

Always-On Non-Dimmable Drivers

AL-98-04-12040-AO



Always-On Non-Dimmable Drivers are available for commercial and residential applications that require lighting and power supplies that are on a majority of the time. Non-dimmable drivers are for use with white tape light on an on/off switch, or to supply reliable, efficient low voltage power to RGB and RGB-W color controllers (which have on-board dimming functionality).

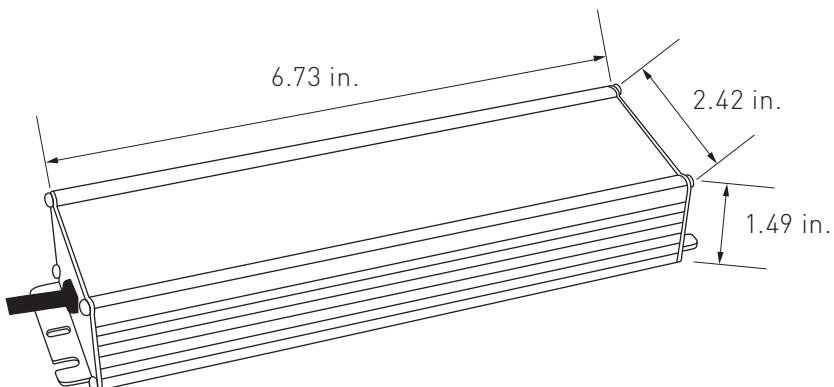
- For applications that require always-on lighting
- Built for long-term continuous use
- Already derated (can be loaded to maximum wattage capacity)
- IP65 for use outdoors or indoors in wet environments
- 7 year warranty

Although non-dimmable drivers are compatible with AC on/off switches, they are not dimmable with AC dimmer switches.

QUICK SPECIFICATIONS

Input	120V~ 277V	120~277V AC
Features	100% Max. Load 0% Min. Load CLASS 2	100% maximum load 0% minimum load Class 2
Environment		Dry/wet environment (IP65) Dust tight and protected against jets of water
Certifications		RoHS UL Recognized Component
Warranty		7 year limited

DIMENSIONS



ALLOY LED® Specifications

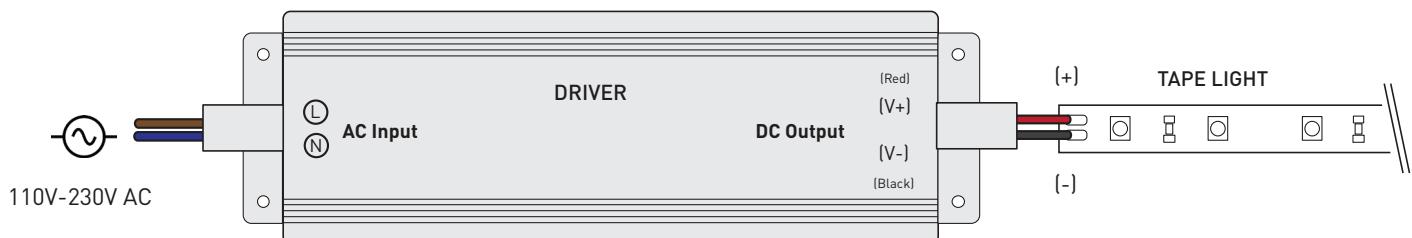
TECHNICAL INFORMATION

Item #	AL-98-04-12040-A0	
Output	DC Voltage ¹	12V DC
	Rated Current	3.33A
	Current Adj. Range	2~3.33A
	Rated Power	40W
	Ripple & Noise (Max.) ²	150mVp-p
	Voltage Tolerance ³	±2.5%
	Line Regulation	±0.5%
	Load Regulation	±2.0%
	Setup, Rise Time ⁶	500ms, 80ms at full load
Input	Hold Up Time (Avg.)	16ms at full load
	Voltage Range ⁴	120~277V AC
	Frequency Range	47~63HZ
	Efficiency (Avg.)	>86.5%
	AC Current (Avg.)	0.43A/115V AC 0.24A/230V AC
	Inrush Current (Max.)	COLD START 50A (twidth=210μs measured at 50% Ipeak) at 230V AC
Protection	Leakage Current	<0.75mA / 277V AC
	Overload	95~108% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed
	Over Voltage	15~21V Protection type: Shut down o/p voltage, re-power on to recover
Environment	Working Temp.	-40~+80°C, -40~176°F
	Working Humidity	20~95% RH, non-condensing
	Storage Temp., Humidity	-40~+80°C, -40~176°F / 10~95%RH
	Temp Coefficient	±0.03%/°C (0~60°C, 32~144°F)
	Vibration	10~500Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes
Safety & EMC	Safety Standards	UL87500, CAN/CSA C22.2 No.223-M91, IP65 approved; design refer to TUVEN60950-1
	Withstand Voltage	I/P-O/P: 3.75KV AC
	Isolation Resistance	I/P-O/P:>100MΩ/500V DC/25°C, 77°F/70% RH
	EMC Emission	Compliance to EN55022 (CISPR22) ClassB, EN61000-3-2 Class A,EN61000-3-3
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A
Other	Warranty	7 Year Limited
	MTBF	1131.9K hrs min. Telcordia SR-332 (Bellcore) ; 336.5K hrs min. MIL-HDBK-217F (25°C, 77°F)
	Size	6.73" L x 2.42" W x 1.49" H

1. All parameters NOT specially mentioned are measured at 230V AC input, rated load and 25°C, 77°F of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltage. Please check the static characteristics for more details.
5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the setup time.
7. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit.
8. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.

Warning: Do NOT reverse polarity high voltage input of the driver as it will destroy the product.

WIRING DIAGRAMS



IP (INGRESS PROTECTION) RATING GUIDE

IP 6 5

Solid Protection Rating Water Protection Rating

Solid Ingress Rating		Water Ingress Rating	
0	Not protected against solid objects	0	Not protected against water
1	Protected against solid objects greater than 50mm	1	Protected against vertically falling water droplets
2	Protected against solid objects greater than 12.5mm	2	Protected against vertically falling water droplets with enclosure tilted up to 15°
3	Protected against solid objects greater than 2.5mm	3	Protected against sprays of water up to 60°
4	Protected against solid objects greater than 1mm	4	Protected against water splashes from all directions
5	Protected against limited amounts dust	5	Protected against jets of water
6	Dust tight	6	Protected against heavy seas and jets of water
		7	Protected against immersion in 1m of water for up to 30 min.

TROUBLESHOOTING

Q: Why is the driver blinking?

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. Check if it is 12V or 24V and make sure tape light and driver 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.