Triac

Triac Constant Current Dimming LED Driver

- Dimming interface: Triac/ELV, apply to leading edge/trailing edge Triac dimmers and dimming system
- 1 channel constant current output, multi-current optional
- Built-in active PFC function: 0.95 Typ
- Over-load / Short circuit protection, recover automatically
- Class II design, SELV safety ultra-low voltage
- Suitable for indoor LED lighting application

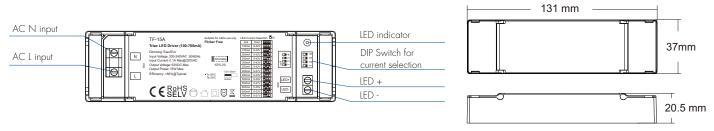




Applications

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

Mechanical Structures and Installations



Technical Parameters

| - | 1 | |
|---------------|-----------------------------|---|
| Output | Output Voltage | 9~42VDC |
| | Max Output Voltage | Max. 52VDC |
| | Output Current | 100-700mA |
| | Output Power | Max. 15W |
| | Dimming Range | 0~100%, dimming depth: 0.1% |
| | PWM Frequency | 4KHz |
| | Current Accuracy | 100mA ±10%, the rest of the current ±5%. |
| | Ripple & Noise | ≤5%(Maximum current non dimming state) |
| | Input Voltage Range | 220~240VAC |
| | Frequency Range | 50/60Hz |
| | Efficiency(TYP) | >80% (at full load) |
| | Input Current | ≤0.1A/230AC |
| Input | Power Factor | >0.95/230VAC |
| mipo. | THD | <14% / 230VAC (at full load) |
| | Anti Surge | LN:1KV |
| | Inrush Current | Cold start 9A, 200us duration (50% Ipeak) / 230VAC |
| | Leakage Current | < 0.5mA/230VAC |
| | Standby Power/No Load Power | <1W(dimming off) |
| | Over Load Power | Current decrease or Hiccup, recovers automatically after fault condition is removed |
| Protection | Short Circuit | Output shutdown in case of short-circuit, automatic recovery when short-circuit is removed. |
| | Over Temperature | Reduce the output current or turn off the output when the PCB temperature >110% °C, <90% °C automatically restore the output. |
| | Woking Temperature | -20°⊂45°C |
| | T-case Max | 90℃ |
| Environment | Working Humidity | 20%~90%RH, non-condensing |
| Liivironineni | Storage Temp/Humidity | -40°C~80°C, 10%~95%RH |
| | Temperature Coefficient | ±0.03%/°C (0·50%) |
| | Vibration Resistance | 10-500Hz, 2G,6min/cycle, X, Y, Zaxes/2min |
| | IP Rating | IP20 |
| Safety&EMC | Security Specifications | IEC/EN61347-1, IEC/EN61347-2-13 |
| | Withstand Voltage | I/P-O/P: 3750VAC |
| | Insulation Resistance | I/P-O/P: 100MΩ/500VDC/25°C/70%RH |
| | EMC Emission | EN55015, EN61000-3-2 Class C, IEC61000-3-3 |
| - | EMC Immunity | EN61000-4-2.3.4.5.6.8.11, EN61547 |
| | Certications | CE |

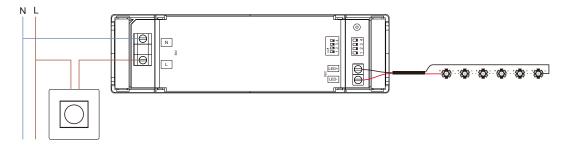


| 1 2 3 4 | | | | | | | | | | | | | |
|----------------|----------|-----------|----------|------------|-----------|------------|-----------|-------------|---------|-------------|---------|------------|-----------|
| Output Voltage | 9-42V | 9-42V | 9-42V | 9-42V | 9-42V | 9-42V | 9-37V | 9-33V | 9-30V | 9-27V | 9-25V | 9-23V | 9-21V |
| Output Current | 100mA | 150mA | 200mA | 250mA | 300mA | 350mA | 400mA | 450mA | 500mA | 550mA | 600mA | 650mA | 700mA |
| Output Power | 0.9-4.2W | 1.35-6.3W | 1.8-8.4W | 2.25-10.5W | 2.7-12.6W | 3.15-14.7W | 3.6-14.8W | 4.05-14.85W | 4.5-15W | 4.95-14.85W | 5.4-15W | 5.85-14.9W | 6.3-14.7W |

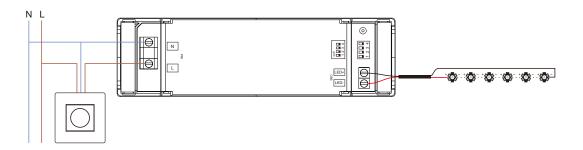
Note: Please select the current through the DIP switch on the board with power off.

Wiring diagram

1. Connect Triac dimmer(no Neutral wire)



2. Connect Triac dimmer(with Neutral wire)



Triac dimming input

While connected with a Triac dimmer, such as Lutrom, Clipsal, Dynalite dimmer, different Triac dimmers from different suppliers may have different minimum dimming levels which the driver can not be dimmed below. To dim to 1%, please make sure the dimmer supports 1% minimum dimming level.

Installation note

- 1. This product must be installed and adjusted by a qualified professional.
- 2. This product is non-waterproof. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- 3. LED driver should keep a certain distance from the heating stuff(such as the luminaries radiator). The installation interval between the product and the product is recommended to be 15cm, so as not to affect the service life due to poor heat dissipation.
- 4. Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
- 5. If a fault occurs, please do not attempt to fix the product by yourself. If you have any questions, please contact us in time.