## ALLOYLミDo Specifications

## 0-10V Dimmable Drivers with Junction Box

AL-98-06-24096-277

$0-10 \mathrm{~V}$ dimmable LED drivers are designed to integrate into existing 0-10V dimming systems and provide smooth, efficient power and dimming capability for LED lighting. These drivers include an inspection-ready UL Listed junction box enclosure and offer unparalleled performance for 0-10V systems. These drivers are already derated, which means they can be loaded to maximum wattage capacity.

- Includes UL Listed junction box
- $100 \%$ to $1 \%$ dimming
- For use indoors in dry/damp environments
- 100~277V AC input for commercial and residential
- No minimum load
- 5 year warranty


## QUICK SPECIFICATIONS

| Input | 100V~ | 100-277V AC |
| :---: | :---: | :---: |
| Features |  | 100\% maximum load $0 \%$ minimum load Class 2 |
| Environment | Cis | Dry/damp environment |
| Certifications | ${ }_{\text {LUSTED }}^{\text {UL }} \text { Uus }$ | UL Listed RoHS |
| Warranty | (5) | 5 year limited |

## DIMENSIONS

Junction Box Dimensions


## ALLOYLこ $D^{\circ}$ Specifications

## TECHNICAL INFORMATION

| Item \# |  | AL-98-06-24096-277 |
| :---: | :---: | :---: |
| Output | DC Voltage | 24 V DC |
|  | Rated Current | 4 A |
|  | Rated Power | 96W |
|  | Voltage Accuracy | $\pm 0.5 \mathrm{~V}$ |
|  | Dimming Range | 100~1\% |
| Input | Voltage Range | 100~277V AC |
|  | Frequency Range | $47 \sim 63 \mathrm{HZ}$ |
|  | Power Factor (Avg.) | 0.98 @ 120V AC 0.95 @ 277V AC |
|  | Full Load Efficiency (Avg.) | 83\% @ 120V AC 86\% @ 277V AC |
|  | AC Current (Avg.) | 1.3A |
|  | Inrush Current | 20A, 50\%, 1.6ms @ 120V AC 25A, 50\% 1.2ms @ 277V AC |
|  | Leakage Current | $<0.5 \mathrm{~mA}$ |
| Protection | Short Circuit | Shut down o/p voltage, re-power on to recover after fault condition removed |
|  | Over Temperature | $100^{\circ} \mathrm{C} \pm 10^{\circ} \mathrm{C}$ - Shut down o/p voltage, automatic recovery after cooling |
|  | Over Voltage | $\leq 120 \%$ constant current limiting, auto-recovery |
| Environment | Working Temp. | $-40 \sim+60^{\circ} \mathrm{C},-40 \sim+140^{\circ} \mathrm{F}$ |
|  | Working Humidity | 20~95\% RH, non-condensing |
|  | Storage Temp., Humidity | $-40 \sim+80^{\circ} \mathrm{C},-40 \sim 176{ }^{\circ} \mathrm{F} / 10 \sim 95 \% \mathrm{RH}$ |
|  | Temp Coefficient | $\pm 0.03 \% /{ }^{\circ} \mathrm{C}\left(0 \sim 50^{\circ} \mathrm{C}, 32 \sim 122^{\circ} \mathrm{F}\right)$ |
|  | Vibration | $10 \sim 500 \mathrm{~Hz}, 5 \mathrm{G} 12 \mathrm{~min} . / 1$ cycle, period for 60 min. each along $X, Y, Z$ axes |
| Safety \& EMC | Safety Standards | UL8750 + UL1310, class 2 CAN/CSA-C22.2 No. 250.13 |
|  | Withstand Voltage | I/P-O/P: 1.88 KV AC |
|  | Isolation Resistance | I/P-O/P:>100M $2 / 500 \mathrm{~V}$ DC/ $25^{\circ} \mathrm{C}, 77^{\circ} \mathrm{F} / 70 \% \mathrm{RH}$ |
|  | EMC Emission | FCC 47 CFR Part 15, Subpart B |
| Other | Warranty | 5 Year Limited |
|  | Dimensions ( $\mathrm{L} \times \mathrm{W} \times \mathrm{H}$ ) | $15 \times 3 \times 2.25$ in. |
|  | Knockouts (\#-dia.) | 6 knockouts - 7/8 in. |

All parameters NOT specially mentioned are measured at $110 \mathrm{~V} / 220 \mathrm{~V}$ AC input, rated load, and $25^{\circ} \mathrm{C}, 77^{\circ} \mathrm{F}$ of ambient temperature.
Warning: Do NOT reverse polarity high voltage input of the driver as it will destroy the product.

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## WIRING DIAGRAMS

Using a Standard Wall Dimmer


Note: Dimmer switch wiring for reference use only. Please follow wiring instructions provided with the dimmer switch.

## TROUBLESHOOTING

Q: Q: Why are the lights connected to the driver blinking roughly once a second?
A: The driver may be overloaded. Check to make sure the maximum wattage is not being exceeded. There could also be a possibility of incompatible voltage. Confirm that the driver and tape light voltage match.

Q: How do I determine the compatibility?
A: Check the voltage, wattage, load capacity of both the tape light and driver.
Q: Is it possible to have multiple runs of tape light that are daisy-chained together connect to a driver with 1 lead wire?
A: Yes, but only if the total length of consecutive runs do not exceed the tape light's maximum run and also does not exceed the driver's maximum wattage.

