TF-15A

Triac

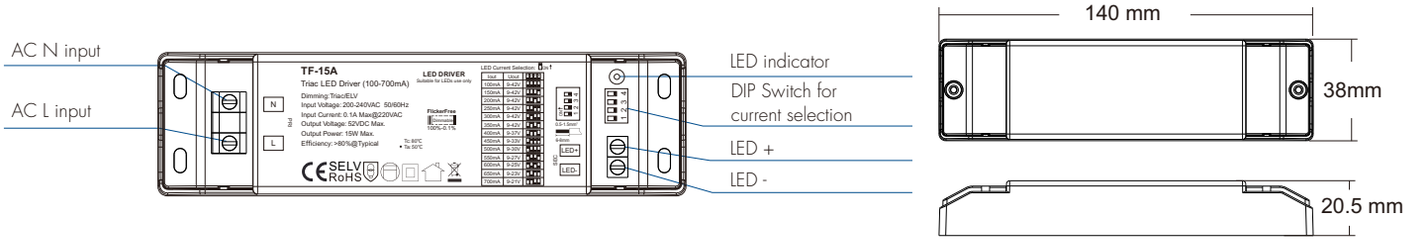
Triac Constant Current Dimming LED Driver

- 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

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	Input Voltage Range	200~240VAC
	Frequency Range	50/60Hz
	Efficiency(TYP)	>80% (at full load)
	Input Current	⩽0.1A/230AC
	Power Factor	>0.95/230VAC
	THD	<14% / 230VAC (at full load)
	Anti Surge	L-N:1KV
	Inrush Current	Cold start 9A, 200us duration (50% Ipeak) / 230VAC
	Leakage Current	< 0.5mA/230VAC
	Standby Power/No Load Power	<1W(dimming off)
Protection	Over Load Power	Current decrease or Hiccup, recovers automatically after fault condition is removed
	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% ℃, <90% ℃ automatically restore the output.
Environment	Woking Temperature	-20℃~50℃
	T-case Max	80℃
	Working Humidity	20%~90%RH, non-condensing
	Storage Temp/Humidity	-40℃~80℃, 10%~95%RH
	Temperature Coefficient	±0.03%/℃ (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℃/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

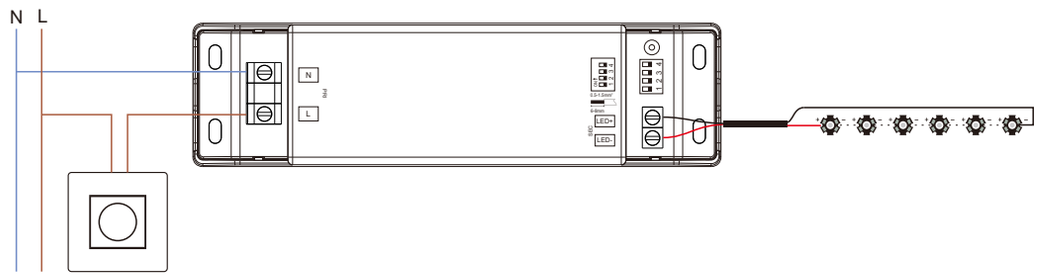
LED Current Selection:

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

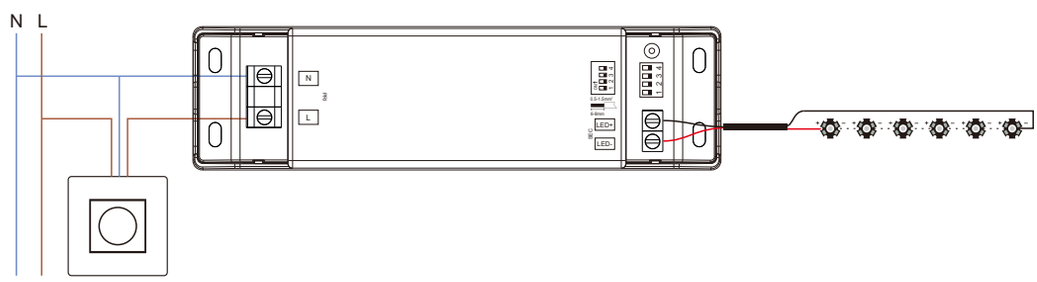
Note: Please select the current through the DIP switch on the board with power off.

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.