

## Triac Dimming Constant Voltage LED Driver

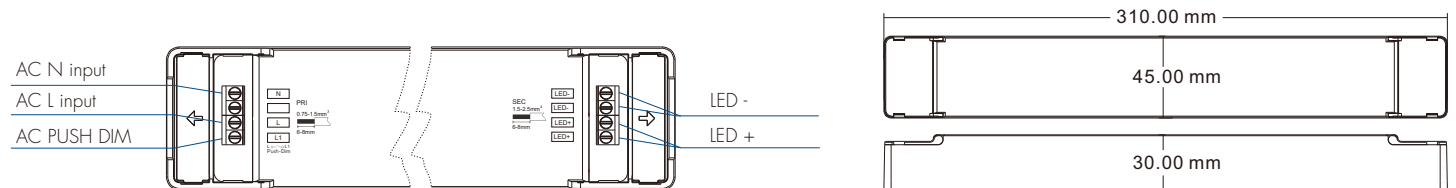
- Dimming voltage range 40-220VAC
- Supports leading-edge triac / trailing-edge ELV phase-cutting and AC self-resetting switch dimming
- Apply to leading edge / trailing edge triac dimmers and dimming system
- Connection of push switch for on/off and dimming
- Built-in active power factor correction (PFC) function
- Short-circuit/Over-temperature/Over-load/Over-voltage protection
- Class II design, SELV safety ultra-low voltage
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty



### Applications

- Suitable for LED-related light bar fixtures or devices using LED strips and LED strips (e.g., LED decorative or announcement devices).
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

### Mechanical Structures and Installations

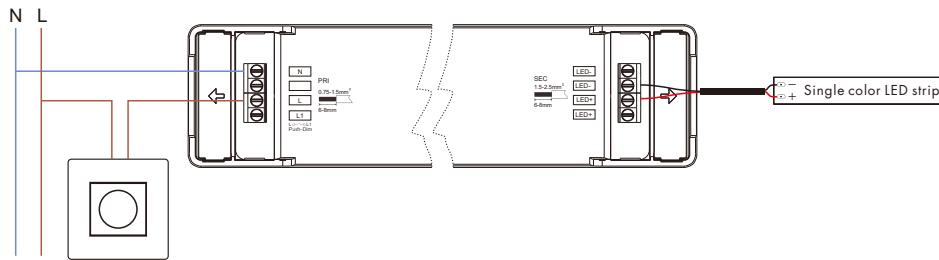


### Technical Parameters

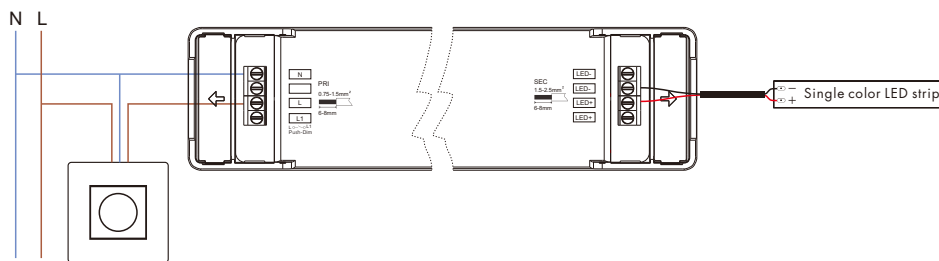
Model		TF-150-12	TF-150-24
Output	Output Voltage	12VDC $\pm$ 4%	24VDC $\pm$ 2.5%
	Output Current	12.5A	6.25A
	Output Power	Max. 150W	
	Dimming Range	0~100%	
	PWM Frequency	4KHz	
	Ripple & Noise	180mVpp	240mVpp
Input	Input Voltage Range	220~240VAC	
	Frequency Range	50/60Hz	
	Efficiency(TYP)	91%	
	Input Current	<0.75A/230VAC	
	Power Factor	>0.95/230VAC (at full load)	
	THD	<10% / 230VAC (at full load)	
	Anti Surge	L:N:1KV	
	Inrush Current	Cold start30A, at 230VAC	
	Leakage Current	< 0.5mA/230VAC	
	Dimmer Voltage Range	40-220VAC	
Protection	Dimming Interface	Leading-edge Triac/trailing-edge ELV phase-cut, Push-DIM	
	Over Load Power	Hiccup protection when load >110%~140% and automatic recovery when load is reduced.	
	Short Circuit	Hiccup mode, automatic recovery when fault conditions are removed	
Environment	Over Temperature	Reduces output power and automatically restores output when fault conditions are removed.	
	Working Temperature	-20°C~45°C	
	Tcase Max	90°C	
	Working Humidity	20%~90%RH, non-condensing	
	Storage Temp/Humidity	-40°C~80°C, 10%~95%RH	
	Temperature Coefficient	$\pm$ 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: 100M $\Omega$ /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	
	Certifications	CE	

## Wiring diagram

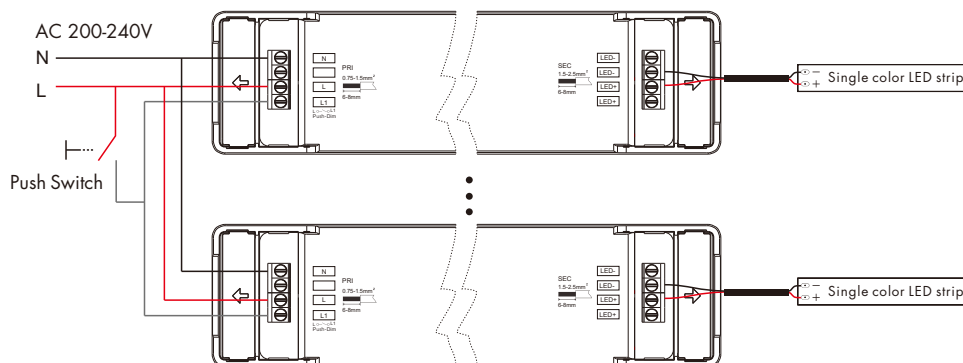
### 1. Connect Triac dimmer(no Neutral wire)



### 2. Connect Triac dimmer(with Neutral wire)



### 3. Connect AC Push switch



## 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.

## AC Push-Dim input

The provided AC Push-Dim interface allows for a simple dimming method using commercially available non-latching(momentary) wall switches.

- **Short press:** Turn on or off light.
- **Long press (1-6s):** Press and hold to step-less dimming, with every other long press, the light level goes to the opposite direction.
- **Dimming memory:**  
Light returns to the previous dimming level when switched off and on again, even at power failure.
- **Synchronization:**  
If more than one LED driver are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%.  
This means there is no need for any additional synchrony wire in larger installations.  
We recommend the number of LED drivers connected to a push switch does not exceed 25 pieces,  
The maximum length of the wires from push to LED driver should be no more than 20 meters.

### Note:

1. Triac dimming and PUSH dimming cannot be used at the same time.
2. If the product be used with the Push-Dim interface prior to using the Triac interface, the Triac dimming signal should change over 10% to return Triac control.  
(First, adjust the Triac dimming signal to the maximum, and then turn it down so that the signal changes by more than 10%.)

## 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. The product installation ambient temperature must not exceed the ambient temperature value at any time.
4. 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 20cm, so as not to affect the service life due to poor heat dissipation.
5. 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.
6. If a fault occurs, please do not attempt to fix the product by yourself. If you have any questions, please contact us in time.