

KVG-DH Series 120W

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 86%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP66
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

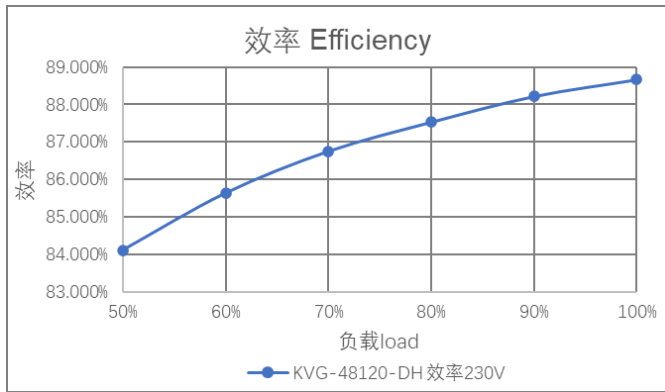
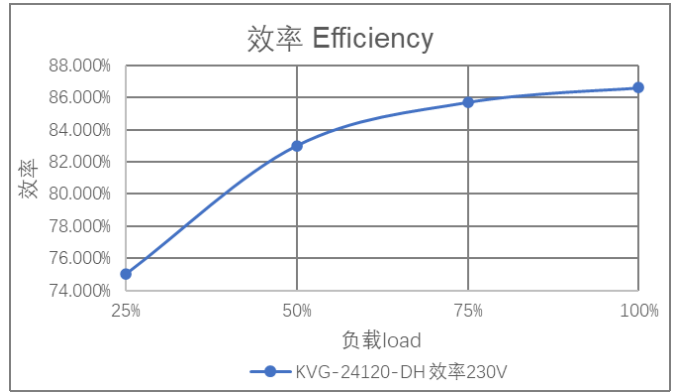
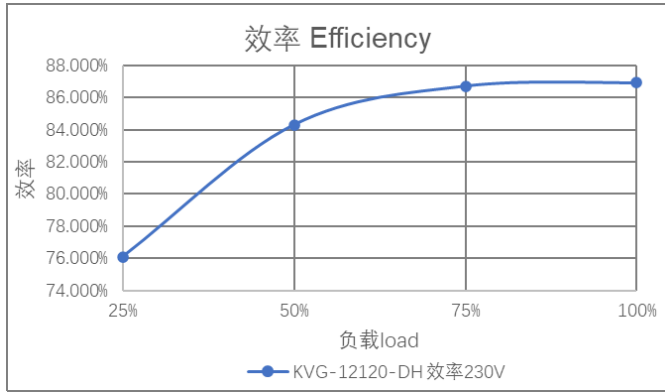
Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 120W

Specification

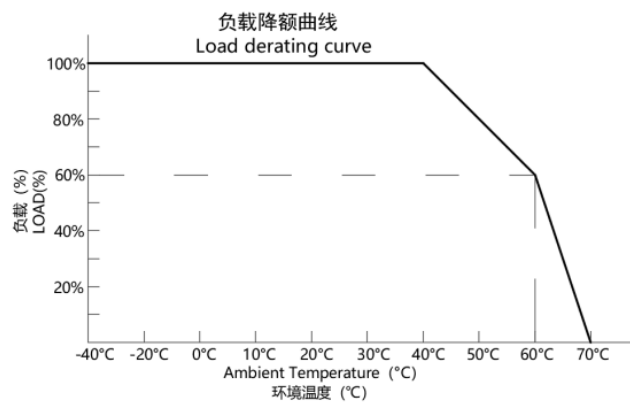
Model		KVG-12120-DH	KVG-24120-DH	KVG-48120-DH
Certificate		CE / ROHS / Reach		
Output	DC Voltage	12V	24V	48V
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	10A	5A	2.5A
	Rated power	120W		
	Load Regulation	±2%	±1%	
Input	Voltage Range	200-240VAC		
	Frequency Range	47 - 63Hz		
	Power Factor (Typ.) @ full load	0.95@230VAC		
	THD(Typ.) @ full load	≤20%		
	Efficiency(Typ.) @ full load	86%@230VAC	86%@230VAC	88%@230VAC
	AC Current (Max.)	0.8A	0.9A	1.2A
	Inrush Current (Typ.)	60.8A,376us@50%Ipeak 65.6A,216us@50%Ipeak 38.4A,700us@50%Ipeak		
	Leakage current	<0.5mA		
Protection	Short Circuit	Hiccup mode, 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~+70°C (see below derating curve)		
	Working Humidity	20 - 95%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, 5G 10min./1 cycle, period for 60min. each along X,Y,Z axes		
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13		
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC		
	Isolation resistance	I/P-O/P:100MΩ/500VDC/25°C/70%RH		
	EMC Emission	EN55015 EN61000-3-2 EN61000-3-3		
Others	Net Weight	1.05Kg		
	Dimension	230*70*43mm(L*W*H)		
	Packing	340*270*175mm 10pcs /CTN		
Notes	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)



