

## Phase cut /Triac dimmable driver-PWM output

KVF-TDWJN series 100W

### Whole Family

KVF-XXXXX-TDWJN 12V/ 24VDC  
30W 60W 80W 96W 100W  
120W 150W 200W 300W



TYPE HL



### ■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 86%
- 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 and wet location
- Flicker-free
- Dimming function:  
Phase dimming: work with forward phase /leading edge ,MLV and  
Reverse phase /trailing edge ,ELV,TRIAC dimmers
- Suitable for LED lighting and moving sign applications

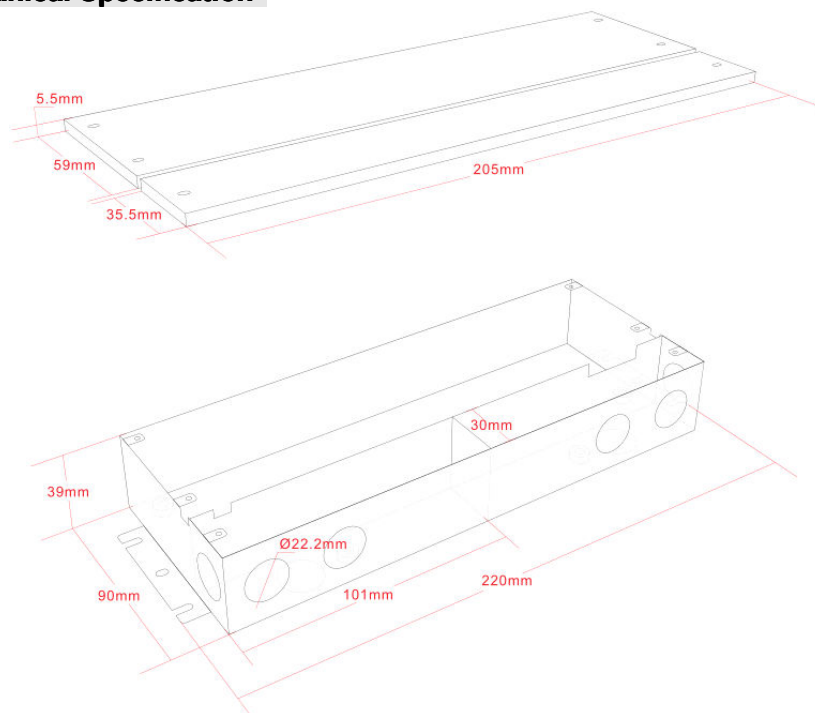
Model		KVF-12100-TDWJN		KVF-24100-TDWJN	
Certificates		FCC UL cUL			
Output	DC Voltage	12V		24V	
	Rated Current	8.33A		4.16A	
	Rated Power	100W			
	Voltage Tolerance	±0.5V			
	Voltage Regulation	±0.5%			
	Load Regulation	±1%			
Input	Voltage Range	100-277VAC			
	Frequency Range	47-63Hz			
	Power Factor   Typ.   @ full load	0.99@120VAC   0.96@277VAC		0.98@120VAC   0.96@277VAC	
	THD   Typ.   @ full load	<20%			
	Efficiency   Typ.   @ full load	80% @120Vac   83%@277Vac		83% @120Vac   86%@277Vac	
	AC Current   Max.	1.5A@100VAC			
	Inrush Current   Typ.	20A, 50%, 1.6ms @120Vac   25A, 50%, 1.2ms @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% constant current limiting, auto-recovery			
	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   95%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			
	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			

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<b>others</b>	Net. Weight	1.3Kg
	Size	220*94.5*40mm (L*W*H)
	packing	10PCS/CTN
<b>Notes</b>	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.	

### ■ Mechanical Specification



Unite: mm

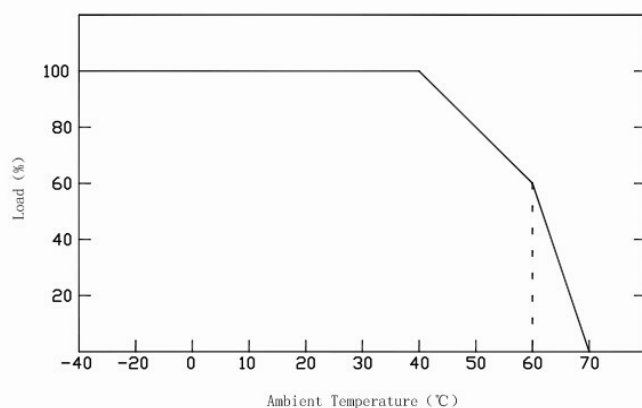
Tolerance: 0.5-2mm

JM88-A1 housing

220(L)\*94.5(W)\*40(H) mm

Input wire 18AWG Black and White to be connected to AC L and N ,Green wire go ground,  
Output wire 16AWG Red to LED Positive side (+) , Black to LED Negative side (-).

### ■ Derating Curve



To extend their life, please refer to the Derating Curve and derate according to the temperature.

