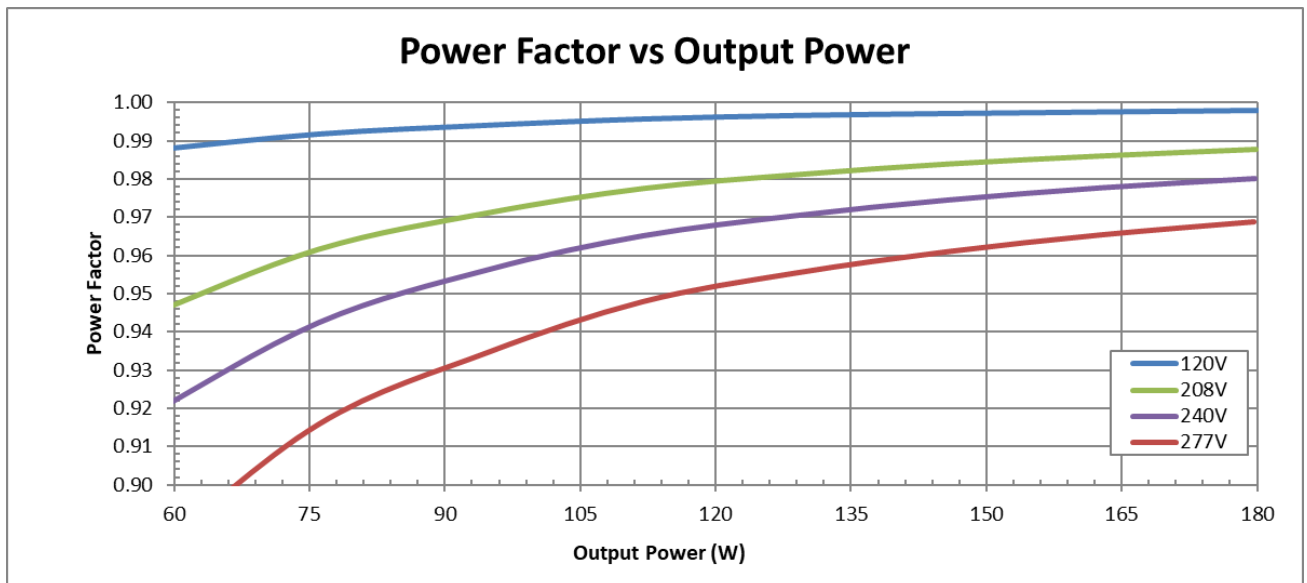
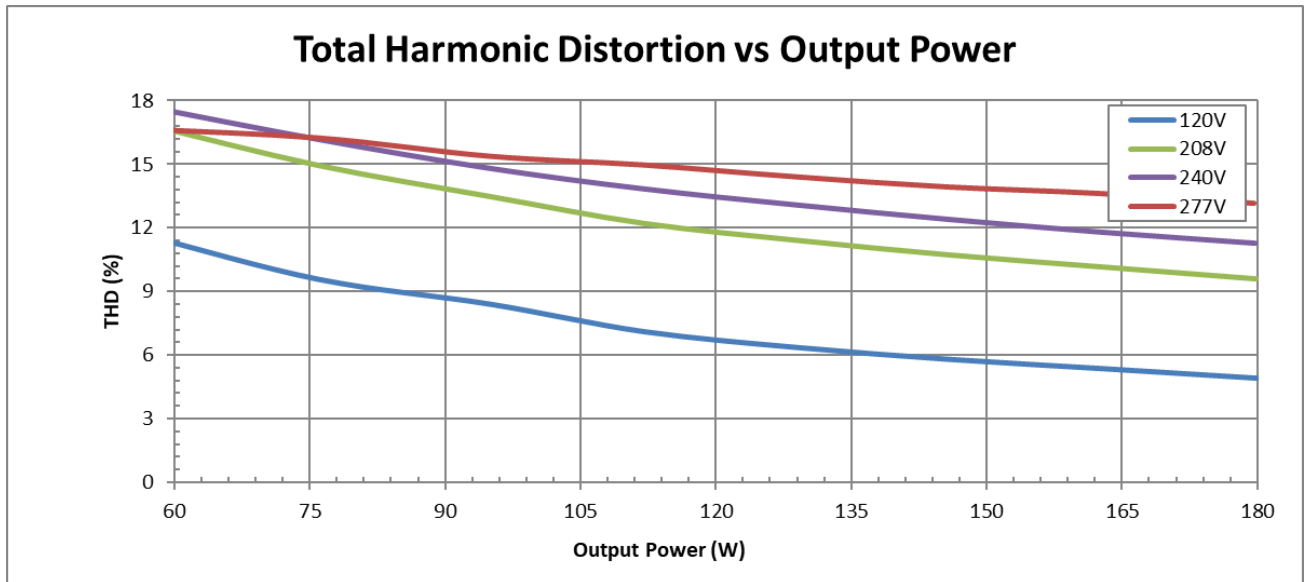
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# D14CC180UNVPWX12-F

