

Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 60W

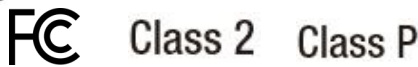
**Whole Family**

**KVG-XXXXX-DW 12V/ 24VDC**  
**30W 60W 80W 96W 100W**  
**120W 150W 200W 300W**



**■ Features:**

- Output constant Voltage
- Range: 100-277VAC
- Built-in active PFC function
- Efficiency up to 85%
- Protections: short circuit/over load/ over temperature
- Cooling by free air convection
- Full protection plastic housing, for dry and damp locations
- Dimming function:
  - Phase dimming: work with forward phase /leading edge ,MLV and Reverse phase /trailing edge ,ELV, TRIAC dimmers
  - 0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
  - Dimming range: 0-100%
- Suitable for LED lighting and moving sign applications



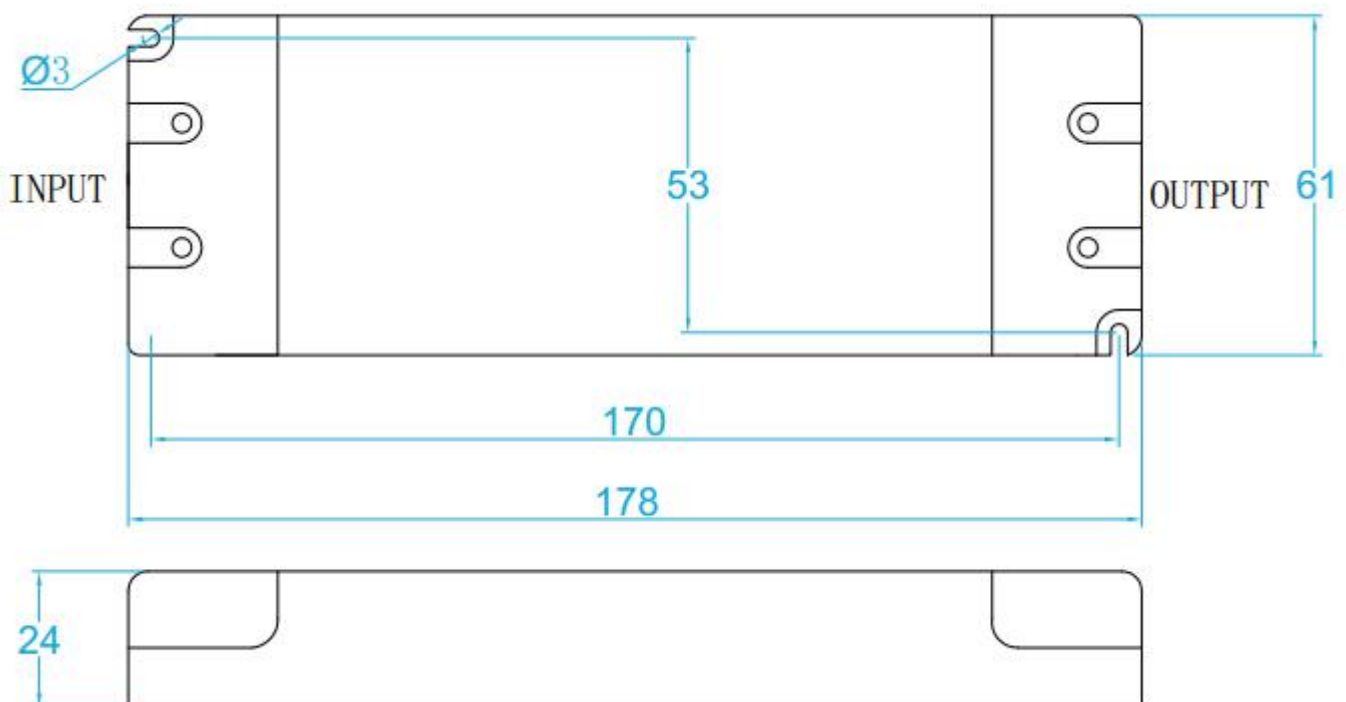
**■ Specification**

Model		KVG-12060-DW	KVG-24060-DW
Certificates		FCC UL cUL Class 2	
Output	DC Voltage	12V	24V
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Rated current	5A	2.5A
	Rated power	60W	
	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%@120VAC &277VAC	
	Efficiency(Typ.)@ full load	83%@120VAC 85%@277VAC	83%@120VAC 84%@277VAC
	AC Current(Max.)	0.9A	
	Inrush Current (Typ.)	14A, 50%, 780us @120VAC; 15A, 50% , 660us @277VAC	
Leakage current	<0.5mA		
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition removed	
	Over Load	≤120% Hiccup mode,recovers automatically after fault condition is removed	
	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 - 95%RH,non-condensing	
	Storage TEM.,Humidity	-40 - +80°C,10 - 95%RH	
