

Constant Voltage TRIAC Dimmable Driver---120W Series



Features

- Output constant voltage
- Universal AC input: 90-130VAC
- Power Factor: up to 0.95
- High Efficiency: up to 84%
- Protections: short circuit / over loading / over current
- Full protection aluminum housing
- Suitable for Dry / Damp / Wet location
- Cooling by free air convection
- Work with leading edge and trailing edge TRIAC dimmers
- Strong compatibility, flicker-free dimming
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting

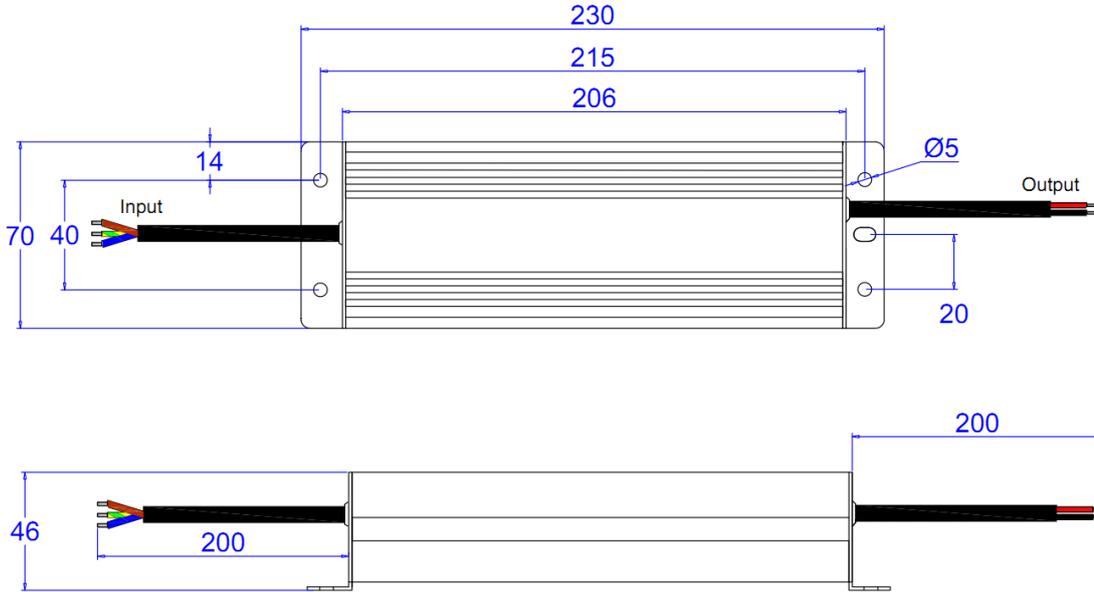
Specification

| Model | | ETD12120 | ETD24120 | ETD36120 | ETD48120 |
|-------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------|----------|
| output | DC Voltage | 12V | 24V | 36V | 48V |
| | Voltage Tolerance | ±0.5V | | | |
| | Rated current | 10A | 5A | 3.3A | 2.5A |
| | Rated power | 120W | | | |
| input | Voltage Range | 100~130VAC | | | |
| | Frequency Range | 50~60HZ | | | |
| | Power Factor (Typ.) | PF≥0.65 | | | |
| | Efficiency (Typ.) | 83% | 84% | 85% | 85% |
| | AC Current (Typ.) | 2A | 2A | 2A | 2A |
| | Leakage current | < 0.70mA/110VAC | | | |
| Protection | Short Circuit | Hiccup mode, recovers automatically after fault condition is removed | | | |
| | Over Loading | ≤ 120% | | | |
| | Over Current | ≤1.4*I out | | | |
| | Over temperature | 100°C±10°C (The output voltage will turn off when the temperature is higher than 100°C±10°C, after the temperature drop off, it will recover) | | | |
| Environment | Working TEMP. | -40~+60°C | | | |
| | Working Humidity | 20~90%RH, non-condensing | | | |
| | Storage TEM.,Humidity | -40~+80°C, 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 | UL1012 | | | |
| | Withstand voltage | I/P-O/P:1500KVAC | | | |
| | Isolation resistance | I/P-O/P: 100MΩ/500VDC/25°C/70%RH | | | |
| | EMC EMISSION | FCC Part 15 B | | | |
| Others | Net.Weight | 1.3 Kg | | 1.5Kg | |
| | Size | 200*70*46mm (L*W*H) | | 380*77*57mm (L*W*H) | |
| | packing | 324*279*176mm 10PCS | | | |

