

**Phase cut /Triac dimmable driver-PWM output KVF-TDWL series 60W**

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 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 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



**FC Class 2 Class P**

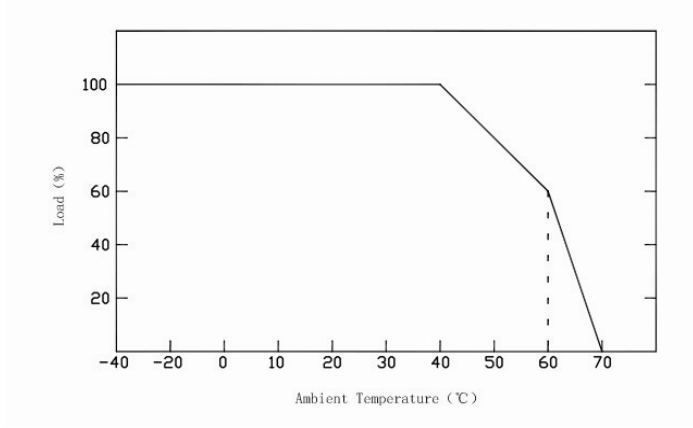
**■Specification**

Model		KVF-12060-TDWL	KVF-24060-TDWL
<b>Certificates</b>		FCC UL cUL Class 2	FCC UL cUL Class 2
<b>Output</b>	DC Voltage	12V	24V
	Rated Current	5A	2.5A
	Rated Power	60W	
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Load Regulation	±1%	
<b>Input</b>	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	120V<10%; 277V<15%	
	Efficiency (Typ.) @ full load	120V 84% ; 277V 86%	120V 83% ; 277V 85%
	AC Current (Max.)	0.9A@100VAC	
	Inrush Current (Typ.)	120V--11A, 50%, 1ms ; 277V--27A, 50%, 1.08ms	
Leakage current	<0.50mA		
<b>Protection</b>	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.	
<b>Environment</b>	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	
<b>Safety&amp; EMC</b>	Safety standards	UL8750+UL1310, 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	
<b>others</b>	Net. Weight	0.45Kg	
	Size	300*32*20mm (L*W*H)	
	packing	330*270*160mm/30pcs /CTN	

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<b>Notes</b>	<p>1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25°C of ambient temperature.</p> <p>2. To extend the driver's using life ,please reduce the loading at lower input voltage.</p>
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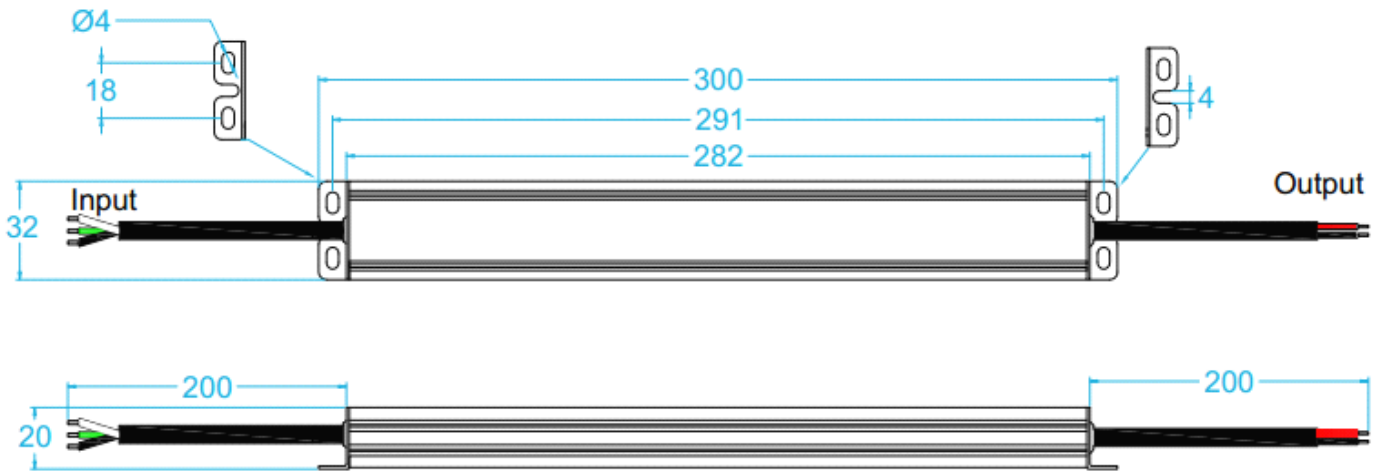
**Derating Curve**