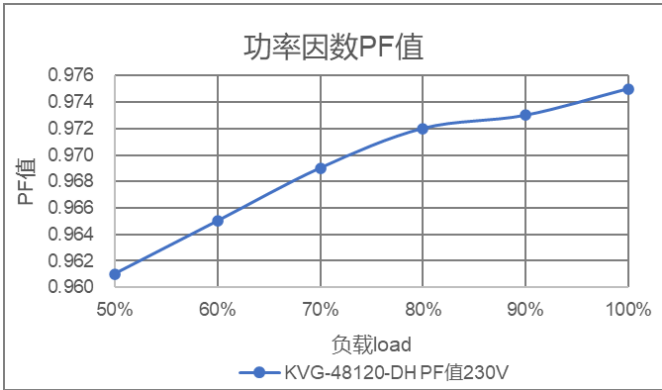
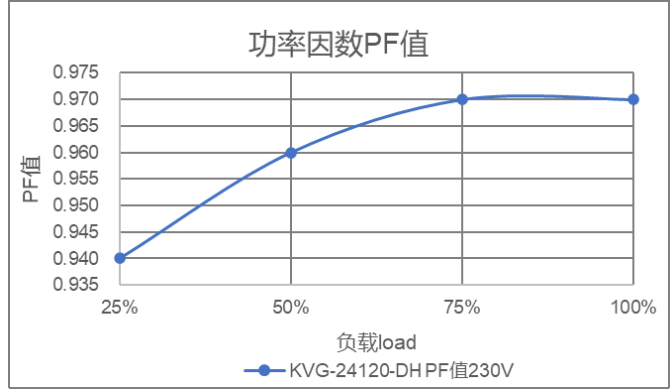
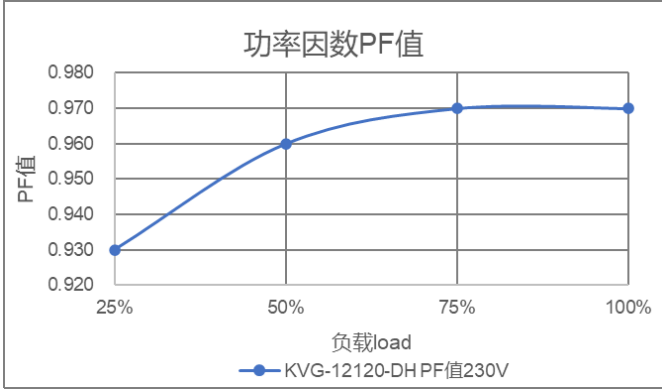
Derating Curve (output load vs TEMP.)



