

## KVG-DH Series 30W

Whole Family: KVG-XXXXX-DH 12V/ 24V/48VDC - [ 30W 60W 80W 100W 120W 150W 200W 300W 320W 360W ]



### Features

Output:	Constant Voltage
Range:	200-240VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 80%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP20
Dimming function:	<u>Phase dimming</u> : work with leading edge, MLV and trailing edge, ELV, TRIAC dimmers <u>0-10V dimming</u> : 0-10V/ 1-10V/ Potentiometer/ 10V PWM 4 in 1
Dimming range:	0-100%
PWM frequency	20K Hz
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

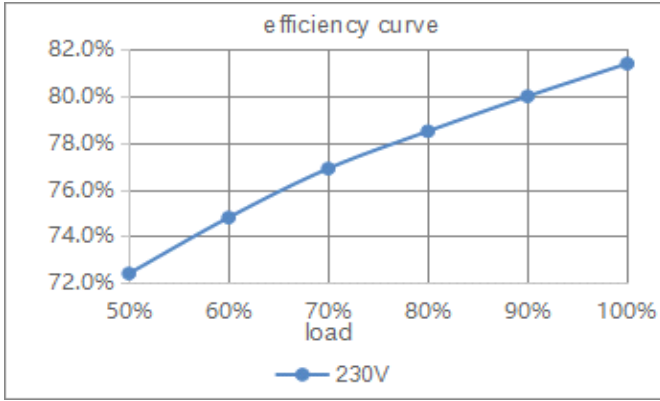
**Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 30W**

**Specification**

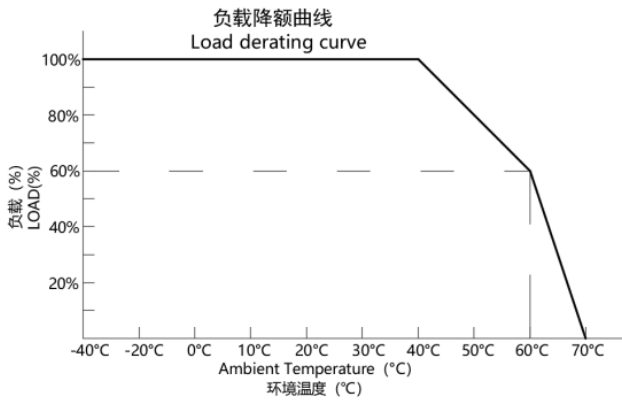
Model		KVG-12030-DH	KVG-24030-DH	KVG-48030-DH
<b>Certificate</b>		CE / ROHS / Reach		
<b>Output</b>	DC Voltage	12V	24V	48V
	Adjustable rated voltage range	10V-13V	21.5V-25.5V	46V-48V
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	5A	2.5A	0.625A
	Rated power	30W		
	Load Regulation	±2%	±1%	
<b>Input</b>	Voltage Range	200-240VAC		
	Frequency Range	47 - 63Hz		
	Power Factor (Typ.) @ full load	0.96@230VAC 50HZ	0.96@230VAC 50HZ	0.95@230VAC 50HZ
	THD(Typ. ) @ full load	<20%		
	Efficiency(Typ.) @ full load	79%@230VAC	79%@230VAC	80%@230VAC
	AC Current (Max.)	0.20A		
	Inrush Current (Typ.)	30A, 90us @50%230VAC		20A, 90us @50%230VAC
	Leakage current	<0.5mA		
<b>Protection</b>	Short Circuit	Hiccup mode,recovers automatically after fault condition is removed		
	Over Load	≤120% Hiccup mode,re-power on to recover after fault condition is removed		
	Over temperature	100°C±10°C shut down o/p voltage, automatically recover after cooling		
<b>Environment</b>	Working TEMP.	-40~+60°C (see below derating curve)		
	Working Humidity	20 - 90%RH non-condensing		
	Storage TEM.,Humidity	-40 - +80°C,10 - 95% RH non-condensing		
	TEMP.coefficient	±0.03%/°C(0 - 50°C)		
	Vibration	10~500Hz, 2G 10min./1 cycle, period for 60min. each along X,Y,Z axes		
<b>Safety &amp; EMC</b>	Safety standards	EN61347-1 EN61347-2-13 EN62493		
	Withstand voltage	I/P-O/P:3.75KVAC		
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70%RH		
	EMC Emission	EN55015 EN61000-3-2 EN61000-3-3 ,AS CISPR 15:2017 CISPR 16-2-3		
<b>Others</b>	Net Weight	0.21Kg		
	Dimension	155*54*19.7mm(L*W*H)		
	Packing	350*240*130mm 40pcs /CTN		
<b>Notes</b>	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation .			

