

Triac/0-10V/1-10V/Potentiometer/10V PWM 5 in 1 Dimmable LED driver 200W

KVG-DH Series 200W

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 87%

Protections: Short circuit/ over load/ over temperature

Heat dissipation: Cooling by free air convection

Waterproof performance: IP66

Dimming function: Phase dimming: work with leading edge, MLV and trailing edge, ELV, TRIAC dimmers.

0-10V dimming: 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



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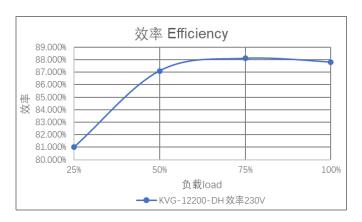
Specification

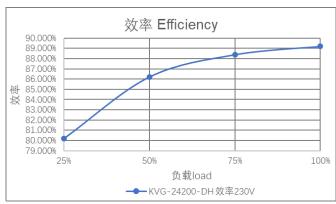
Model		KVG-12200-DH	KVG-24200-DH	KVG-48200-DH
Certificate		CE / ROHS / Reach		
Output	DC Voltage	12V	24V	48V
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	16.67A	8.34A	4.17A
	Rated power	200W		
	Load Regulation	±2%	% ±1%	
Input	Voltage Range	200-240VAC		
	Frequency Range	47 - 63Hz		
	Power Factor (Typ.) @ full load	0.95@230VAC	0.96@230VAC	
	THD(Typ.) @ full load	≤20%		
	Efficiency(Typ.) @ full load	87%@230VAC	89%@230VAC	
	AC Current (Max.)	1.2A		
	Inrush Current (Typ.)	96A,72us @50%lpeak 76.8A,116us @50%lpeak 72.8A,132us @50%lpeak		
	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℃±10℃ 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℃,10 - 95% RH non-condensing		
	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	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	1.45Kg		
	Dimension	256*78*47mm(L*W*H)		
	Packing	340*280*185mm 10p	pcs /CTN	
Notes	 All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Tolerance: includes set up tolerance and load regulation . 			

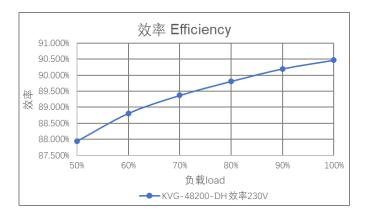


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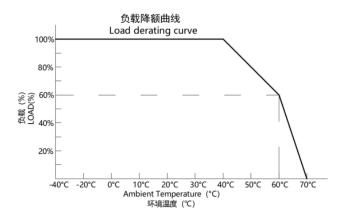
Efficiency Curve (efficiency vs output load)







Derating Curve (output load vs TEMP.)

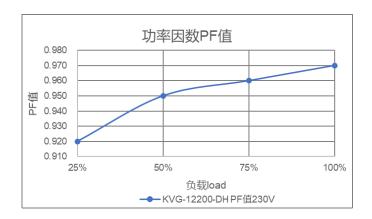


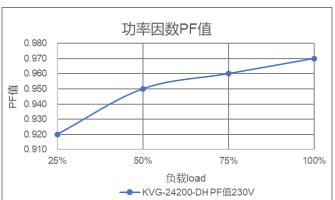
To extend their life, please refer to the Derating Curve and derate according to the temperature.

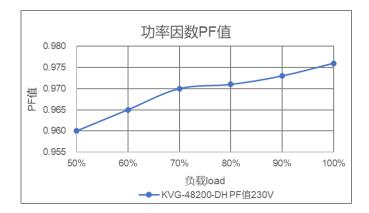


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Power Factor Curve



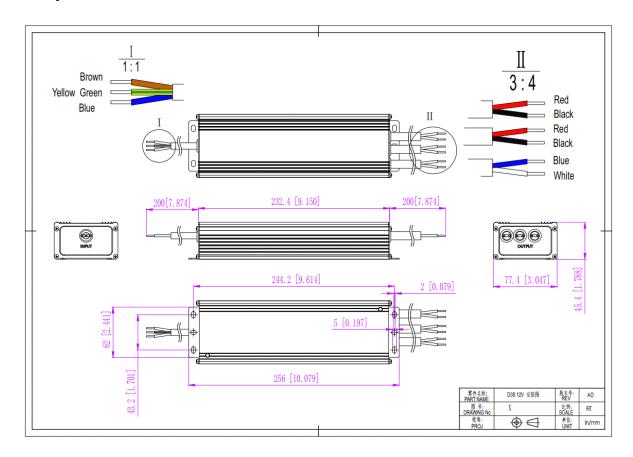






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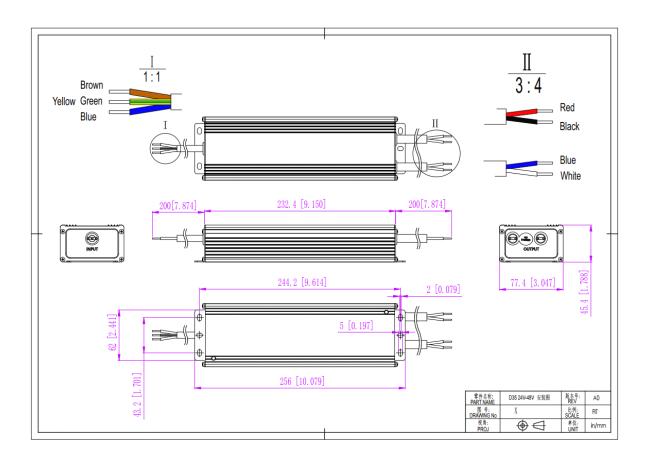
Mechanical Specification



12V Version



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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:

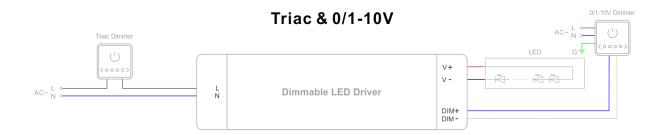
- 1. Suggested wire diameter: Input 0.75-2mm²; Output:0.5-2mm².
- $2. \hspace{0.5cm} \hbox{Any other requests for cable, we can customized.} \\$



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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;

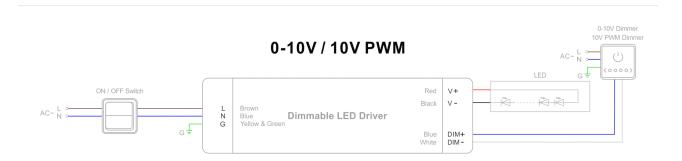


Using one dimming --- TRIAC/Phase cut dimming

- 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.

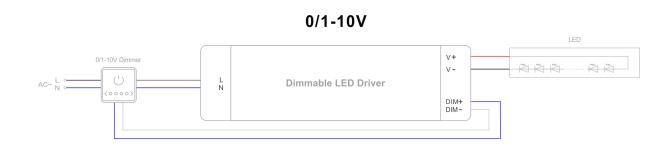


Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming





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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 $\,$