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

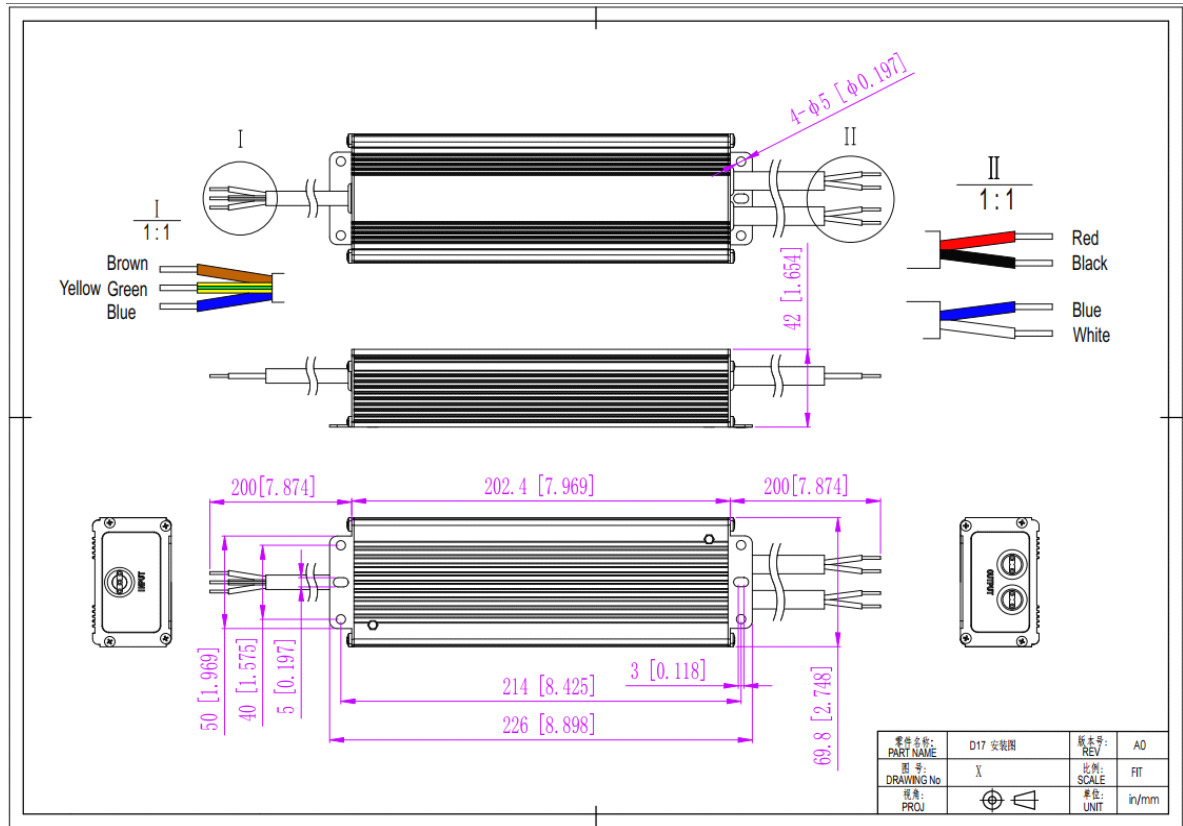
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Power Factor Curve



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Mechanical Specification



12V&24V&48V Version

1. Input cable 3C*1.0mm², the Green/yellow cable to (FG), Brown cable to L, and Blue cable to N of Mains AC.
2. Output cable 2C*1.5mm², Red cable (+) to LED Positive side (+), Black cable (-) to LED Negative side (-).
Two groups of 12V&24V&48V.

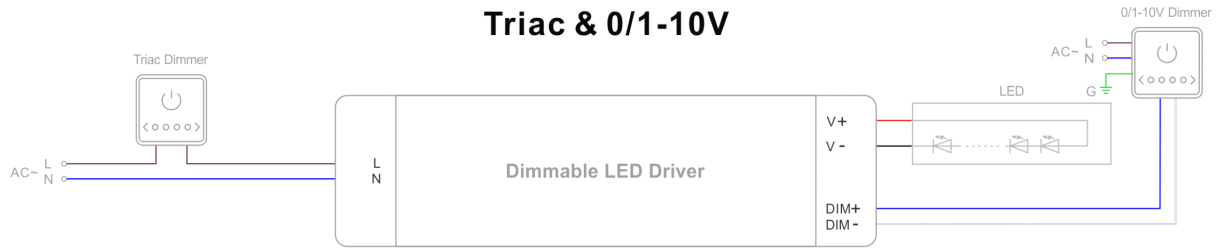
Warm tips:

1. Suggested wire diameter: Input 0.75-2mm²; Output:0.5-2mm².
2. Any other requests for cable, we can customized.

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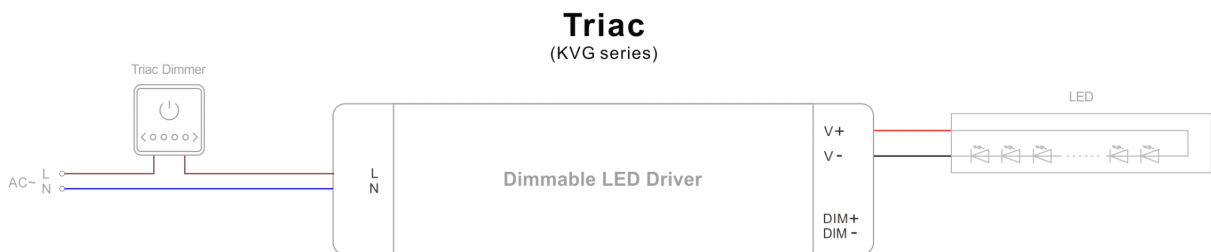
Dimming Operation and Connecting Diagram

- **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;

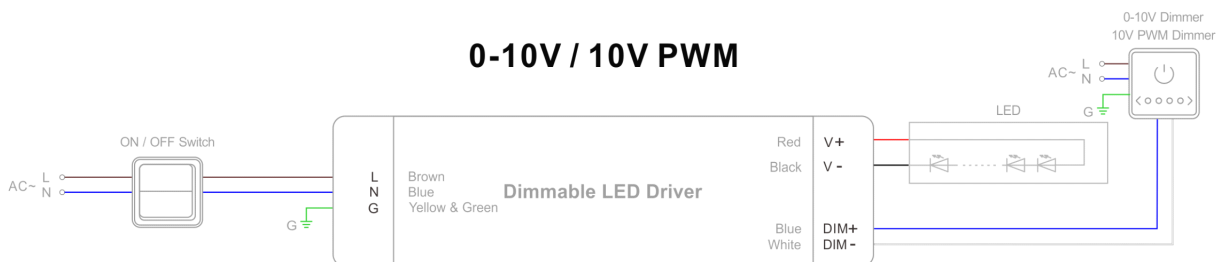


Using one dimming ---TRIAC/Phase cut dimming

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.

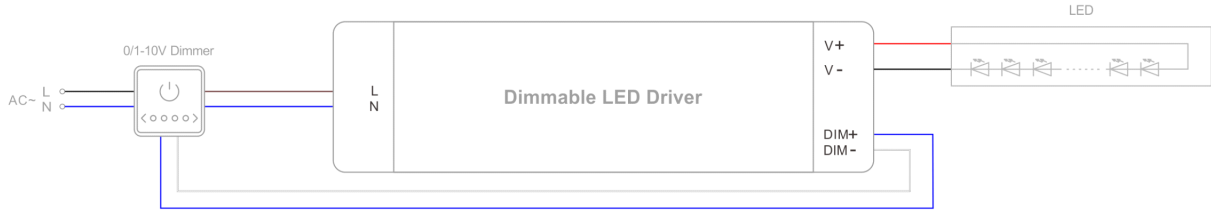


● **Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming**

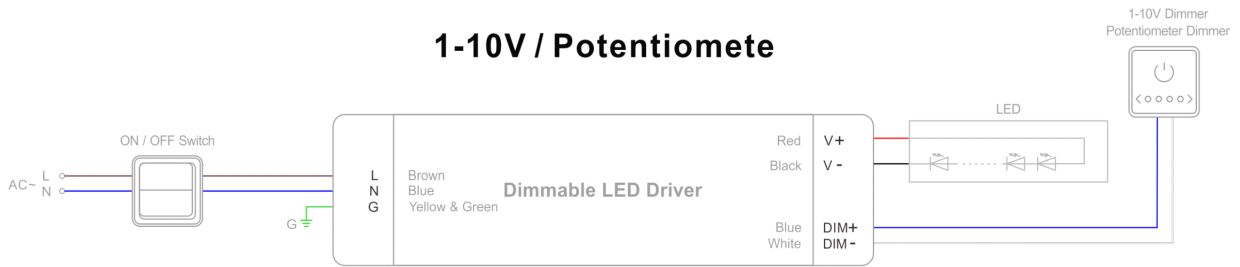


Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 120W

0/1-10V



1-10V / Potentiomete



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