## Performance: Total Harmonic Distortion, & 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.

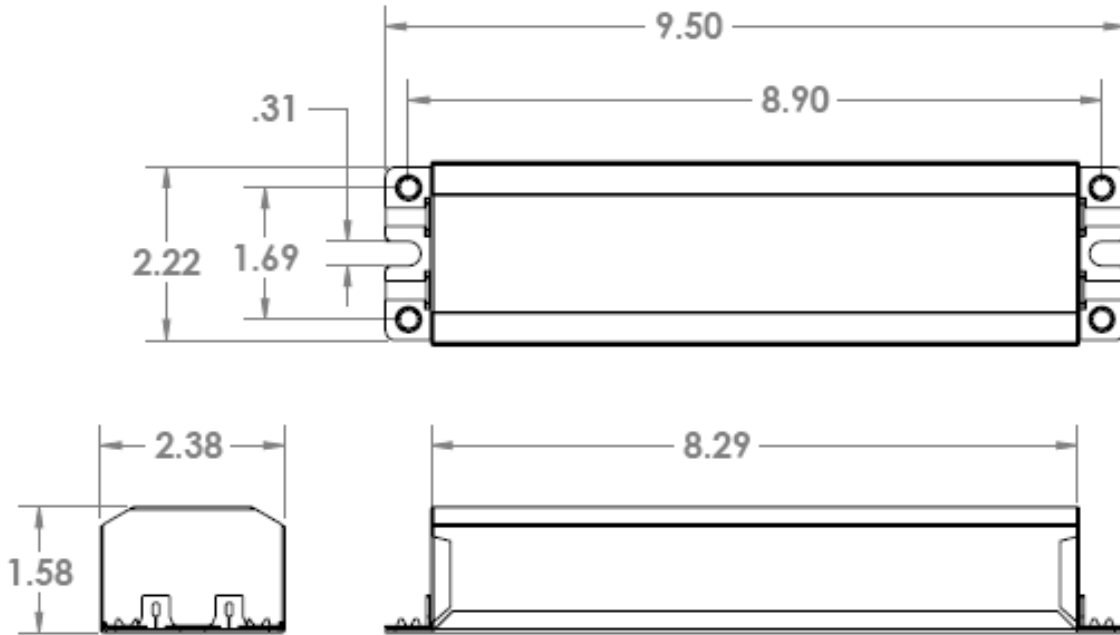


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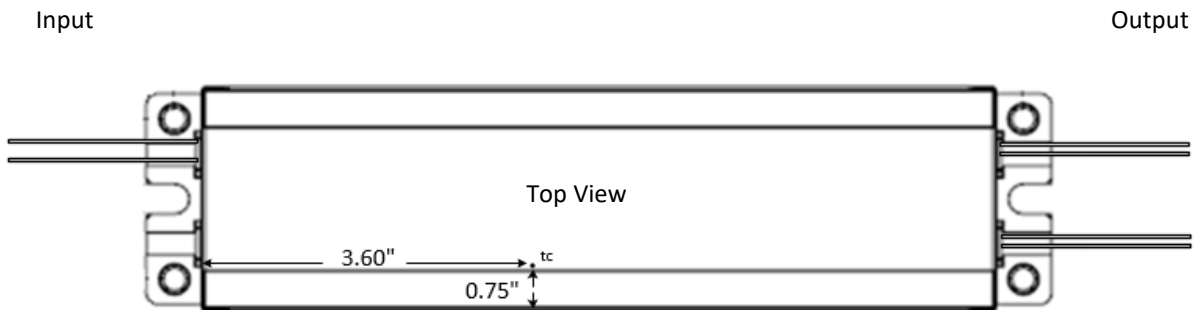


# D14CC180UNVPWX12-F

## Dimensional Diagram:



## Tc Location:



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Transient Protection		
Transient	Differential Mode (L-N)	Common Mode (L-G, N-G, L&N-G)
IEEE C62.41 1.2/50µs Combination Wave (w/t 2Ω)	> 6kV*	> 6kV*

Isolation					
Isolation	Input	Output	0-10V	Auxiliary	Enclosure
Input	-	2xU + 1kV	2xU + 1kV	2xU + 1kV	288V*
Output	2xU + 1kV	-	2xU + 1kV	2xU + 1kV	2xU + 1kV
0-10V	2xU + 1kV	2xU + 1kV	-	2xU + 1kV	2xU + 1kV
Auxiliary	2xU + 1kV	2xU + 1kV	2xU + 1kV	-	2xU + 1kV
Enclosure	288V*	2xU + 1kV	2xU + 1kV	2xU + 1kV	-

U = Max Input Voltage

\*Driver uses MOVs for transient protection.

Refer to application note EVD07 at [www.unvlt.com](http://www.unvlt.com) for additional information on Hi-Pot Testing.

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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