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**Efficiency Curve (efficiency vs output load)**

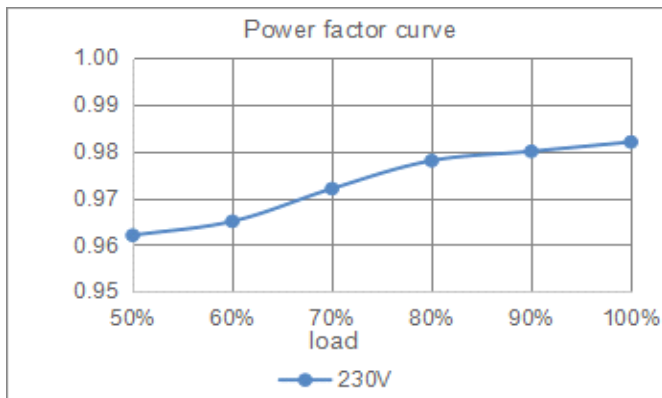


**Derating Curve (output load vs TEMP.)**



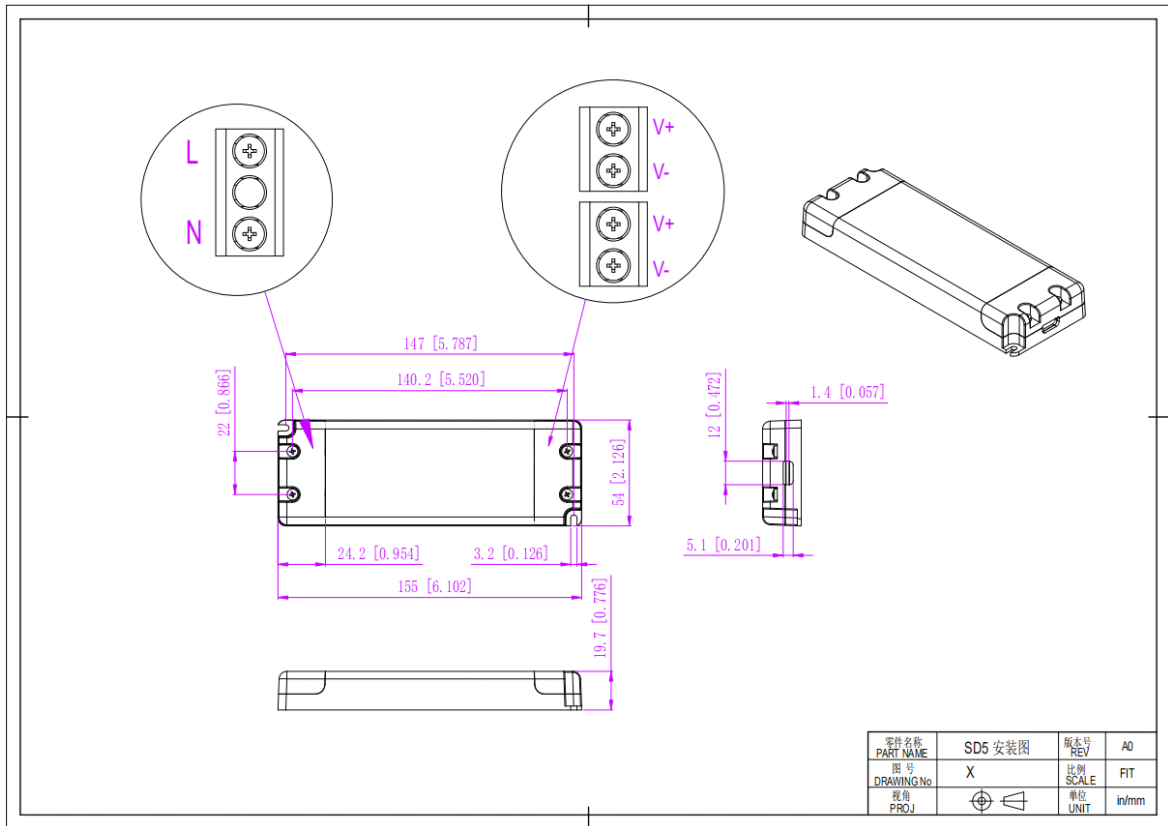
❖ To extend their life, please refer to the Derating Curve and derate according to the temperature.

