0-10V Dimmable Drivers with Junction Box

AL-98-06-24XXX

0-10V 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% Maximum Load
- Dry Location (except 192W and 288W models – Wet/Dry)
- No minimum load
- 5 year warranty

QUICK SPECIFICATIONS

Item Number	AL-98-06-24020	AL-98-06-24060-277 AL-98-06-24080-277 AL-98-06-24096-277	AL-98-06-24150-277 AL-98-06-24200-277	AL-98-06-24192-MT AL-98-06-24288-MT
Input	120V 120V AC	100V~ 277V 100-277V AC		
Features	100% Max. Load, 0% Min. Load, CLASS 2 100% maximum load 0% minimum load Class 2		100% Max. Load, 0% Min. Load 100% maximum load 0% minimum load	100% Max. Load, 10% Min. Load, CLASS 2 100% maximum load 10% minimum load Class 2
Environment	DRY LOCATION, IP20 Dry environment (IP20) Protection from solid objects			DRY LOCATION, WET LOCATION Dry/wet environment (IP66)
Certifications	ETL Intertek, RoHS ETL Listed RoHS	c UL us LISTED, RoHS UL Listed RoHS		
Warranty	WARRANTY 5 YEAR 5 year limited			

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24V MODELS TECHNICAL INFORMATION

Item Number	AL-98-06-24020	AL-98-06-24060-277	AL-98-06-24080-277	AL-98-06-24096-277	AL-98-06-24150-277	AL-98-06-24200-277
DC Voltage	24V DC	24V DC	24V DC	24V DC	24V DC	24V DC
Rated Current	0.83A	2.5A	3.33A	4A	6.25A	8.33A
Rated Power	20W	60W	80W	96W	150W	200W
Voltage Tolerance	-	-	±0.5V	-	-	±0.5V
Voltage Regulation	-	-	±0.5%	-	-	±0.5%
Voltage Accuracy	±0.5V		-	±0.5V		-
Load Regulation	-	-	±1%	-	-	±1%
Dimming Range	100~1%					
Voltage Range	100~265V AC	100~277V AC				
Frequency Range	47~63HZ					
Power Factor (Avg.)	PF>0.92 / 110V AC		0.98 @ 120V AC 0.95 @ 277V AC		0.99 @ 120V AC 0.94 @ 277V AC	0.98 @ 120V AC 0.95 @ 277V AC
THD (Avg.) Full Load	-	-	<20% @ 120V AC & 277V AC	-	-	<20% @ 120V AC & 277V AC
Full Load Efficiency (Avg.)	82%	83% @ 120V AC 84% @ 277V AC	83% @ 120V AC 85% @ 277V AC	83% @ 120V AC 86% @ 277V AC	85% @ 120V AC 87% @ 277V AC	86% @ 120V AC 88% @ 277V AC
AC Current (Avg.)	0.22A / 110V AC	0.9A	1.15A	1.3A	1.8A	2.3A
Inrush Current	-	14A, 50%, 780us @ 120V AC 15A, 50%, 660us @ 277V AC	20A, 50%, 1.6ms @ 120V AC 25A, 50% 1.2ms @ 277V AC		15A, 50%, 1.4ms @ 120V AC 30A, 50% 1.4ms @ 277V AC	
Leakage Current	<0.5mA / 110V AC	<0.5mA				
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed	Shut down o/p voltage, re-power on to recover after fault condition removed				
Over Temperature	-	100°C ± 10° C (212°F ± 50°F)- Shut down o/p voltage, automatic recovery after cooling				
Over Voltage	≤120%	≤120% Hiccup mode, recovers automatically after fault condition is removed	≤120% constant current limiting, auto-recovery			
Over Current	≤1.2*I out	-	-	-	-	-
Working Temp.	-40 ~ +50°C, -40 ~ +122°F	-40 ~ +60°C, -40 ~ +140°F				
Working Humidity	20~90% RH, non-condensing	20~95% RH, non-condensing				
Storage Temp., Humidity	-40 ~ +80°C, -40~176°F / 10~95%RH					
Temp. Coefficient	±0.03%/°C (0~50°C, 32~122°F)					
Vibration	10~500Hz, 2G 12min./1 cycle, period for 72min. each along X,Y,Z axes	10~500Hz, 2G 10min./1 cycle, period for 60 min. each along X, Y, Z axes	10~500Hz, 5G 12min./1 cycle, period for 72 min. each along X, Y, Z axes	10~500Hz, 5G 12min./1 cycle, period for 60 min. each along X, Y, Z axes	10~500Hz, 5G 10min./1 cycle, period for 60 min. each along X, Y, Z axes	10~500Hz, 5G 12min./1 cycle, period for 60 min. each along X, Y, Z axes
Safety Standards	EN61347-1, EN61347-2-13	UL8750+UL1310, CAN/CSA-C22.2 No.250.13	UL8750 + UL1310, class 2 CAN/CSA-C22.2 No.250.13	UL8750 + UL1310, class 2 CAN/CSA-C22.2 No.250.13	UL8750, CAN/CSA-C22.2 No.250.13	UL8750, CAN/CSA-C22.2 No.250.13
Withstand Voltage	I/P-O/P: 3.75KV AC	I/P-O/P: 1.88KV AC				
Isolation Resistance	I/P-O/P:>100MΩ/500V DC/25°C, 77°F/70% RH					
EMC Emission	Compliance to 55015,EN61000-3-2 (≥60%load)	FCC 47 CFR Part 15, Subpart B				
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level	-	-	-	-	-
Warranty	5 Year Limited					
Dimensions (L x W x H)	13.8 x 3 x 1.46 in.		15 x 3 x 2.25 in.		16 x 3.43 x 2.36 in.	15 x 3 x 2.25 in.
Knockouts (# - dia.)	6 knockouts - 7/8 in.					
Color	White	White	Black	Black	Black	Black

