

# **KVG-DHS Series 60W**

Whole Family: KVG-XXXX-DHS 12V/ 24VDC - [ 30W 60W 80W 96W 100W 120W 150W ]





## **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:	IP20		
Dimming function:	Phase dimming: work with Leading edge and Trailing edge TRIAC dimmer or control system		
	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		



# Specification

Model		KVG-12060-DHS	KVG-24060-DHS	
Certificate		SAA / CE / ROHS / Reach		
Output	DC Voltage	12V	24V	
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	5A	2.5A	
	Rated power	60W		
	Load Regulation	±2%	±1%	
Input	Voltage Range	200-240VAC		
	Frequency Range	47 - 63Hz		
	Power Factor (Typ.) @ full load	0.96@230VAC	0.96@230VAC	
	THD(Typ.) @ full load	≤20%		
	Efficiency(Typ.) @ full load	83%@230VAC	86%@230VAC	
	AC Current (Max.)	0.5A		
	Inrush Current (Typ.)	57.6A,128us @50%230VAC		
	Leakage current	<0.5mA		
Protection	Short Circuit	shut down o/p voltage, recovers automatically after fault condition is removed		
	Over Load	≤120% Hiccup mode, recovers automatically after fault condition is removed		
	Over temperature	100 $^\circ\!\mathrm{C}\pm10^\circ\!\mathrm{C}$ shut down o/p voltage, automatically recover after cooling		
	Working TEMP.	-40~+60 °C (see below derating curve)		
Environment	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		60min. each along X,Y,Z axes	
Safety & EMC	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℃ / 70%RH		
	EMC Emission	EN55015 EN61000-3-2 EN61000-	-3-3 EN61547	
Others	Net Weight	0.22Kg		
	Dimension	300*30*18.5mm(L*W*H)		
	Packing	330*330*130mm 50pcs /CTN 12.2	〈g/CTN	
Notes	<ol> <li>All parameters NOT specially mentioned are measured at rated load and 25°C of ambient temperature.</li> <li>Tolerance: includes set up tolerance and load regulation .</li> </ol>			



# 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**





## **Mechanical Specification**



#### 12V&24V Version

- 1. Input terminals: (L) and (N) to connect to L and N of Mains AC.
- 2. Output terminals: LED (+) to LED Positive side (+) , LED (-) to LED Negative side (-).
- 3. Dimming Terminal: DIM (+) to 0/1-10V dimmer signal(+ ),DIM (-) to 0/1-10V dimmer signal(-).
- 4. Please DO NOT connect "DIM-" to "LED-", "DIM+" to " LED+", or other incorrect connection.
- 5. Please make sure your 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>.
- $2. \quad \mbox{ Any other requests for , we can customized. }$



#### **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 Leading edge and Trailing edge TRIAC dimmer or control 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









### Instruction

- 1. This driver should be installed by qualified and professional person.
- Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation; If the product is installed in a sealed lamp, it is recommended to reduce the load and use it; The recommended load size is ≤ 80% of the rated load.
- 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