**Power Factor Curve**



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**Mechanical Specification**



**12V&24V Version**

1. Input with DG126 terminals 3P: Live Wire AC (L), Neutral Wire AC(N) .
2. Output LED SEC with DG126 terminals 2P: output Positive (LED+), output negative (LED-). Connected to LED Lamps.
3. DALI or PUSH Dim. terminals with DG126 terminals 2P.  
when DALI dimming, signal dimming DA1, DA2 ( No polar ) connected to the BUS of the DALI Master;  
when PUSH dimming, (N) is connected to AC (N) while (L) is connected to Push dim switch dimmer (L) .
4. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

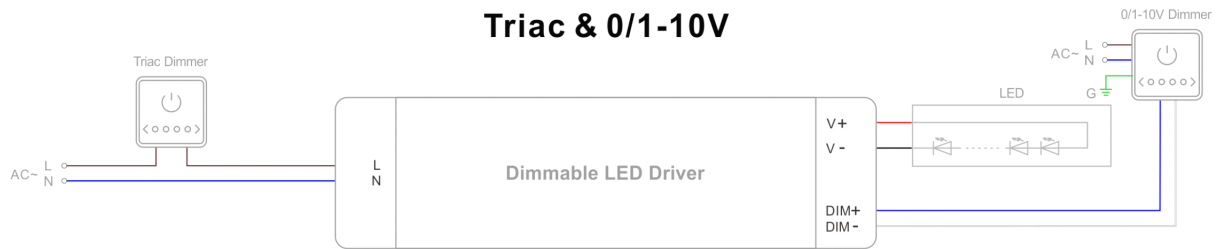
Warm tips:

1. Suggested wire diameter: Input 0.75-2mm<sup>2</sup>; Output:0.5-2mm<sup>2</sup>.
2. Any other requests for cable, we can customized.

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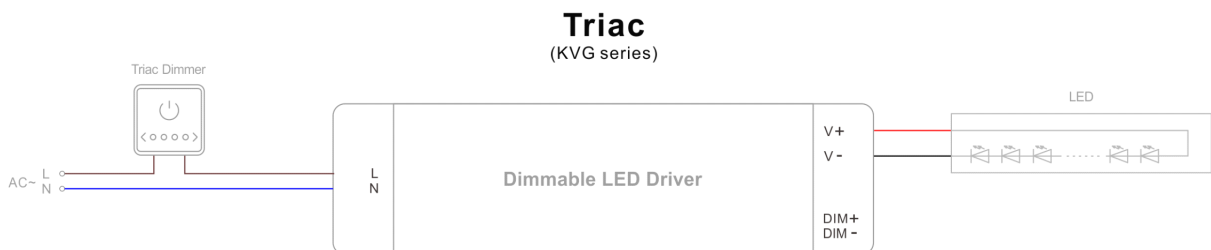
**Dimming Operation and Connecting Diagram**

