

# SOLIDRIVE PRO-V

## Constant Voltage

## Phase-Cut Dimmable LED Driver

# Specification Sheet

The **SOLIDRIVE PRO-V** Constant Voltage Class 2 LED Drivers from Magnitude Lighting are UL Listed. Drivers with enclosures have a built-in junction box on both the input and output. These drivers are IP66 and UL2043 plenum rated and are suitable for both indoor and outdoor installations. With universal input voltage ranging from 120 to 277VAC, the **PRO-V** Series of drivers are designed for residential, commercial and industrial applications. Our phase-cut dimming delivers smooth flicker-free dimming down to 1% with most LED's and a wide variety of compatible dimmers. As always, a 5-year warranty is a standard on all of Magnitude's products.

### Key Features

- Forward & Reverse Phase-Cut Dimming
- Flicker Free Dimming, Down to 1%
- Universal Input Voltage – 120 to 277VAC
- UL Listed Enclosure with Built-In Junction Boxes
- IP66 – For Both Indoor & Outdoor Use
- Class 2, Class P
- Hiccup Mode Protection For Short Circuit & Over-Temperature
- Overload Protection



**NOM**

MEETS TITLE 24/JA8 REQUIREMENTS

IP66

24V DC

SELV

RoHS Compliant

UL US LISTED

CLASS 2

TYPE HL

CLASS P

CCR DIM

DIMMABLE

120-277VAC

DIM DOWN TO 1%

**Product Name:** SOLIDRIVE PRO-V

**Description:** Constant Voltage Phase Cut Dimmable LED Driver

**Installation:** Can have integrated junction box with multiple 7/8" knockouts or no junction box with wire leads

**Driver Type:** Class 2 Single Channel

**Dimming:** Phase-cut dimming down to 1% with both Leading Edge (MLV) and Trailing Edge (ELV) dimmers

**Output Dimming Method:** Uses CCR method for dimmed low voltage output

**Input Voltage:** Universal 120VAC to 277VAC, 50/60Hz

**Output Voltage:** 24VDC

**IP Rating:** IP66

**Listing:** UL Listed

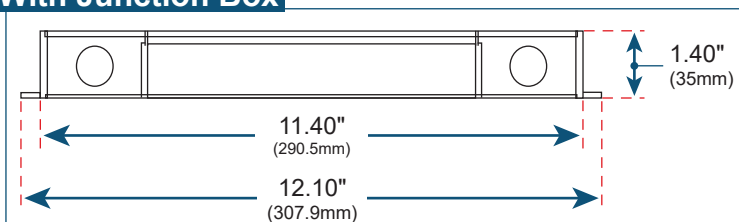
**Certifications:** UL8750, UL2043 Plenum Rated, NOM

**Warranty:** 5-Year Warranty

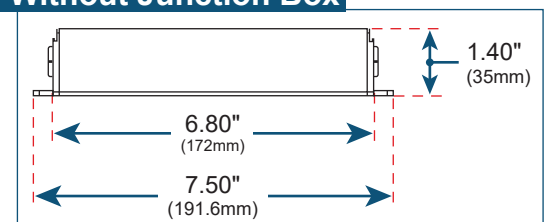
|               | With Junction Box    | Without Junction Box |
|---------------|----------------------|----------------------|
| <b>Length</b> | 12.10"<br>(307.34mm) | 7.50"<br>(190.5mm)   |
| <b>Width</b>  | 2.36"<br>(59.94mm)   | 2.36"<br>(59.94mm)   |
| <b>Height</b> | 1.40"<br>(35.6mm)    | 1.40"<br>(35.6mm)    |

| ORDERING GUIDE |                                  |   |            |
|----------------|----------------------------------|---|------------|
| Type           | Max Power                        | Listing   | Output     |
| VOP            | 30 – 30W<br>60 – 60W<br>96 – 96W | L – With Junction Box<br>R – Without Junction Box | 24 – 24VDC |

