

Phase cut /Triac dimmable driver PWM output (KVF - TDW series 120W)



Features

- Output constant voltage
- UL, cUL listed, Class P, Type HL
- Universal AC input: 100-277VAC
- Power Factor: up to 0.99
- High efficiency : up to 82%
- Dimming range: 0-100%
- Load: 10-100%
- Protection:short circuit/over loading/ Over temperature
- PWM output, does not change the color index
- Full protection aluminum housing, for dry, damp, wet location
- 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



Class 2 Class P

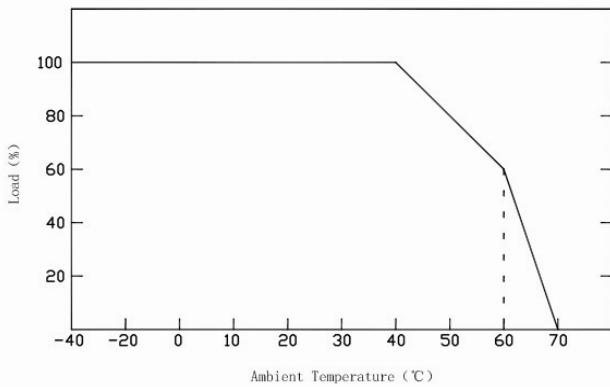
Specifications

| Model | KVF-12120-TDW | | KVF-24120-TDW | | |
|-------------------------|---------------------------------|--|---------------|-------------|-------------|
| Certificates | FCC UL cUL | | FCC UL cUL | | |
| Output | DC Voltage | 12V | 24V | | |
| | Rated Current | 10A | 5A | | |
| | Rated Power | 120W - 480W | | | |
| | Voltage Tolerance | ±0.5V | | | |
| | Voltage Regulation | ±0.5% | | | |
| | Load Regulation | ±2% | ±1% | | |
| Input | Voltage Range | 100-277VAC | | | |
| | Frequency Range | 47-63Hz | | | |
| | Power Factor (Typ.) @ full load | 0.99@120VAC | 0.96@277VAC | 0.98@120VAC | 0.96@277VAC |
| | THD (Typ.) @ full load | <20% | | | |
| | Efficiency (Typ.) @ full load | 82% | 82% | | |
| | AC Current (Max.) | 1.7A@100VAC | | | |
| | Inrush Current (Typ.) | 20A, 50%, 1.6ms | | | |
| | Leakage current | <0.50mA | | | |
| Protection | Short Circuit | shut down o/p voltage, re-power on to recover after fault condition is removed | | | |
| | Over Loading | ≤120% constant current limiting, auto-recovery | | | |
| | Over temperature | 100°C±10°C 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°C, 10~95%RH | | | |
| | TEMP .coefficient | ±0.03%/°C (0~50°C) | | | |
| | Vibration | 10~500Hz, 5G 10min./1 cycle,period for 60min. each along X,Y,Z axes | | | |
| Safety & EMC | Safety standards | UL8750 | | | |
| | Withstand voltage | I/P-O/P:1.88KVac | | | |
| | Isolation resistance | I/P-O/P:100MΩ/500VDC/25°C/70%RH | | | |
| | EMC EMISSION | FCC Part 15 B | | | |
| others | Net. Weight | 1.05Kg | | | |
| | Size | 230*70*43mm (L*W*H) | | | |
| | packing | 10PCS/CTN | | | |

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| Notes | 1. All Parameters are done on 120VAC input and a ambient temperature of 25 degrees Celsius (77 degrees Fahrenheit) |
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Derating Curve

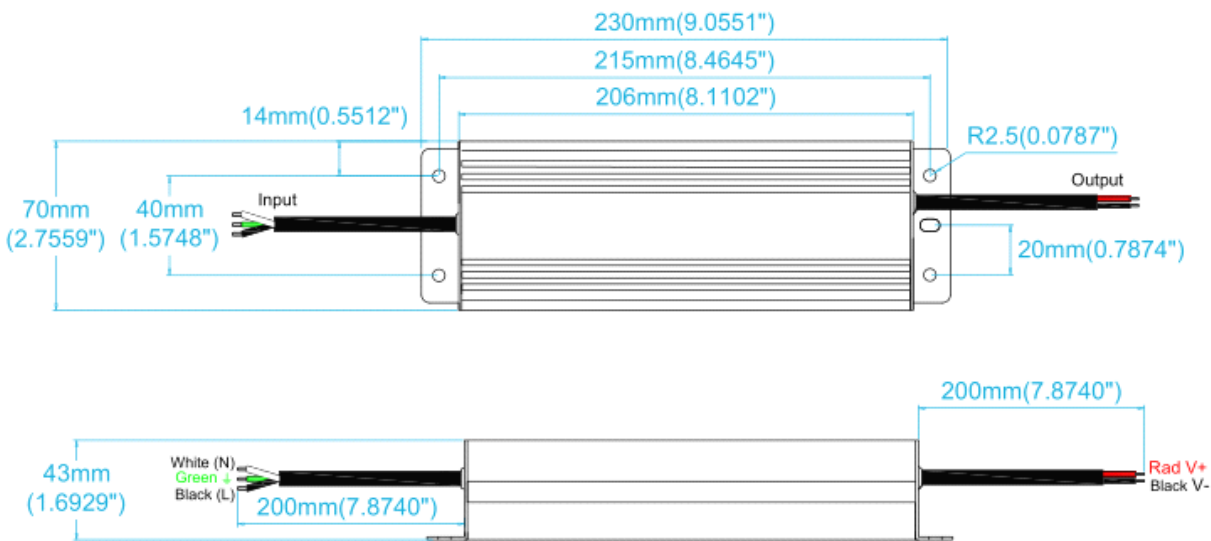


※IMPORTANT. Read carefully. The driver MUST be installed on a well ventilated location. Do not locate the driver in a box without active ventilation. The driver should have at least 50mm/2 inch space from any wall. Create at least 15mm/0.5" space between the bottom of the power supply and the wall/floor. See the derating curve on how heat impacts the drivers' performance.

