

Phase Cut / Triac Dimmable Driver PWM Output (KVF - TDW Series 120W)

GRANDMIRRORS
SINCE 2001

Features



- Output constant voltage
- UL, cUL listed, Class P, Type HL
- Universal AC input : 100-277VAC
- Power Factor : up to 0.99
- High efficiency : up to 82%
- Dimming range : 0-100%
- Load : 10-100%
- Protection : short circuit / over loading / Over temperature
- PWM output, does not change the color index
- Full protection aluminum housing, for dry, damp, wet location
- Flicker-free
- Compatible with Forward phase, Reverse phase, Triac, MLV, ELV Dimmers
- Cooling by free air convection
- Suitable for LED lighting and moving sign applications

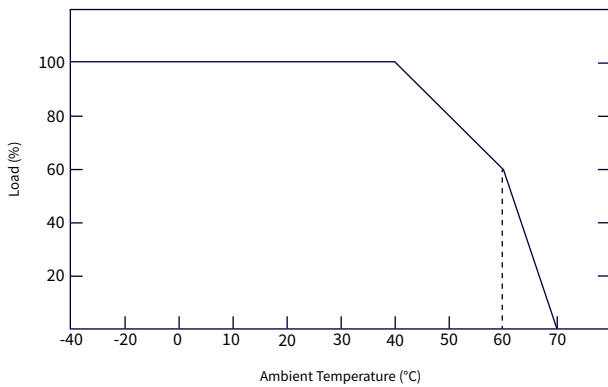


Specifications

Model	KVF-12120-TDW	KVF-24120-TDW	
Certificates	FCC UL cUL	FCC UL cUL	
Output	DC Voltage	12V	24V
	Rated Current	10A	5A
	Rated Power	120W - 480W	
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Load Regulation	±2%	±1%
Input	Voltage Range	100-277VAC	
	Frequency Range	47-63Hz	
	Power Factor (Typ.) @ full load	0.99@120VAC 0.96@277VAC	0.98@120VAC 0.96@277VAC
	THD (Typ.) @ full load	<20%	
	Efficiency (Typ.) @ full load	82%	82%
	AC Current (Max.)	1.7A@100VAC	
	Inrush Current (Typ.)	20A, 50%, 1.6ms	
	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% constant current limiting, auto-recovery	
	Over Temperature	100°C ±10°C shut down o/p voltage, automatically recover after cooling	
Environment	Working TEMP.	-40 ~ +60°C (see below derating curve)	
	Working Humidity	20 ~ 90% RH, non-condensing	
	Storage TEMP. Humidity	-40 ~ +80°C 10 ~ 95%RH	
	TEMP. Coefficient	±0.03%/°C (0 ~ 50°C)	
	Vibration	10~ 500Hz, 5G10min./1cycle, period for 60min. each along X, Y and Z axes	
Safety & EMC	Safety Standards	UL8750	
	Withstand Voltage	I/P-O/P : 1.88KVac	
	Isolation Resistance	I/P-O/P : 100M Ω/500VDC/25°C/70%RH	
	EMC EMISSION	FCC Part 15 B	
Others	Net. Weight	1.05Kg	
	Size	230*70*43mm (L*W*H)	
	Packing	10PCS/CTN	

Notes	1. All Parameters are done on 120VAC input and a ambient temperature of 25 degrees Celsius (77 degrees Fahrenheit)
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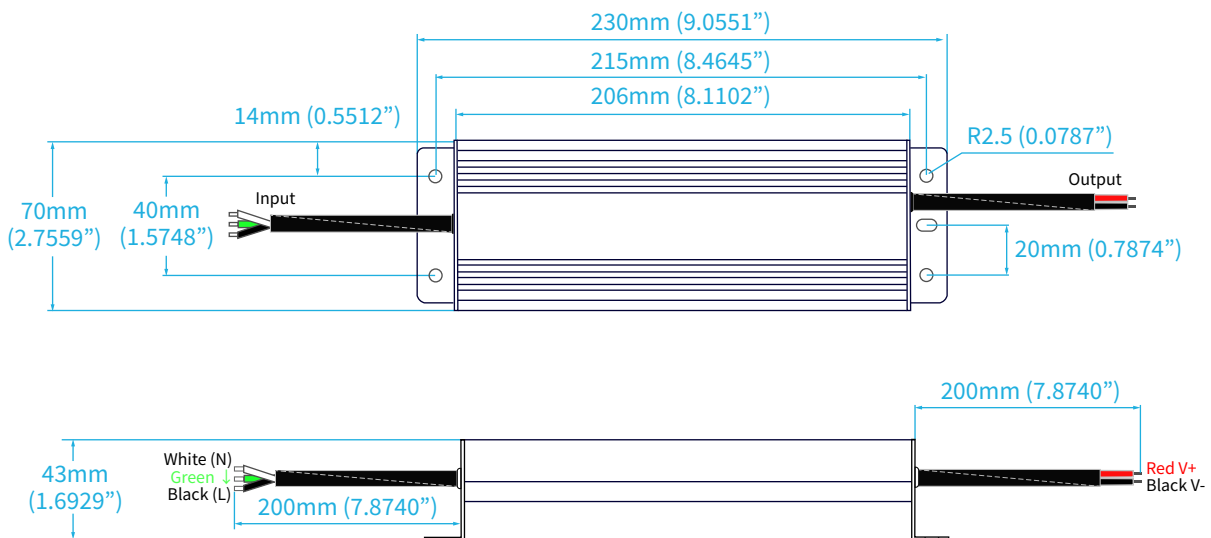
Derating Curve



※ **IMPORTANT.** Read carefully. The driver **MUST** be installed on a well ventilated location. Do not locate the driver in a box without active ventilation. The driver should have at least 50mm/2 inch space from any wall. Create at least 15mm/0.5" space between the bottom of the power supply and the wall/floor. See the derating curve on how heat impacts the drivers' performance.