※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



- ※Input Rubber cable SJOW 18AWG ( 3C\*0.824mm<sup>2</sup> ) ,the green cable connect with (FG),Black with AC (L),White with AC(N)
- ※Output Rubber cable SJOW 18AWG (2C\*0.824mm<sup>2</sup> ) ,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**

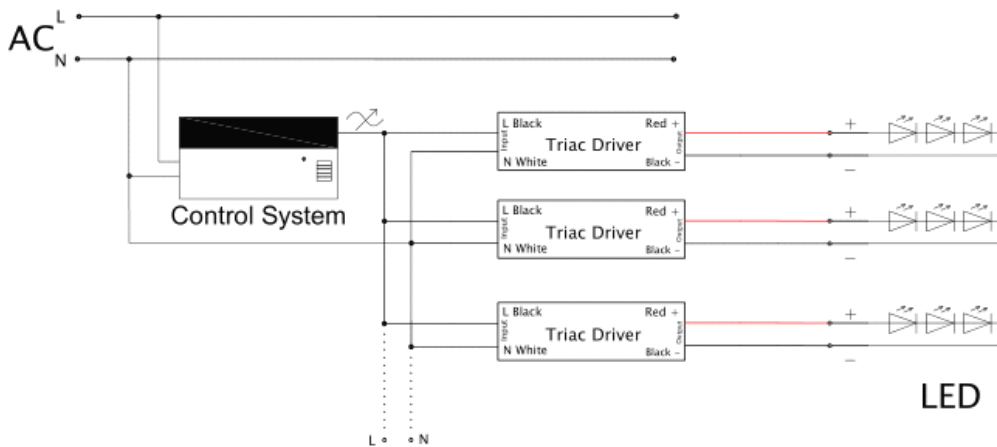
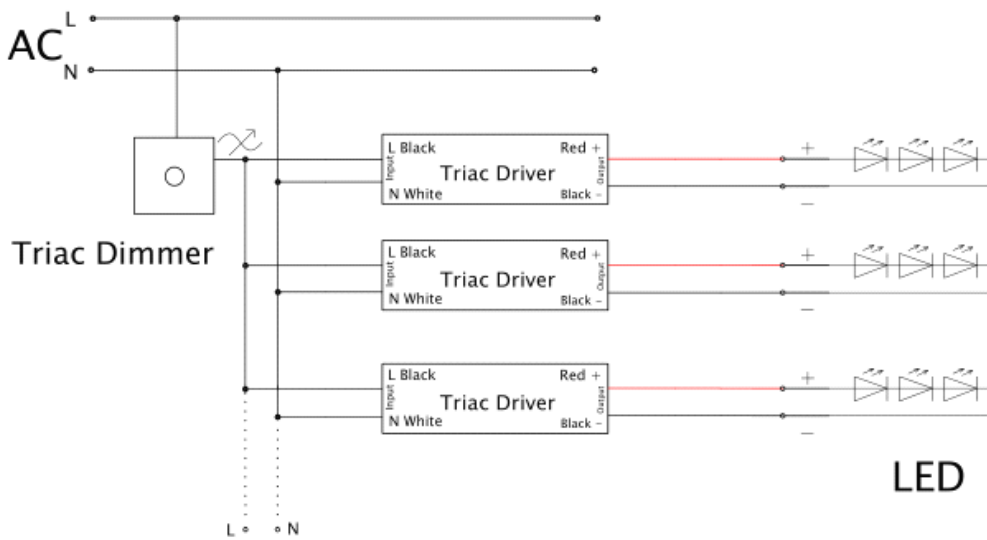
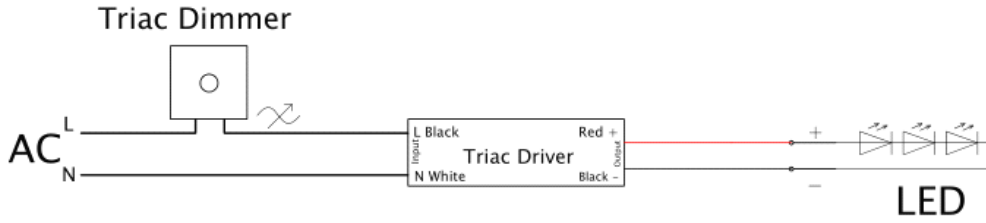
- ※The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase/triac dimmer.
- ※Usually matching with Forward phase , leading edge , Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge ,Electric

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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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