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| <p>Notes</p> | <ol style="list-style-type: none"> 1. All parameters if NOT specially mentioned are measured at 110VAC input , rated load and 25°C of ambient temperature. 2. To extend the driver's using life, please reduce the loading when start the drivers at lower input voltage. 3. Loading should be 60-100% |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

■ 120W TRIAC dimmable driver Mechanical Specification

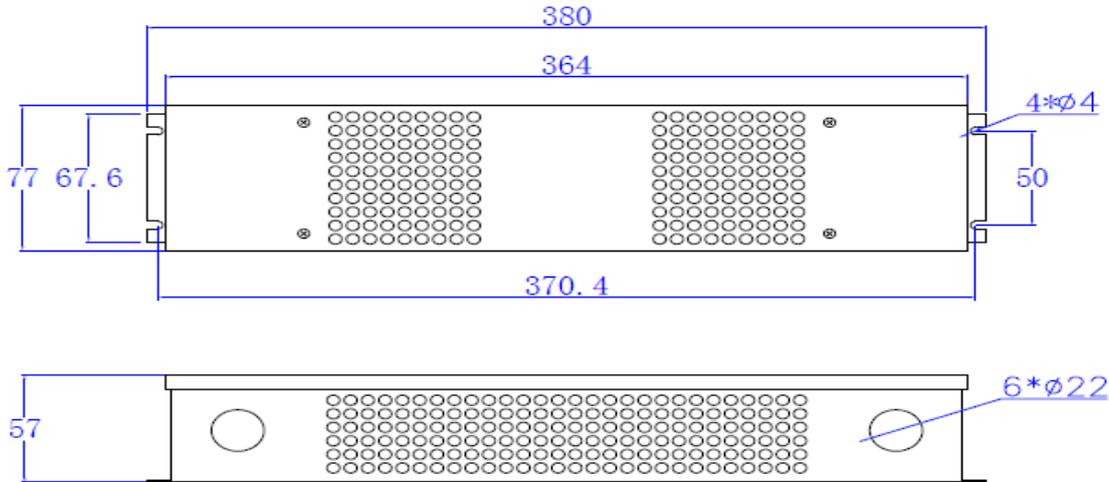


※ Input black (L) and white (N) wires to be connected AC, Green wire to be connected ground; output red and black wires to be connected led lighting.

■ Mechanical Specification of 120W Phase/TRIAC Dimmable Driver with junction box



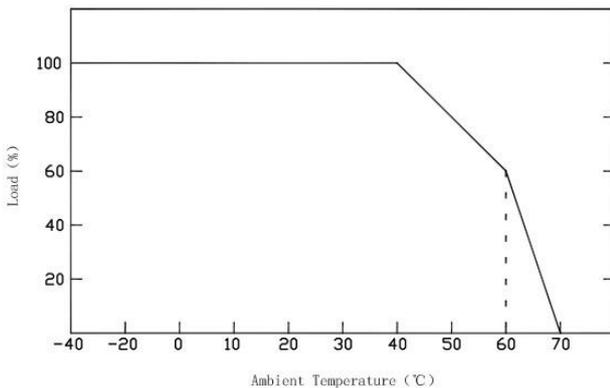
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■Dimming Operation

- ※ Output constant current level can be adjusted through input terminal of the AC phase line (L) by connection a TRIAC dimmer.
- ※ Compatible with Leading edge or tailing edge TRIAC dimmers.
- ※ Please try to use the small power dimmer, have access to a wider dimming range, high-power dimmer is difficult to achieve the output current to zero

■Derating Curve



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

USER'S MANUAL

When using electrical products, basic precautions should always be practiced including the following:

1. Read and follow all safety instructions;

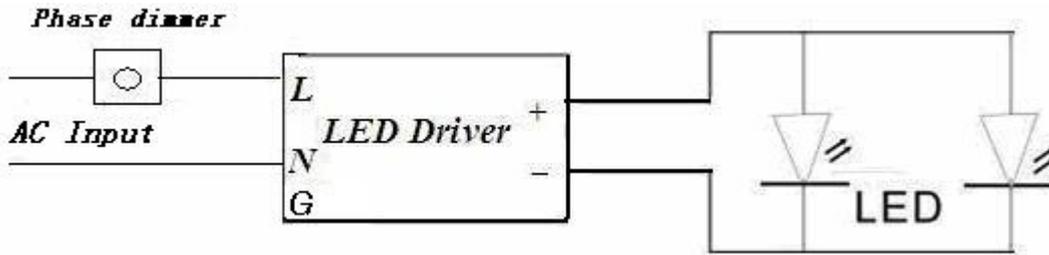
Reference the National Electrical Code, ANSI/NFPA 70, specifically for the installation of wiring and clearances from power and lighting conductors.