	TEMP.coefficient	±0.03%/°C(0 - 50°C)	
	Vibration	10~500Hz, 2G 10min./1 cycle,period for 60min. each along X,Y,Z axes	
Safety & EMC	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°C/70%RH	
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B	

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<b>Others</b>	Net Weight	0.35Kg
	Dimension	178*61*24mm(L*W*H)
	packing	290*215*140mm 20pcs /CTN
<b>Notes</b>	1. All parameters NOT specially mentioned are measured at 120VAC input , rated load and 25°C of ambient temperature. 2. Tolerance: includes set up tolerance, line regulation and load regulation . 3. The power supply is considered as a component that will be operated in combination with final Equipment. Since EMC performance will be affected by the complete installation, the final equipment manufactures must be-qualify EMC Directive on the complete installation again.	

**■ Mechanical Specification**



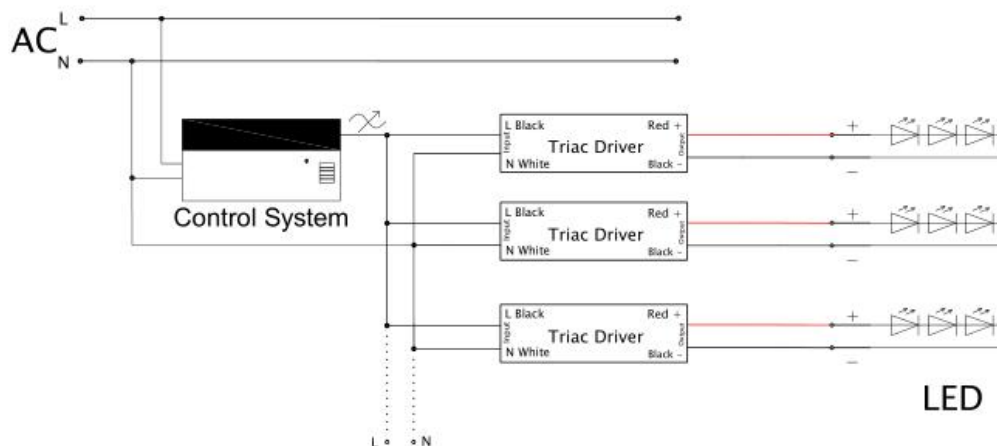
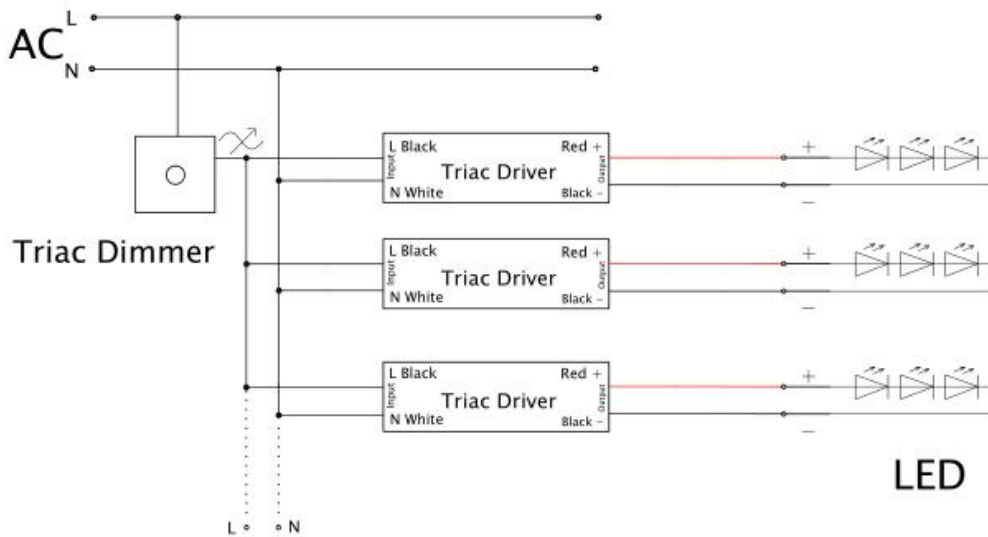
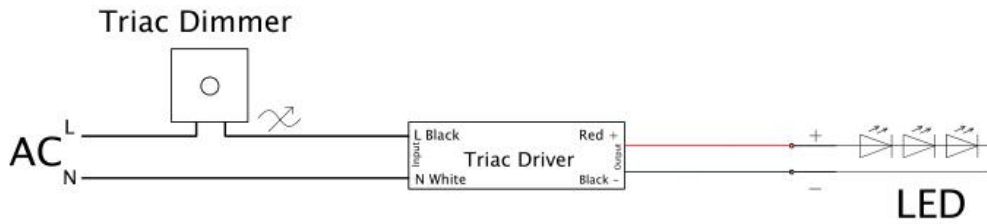
- ※Input with terminals Live(L) and Neutral(N) wires to be connected AC;
- ※Output LED SEC output Positive (LED+) , output negative(LED-). Connected to LED light.
- ※Output terminals DIM (+) to 0/1-10V dimmer signal(+ ),DIM (-) white connect to 0/1-10V dimmer signal (-)
- ※Please DO NOT connect “DIM-“ to “LED-“, “DIM+“ to “ LED+“ ,or other incorrect connection.
- ※Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged.
- ※Note: Any other requests we can customize.

