



SPEC SHEET: WAVELUX INDOOR/OUTDOOR UNIVERSAL DIMMABLE LED DRIVER 288W

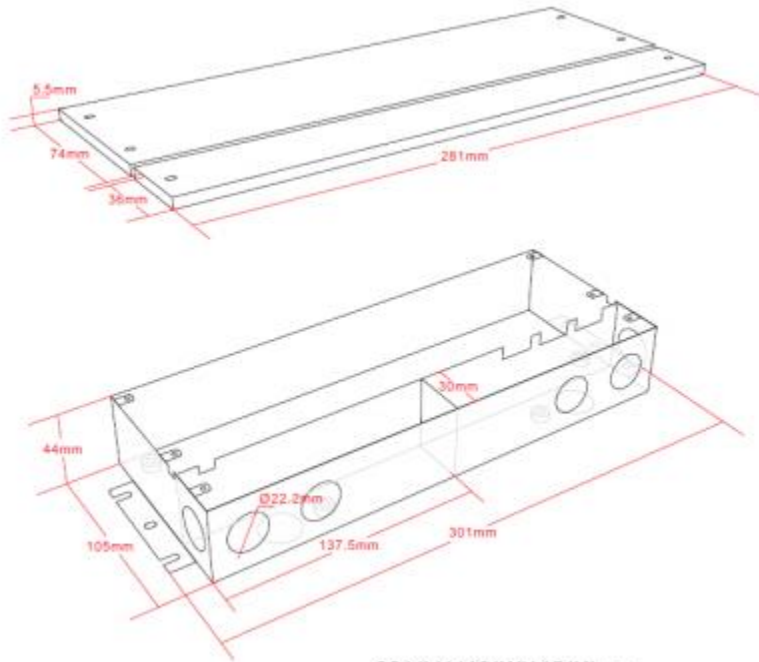
The Wavelux Indoor/Outdoor Universal Dimmable LED Driver is a sophisticated driver for virtually any single color 24V LED Strip Light. The universal dimmable driver allows for a full 0-100% dimming range, flicker-free output that is compatible with Forward Phase, Reverse Phase, Triac, MLV, ELV dimmers and the full protective IP66 housing allows for dry (indoors), damp and wet locations (outdoors), while providing knockout for mounting in nearly any environment. Ideal for schools, commercial buildings, residential, signage, retail and more, this driver is your all-in-one contractor grade LED Strip power supply that works with most brands of LED wall dimmers. With built-in safety features like short circuit protection, overload, no-load, and over temperature control, the fan-less design means a quiet, flicker-free operation. Works with all 24V Pixel-Free LED and Wavelux LED Products, among most other LED Strip lights. A high power factor (up to 0.99), and a high efficiency (up to 91%), this LED Driver is recommended for a load from 10-90% of the LED strips' listed power consumption.

NOTE: This driver uses a 3 output (24V), or 5 output (12V) system so the max power draw from each line should be 96W (24V) or 60W (12V) per LED Strip. Do not combine multiple output channels to increase power through a single LED Strip.

Model		KVF-C12300-TDWJ	KVF-C24288-TDWJ
Certificates		UL cUL FCC	
Output	DC Voltage	12V	24V
	Rated Current	5*5A	3*4A
	Rated Power	300W (5*60W)	288W (3*96W)
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Load Regulation	±1%	
Input	Voltage Range	100-277VAC	
	Frequency Range	47-63Hz	
	Power Factor (Typ.) @ full load	0.99@120VAC 0.95@277VAC	0.99@120VAC 0.95@277VAC
	THD (Typ.) @ full load	<20%	
	Efficiency (Typ.) @ full load	85%@120VAC 90%@277VAC	87%@120VAC 89%@277VAC
	AC Current (Max.)	3.6A@100VAC	3.4A@100VAC
	Inrush Current (Typ.)	35A (twidth=960us) @120VAC ; 43A (twidth=1ms) @277VAC	
	Leakage current	<0.50mA	
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition is removed	
	Over Loading	≤120% Hiccup mode ,recovers automatically after fault condition is removed	
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.	
Environment	Working TEMP.	-40~+60℃ (see below derating curve)	
	Working Humidity	20~90%RH, non-condensing	
	Storage TEMP. Humidity	-40~+80℃, 10~95%RH	
	TEMP .coefficient	±0.03%/℃ (0~50℃)	
	Vibration	10~500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes	
Safety& EMC	Safety standards	UL8750+UL1310	
	Withstand voltage	I/P-O/P:1.88KVAC	
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25℃/70%RH	
	EMC EMISSION	FCC Part 15 B	
others	Net. Weight	2.45Kg	
	Size	301*110*45mm (L*W*H)	
	packing	365*250*245mm/10pcs /CTN G.W.:26.5KG/CTN	
Notes	1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25℃ of ambient temperature. 2. To extend the driver's using life ,please reduce the loading at lower input voltage.		



