

### General description:

PE281 is one of the constant current dimming LED driver developed by my 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.

The driver adopts silica gel heat conduction technology, which can withstand 55  $^\circ C$  high temperature.

## Specification:

	Model	PE281B2435	PE281B4225	PE281B4230	PE281B2450	PE281B1570				
	Output Voltage	12-24Vdc	25-42Vdc	25-42Vdc	12-24Vdc	6-15Vdc				
OUTPUT	Max Output Voltage	24Vdc	42Vdc	42Vdc	24Vdc	15Vdc				
	Non-load Output Voltage	27Vdc	45Vdc	45Vdc	27Vdc	19Vdc				
	Output Current	350mA 250mA		300mA	500mA	700mA				
	Output Power	4. 2W~8. 4W 6. 25W~10. 5W		7.5W~12.6W	6W~12W	4. 2W~10. 5W				
	Strobe Level	Lower flicker(8%)								
	Dimming Range	2~100%,								
	PWM Dimming Frequency									
	Current Accuracy	±5%								
	Ripple & Noise	=500mv p-p								
INPUT	Dimming Interface	Triac Leading edge/Tralling edge								
	Input Voltage Range	200-250Vac								
	Frequency	50/60Hz								
	Input Current	<0.072A	<0.08A	<0.08A	<0.08A	<0.077A				
	Power Factor	PF>0.9(at full load)	PF>0.9(at full load)	PF>0.9(at full load)	PF>0.9 (at full load)	PF>0.88(at full load)				
	THD	230Vac@THD <18% (at full load)								
	Efficiency(typ.)	77%	79%	79%	78%	77%				
	Inrush Current(typ.)	Cold start1.44A	Cold start1.54A	Cold start1.54A	Cold start1.32A	Cold start1.54A				
	Anti Surge	L-N: 1. 5kV								
	Leakage Current	<0.25mA/230Vac								
	Working Temperature	ta: 45 °C tc: 85 °C								
	Working Humidity	20 ~ 95%RH, non-condensing								
NVIRONMENT	Storage Temp., Humidity	-40~80 °C ,10~95%RH								
	Temp. Coefficient	±0.03%/°C(0-50)°C								
	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.								
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature $\ge$ 110°C, , auto recovers.								
	Over Load Protection	Shut down the output when rated power≥102%, auto recovers.								
	Short Circuit Protection	Shut down automatically if short circuit occurs, auto recovers.								
	Non-load Protection	Shut down the output if no load, auto recovers when load back to normal.								
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac								
	Isolation Resistance	I/P-O/P: 100M Ω /500VDC/25°C/70%RH								
	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13								
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3								
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547								
	Strobe Test Standard	IEEE 1789								
OTHERS	Dimension	55.5×39×23. 5/60mm(L×W×H/D)								
	Packing	PE bag								
	Weight(G.W.)	75g±10g								

Dimensions :



# Wiring:

The output wire: 20AWG red and black PVC cable ,length 200-230mm,wire stripping requirement:5-7mm

The input wire : 20AWG Brown Blue VDE double insulated wire, length 150-160mm, wire stripping requirement: 5-7mm **Compatibility:** 

Dimming system Model	Wring 1 sample	Wring 2 samples	Wring 3 samples	Dimmer Model	Wring 1 sample	Wring 2 samples	Wring 3 samples	Dimmer Model	Wring 1 sample	Wring 2 samples	Wring 3 samples
Leviton LNPWR-05B	NF	NF	NF	Panasonic WMY549	NF	NF	NF	BG DM400AP UK	NF	NF	NF
Siemens 5WG1 528-1DB01	NF	NF	NF	Siemens 5UH82223-NC01	NF	NF	NF	CLIPSAL 32E540LM	NF	NF	NF
JOBO dimming system	NF	NF	NF	Simon 45E201	NF	NF	NF	CLIPSAL 32E540UDM	NF	NF	NF
DALITEK DM802	NF	NF	NF	OPPLE P068102	NF	NF	NF	CLIPSAL 32E54TM	NF	NF	NF
Lutron QSGR-3P	NF	NF	NF	CABLOFIL VRCM2	NF	NF	NF	HPM CAT 400L	NF	NF	NF
ABB 6197/12-12-101-500	NF	NF	NF	CDN X6-TG02	NF	NF	NF	KAOYI KDT-450A	NF	NF	NF
Crestron DIN-1DIM4	NF	NF	NF	ELKO 315GLED	NF	NF	NF	LEGRAND 400T	NF	NF	NF
Schneide L5504D2Ar	NF	NF	NF	ELKO 316GLED	NF	NF	NF	LEGRAND 400L	NF	NF	NF
DAJIN DC-TG0405CP	NF	NF	NF	POL CAT634LM	NF	NF	NF	DIGINET DGLCDM400	NF	NF	NF
Lite-Puter EDX-F0411	NF	NF	NF	DETA Gr100 UK	NF	NF	NF				
Rmarks	Abbreviation: no flicker - NF, not compatible - NC, slight flicker - SL, flicker - F, strict flicker - SF										

Note: due to the different power of dimmer and dimming system, the compatibility will be different. Before purchase, it needs to confirm

with the business to ensure the best matching effect of the product.

## The use of guidance:

Note:

\*\* 1: please pay attention to the distinction between input and output, connect correctly, then power on

\* \*2: please connect first the load of the DC output, open the power supply after checking; in the constant current mode, if power on at open circuit, please turn off the power supply and can't connect the LED until the electric energy stored by the output release, or it may damage the LED;

\*\*3: this type of power supply is only limited to the use of the LED lamps and lanterns, the input voltage range is AC200-250V, the heat insulation cotton and other items that obstruct the heat dissipation of the product, which conforms to the product under the Specified output voltage, current range, the use environment temperature is -20-45 degrees, and the surface can not cover the conditions of the environment, this product enjoys three years of free warranty.

### The abnormal conditions and the corresponding treatment methods:

1, the LED lamp doesn't bright after the dimming driver is connected at the first time , please turn off the AC input and check as follow:

a) Whether or not DC output bad contact;

b)Whether DC output polarity is reversed, or the LED board is welded anti;

c)Whether AC input is bad contact; test after eliminating these failures.

- 2, the device has good connection, LED lights, but the LED flicker, please turn off the AC input, then check the DC output:
- a) overload, under load.

b) Whether or not the parameters and actual parameters match.

3, please timely communicate with us if you any questions in the using, we will try our best to solve the problems with you.

### Statement:

The pictures and specifications is for reference only, in kind prevail, specifications are subject to change with further notice.