Mechanical Specification

Unit : mm
Tolerance : P 0.5-2mm



※ Input Rubber wire 3*18AWG Black and White to be connected to AC L and N, Green wire to ground.

※ Output Rubber wire, 2*16 AWG Red to LED Positive side (+), Black to LED Negative side(-).

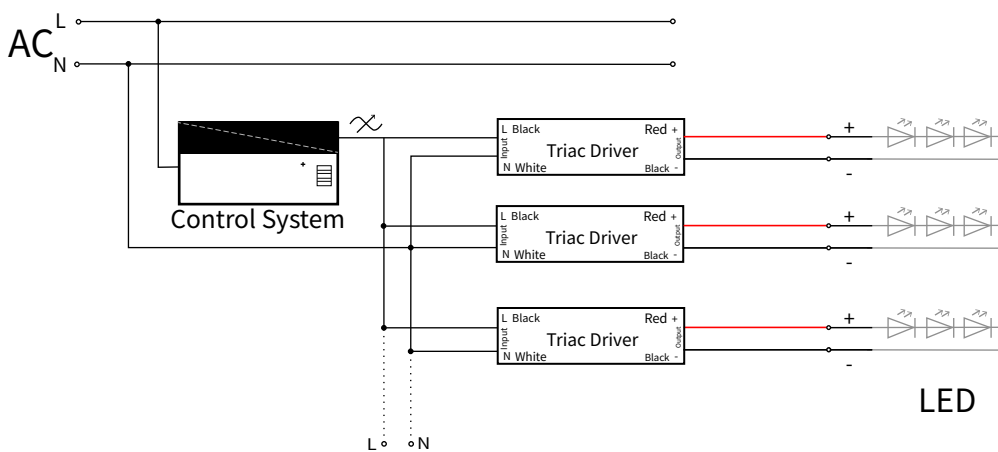
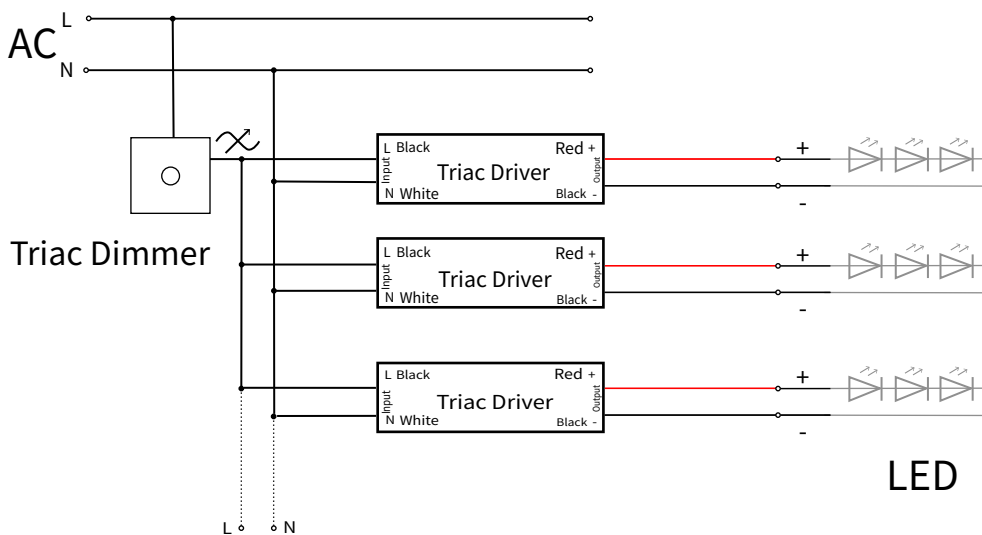
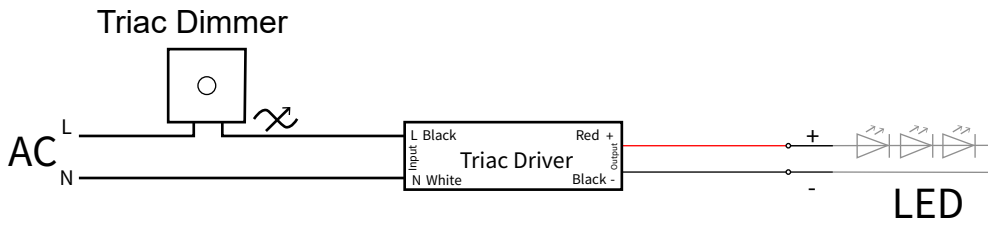
Dimming Operation

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

※ Usually matching with Forward phase, leading edge, Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge, Electric low voltage Dimmers.

※ Please try to use dimmers with power at least 1.5 times as the output power of the driver.

Connecting Diagram



Instruction:

- 1) This driver must be installed by a licensed electrician only.
- 2) Ensure that there is adequate ventilation around the driver. Do not install in a box or enclosure without active ventilation.
- 3) Keep the driver out of direct sunlight and install in a dry place only.
- 4) Ensure the wiring and connections are correct before turning on.