STRUCTURAL DIAGRAM:

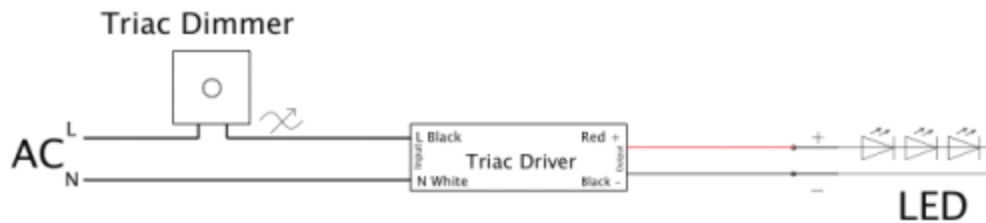


Unite: mm
Tolerance: P 0.5-2mm

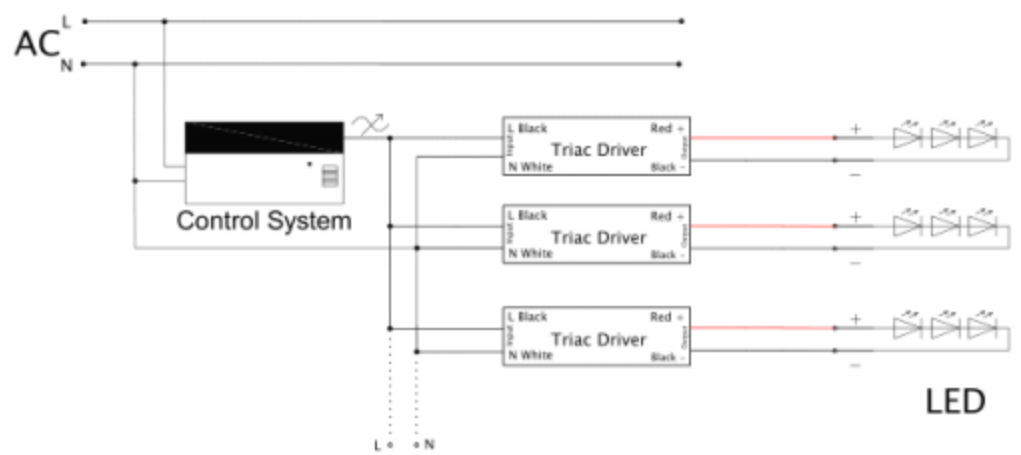
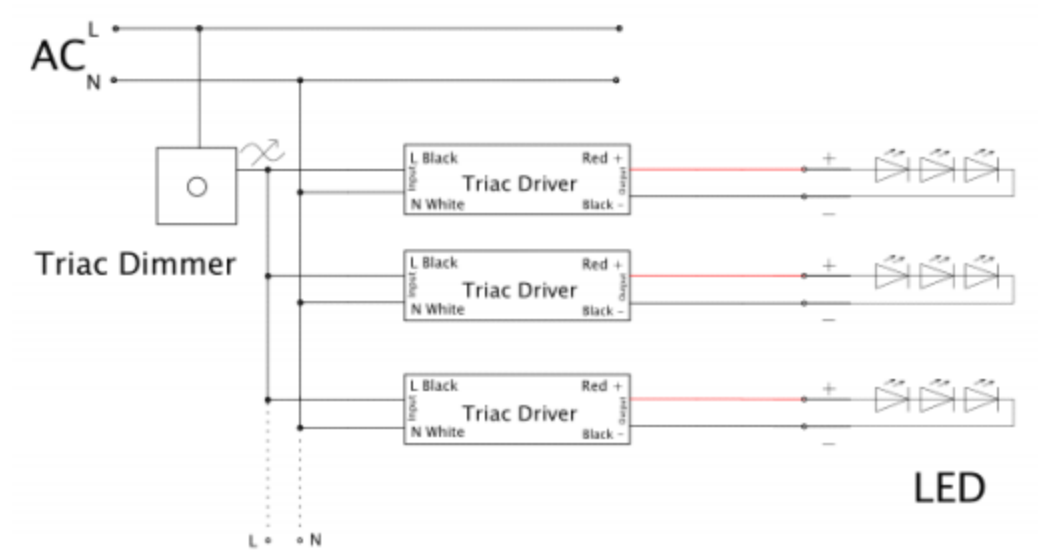
301(L)*110(W)*45(H) mm