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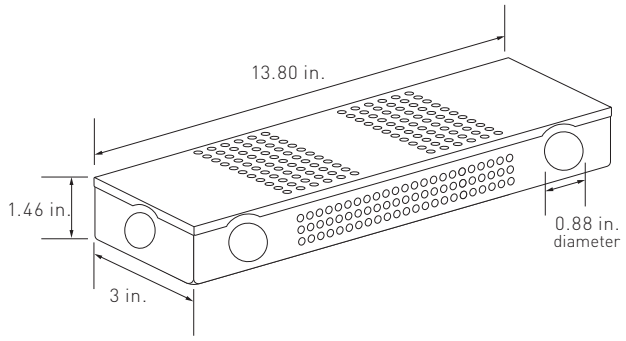
MULTI-TAP MODELS TECHNICAL INFORMATION

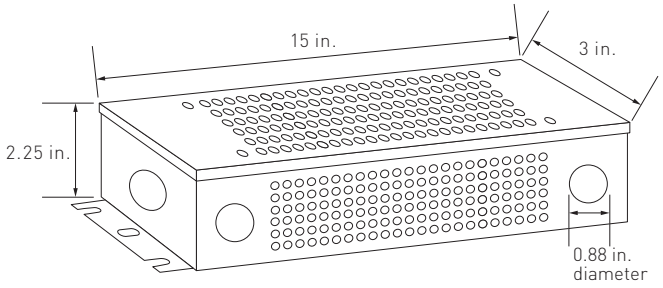
Item Number	AL-98-06-24192-MT	AL-98-06-24288-MT
DC Voltage	24V DC	24V DC
Channels	2	3
Current Per Channel	4A (8A total)	4A (12A total)
Wattage Per Channel	96W (192W total)	96W (288W total)
Voltage Accuracy	±0.5V	
Dimming Range	100~1%	
Voltage Range	100~277V AC	
Frequency Range	47~63HZ	
Power Factor (Avg.)	0.99 @ 120V AC / 0.94 @ 277V AC	0.99 @ 120V AC / 0.95 @ 277V AC
Full Load Efficiency (Avg.)	87% @ 120V AC / 89% @ 277V AC	87% @ 120V AC / 91% @ 277V AC
AC Current (Avg.)	2.3A / 100V AC	3.4A / 100V AC
Leakage Current	<0.5mA	
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed	
Over Temperature	100°C ± 10° C - Shut down o/p voltage, re-power on to recover	
Over Voltage	≤280V AC	
Working Temp.	-40 ~ +60°C, -40 ~ +140°F	
Working Humidity	20~90% RH, non-condensing	
Storage Temp., Humidity	-40 ~ +80°C, -40~176°F / 10~95%RH	
Temp. Coefficient	±0.03%/°C (0~50°C, 32~122°F)	
Vibration	10~500Hz, 5G 12 min. / 1 cycle, period for 72 min. each along X, Y, Z axes	
Safety Standards	UL 8750, UL 1310	
Withstand Voltage	I/P-O/P: 1.88KV AC	
Isolation Resistance	I/P-O/P:>100MΩ / 500V DC / 25°C, 77°F / 70% RH	
EMC Emission	FCC 47 CFR Part 15, Subpart B	
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level	
Warranty	5 Year Limited	
Dimensions (L x W x H)	11 x 4.25 x 1.8 in.	11.85 x 4.25 x 1.8 in.
Knockouts (# - dia.)	8 knockouts - 7/8 in.	
Color	Black	Black

