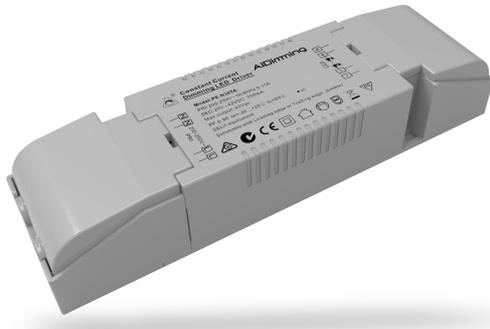


PE-N45TA series:



**Features:**

- LED phase-cut dimming driver, dimming range 2-100%
- Suitable for RPC MOSFET dimmer and FPC TRAIC dimmer
- Active PFC Function, No flicker
- Protection styles: short circuit/ over current /over voltage
- natural air cooling
- Fast press terminal
- Applicable to LED household lighting and commercial lighting applications
- No load safe protective device
- Simple installation
- Measure up to the world lighting equipment safety standard
- Protection class II
- 3 years warranty

## Description

PE-N45TA series is one of the constant current dimming LED driver developed by our company with high power factor, high efficiency, high precision, the use of the efficient stable low loss switch control chip and the high performance components makes it with low noise, energy saving, environmental protection, long life and other characteristics.

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Zhongshan AIDimming Electronics Co., Ltd

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Website: [www.savemoreled.com](http://www.savemoreled.com)

**Product performance parameters**

1. Electric features

Model		PE-N45TA42105
Output	output power	44.1W
	constant voltage	SELV 25-42V
	constant current	1050mA
	current precision	±5%
	ripple	25.2mVp-p
	start-up time	<600mS
Input	voltage range	200-250
	frequency range	47-63Hz
	PF	PF>0.99
	Efficiency (Typ.)	0.83@AC200V 0.83@AC265V
	Alternating current	238mA
Protection	open circuit	voltage limiting protection model, the output voltage is the Max voltage.
	short circuit	hiccup model, after removing the abnormal condition it can be start again
	over current	dual constant current, it isn't possible to over current
	over voltage	55V
Environment	Operating temperature	-20~ +45°C
	Operating humidity	10-85%RH
	storage temperature humidity	-40~ 85°C 10-85%RH
	temperature coefficient	±0.03%/°C (0-50°C)
Safety	safety specification	EN 61347-2-13:2006 /EN 61347-1:2008
	Withstand voltage	I/P-O/P:3.75KVAC
	Insulation resistance	I/P-O/P:100M Ohms / 500VDC /25°C/70%RH
	EMI	EN55015
	harmonic current	EN6000-3-2/EN6000-3-3
	Electromagnetic susceptibility	EN6000-4-2
Others	size	(L*W*H): 190*43*30mm

**Remark:**

1. All the parameters are test on AC220V、rated load、temperature25℃
- 2.The driver is regarded as one part of the whole products ,so the EMC of the whole products need to be tested again.

## 2. Long term Burn-in test

A certain number of products are randomly sampled at normal temperature to be burn-in test for long time, With multiple-channel life inspection instrument do the switching simulation test of 50 seconds turn on then 10 seconds power off under the input voltage of 240V , the switch cycle is 4000 times under the maximum output state of the product.

Long term aging test report

### Product long term aging test

Input Voltage	Output Load	Shell temperature rise	Required aging time	Actual aging time	State
240V	42V/1050mA	≤40℃	72H	72H	OK

) Note: the input 240V full load , repeated switch to simulate the test with multiple-channel life inspection instrument during the product burn in test, the ambient temperature of the aging room is generally at 23-30 C (relative to the outside temperature, higher in summer temperature).

## 3. Withstand voltage test

The use of Withstand Voltage tester TH2811D, respectively short circuit input and output, high voltage connection input end, connect ground , connect output and then in 10 seconds the voltage rises from 0 to AC3750V, keep 50 seconds, during the period, no fire , no alarm, leakage current is less than 2mA.

## 4. Surge lightning test

Waveform data: 1.2/50μs

Test voltage: 2000V

At experimental voltage condition, exert surge pulse for three times respectively at the 0° phase, 90° phase, 180° phase and 270° phase, the time interval between continuous pulses is 20S.

