OVERVIEW

24VDC Commercial Grade 120~277VAC Constant Voltage Drivers are designed for commercial grade projects of any size. Pair these drivers with a variety of low voltage REIGN Dimmers, RGB/DMX Controls, and 120V ~277VAC switches to create long lasting installations that offer high efficiency. These drivers are IP67 rated and are suitable for install in a wide range of commercial applications in dry, damp, or wet locations.

FEATURES

• 120~277VAC Input
• High efficiency
• Short circuit, over current, over voltage, over temperature protections
• Plastic housing with Class II design, fault ground protection
• Class 2 power unit
• Fanless design, cooling by free air convection
• No load power consumption <0.15W
• UL Recognized Component (driver only)
• UL Listed (LO-PRO® Junction Box & Driver Combo)
• 5-year warranty

RECEIVE A UL LISTED DRIVER WHEN ORDERING THE LO-PRO® JUNCTION BOX & DRIVER COMBO ON PAGE 2.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**SPECIFICATIONS - 120VAC~277VAC Models (24VDC Output)**

<table>
<thead>
<tr>
<th>Input Voltage / Frequency¹</th>
<th>120 ~ 277VAC, 50/60Hz (Refer to 'Static Characteristics Curve')</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimmability²</td>
<td>Yes, with compatible PWM dimmer/controls</td>
</tr>
<tr>
<td>Ambient Temp³</td>
<td>40 ~ +185°F (Refer to 'Derating Curve')</td>
</tr>
<tr>
<td>Operating Temp⁴</td>
<td>40 ~ +185°F</td>
</tr>
<tr>
<td>Environment:</td>
<td>IP67 outdoor / wet location when installed in wet location J-Box. Lo-Pro J-Box &amp; Driver Combo is suitable for indoor / dry locations.</td>
</tr>
<tr>
<td>Working Humidity:</td>
<td>20 ~ 95% RH non-condensing</td>
</tr>
<tr>
<td>Housing / Cooling:</td>
<td>Plastic housing / cooling by free-air convection</td>
</tr>
<tr>
<td>UL Recognized Component (Driver Only):</td>
<td>UL8750(type “HL”), CSA C22.2 No. 250.13-12, ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67 approved; Design refer to EN60335-1. CE Certified.</td>
</tr>
<tr>
<td>UL Listed (Lo-Pro J-Box &amp; Driver Combo):</td>
<td>UL 1598 UL# E469769. UL8750(type “HL”), CSA C22.2 No. 250.13-12, ENEC EN61347-1, EN61347-2-13 independent, EN62384,= EN60335-1. CE Certified.</td>
</tr>
</tbody>
</table>

**LO-PRO® JUNCTION BOX & DRIVER COMBO**

**UL LISTED DRIVER OPTION**

SKUs highlighted in blue qualify for the Lo-Pro Junction Box & Driver Combo. An additional UL Listed E469769 Sticker will be placed on the outside of the Lo-Pro J-Box certifying the combo as a UL Listed Low Voltage Power unit. Conforms to Article 725.121(A)(2) of the National Electrical Code®. For full driver specifications, see the driver spec sheet.

<table>
<thead>
<tr>
<th>Component Recognized Driver</th>
<th>LO-PRO® Junction Box</th>
<th>UL Listed Driver from Diode LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI-CV-MW24V60W-277</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DI-CV-MW24V60W-277-LPS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DI-CV-MW24V90W-277</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DI-CV-MW24V90W-277-LPS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power / Max Load</th>
<th>60W / 2.5A (See Derating Curve)</th>
<th>90W / 3.75A (See Derating Curve)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Full Load</td>
<td>24VDC</td>
<td>24VDC</td>
</tr>
<tr>
<td>Class 2</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Minimum Load</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Input Current Full Load</td>
<td>0.8A@115VAC, 0.4A@230VAC, 0.32A@277VAC</td>
<td>0.95A / 115VAC, 0.5A / 230VAC, 0.4A / 277VAC</td>
</tr>
<tr>
<td>Primary Leads</td>
<td>SJTW 18/2AWG, AC/L (Brown), AC/N (Blue)</td>
<td>SJTW 18/2AWG, AC/L (Brown), AC/N (Blue)</td>
</tr>
<tr>
<td>Secondary Leads</td>
<td>SVT 18/2AWG, V+(Red), V-(Black)</td>
<td>SVT 18/2AWG, V+(Red), V-(Black)</td>
</tr>
<tr>
<td>Voltage Boost⁵</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Circuit Breakers</td>
<td>Auto Reset Hiccup</td>
<td>Auto Reset Hiccup</td>
</tr>
<tr>
<td>Efficiency / PF Full Load</td>
<td>89% / PF: ≥0.97@115VAC, ≥0.95@230VAC, ≥0.92@277VAC</td>
<td>86% / PF: ≥0.98@115VAC, ≥0.96@230VAC, ≥0.94@277VAC</td>
</tr>
<tr>
<td>THD Full Load</td>
<td>5%@115VAC, 10%@230VAC, 16%@277VAC</td>
<td>5%@115VAC, 8%@230VAC, 14%@277VAC</td>
</tr>
<tr>
<td>Dimensions</td>
<td>5.9 x 2.1 x 1.4 in. (L x W x H)</td>
<td>11.25 x 3.75 x 1.90 in. (L x W x H)</td>
</tr>
<tr>
<td>Weight</td>
<td>1.1 lbs (17.6 oz.)</td>
<td>3.0 lbs (48 oz.)</td>
</tr>
</tbody>
</table>