DIMENSIONS

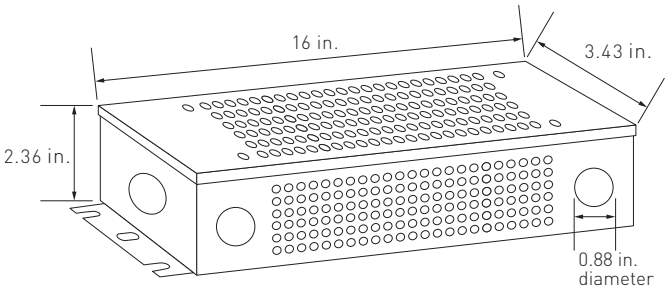
AL-98-06-24020
AL-98-06-24060-277



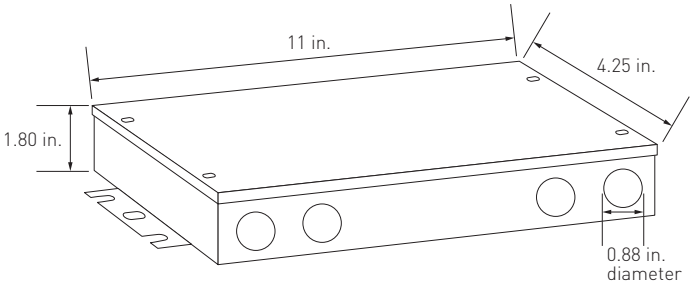
AL-98-06-24080-277
AL-98-06-24096-277
AL-98-06-24200-277



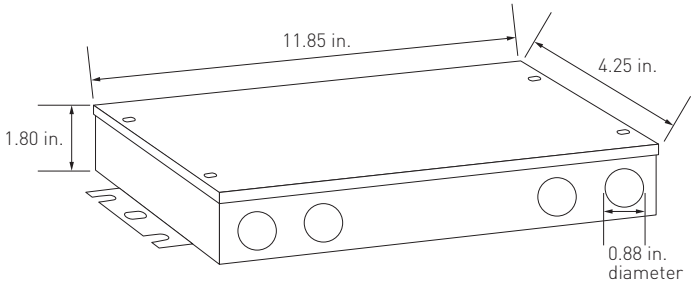
AL-98-06-24150-277



AL-98-06-24192-MT



AL-98-06-24288-MT



WIRING DIAGRAMS

Using a Standard Wall Dimmer

AL-98-06-24020
AL-98-06-24060-277
AL-98-06-24080-277
AL-98-06-24096-277
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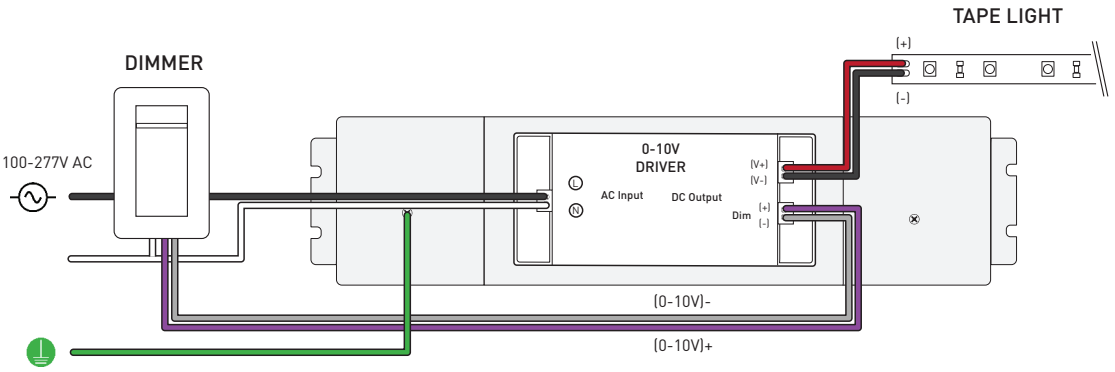
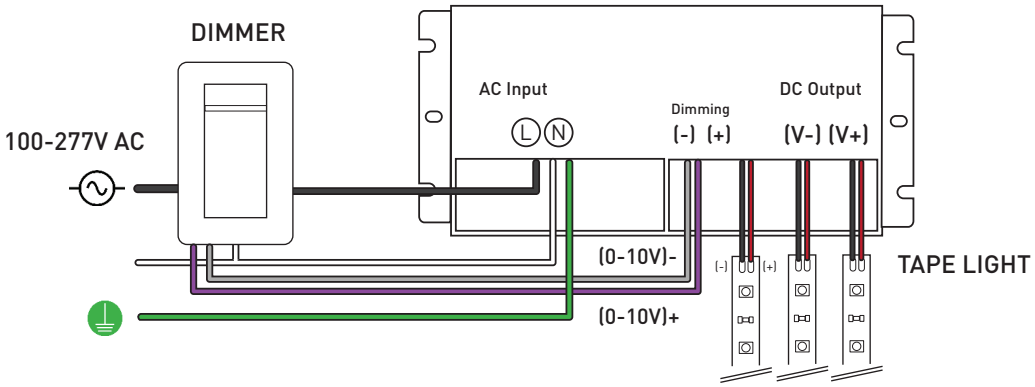
AL-98-06-24200-277



AL-98-06-24192-MT
AL-98-06-24288-MT



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.

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