

D310CQ50UNVA-A

Dimmable LED Driver with 4 Output Channels

- 310mA Constant Current Output
- Class 2 Output
- Parallel Output channel configuration options



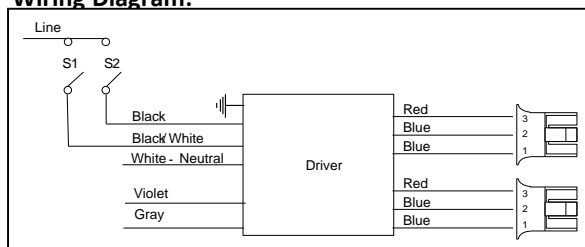
Performance

Input Voltage	120 ~ 277 Vac
Input Current Max	0.50 /120V 0.22/277V
Input Power Max	57W
Input Frequency	50 - 60 (Hz)
Power Factor	> 0.95
THD max	< 20 %
Output Voltage	25V-41V
Output Current	310mA per Channel
Output Power	12.5W per Channel
Line Regulation	±3 %
Load Regulation	±5 %

Environmental

EMI and RFI	Meets FCC part 15 (Class A) Non-Consumer Limits
Operating Temperature	-40°C to 60°C (-40°F to 140°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
tc	85°C (185°F) max
Protection Rating	UL Dry & Damp

Wiring Diagram:



Control Wiring

- Use Violet (+) & Gray (-) for connection to 0-10vDC.
- Driver protected if line voltage is applied.
- Wiring Violet & Gray together provides 3% light output.
- Capping Violet & Gray separately provides 100% light output.

Note: Black and Black/White Leads must be connected to the same phase of the same circuit.

Physical

Length	9.50 in (241.3 mm)
Width	1.70 in (43.2 mm)
Height	1.18 in (30.0 mm)
Mounting Length	8.89 in (225.8 mm)
Weight (lbs)	1.7
Lead Lengths	
Blk, Wht, Blk/Wht	39 in. (990mm)
Red(+), Blue(-), Gry, Prp	18 in (457mm)

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

Output connector: Wago - 873-103/VE00-500

Protection

Over voltage, Overload and short circuit, over temp.

Safety:

UL 1012 & CSA107

0-10V Dimming Interface

Analog 0 to 10 vDC Voltage Control

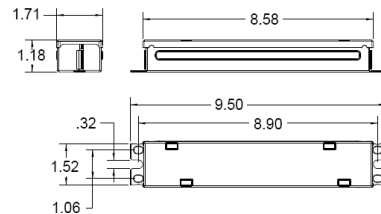
- 10v = maximum output
- 0v = minimum output
- 0-10V interface can be wired as Class 1 or Class 2 Circuit.
- Driver will source a maximum of 250uA for control needs.
- Built-in line voltage protection circuit: Deep-dimming condition when line voltage is applied to control leads.

Step Dimming

- 100% / 50% Maximum dim level

S1	S2	INPUT POWER
OPEN	OPEN	0%
OPEN	CLOSE	50%
CLOSE	OPEN	50%
CLOSE	CLOSE	100%

Dimensions:





Conditions of Acceptability -

File: E339166

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D310CQ50UNVA-A, D255CQ42UNVA-A, D185CQ30UNVA-A, and D150CQ25UNVA-A.

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 maximum available output parameters of each driver output were within the maximum allowable limits for Class 2, inherently limited as specified in the UL 1310 standard for Class 2 Power Units.
3. The Driver is suitable for use in “DRY” or “DAMP” locations.
4. The driver was evaluated for use in a **55°C** elevated ambient and the maximum case temperature at (Tc) location –see ILL. **1 for specific Tc location** - should not exceed **85°C** when the driver is installed in the end-use application.
5. The leakage current test must be repeated in accordance with the UL1310 safety requirements of these units shall be considered in the end-use application.
6. The primary (Black, White, and Black with white dots) and the output (Red-Blue) and control dimming 0-10V (purple-Gray) connection wires of the driver are R/C (AVLV2/8), 18 AWG, 90°C. The suitability of the leads shall be determined in the end-use application.
7. The need to perform the Strain Relief and/or Pushback Relief Tests on the lead wires should be determined in the end-use application.
8. The case must be connected to earth grounded in the end use.
9. As shown in Illustration #11, the parallel connection combination of two outputs of the following driver models specified in the following table were evaluated and the maximum available output parameters were within the maximum allowable limits for Class 2, inherently limited as specified in the UL 1310 standard:

Model	Number of drivers to be connected in parallel	Input, 50/60 Hz		Maximum Output	
		V	A	V DC	A DC (*)
D255CQ42UNVA-A	2	120-277	0.82-0.38	41	2.04
D185CQ30UNVA-A	2	120-277	0.60-0.28	41	1.48
D150CQ25UNVA-A	2	120-277	0.48-0.24	41	1.2

(*) – Maximum available current from the output of two drivers (A total of 8 output channels) that were connected in parallel.

In addition and when required, the leakage current test must be repeated in accordance with the UL1310 safety requirements

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.



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