**■ Dimming Operation and Connecting Diagram**

※Using two ways of dimming at the same time, you must be assured that LED lighting is up to the max. Brightness then you could operate with the other dimming;

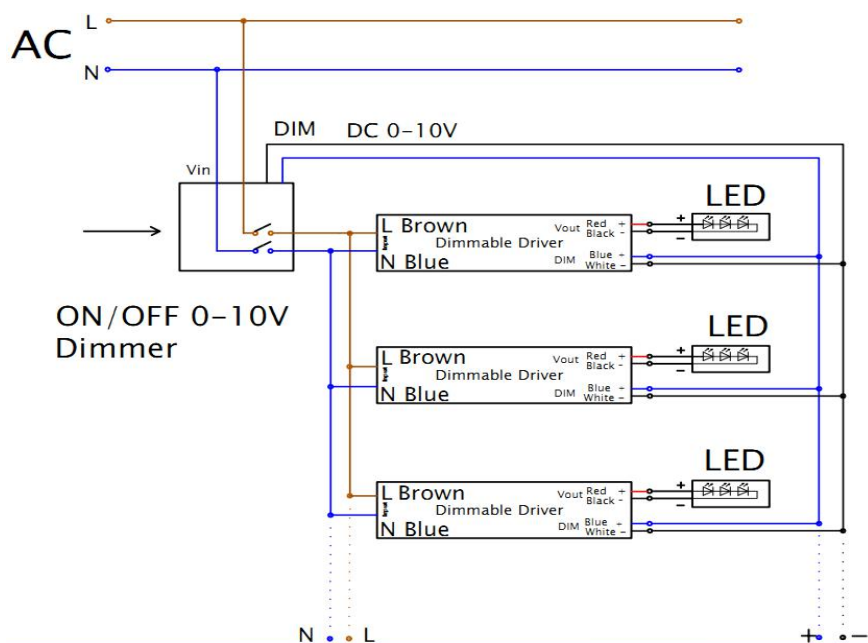
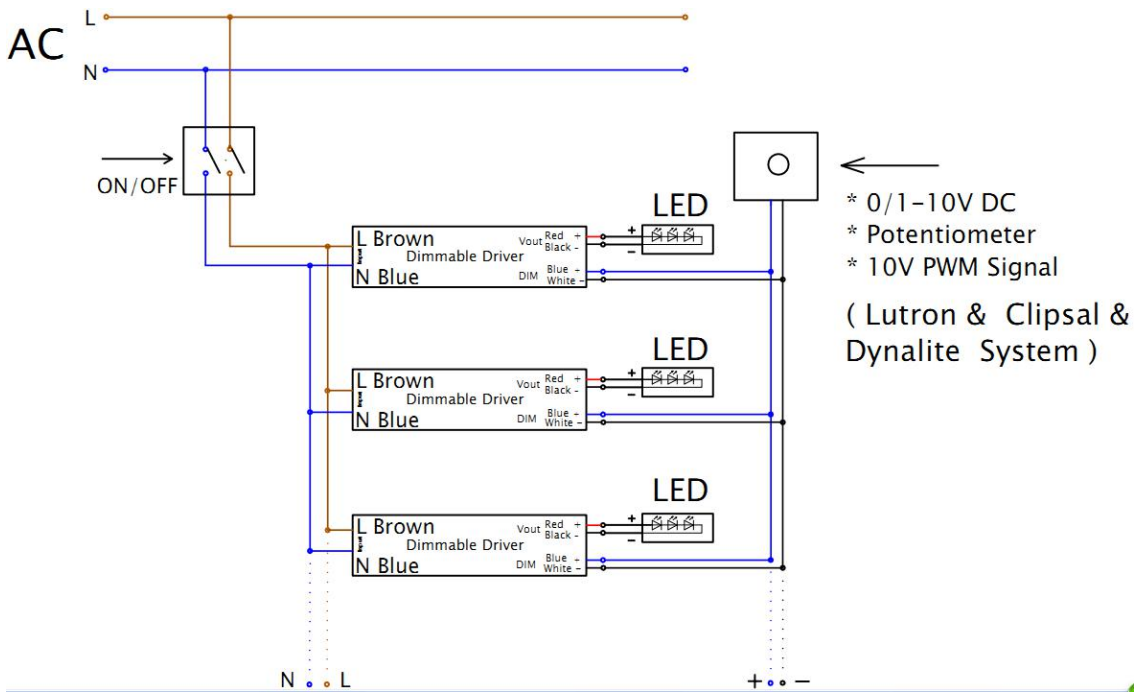
※Using one dimming ---TRIAC/Phase cut dimming

