## D28CC95UVPA12-F

## 2800mA Programmable LED Driver

$>$ Universal (120-277V) Input Voltage
$>$ Class 2, 95W Constant Current Output with 0-10V dimming
$>$ Full featured programmability with 12 Vdc 100 mA auxiliary output


| Performance |  |
| :--- | :--- |
| Input Voltage | $120 \sim 277 \mathrm{Vac}$ |
| Input Current Max | $0.90 / 120 \mathrm{~V} \quad 0.39 / 277 \mathrm{~V}$ |
| Input Power Max | 108 W |
| Input Frequency | $50-60(\mathrm{~Hz})$ |
| Power Factor* | $>0.95$ |
| THD max* | $<20 \%$ |
| Output Voltage | 18 V to 34V @ 2.80 Amps |
| (Refer to Power Curve Chart) | 18 V to 56V @ 1.70 Amps |
| Max. Output Current | 2800 mA |
| Min. Dimming Current | 140 mA |
| Output Power | 95 W |
| Standby | $<2.8 \mathrm{~W}$ @ 120Vac |
| Power | $<3.5 \mathrm{~W}$ @ 277Vac |
| Line Regulation | $\pm 3 \%$ |
| Load Regulation | $\pm 5 \%$ |
| Output Current Ripple | $<10 \%$ (Pk-Pk/avg) |
| Inrush Current | $120 \mathrm{~V}: 25 \mathrm{~A} / 230 \mathrm{uS}$ |
| Peak / >50\% Duration | $277 \mathrm{~V}: 54 \mathrm{~A} / 85 \mathrm{uS}$ |

* Refer to charts for additional information
- Harmonic Emissions comply with ANSI C82.77
- Inrush current complies with NEMA 410


## Ordering Information

| Order Number | Description | Qty/Carton |
| :---: | :---: | :---: |
| D28CC95UVPA12-F010C | Standard Product | 10 |

Protection:
Over Voltage, Under Voltage, Short Circuit, Over Temp Safety:

UL 8750 \& CSA 250.13
Class P

| Auxiliary Output |  |
| :--- | :--- |
| Output Voltage | 12 Vdc |
| Output Current | 100 mA |

## Physical

| Length | 9.50 in |  |  |
| :--- | :--- | :---: | :---: |
| Width | 2.38 in |  |  |
| Height | 1.58 in |  |  |
| Mounting Length | 8.90 in |  |  |
| Weight (Ibs) | 2.6 |  |  |
| Lead Lengths (+/- 1 in) |  |  |  |
| Blk, Wht, Purple, Gray | 11.5 in |  |  |
| Red(+), Blue(-) | 11.5 in |  |  |
| Orange, Yellow/Black, Black/Wht, Blue/Wht |  |  | 11.5 in | Lead-wires are 18 AWG $105^{\circ} \mathrm{C} / 600 \mathrm{~V}$ solid copper.


| Environmental |  |
| :--- | :--- |
| EMI and RFI | Meets FCC part 15 (Class A) <br> Non-Consumer Limits |
|  | $-40^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$ |
| Storage Temperature | $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$ |
| tc | $85^{\circ} \mathrm{C}$ max for warranty |
|  | $90^{\circ} \mathrm{C}$ max for UL |
| Location Rating | UL Dry \& Damp, Type HL |
| IP Rating | IP66 |
| Transient Protection | IEEE C62.41 $6 \mathrm{kV} * *$ |

**Driver uses MOVs for transient protection.
Refer to application note EVD07 at www.unvlt.com for additional information on Hi -Pot Testing.
 Application and operation performance specification information subject to change without notification.

Lighting Technologies

## D28CC95UVPA12-F

| Programmable Features |
| :--- |
| Output Current |
| Minimum Dimming Level |
| Dim-to-Off |
| Dimming Curve <br> (Linear, Linear Soft Start, Logarithmic) |
| Lumen Maintenance |

*Refer to application notes EVD10 and EVD11 at www.unvlt.com for additional information on programmable features.

## Wiring Diagram

| Programming System |  |
| :--- | :--- |
| Software | EVERset Programming <br> Software |
| Hardware | LDPCO00A <br> Configuration Tool |
| Driver Interface | Wired via 0-10V leads |

Lumen Maintenance


- NOTE: Unused Black/White and Blue/White leads must be individually capped off when thermal foldback control is not used.
*Refer to application note at www.unvlt.com for additional information on programming.


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## D28CC95UVPA12-F

## Driver Operating Range:



Current (mA)

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## D28CC95UVPA12-F

## 0-10V Dimming



## 0-10V Analog Dimming Interface

- Analog 0 to 10 vDC Voltage Control
- Use Violet (+) \& Gray (-) for connection to 0-10vDC.
- $10 \mathrm{v}=$ maximum output, $0 \mathrm{v}=$ 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 $165 u A$ for control needs.
- Controller must sink current from the 0-10V control leads.

