1/5



Phase cut /Triac dimmable driver - PWM output Dimmable LED driver 100W

# **KVF-TDHS Series 100W**

Whole Family: KVF-XXXXX-TDHS 12V/ 24VDC - [ 30W 36W 60W 100W 150W ]











### **Features**

Constant Voltage Output: Range: 200-240VAC

PFC design: Built-in active PFC function

Efficiency: Up to 88%

Protections: Short circuit/ over load/ over temperature

Heat dissipation: Cooling by free air convection

Waterproof performance: IP20

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

0-100% Dimming range:

Application: Suitable for the application of LED lighting

Warranty: 5 years warranty **PWM Output Frequency** 20KHz (Flicker-free)



Phase cut /Triac dimmable driver - PWM output Dimmable LED driver 100W

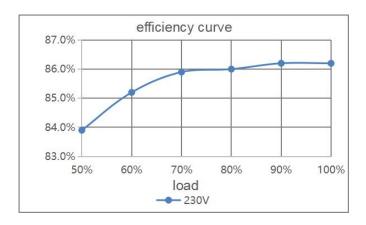
# **Specification**

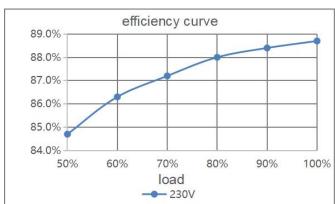
Model		KVF-12100-TDHS	KVF-24100-TDHS
Certificate		ENEC / SAA / CE / CB / RoHS / Reach	
Output	DC Voltage	12V	24V
	Voltage Tolerance	±0.5V	
	Voltage Regulation	≤2%	≤1%
	Rated current	8.33A	4.17A
	Rated power	100W	
	Load Regulation	≤0.5%	
Input	Voltage Range	200-240VAC	
	Frequency Range	47 - 63Hz	
	Power Factor @ full load	≥0.96@230VAC	
	THD(Typ.) @ full load	≤10%	
	Efficiency @ full load	86%	88%
	AC Current (Max.)	0.8A@200VAC	
	Inrush Current (Typ.)	52A,210us@50%Ipeak 230VAC	
	Leakage current	<0.5mA	
Protection	Short Circuit	Shut down o/p voltage, recovers automatically after fault condition is removed	
	Over Load	≤120% constant current limiting, recovers automatically after fault condition is removed	
	Over temperature	Shell surface temp.100℃±10℃ shut down o/p voltage, automatically recover after cooling	
Environment	Working TEMP.	-40~+60℃ (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 10m in./1 cycle, period for 60min. each along X,Y,Z axes	
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13 EN62493 (EU)	
	Withstand voltage	I/P-O/P:3.75KVAC (EU)	
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70%RH	
	EMC Emission	EN55015 EN61000-3-2 EN61000-3-3 (EU)	
Others	Net Weight	0.29Kg	
	Dimension	329.7*30*22mm(L*W*H)	
	Packing	350*330*145mm 50pcs /CTN 15.8Kg/CTN	
Notes	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.</li> </ol>		
	Tolerance: includes set up tolerance and load regulation .		



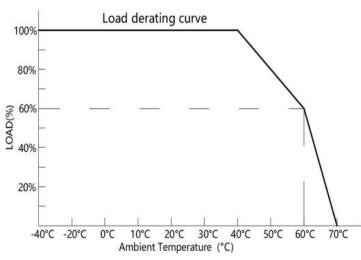
Phase cut /Triac dimmable driver - PWM output Dimmable LED driver 100W

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



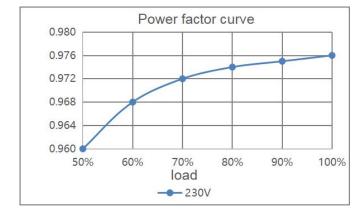


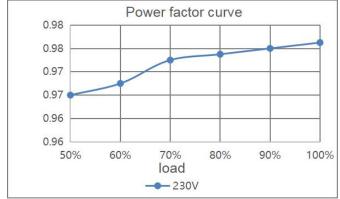
# **Derating Curve (output load vs TEMP.)**



- 1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
- 2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

### **Power Factor Curve**



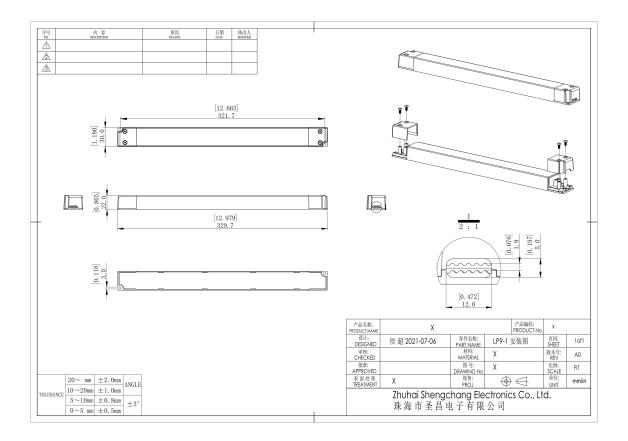


4/5



# Phase cut /Triac dimmable driver - PWM output Dimmable LED driver 100W

# **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. 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 0.75-2.0mm<sup>2</sup>; Output 0.5-2.0mm<sup>2</sup>.
- 2. Any other requests for, we can customized.

5/5



Phase cut /Triac dimmable driver - PWM output Dimmable LED driver 100W

# **Dimming Operation and Connecting Diagram**

### 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 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.

# AC~ N G Brown Blue V+ V- Red Black V+ V-

Triac



# 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