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2.

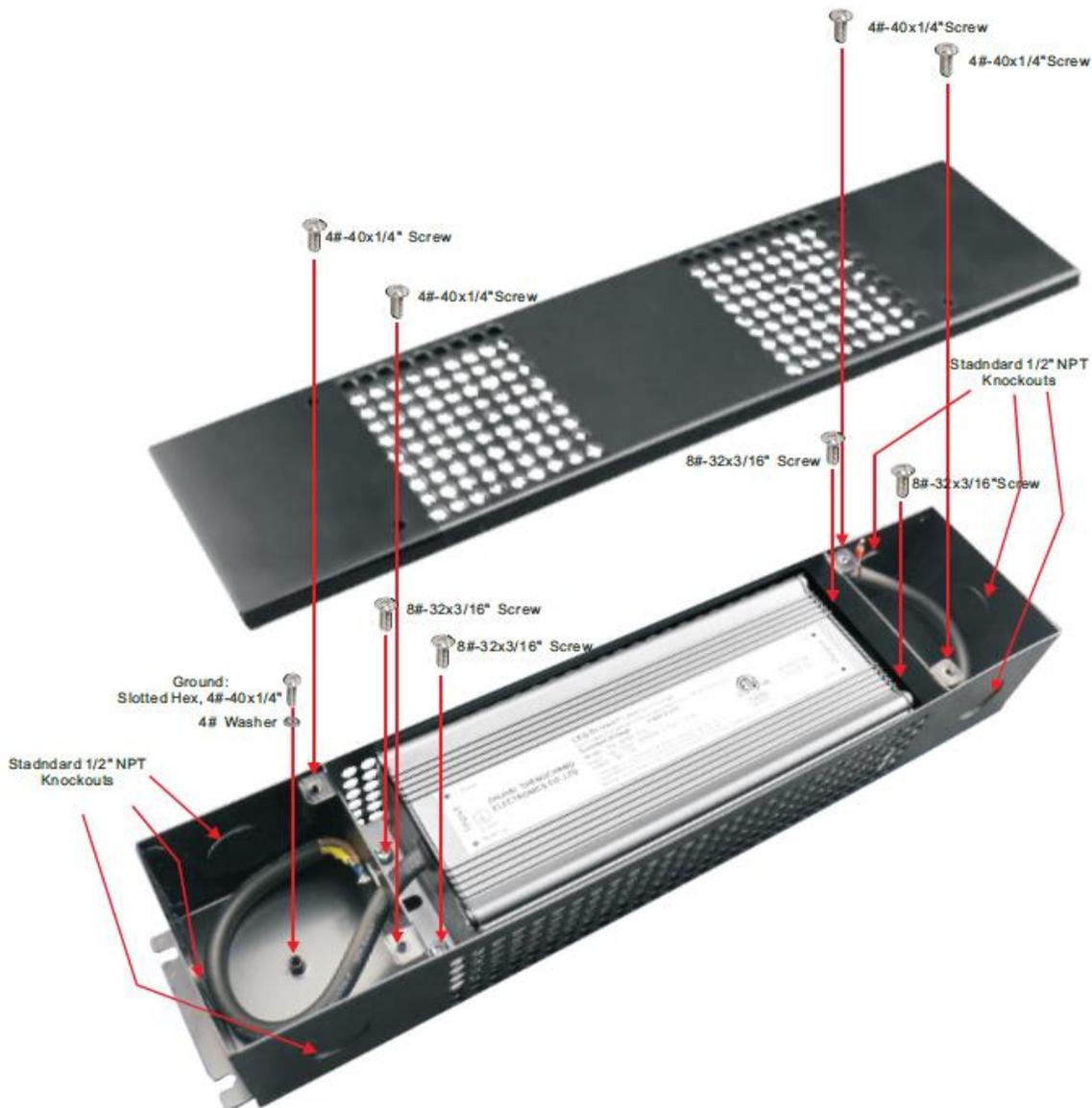
1) Wiring Connection

Phase dimmer is connected with input of LED driver to get dimming. (Forward phase, Reverse phase, ELV, and TRIAC dimmers)



Input black (L) and white (N) wires to be connected with AC, Green wire to be connected with ground; Output red and black wires to be connected with led lighting application.