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¹ Refer to the 'Static Characteristics Curve' if installing under low input voltage conditions to properly derate the power supply load.
² Not compatible with 120VAC dimming controls. PWM dimmer/control spec sheet will indicate if multiple controls can be paired to a single driver.
³ Refer to the 'Derating Curve' if nearing max. ambient temperature to properly derate the power supply load. Do not install product in an environment outside the listed ambient temperature.
⁴ Operating temperature is measured according to the minimum and maximum ambient temperature environment. Operating temperature is measured according to the minimum and maximum ambient temperature environment.
DERATING CURVE

AMBIENT TEMPERATURE, Ta (°C)

LOAD (%)

INPUT VOLTAGE (V) 60Hz

STATIC CHARACTERISTICS

UNIT: mm [in.]

MECHANICAL DIAGRAM (Driver Only)

DI-CV-MW24V60W-277

120-277VAC~
50/60 Hz

AC/L(Brown)
AC/N(Blue)

Vo+(Red)
Vo-(Black)

SVT 18AWGx2C

300±20
[11.8±0.8]

300±20
[11.8±0.8]

35
[1.38]

To Low Voltage LED Load

DI-CV-MW24V90W-277

120-277VAC~
50/60 Hz

AC/L(Brown)
AC/N(Blue)

Vo+(Red)
Vo-(Black)

SVT 16AWGx2C

300±20
[11.8±0.8]

37
[1.48]

To Low Voltage LED Load

300±20
[11.8±0.8]
MECHANICAL DIAGRAM (LO-PRO® JUNCTION BOX & DRIVER COMBO)

DI-CV-MW24V90W-277-LPS

DI-CV-MW24V90W-277-LPS
SAFETY / WARNINGS / DISCLOSURES
1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. DO NOT modify product beyond instructions or warranty will be void.
4. Turn power OFF at main breaker before servicing or installing this product.
5. Proper heat dissipation will prolong the working lifespan of this product. Install in a well-ventilated area free from explosive gases and vapors.
6. Refer to the ‘Static Characteristics Curve’ if installing under low input voltage conditions to properly derate the power supply load
7. Drivers are rated for maximum power output at optimum thermal and voltage conditions. Please refer to the ‘Derating Curve’ for maximum load ratings.
8. Ensure a compatible LED fixture with the correct operating voltage is installed with this product.
9. Suitable for outdoor and wet locations when installed in a wet location J-Box. LO-PRO Junction Box & Driver Combo is rated for indoor / dry locations.
10. To compensate for voltage drop, ensure applicable gauge in-wall rated wire is installed between driver and LED fixture.
11. Compatible with PWM dimmers/controls. Not compatible with 120VAC dimming controls. PWM dimmer/control spec sheet will indicate if multiple controls can be paired to a single driver.

WARRANTY
Limited Warranty
This product has a five (5) year limited warranty from the date of shipment. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at www.dioodle.com/limited-warranty/ within the Policies section. For warranty related questions please contact product support.

Consumer’s Acknowledgment
Diode LED stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Diode LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Diode LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Diode LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer’s responsibility to adhere strictly to all information contained in the Product Specification Sheets. There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.