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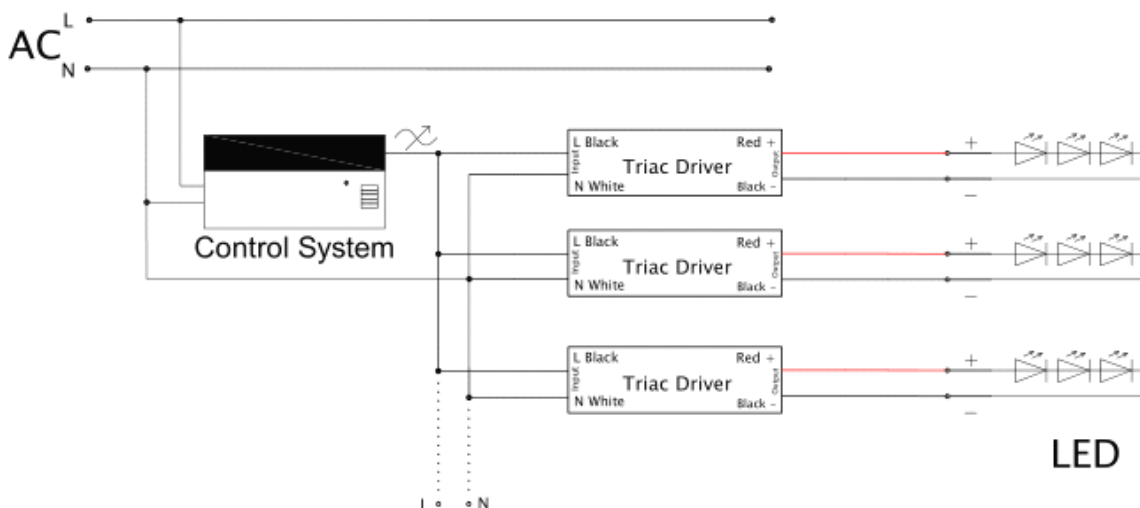
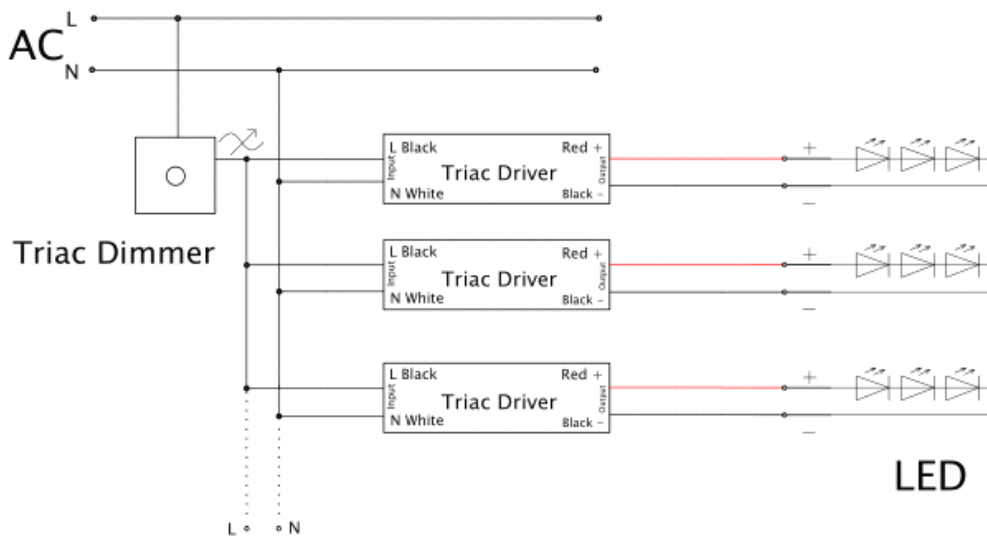
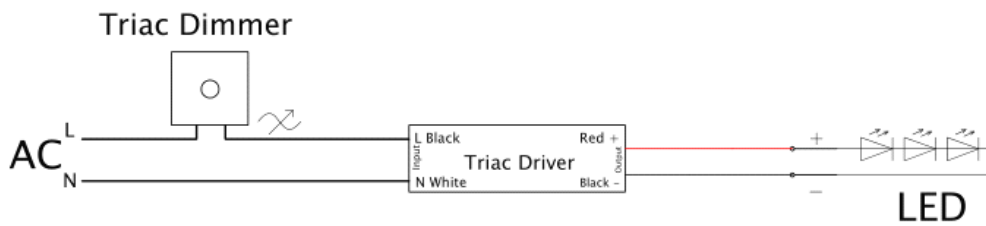
### ■ Dimming Operation

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



**Phase cut /Triac dimmable driver-PWM output**  
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■ **Instruction:**

- 1) This driver should be installed by qualified and professional person;
- 2) Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
- 3) Ensure that wiring is correct before test in order to avoid light and power supply damage;
- 4) If driver Cannot work normally, don't maintain privately;  
Have any question, please contact Zhuhai Shengchang Electronics co.,ltd