2) Assembly



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3. For outdoor or indoor use. Maximum temperature rating of the conductor is 90°C
4. Disconnect the LED Driver before making or breaking connections to the equipment; A disconnect device shall be incorporated in the field wiring
5. The LED Driver is not to be repaired and do not to be used any longer if it is damaged or defective.
6. The external cord or cable cannot be replaced; if the external cord or cable is damaged, the LED Driver shall be scrapped.
7. The protective devices cannot be reset or replaced after a short circuit or an overload
- 8 The LED Driver does not rely upon the luminaire enclosure for protection against accidental contact with live parts.
9. All electrical connections must be in accordance with local, and national electrical codes.

Consult a qualified electrician if you have any electrical questions.

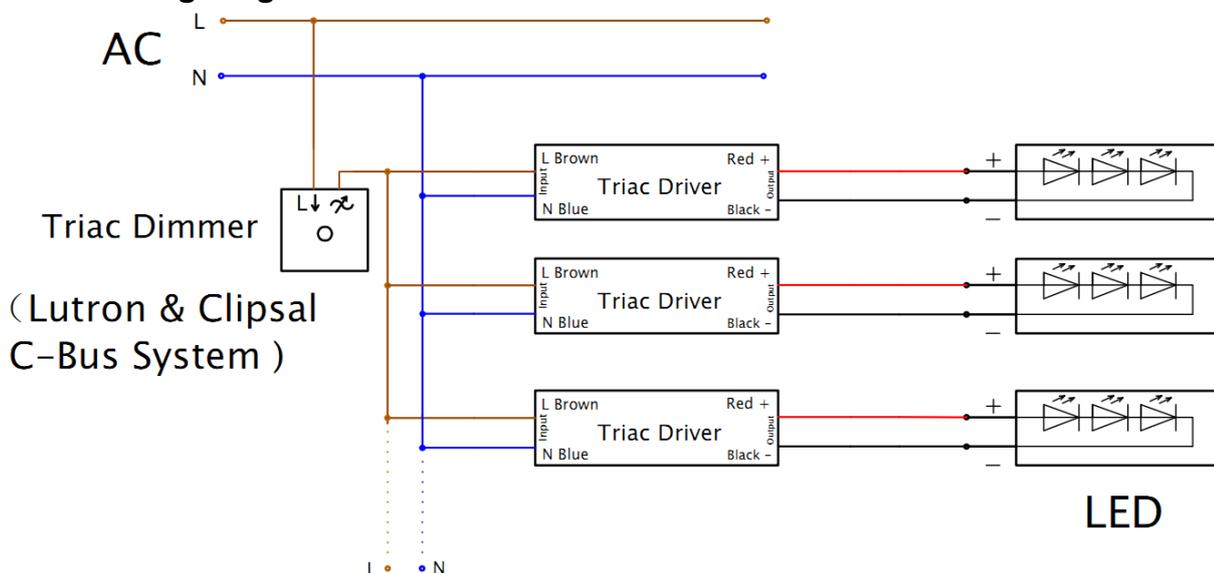
Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction, for models which max. output voltage exceed 60V $\overline{\text{---}}$, at least one pole of the conductive parts in the SELV circuit shall be insulated by insulation capable of withstanding a test voltage of 500 V r.m.s. for 1 min.

