Product Datasheet

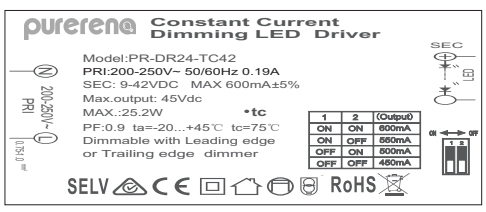
Dimming LED Driver(Constant Current)

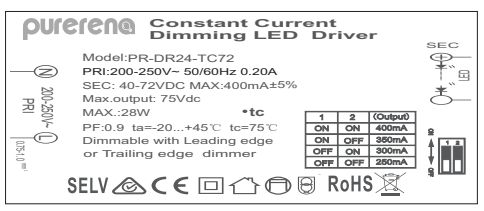
PR-DR24-TC42
PR-DR24-TC72

PR-DR24-TC42 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, long life and other characteristics.

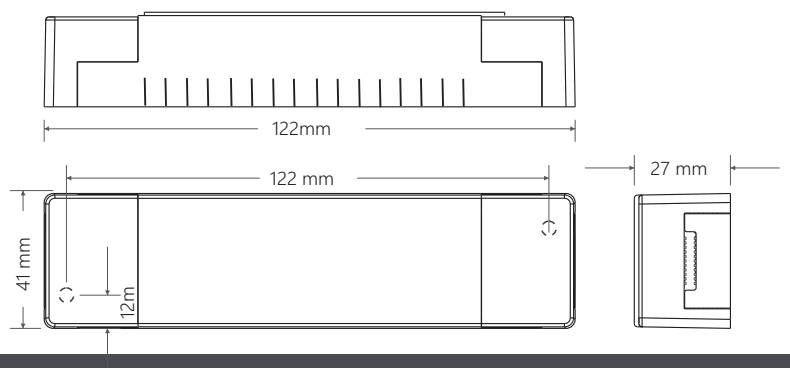
CB RoHS SELV CE Class 2

Labels:





Dimensions:



Features:

- LED phase-cut dimming driver, dimming range 1-100%
- Suitable for RPC MOSFET dimmer and FPC TRAIC dimmer
- Active PFC
- Protections:short circuit/over voltage/over current
- Natural cold wind
- Big terminal locked by screw
- Suitable for LED home lighting and commercial lighting
- Safe no load protection device
- Economic and convenient installation
- conform to the world lighting equipment safety standards
- Protection class II
- Three years warranty

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Specifications:

Model		PR-DR24-TC42	PR-DR24-TC72
OUTPUT	Output Voltage	9-42Vdc	40-72Vdc
	Max Output Voltage	42Vdc	72Vdc
	Non-load Output Voltage	45Vdc	75Vdc
	Output Current	450/500/550/600mA	250/300/350/400mA
	Output Power	4.05W~25.2W	12W~28.8W
	Strobe Level	Lower flicker(2%)	
	Dimming Range	1~100% ,	
	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	<0.16A	<0.17A
	Power Factor	PF>0.92(at full load)	PF>0.93(at full load)
	THD	230Vac@THD <18% (at full load)	
	Efficiency(typ.)	85%	83%
	Inrush Current(typ.)	Cold start1.54A	Cold start1.32A
	Anti Surge	L-N: 1.5kV	
	Leakage Current	<0.25mA/230Vac	
ENVIRONMENT	Working Temperature	ta: 45 °C tc: 85 °C	
	Working Humidity	20 ~ 95%RH, non-condensing	
	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 ≥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: 100MΩ/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	122×41×27mm(L×W×H)	
	Packing	Carton	
	Weight(G.W.)	95g±10g	

LED Current Selection

DIP switch for 4 optional currents' quick selection(see the table below).

PR-DR24-TC42	DIP Switch					PR-DR24-TC72	DIP Switch				
	Output Current	450mA	500mA	550mA	600mA		Output Current	250mA	300mA	350mA	400mA
	Output Voltage	9-42V	9-42V	9-42V	9-42V		Output Voltage	40-672V	40-72V	40-72V	40-72V

* After current setting by DIP switch, power off and then power on to make the new current effective.

* E.g. LED 3.2V/pcs: 9-24V can power 3-7pcs LEDs in series, 9-42V can power 3-12pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

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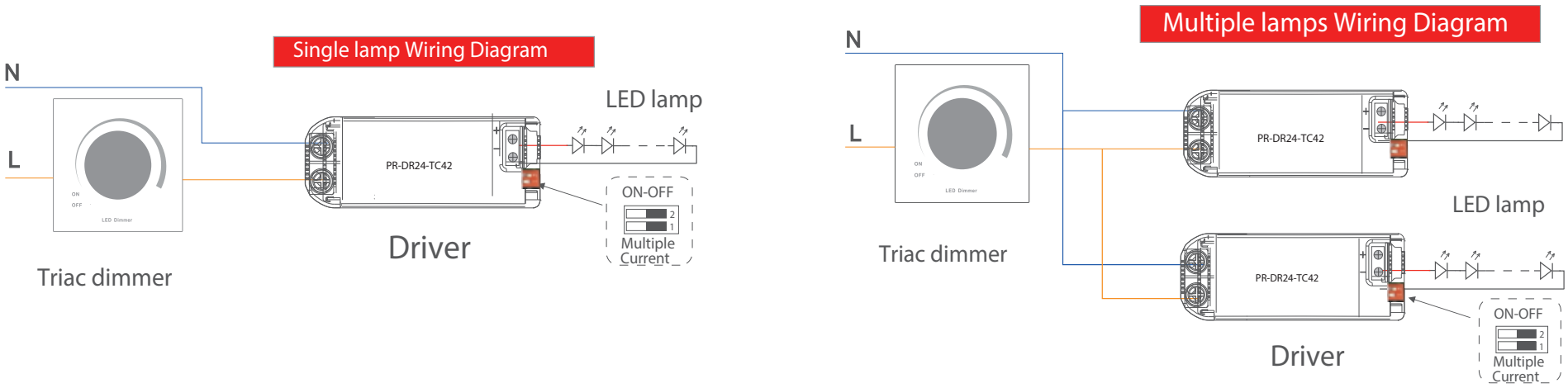
Wiring Diagram:



Wiring:

The input terminal: wire gauge22AWG-14AWG (0.315mm2– 2.06mm2)wire strippingrequirement:9-10mm. The output terminal:wire gauge 22AWG-12AWG (0.315mm2– 3.15mm2)wire stripping requirement:6-7mm.

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										

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