

#### **KVF-TDH Series 80W**

Whole Family: KVF-XXXXX-TDH 12V/ 24V/ 48VDC - [ 30W 60W 80W 90W 100W 120W 150W 200W 300W 320W 360W 500W 600W ]













#### **Features**

Output: Constant Voltage Range: 200-240VAC

Built-in active PFC function PFC design:

Efficiency: Up to 86%

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.

Dimming range:

Suitable for the application of LED lighting Application:

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

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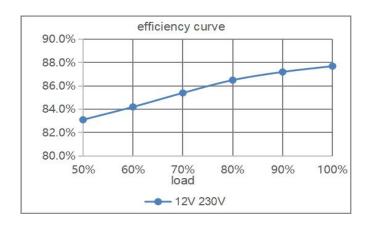
# **Specification**

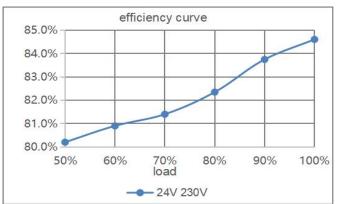
| Model        |   | KVF-12080-TDH   | KVF-24080-TDH | KVF-48080-TDH |
|--------------|---|---|---------------|---------------|
| Certificate  |   | ENEC / SAA(GMA certificate) / CCC / CE / CB / RoHS / Reach                              |               |               |
| Output       | DC Voltage  | 12V   | 24V           | 48V           |
|              | Voltage Tolerance   | ±0.5V   |               |               |
|              | Voltage Regulation  | ≤2%   | ≤1%           |               |
|              | Rated current   | 6.67A   | 3.33A         | 1.67A         |
|              | Rated power   | 80W   |               |               |
|              | Load Regulation   | ≤0.5%   |               |               |
| Input        | Voltage Range   | 200-240VAC  |               |               |
|              | Frequency Range   | 47 - 63Hz   |               |               |
|              | Power Factor  | PF≥0.97@200VAC PF≥0.97@230VAC PF≥0.97@240VAC  |               |               |
|              | THD(Typ.) @ full load   | ≤20%@200VAC @230VAC @240VAC   |               |               |
|              | Efficiency @ full load  | 82%   | 83%           | 86.43%        |
|              | AC Current(Max.)  | 0.8A  |               |               |
|              | Inrush Current (Typ.)   | 56A,280us@230VAC  |               |               |
|              | Leakage current   | <0.5mA  |               |               |
| Protection   | Short Circuit   | Shut down o/p voltage, re-power on to recover 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 the       |               |               |
|              | Over temperature  | temperature drops.  |               |               |
| 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%/°C(0 - 50°C)   |               |               |
|              | Vibration   | 10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes                    |               |               |
| Safety & EMC | Safety standards  | EN61347-1 EN61347-2-13 (EU)   |               |               |
|              | Withstand voltage   | I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC (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  | 1.04Kg  |               |               |
|              | Dimension   | 226*69.8*42mm (L*W*H)   |               |               |
|              | Packing   | 355*285*170mm 10pcs /CTN 11.41KG/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> |   |               |               |

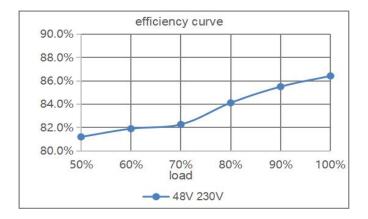
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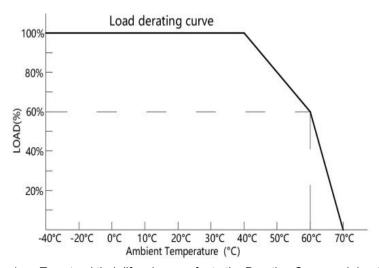
# **Efficiency Curve (efficiency vs output load)**







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



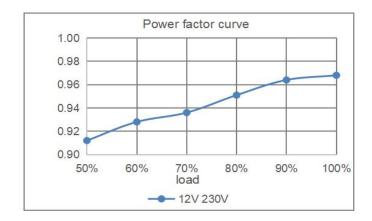
- 1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
- 2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise.

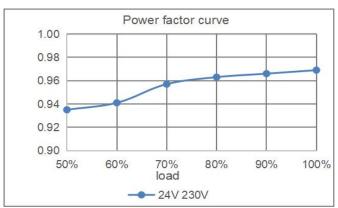
  Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

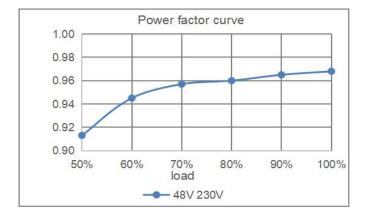
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#### **Power Factor Curve**



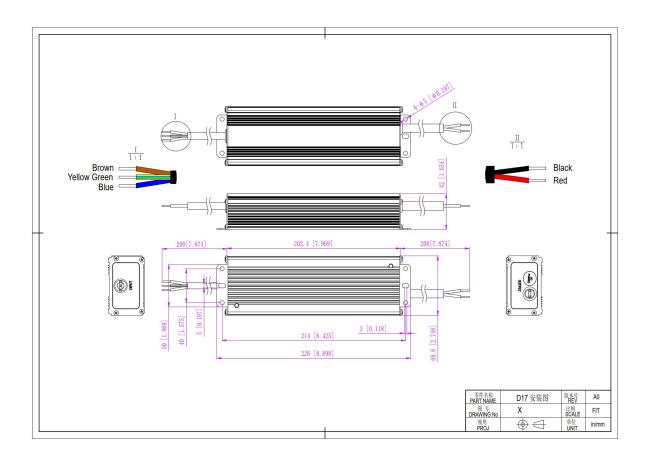




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# **Mechanical Specification**



12V&24V&48V Version

- 1. Input Rubber cable H05RN-F 3\*1.0mm², the Green /Yellow cable connect with (FG),Brown with AC (L),Blue with AC(N).
- 2. Output Rubber cable H05RN-F 2\*1.0mm<sup>2</sup>, Red is output (V+) Positive, Black is output (V-) negative. 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. Any other requests for, we can customized.

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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, MLV and 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.



#### 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.

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