### With Junction Box



### Without Junction Box

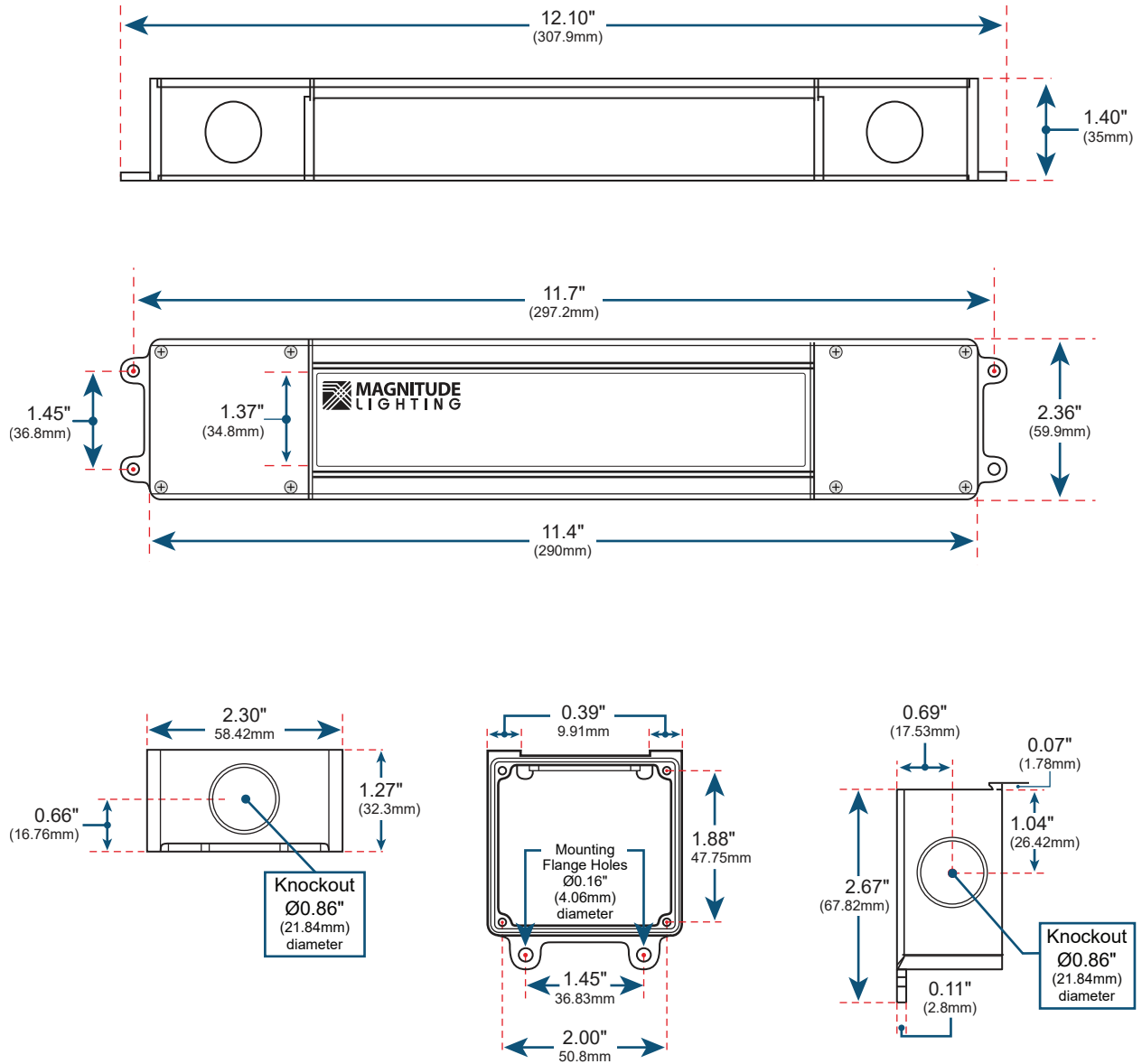


**SPECIFICATIONS**

| <b>Input</b>                         |                                    |                                    |                                    |
|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| <b>Input Voltage Range</b>           | 100 to 277VAC $\pm$ 10%            | 100 to 277VAC $\pm$ 10%            | 100 to 277VAC $\pm$ 10%            |
| <b>Input Frequency</b>               | 50 / 60Hz                          | 50 / 60Hz                          | 50 / 60Hz                          |
| <b>Input Current</b>                 | 0.98A Max                          | 0.98A Max                          | 0.98A Max                          |
| <b>Inrush Current</b>                | < 40A Max @ 120VAC                 | < 40A Max @ 120VAC                 | < 40A Max @ 120VAC                 |
| <b>Efficiency</b>                    | > 86% Max                          | > 86% Max                          | > 86% Max                          |
| <b>Power Factor</b>                  | 277VAC, > 0.90<br>120VAC, > 0.95   | 277VAC, > 0.90<br>120VAC, > 0.95   | 277VAC, > 0.90<br>120VAC, > 0.95   |
| <b>THD</b>                           | < 20%                              | < 20%                              | < 20%                              |
| <b>Output</b>                        |                                    |                                    |                                    |
| <b>Output Voltage</b>                | 24VDC                              | 24VDC                              | 24VDC                              |
| <b>Maximum Load</b>                  | 96W                                | 60W                                | 30W                                |
| <b>Minimum Load</b>                  | 5W                                 | 5W                                 | 5W                                 |
| <b>Output Current @ Max. Load</b>    | 4.1A                               | 2.6A                               | 1.3A                               |
| <b>Output Dimming Method</b>         | CCR                                | CCR                                | CCR                                |
| <b>Output Ripple</b>                 | < 10%                              | < 10%                              | < 10%                              |
| <b>Line Regulation</b>               | $\pm$ 2.5%                         | $\pm$ 2.5%                         | $\pm$ 2.5%                         |
| <b>Load Regulation</b>               | $\pm$ 5%                           | $\pm$ 5%                           | $\pm$ 5%                           |