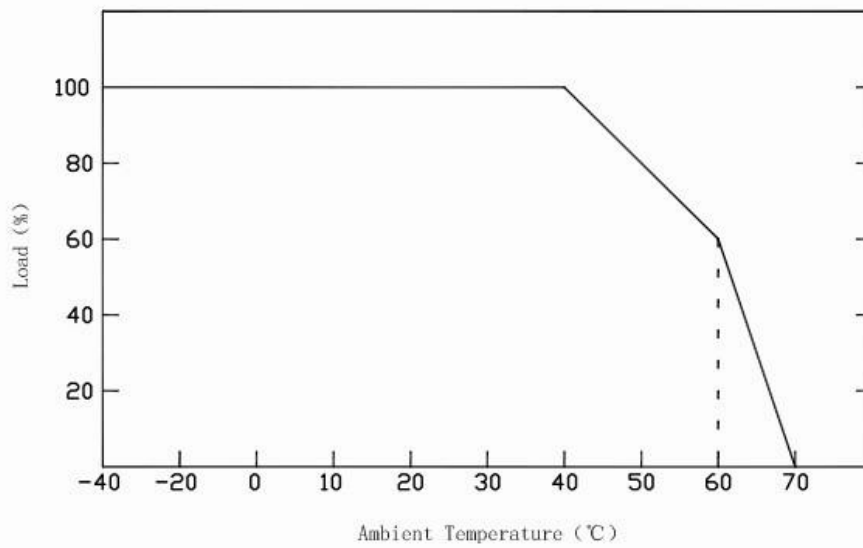
- 1.The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer of lighting system.
- 2.Working with forward phase /leading edge ,MLV and Reverse phase /trailing edge ,ELV, TRIAC dimmers
- 3.Min loading is about 10%
- 4.Please try to use dimmers with power at least 1.5 times as the output power of the driver.



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※Using one dimming ---0-10/1-10V dimming



**■ Derating Curve**

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

**■ 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 illuminfx.

Please visit our website or contact us for more information! [www.illuminfx.com](http://www.illuminfx.com)