

# Phase cut /Triac dimmable driver-PWM output KVF-TDWJ series 60W

# Whole Family

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









#### **■Features**

- ·Output constant voltage
- ·UL, cUL listed, Class 2, Class P, Type HL
- ·Universal AC input: 100-277VAC
- .Power Factor: up to 0.98
  ·High efficiency: up to 83%
  ·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 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

### **■**Specification

Model		KVF-12060-TDWJ	KVF-24060-TDWJ
Certificates		FCC UL cUL Class 2	FCC UL cUL Class 2
Output	DC Voltage	12V	24V
	Rated Current	5A	2.5A
	Rated Power	60W	
	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	0.98@120VAC 0.95@277VAC	0.98@120VAC 0.95@277VAC
	THD (Typ.) @ full load	<20%	
	Efficiency (Typ.) @ full load	83%	83%
	AC Current (Max.)	0.9A@100VAC	
	Inrush Current (Typ.)	14A, 50%, 780us	
	Leakage current	<0.50mA	
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition 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°C (see below derating curve)	
	Working Humidity	$20{\sim}90\%$ 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	1.1Kg	
	Size	188*92*26mm (L*W*H)	
	packing	10PCS/CTN	

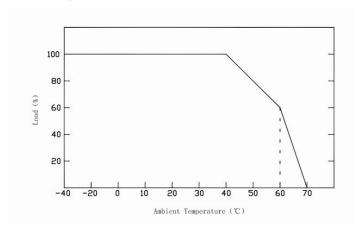


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Notes

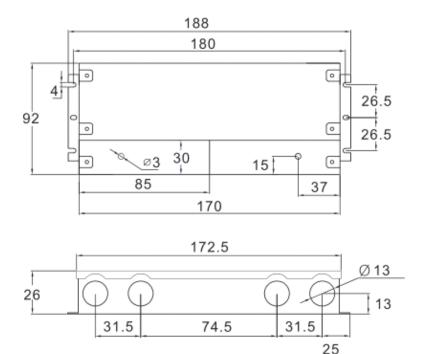
- 1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25  $^{\circ}$ C of ambient temperature.
- 2. To extend the driver's using life ,please reduce the loading at lower input voltage.

## **■Derating Curve**



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

# ■ Mechanical Specification



Unite: mm

Tolerance:P 0.5-2mm

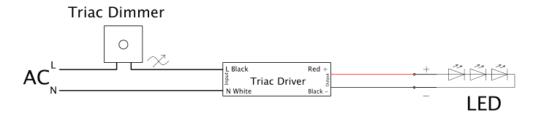
- $\ensuremath{\mathbb{X}}$  Input wire 18AWG Black and White to be connected to AC L and N ,Green wire go ground,
- \*\*Output wire 18AWG Red to LED Positive side (+), Black to LED Negative side (-).

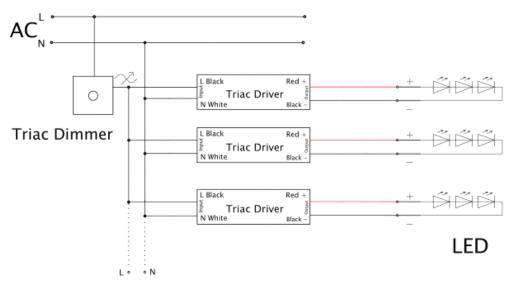
#### **■Dimming Operation**

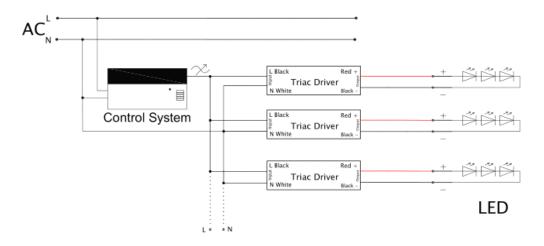
- \*\*The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase/triac dimmer.
- \*\*Usually matching with Forward phase , leading edge , Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge ,Electric low voltage 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 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.

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