- **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;

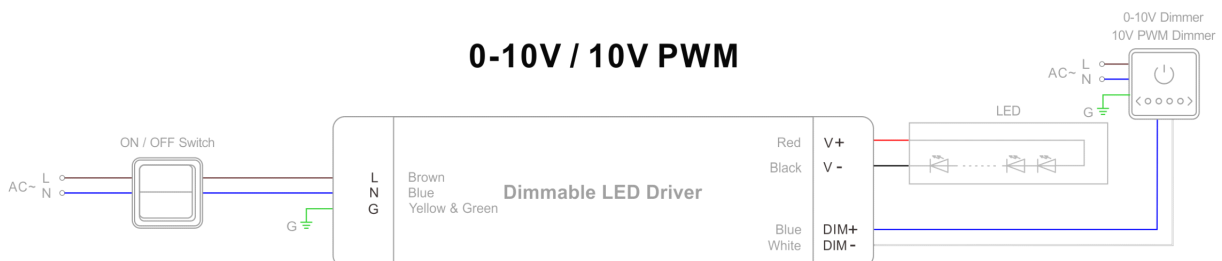


- **Using one dimming ---TRIAC/Phase cut dimming**

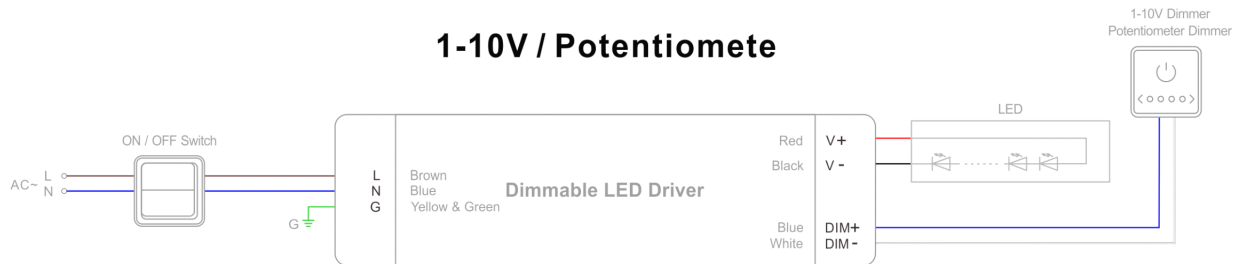
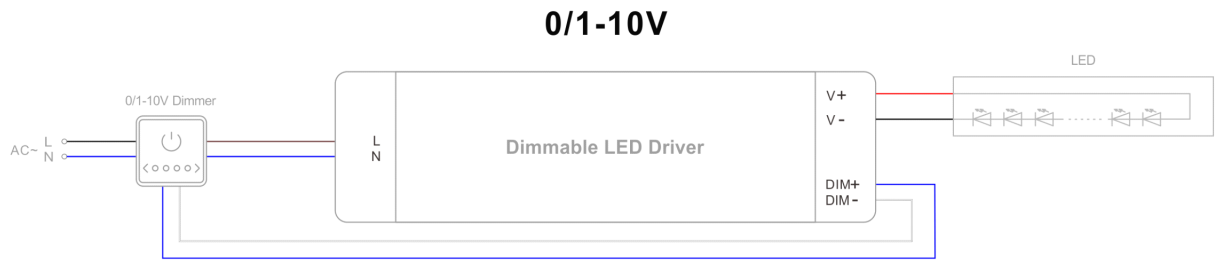
1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
2. Working with forward phase /leading edge, MLV and Reverse phase /trailing edge, ELV, TRIAC dimmers or light system.
3. Min. loading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



- **Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming**



**Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 30W**



## 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 questions, please contact Zhuhai Shengchang.

Please visit our website or contact us for more information! [www.scpower.net.cn/en](http://www.scpower.net.cn/en)