10. Warning:

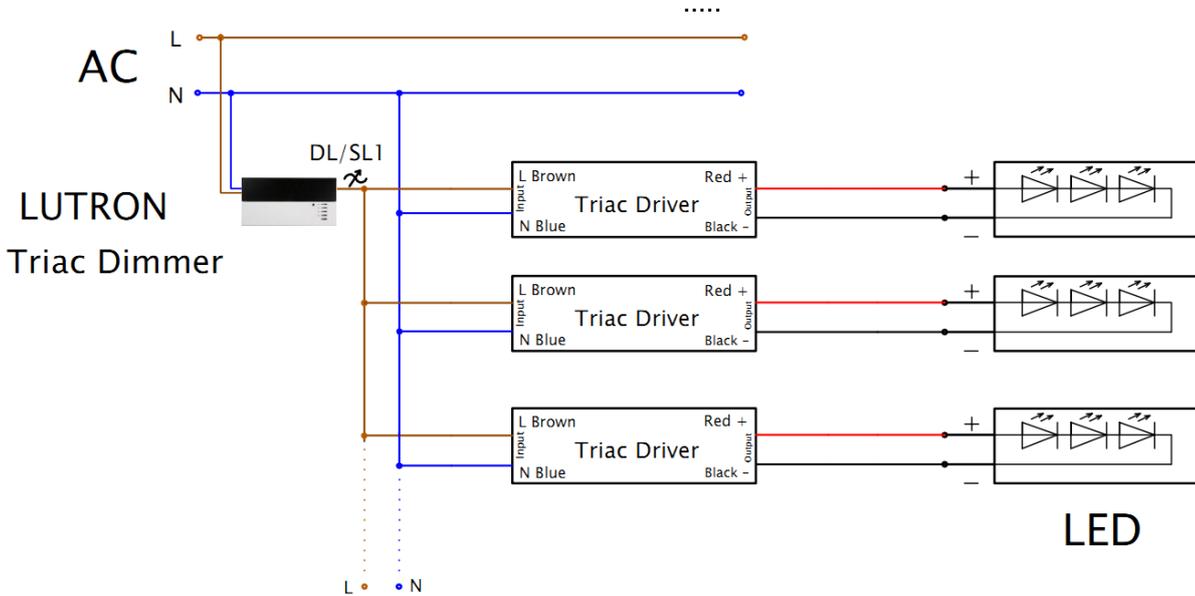
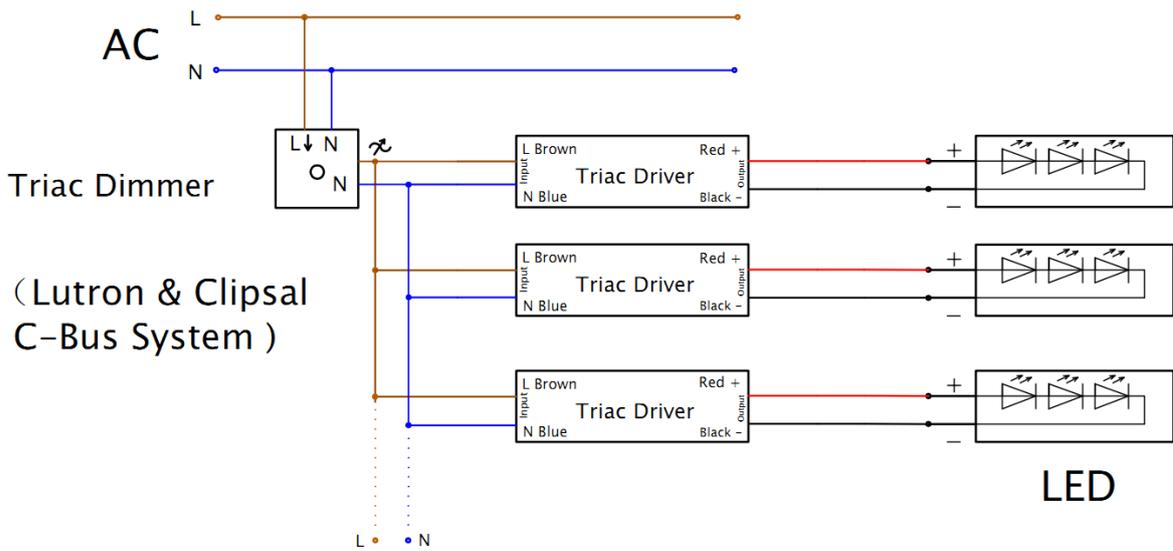
- 1) Prevent to reverse polarity; Output polarity: RED “+”; BLACK “-”
- 2) Risk of Electric Shock. When used outdoors, install only on a circuit protected by a Class A GFCI;
- 3) Risk of Fire. Installation involves special wiring methods to run wiring through a building structure. Consult a qualified electrician;
- 4) Risk of Electric Shock. Mount the unit at a height greater than 1 foot from the ground surface.

SAVE THESE INSTRUCTIONS – This manual contains important safety and operating instructions for power units.

■ Connecting Diagram



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