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Phase cut /Triac dimmable driver - PWM output Dimmable LED driver 150W

### **KVF-TDHL Series 150W**

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











### **Features**

Output: Constant Voltage Range: 200-240VAC

PFC design: Built-in active PFC function

Efficiency: Up to 92%

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 and trailing edge, TRIAC dimmers

Dimming range:

Application: Suitable for the application of LED lighting

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



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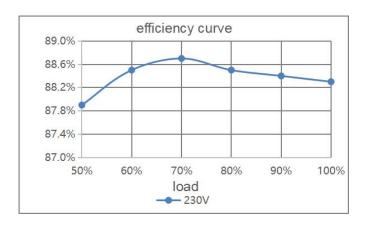
# **Specification**

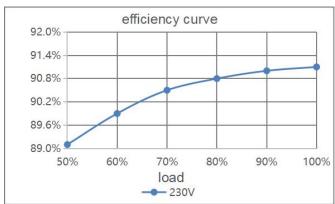
Model		KVF-12150-TDHL	KVF-24150-TDHL
Certificate		ENEC / SAA / CE / CB / RoHS / Reach	
Output	DC Voltage	12V	24V
	Voltage Tolerance	±0.5V	
	Voltage Regulation	≤2%	≤1%
	Rated current	12.5A	6.25A
	Rated power	150W	
	Load Regulation	≤0.5%	
Input	Voltage Range	200-240VAC	
	Frequency Range	47 - 63Hz	
	Power Factor @ full load	0.95@230VAC	
	THD(Typ.) @ full load	≤20%	
	Efficiency @ full load	90%	92%
	AC Current (Max.)	0.95A@200VAC	
	Inrush Current (Typ.)	47.5A,312us@50%lpeak 230VAC	
	Leakage current	<0.5mA	
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed	
	Over Load	≤120% Hiccup mode, recovers automatically after fault condition is removed	
	Over temperature	Shell surface temp.100℃±10℃ shut down o/p voltage, automatically recover after	
	Over temperature	cooling	
Environment	Working TEMP.	-40~+60°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 12m in./1 cycle, period for 72min. each along X,Y,Z axes	
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13 EN62493 (US)	
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC (US)	
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70%RH	
	EMC Emission	EN55015 EN61000-3-2 EN61000-3-3 (US)	
Others	Net Weight	0.53Kg	
	Dimension	368.6*32*23mm(L*W*H)	
	Packing	395*255*170mm 30pcs /CTN 16.8Kg/CTN	
Notes	<ol> <li>All parameters NOT specially mentioned are measured at 230VAC input,rated load and 25°C of ambient temperature.</li> <li>Tolerance: includes set up tolerance and load regulation .</li> </ol>		



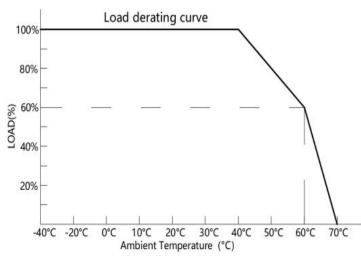
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# **Efficiency Curve (efficiency vs output load)**





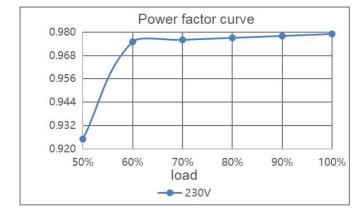
## **Derating Curve (output load vs TEMP.)**

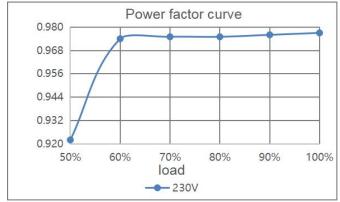


- 1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
- 2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise.

  Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

#### **Power Factor Curve**



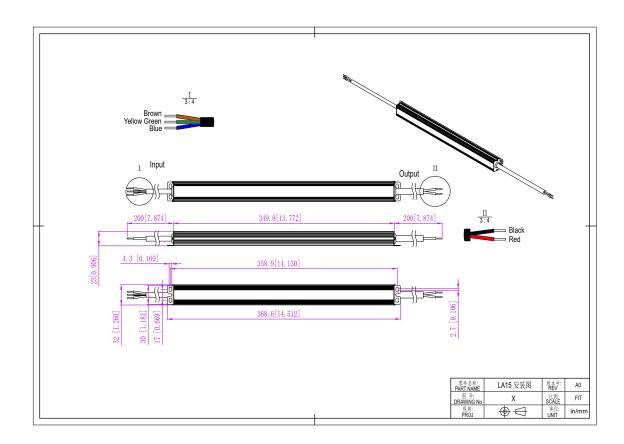


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## **Mechanical Specification**



12V&24V Version

- 1. Input cable H05RN-F 3\*1.0mm<sup>2</sup>: the Brown cable to (L), the Blue cable to (N) and the Yellow & Green cable to (FG) .
- 2. Output cable H05RN-F 2\*1.5mm<sup>2</sup>: Red cable (+) to Positive side(+), Black cable(-) to Negative side (-).
- 3. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

#### Warm tips:

Any other requests for, we can customized.

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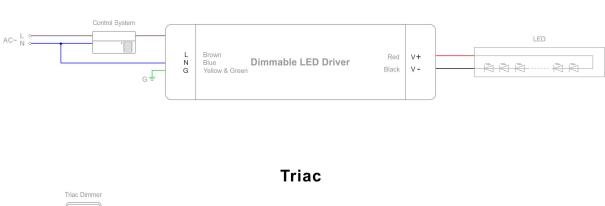


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### **Dimming Operation and Connecting Diagram**

#### 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.



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