Triac Constant Current LED Driver

Model No.: TE-15A / TE-25A / TE-36A

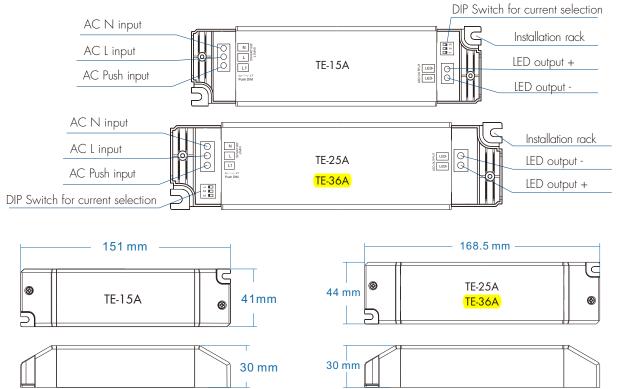




Features

- Dimming interface: Triac/ELV, AC Push-Dim
- Apply to leading edge/trailing edge Triac dimmers and dimming system
- PWM digital dimming, no alter LED color rending index
- 1 channel constant current output, configurable current via DIP switch
- Over-heat / Over-load / Short circuit protection, recover automatically
- Full protective plastic case
- Suitable for indoor LED lighting application
- 5 Year, 50,000hr warranty

Mechanical Structures and Installations



Technical Parameters

Model		TE-15A	TE-25A	TE-36A				
	Output Voltage	10-45VDC	10-52VDC	10-52VDC				
Output	Output Current	150-700mA	250-900mA	350-1200mA				
	Output Power	Max. 15W	Max. 25W	Max. 36W				
	Max Output Voltage	48VDC	58VDC	58VDC				
	Dimming Range	0~100%						
	PWM Frequency	500Hz						
	Current Accuracy	±6%	±3%	±3%				
	Rise Time	430ms(700mA/22V)	500ms(900mA/28V)	500ms(1200mA/30V)				
Input	Input Voltage Range	200VAC~240VAC						
	Frequency Range	50/60Hz						
	Efficiency	>80%/220VAC	>80%/220VAC	>82%/220VAC				
	Alternating Current	0.15A/220VAC	0.22A/220VAC	0.34A/220VAC				
	THD	>15%/220VAC	>15%/220VAC	>15%/220VAC				
	Inrush Current	Cold start 16A at 230VAC	Cold start 27.5A at 230VAC	Cold start 27.5A at 230VAC				
	Leakage Current	< 0.5mA/230VAC	< 0.5mA/230VAC	< 0.5mA/230VAC				
	No Load Power	< 1W	< 1.9W	< 1.9W				
Protection	Over Load Power	When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced.						
	Short Circuit	Shut down automatically if short circuit occurs, auto recovers.						
	Over Temperature	Intelligently adjust or turn off the output current if the PCB temp > 100° C, auto recovers.						
Environment	Woking Temperature	-30°C~55°C						
	T-case Max	70℃						
	Working Humidity	20%~90%RH, non-condensing						
	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,Z axes/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, EMC						

LED Current Selection:

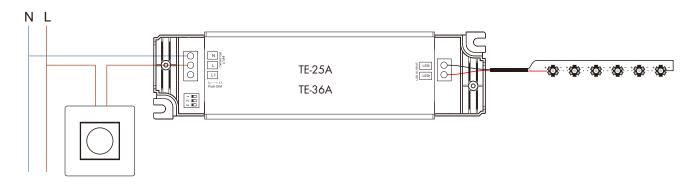
DIP switch	1 2 3								
TE-15A	Output Voltage	10-45V	10-45V	10-43V	10-38V	10-34V	10-30V	10-23V	10-22V
	Output Current	150mA	200mA	350mA	400mA	450mA	500mA	650mA	700mA
	Output Power	1.5-6.75W	2-9W	3.5-15W	4-15W	4.5-15W	5-15W	6.5-15W	7-15W
TE-25A	Output Voltage	10-52V	10-52V	10-52V	10-52V	10-50V	10-42V	10-36V	10-28V
	Output Current	250mA	300mA	350mA	400mA	500mA	600mA	700mA	900mA
	Output Power	2.5-13W	3-15.6W	3.5-18.2W	4-20.8W	5-25W	6-25.2W	7-25.2W	9-25.2W
TE-36A	Output Voltage	10-52V	10-52V	10-52V	10-52V	10-45V	10-40V	10-35V	10-30V
	Output Current	350mA	500mA	600mA	700mA	800mA	900mA	1050mA	1200mA
	Output Power	3.5-18.2W	5-26W	6-31.2W	7-36.4W	8-36W	9-36W	10.5-36W	12-36W

Applications

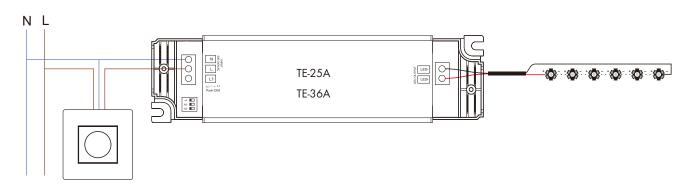
- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

Wiring Diagram

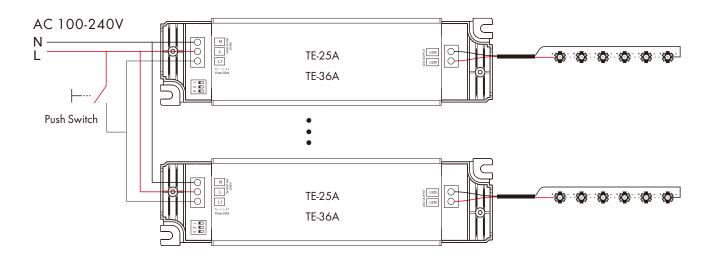
1. Connect Triac dimmer(no Neutral wire)



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 switchs.

• 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.

Dimming Curve

