

#### Phase cut /Triac dimmable driver-PWM output **KVF-TDWS series 30W**

Whole Family KVF-XXXXX-TDWS12V 24VDC 30W 36W 60W 96W 100W





#### **■Features**

- ·Output constant voltage
- ·UL, cUL listed, Class 2, Class P, Type HL
- ·Universal AC input: 100-277VAC
- .Power Factor: up to 0.99 ·High efficiency: up to 80% ·Dimming range: 0-100%
- ·Load: 10-100%
- ·Protection:short circuit/over loading/ Over temperature
- ·PWM output, does not change the color index
- ·Full protection plastic case, for dry and damp locations
- ·Flicker-free
- ·Compatible with Forward phase, Reverse phase, Triac, MLV, ELV Dimmers
- ·Cooling by free air convection
- ·Suitable for LED lighting and moving sign applications

# ■Specification

| Model        |                                 | KVF-12030-TDWS  | KVF-24030-TDWS          |
|--------------|---------------------------------|---|-------------------------|
| Certificates |                                 | FCC UL cUL Class 2  | FCC UL cUL Class 2      |
| Output       | DC Voltage                      | 12V   | 24V                     |
|              | Rated Current                   | 2.5A  | 1.25A                   |
|              | Rated Power                     | 30W   |                         |
|              | Voltage Tolerance               | ±0.5V   |                         |
|              | Voltage Regulation              | ±0.5%   |                         |
|              | Load Regulation                 | ±1%   |                         |
| Input        | Voltage Range                   | 100-277VAC  |                         |
|              | Frequency Range                 | 47-63Hz   |                         |
|              | Power Factor (Typ.) @ full load | 0.99@120VAC 0.95@277VAC   | 0.99@120VAC 0.95@277VAC |
|              | THD (Typ.) @ full load          | 120V<10%; 277V<15%  |                         |
|              | Efficiency (Typ.) @ full load   | 120V 79%; 277V 80%  | 120V 79%; 277V 80%      |
|              | AC Current (Max.)               | 0.5A@100VAC   |                         |
|              | Inrush Current (Typ.)           | 120V5A, 50%, 960us ; 277V13A, 50%, 1ms  |                         |
|              | Leakage current                 | <0.50mA   |                         |
| Protection   | Short Circuit                   | 120VAC Hiccup mode,recovers automatically after fault condition is removed          |                         |
|              |                                 | 277AVC shut down o/p voltage, re-power on to recover after fault condition removed. |                         |
|              | Over Loading                    | ≤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∼+60°C (see below derating curve)  |                         |
|              | Working Humidity                | 20∼90%RH, non-condensing  |                         |
|              | Storage TEMP. Humidity          | -40∼+80℃,10∼95%RH   |                         |
|              | TEMP .coefficient               | ±0.03%/°C (0~50°C)  |                         |
|              | Vibration                       | 10∼500Hz, 2G 10min./1 cycle,period for 60min. each along X,Y,Z axes                 |                         |
| Safety& EMC  | Safety standards                | UL8750+UL1310, CAN/CSA-C22.2 No.250.13  |                         |
|              | Withstand voltage               | I/P-O/P:1.88KVac  |                         |
|              | Isolation resistance            | I/P-O/P:100MΩ/500VDC/25°C/70%RH   |                         |
|              | EMC EMISSION                    | FCC 47 CRF Part 15, Subpart B   |                         |
| others       | Net. Weight                     | 0.2Kg   |                         |
|              | Size                            | 260*30*18.5mm (L*W*H)   |                         |
|              | packing                         | 330*270*130mm/50pcs /CTN  |                         |



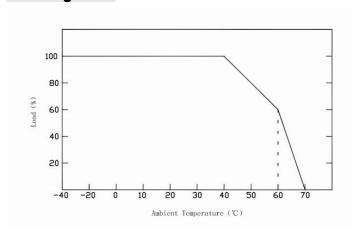
## Phase cut /Triac dimmable driver-PWM output

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# Notes

- 1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and  $25\,^{\circ}$ C of ambient temperature.
- 2. To extend the driver's using life ,please reduce the loading at lower input voltage.

# **■Derating Curve**



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

# ■ Mechanical Specification

260

260

23

OUTPUT \*\*

30

252

- \* Input with terminals Live(L) and Neutral(N) wires to be connected AC;
- \*\*Output with terminals "+ "Positive and "-" Negative to be connected led lighting.

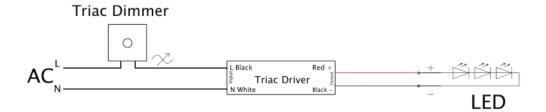
## **■Dimming Operation**

- \*\*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.
- \*\*Usually matching with Forward phase , leading edge , Magnetic low voltage, triac dimmers, or Reverse phase, trailing edge ,Electric low voltage Dimmers.
- XPlease try to use dimmers with power at least 1.5 times as the output power of the driver.

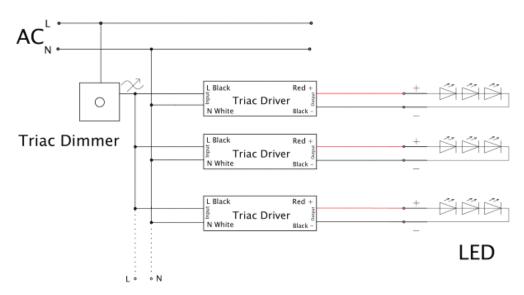
#### **■ Connecting Diagram**

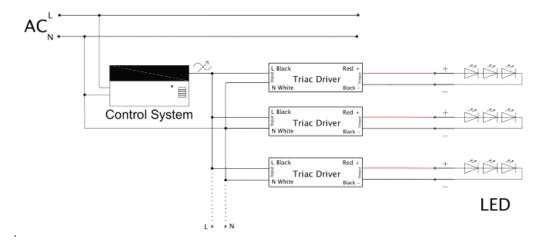


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#### ■ Instruction:

- 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 question, please contact Zhuhai Shengchang.

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