| <b>Turn On Delay Time</b>            | < 0.5 sec                          | < 0.5 sec                          | < 0.5 sec                          |
| <b>Environmental</b>                 |                                    |                                    |                                    |
| <b>Env. Protection Rating</b>        | IP66                               | IP66                               | IP66                               |
| <b>Ambient Operating Temp.</b>       | -25°C to +40°C<br>(-13°F to 104°F) | -25°C to +40°C<br>(-13°F to 104°F) | -25°C to +40°C<br>(-13°F to 104°F) |
| <b>Max. Case Temp. (Tcase)</b>       | 80°C (176°F)                       | 80°C (176°F)                       | 80°C (176°F)                       |
| <b>Storage Temperature</b>           | -40°C to +85°C<br>(-40°F to 185°F) | -40°C to +85°C<br>(-40°F to 185°F) | -40°C to +85°C<br>(-40°F to 185°F) |
| <b>Expected Lifetime</b>             | $\geq$ 50,000 hrs @Tc $\leq$ 75    | $\geq$ 50,000 hrs @Tc $\leq$ 75    | $\geq$ 50,000 hrs @Tc $\leq$ 75    |
| <b>Audible Noise</b>                 | < 24 dB Class A                    | < 24 dB Class A                    | < 24 dB Class A                    |
| <b>Dimming (Dimming Models Only)</b> |                                    |                                    |                                    |
| <b>Dimming Style</b>                 | Phase-Cut Dimming                  | Phase-Cut Dimming                  | Phase-Cut Dimming                  |
| <b>Minimum Dimming Level</b>         | 1%                                 | 1%                                 | 1%                                 |
| <b>Dimming Curve</b>                 | Linear                             | Linear                             | Linear                             |
| <b>Protection</b>                    |                                    |                                    |                                    |
| <b>Over Current Protection</b>       | Yes                                | Yes                                | Yes                                |
| <b>Short Circuit Protection</b>      | Yes                                | Yes                                | Yes                                |

**MECHANICAL DIAGRAMS**

**WITH Junction Box**



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### Customer Service

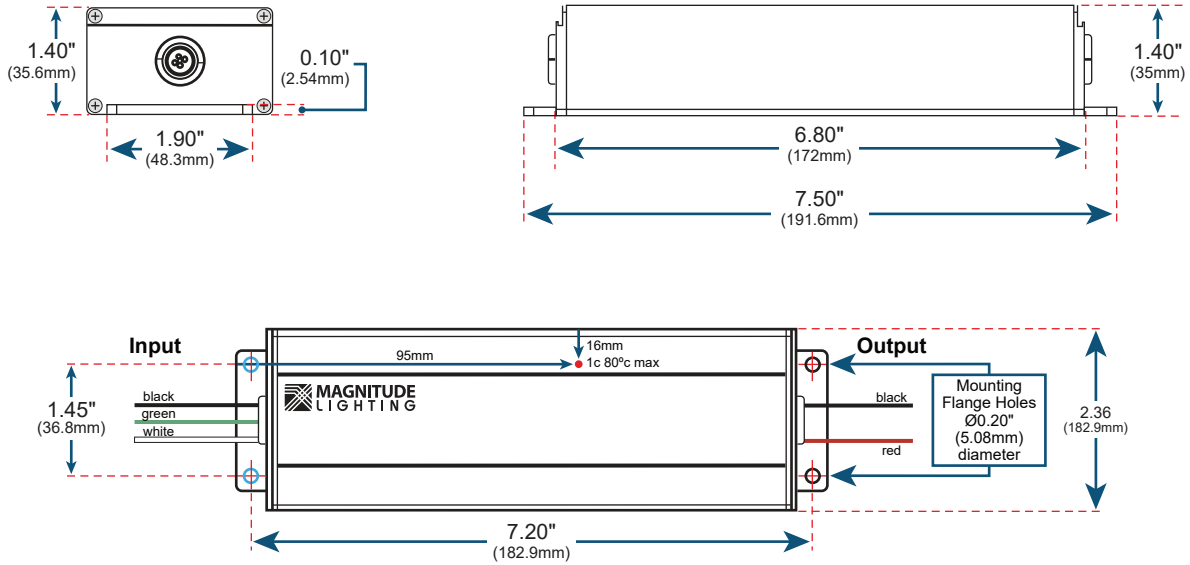
Phone: (714) 312-5080

Fax: (714) 312-5070

E-mail: CustomerCare@magnitudeinc.com

## MECHANICAL DIAGRAMS

### WITHOUT Junction Box



### WIRING DIAGRAM

