

## Phase cut /Triac dimmable driver-PWM output

### **KVF-TDWL series 100W**

Whole Family
KVF-XXXXX-TDWL 12V 24VDC
30W 36W 60W 96W 100W





#### **■Features**

- ·Output constant voltage
- ·UL, cUL listed, Class 2, Class P, Type HL
- ·Universal AC input: 100-277VAC
- .Power Factor: up to 0.99
  ·High efficiency: up to 88%
  ·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 case, for dry, damp and wet locations
- ·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-12100-TDWL	KVF-24100-TDWL
Certificates		FCC UL cUL	FCC UL cUL
Output	DC Voltage	12V	24V
	Rated Current	8.3A	4.17A
	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 0.95@277VAC	0.99@120VAC 0.97@277VAC
	THD (Typ.) @ full load	<20%	
	Efficiency (Typ.) @ full load	120V 82%; 277V 86%	120V 85%; 277V 88%
	AC Current (Max.)	1.4A@100VAC	
	Inrush Current (Typ.)	120V11A, 50%, 1.04ms ; 277V27A, 50%, 960us	
	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% shut down o/p voltage, re-power on to recover	
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling.	
Environment	Working TEMP.	-40∼+60℃ (see below derating curve)	
	Working Humidity	$20{\sim}90\%$ 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, CAN/CSA-C22.2 No.250.13	
	Withstand voltage	I/P-O/P:1.88KVac	
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25℃/70%RH	
	EMC EMISSION	FCC 47 CRF Part 15, Subpart B	
others	Net. Weight	0.55Kg	
	Size	330*32*23mm (L*W*H)	
	packing	360*270*175mm/30pcs /CTN	



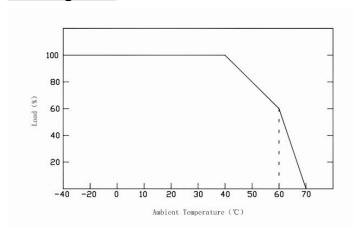
### Phase cut /Triac dimmable driver-PWM output

#### **KVF-TDWL series 100W**

## **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.

#### **■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 Ø4 330 18 321 Output Input Ó Ò 0 200 200

※Input Rubber cable SJOW 18AWG (3C\*0.824mm²), the green cable connect with (FG), Black with AC (L), White with AC(N)

- \*\*Output Rubber cable SJOW 18AWG (2C\*0.824mm²), Red is output(V+) Positive, Black is output (V-) negative. Connected to LED Lamps.
- \*\*Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.
- Note: Any other requests we can customized.

#### ■Dimming Operation

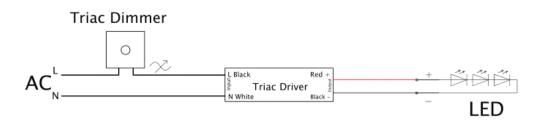
- \*\*The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection
- \*Usually matching with Forward phase, leading edge, Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge, Electric low voltage Dimmers.

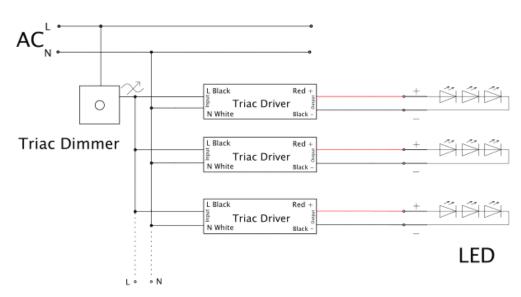


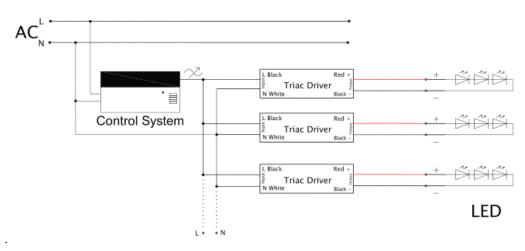
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\*\*Please try to use dimmers with power at least 1.5 times as the output power of the driver.

# **■ 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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