Programmable Dimming Features

| Feature | Range | Factory Default |
| :--- | :--- | :--- |
| Maximum Output Current | $840-2800 \mathrm{~mA}$ | default $=2800 \mathrm{~mA}$ |
| Minimum Dimming Level | $140-700 \mathrm{~mA}$ | default = 140mA |
| Dimming Curve | (Linear, Linear Soft Start, <br> Logarithmic w/ factor 1 to 7) | default = Linear |
| Dimming Control Voltage Range |  |  |
| Max Bright Control Voltage <br> Min Dim Level Control Voltage <br> Dim-to-Off | $7-9 \mathrm{Vdc}$ | $1-3 \mathrm{Vdc}$ |

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Lighting Technologie

## D28CC95UVPA12-F

## Performance: Efficiency

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

Efficiency Vs. Output Voltage, 120V In


Efficiency Vs. Output Voltage, 277V In


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## D28CC95UVPA12-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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## D28CC95UVPA12-F

## 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)


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## D28CC95UVPA12-F

Transient Protection

| Transient | Differential Mode (L- <br> N) | Common Mode (L-G, <br> N-G, L\&N-G) |
| :---: | :---: | :---: |
| IEEE C62.41 1.2/50 <br> Combination Wave (w/t $2 \Omega$ ) | $>6 \mathrm{kV}^{* *}$ | $>6 \mathrm{kV}^{* *}$ |

**Driver uses MOVs for transient protection.
Refer to application note EVD07 at www.unvlt.com for additional information on Hi-Pot Testing.

| Isolation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Isolation | Input | Output | 0-10V | Auxiliary | NTC | Enclosure |
| Input | - | $2 \mathrm{xU}+1 \mathrm{kV}$ | $2 \mathrm{xU}+1 \mathrm{kV}$ | $2 \mathrm{xU}+1 \mathrm{kV}$ | $2 \mathrm{xU}+1 \mathrm{kV}$ | 410 V |
| Output | $2 \mathrm{xU}+1 \mathrm{kV}$ | - | $2 \mathrm{xU}+1 \mathrm{kV}$ | Non-isolated | Non-isolated | 700 V |
| 0-10V | $2 \mathrm{xU}+1 \mathrm{kV}$ | $2 \mathrm{xU}+1 \mathrm{kV}$ | - | $2 \mathrm{xU}+1 \mathrm{kV}$ | $2 \mathrm{xU}+1 \mathrm{kV}$ | $2 \mathrm{xU}+1 \mathrm{kV}$ |
| Auxiliary | $2 \mathrm{xU}+1 \mathrm{kV}$ | Non-isolated | $2 \mathrm{xU}+1 \mathrm{kV}$ | - | Non-isolated | 700 V |
| NTC | $2 \mathrm{xU}+1 \mathrm{kV}$ | Non-isolated | $2 \mathrm{xU}+1 \mathrm{kV}$ | Non-isolated | - | $2 \mathrm{xU}+1 \mathrm{kV}$ |
| Enclosure | 410 V | 700V | $2 \mathrm{xU}+1 \mathrm{kV}$ | 700V | $2 \mathrm{xU}+1 \mathrm{kV}$ | - |

U = Max Input Voltage

## 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.

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## D28CC95UVPA12-F

## Dimensional Diagram



## Tc Location



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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## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for LED Power Supplies category:
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Other Similar products are found below :
ESS015W-1000-12 EUC-075S105DT PDA-WIFI PIFC-K250F PITB-K222A ALD-514012PJ134 LB240S24KH LMH020-SPLC-000000000017953479535 EUG-200S210DT ESS030W-1050-21 ESS030W-0900-32 BPOXL 4-12-035 SLM160W-3.9-40-ZA ESS010W-018042 ESS010W-0350-24 ESS010W-0200-42 PDA080B-1A0G PDA150B-S1A5G ZPS-20 SLM140W-1.05-130-ZA ESS040W-1400-27 ESS015W-0700-18 ESS010E-0250-42 EVM120W-2700-42-ECN2 EDC-100S105SV-0007 79278 EUD-150S350DVA LWA320-C420-ARKB 50304 HVG-320-36AB HVG-320-54AB OT FIT 50/220-240/300 D L OT FIT 35/220-240/350 D CS L OT FIT 65/220-240/350 D CS L ELEMENT 30/220-240/700 S LC 75W 100-400MA 1-10V LP EXC LCA 35W 150-700MA ONE4ALL LP PRE LCA 50W 100-400MA ONE4ALL LP PRE LCA 50W 350-1050MA ONE4ALL LP PRE LCA 50W 350-1050MA 2XCH LP PRE LCI 150/325-1050/300 O4A SL PRE LCA 75W 100-400MA ONE4ALL LP PRE LCA 45W 500-1400MA ONE4ALL SC PRE LC 50W 100-400MA FLEXC LP EXC LCA 75W 350-1050MA ONE4ALL LP PRE LC 50W 350-1050MA FLEXC LP EXC LC 75W 350-1050MA FLEXC LP EXC LCA 75W 9001800MA ONE4ALL LP PRE


[^0]:    * Refer to application note EVD10 at www.unvlt.com for additional information on programmable dimming features.