## 5. Flicker test

There are two evaluation parameters for the luminaire flicker at IEEE Std 1789-2015, flicker percent and flicker index , using flicker tester to collect relevant data in the case of input 240V and different brightness output.

### Flicker test report table

Model	Output	Output	Brightness	Flicker Frequency	Flicker index	Flicker percent	Result
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PE-N45TA	AC240V	42V 1050mA	100%	0.0Hz	0.00	0.0%	Flicker free
			50%	0.0Hz	0.00	0.0%	Flicker free

Note:

At the frequency of alternating current 50Hz, the frequency of the domestic lamps and lanterns is 100Hz, and the luminaire flicker percentage is less than 3.2%. which is the limit range of flicker free harm. The flicker percentage is 8% included the low risk range , and the luminaire flicker is a safe range. If the flicker percent is more than 8%, the lighting product can be seen as a flicker luminaire.

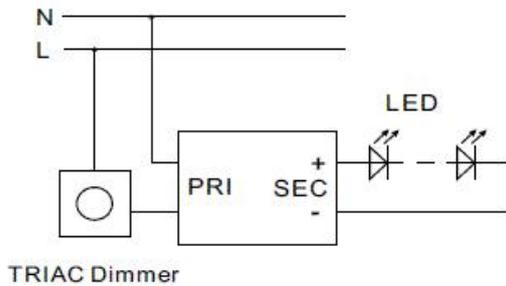
## 6. Standard operation

### Dimming operation

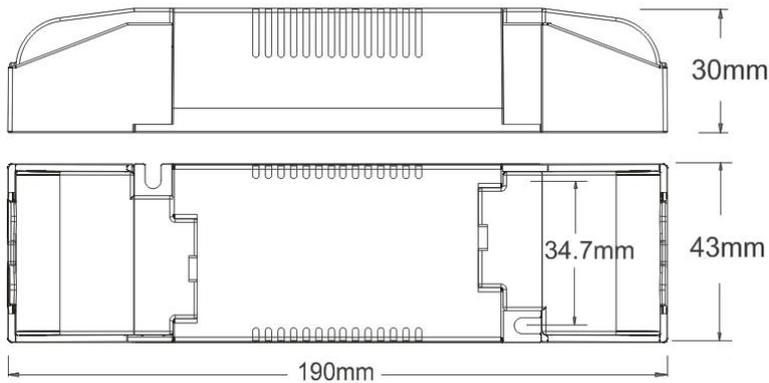
In the power line L, the TRIAC Dimmer can be connected in series to achieve dimming.



In the power line L, the TRIAC Dimmer can be connected in series to achieve dimming.



## 7. The product dimension



## 8. Instruction

Input and output connect according to the label, please note the Positive and Negative electrode.

Note:

- ★1. Please note the input and output, confirm the wires are right then turn on.
- ★2. First connect the load of the DC output terminal, confirm it is right then electrify; if it is open circuit please turn off the power, wait for the electrical release, then put on the LED, or it will burn out the LED.
- ★3. this type of power supply is only limited to the use of LED lamps and lanterns, the input voltage range is AC 200-265V, the output voltage is DC25-42V, and current 1050mA±5% , the use environment temperature is -20 to +45 degrees, and the surface can not cover the heat insulation cotton and other items that obstruct the heat dissipation of the product, which conforms to the product Under the conditions of the environment, this product enjoys three years of free warranty.

## 9. Abnormal phenomenon and the appropriate solutions:

1. After installed the driver to the lighting first time, if not light please cut down the AC input and check:
  - a) If the DC output connect okay or not ;
  - b) If the DC output positive and negative electrode connect opposite, if the LED board welded opposite;
  - c) If the AC input connect okay or not.
2. After installed, LED light, but flicker, cut down the AC input, check the DC output side:
  - a) If the lighting overload, light load;
  - b) If the driver parameters and the actual parameters do not match.
3. When using the driver if there are questions or problems, please contact with our company in time, and feedback to us, we will help you to solve.

## 10. Statement:

Pictures and specifications only for reference.