Mechanical Specification

Unite: mm

Tolerance:P 0.5-2mm



※ Input Rubber wire 3*18AWG Black and White to be connected to AC L and N ,Green wire go ground,

※Output Rubber wire, 2*16AWG Red to LED Positive side (+) , Black to LED Negative side (-).

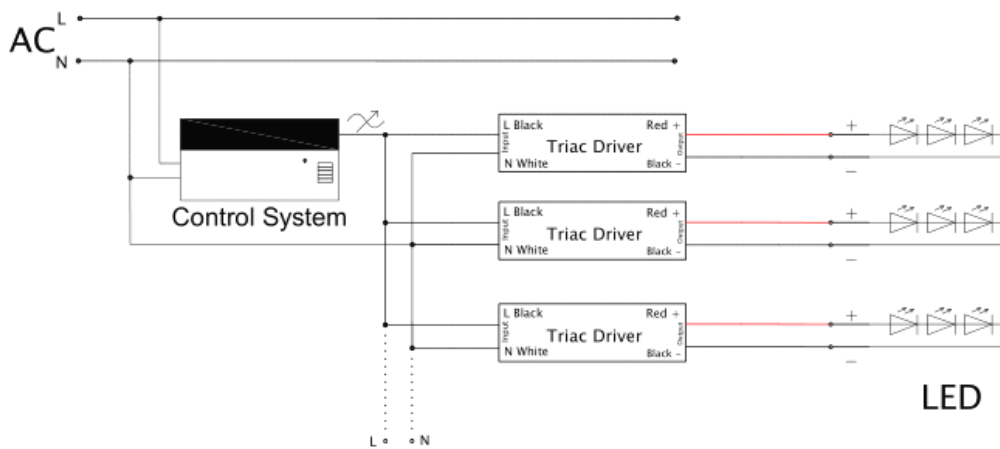
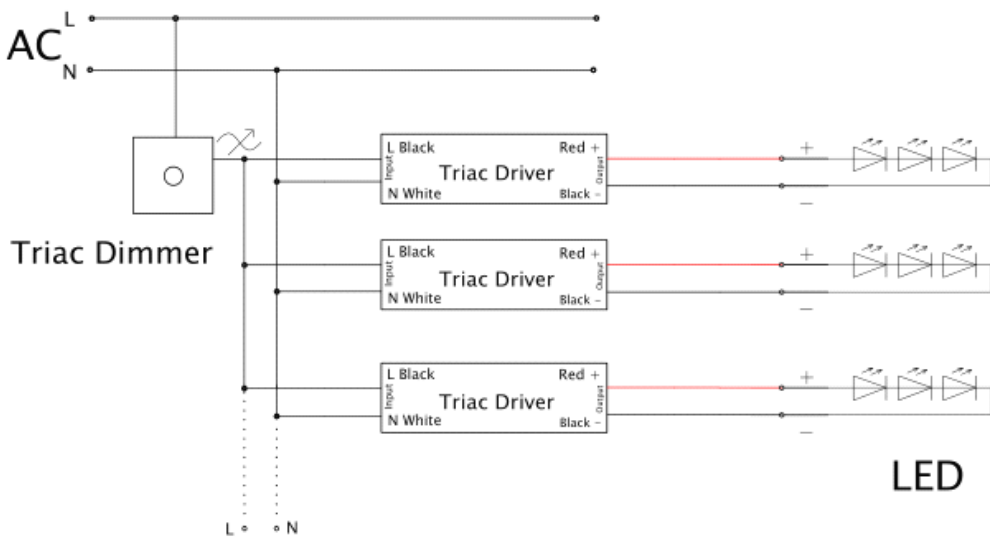
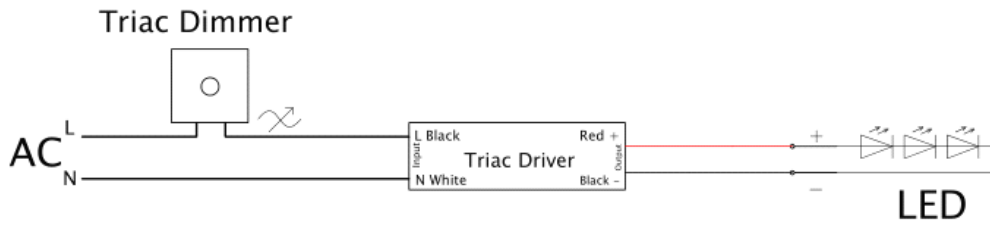
Dimming Operation

※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.

※Please try to use dimmers with power at least 1.5 times as the output power of the driver.

Connecting Diagram



Instruction:

- 1) This driver must be installed by a licensed electrician only.
- 2) Ensure that there is adequate ventilation around the driver. Do not install in a box or enclosure without active ventilation.
- 3) Keep the driver out of direct sun light and install in a dry place only.
- 4) Ensure the wiring and connections are correct before turning on.