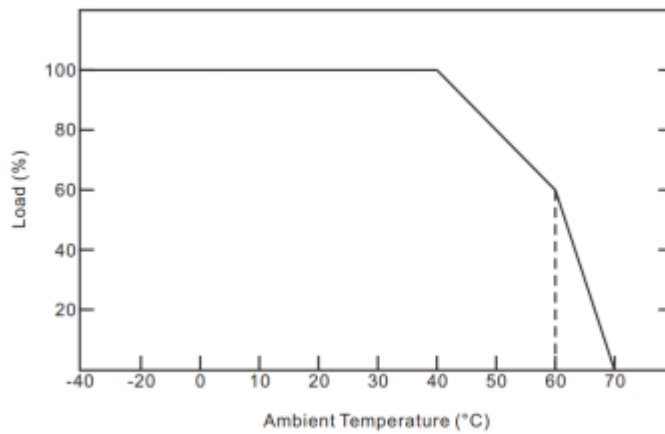
WIRING DIAGRAM



Input Wire: 18AWG Black and White to be connected to AC Line (L) and Neutral (N), Green Wire connect to Ground
Output Wire: 16AWG Red to LED Positive Side (+), Black to LED Negative side (-). Five output cables for 12V, three output cables for 24V



DERATING CURVE





DIMMING OPERATION

The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of AC phase line (L) by connecting a phase/triac dimmer.

Typically this driver is paired with compatible with Forward phase, leading edge, Magnetic Low Voltage (MLV), Triac, trailing edge, Reverse Phase, Electronic Low Voltage (ELV) Dimmers, see connecting diagram on dimmer switch for proper wiring.

PRO-TIP: Match dimmers with at least 1.5x the output power of the driver. For instance, use dimmer switch with compatibility of 400W or more for best results.

FAQ

Is this capable of being used both indoor and outdoors?

Yes, the rating is IP66 and rated for both indoor and outdoor applications. Be sure to use proper ventilation when using to avoid the power supply overheating.

Will this power supply be suitable for contractor use?

YES! This driver should be the go-to driver in any electrical contractor's bag. It's compatible with most LEDs and wall dimmer switches, has all the certifications most contractors will require (UL, cUL, FCC, RoHS, Class 2, Type HL, etc).

Can I combine all 3 outputs to increase the power per LED strip?

No. We do not recommend tying multiple outputs together to power larger loads. Instead, it is preferred to break up the load into smaller segments that will be under the max power threshold (96W for 24V strips, 60W for 12V LED Strips).

Why is this different than a more common power supply?

This specifically designed LED Strip Universal dimming driver can control a wide range of LED strips, through many off-the-shelf dimmers found at local hardware stores. Most LED power supplies are either not dimmable without extra hardware, or dimmable only with specific dimmers. This power supply gives you far more control and wider dimming range than nearly any other power supply on the market.

PRECAUTIONS

- In order to guarantee sufficient voltage is available to drive LED Strip in all conditions, make sure power supply is rated for 20% more than LED Strip consumption.
- For best results, make sure load (LED Strip power consumption) is within 10-80% of this driver
- Do not touch AC Power Supply when powered on
- Polarity Matters! Make sure to wire positive and negative poles of wires during installation to avoid damage to the strip
- Make sure driver is installed with adequate ventilation around it to allow for heat dissipation
- Product is not intended to be submerged and used in swimming pools or hot tubs
- Professional installation recommended