

## Phase cut /Triac dimmable driver-PWM output 30W





# Features

Output:	Constant Voltage		
Range:	100-277VAC		
PFC design:	Built-in active PFC function		
Efficiency:	Up to 79%		
Protections:	Short circuit/ over load/ over temperature		
Heat dissipation:	Cooling by free air convection		
Waterproof performance:	Full protection iron housing, for dry, damp & wet location		
Dimming function:	Phase dimming: work with Forward phase, MLV and Reverse phase, ELV, TRIAC dimmers.		
Dimming range:	0-100%		
Application:	Suitable for the application of LED lighting		
Warranty:	2 years warranty		
Others:	PWM output, High power factor PF≥0.95, flicker-free dimming		

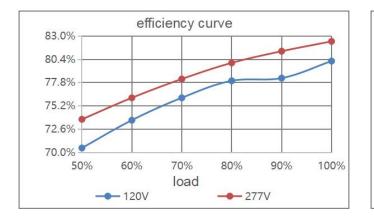


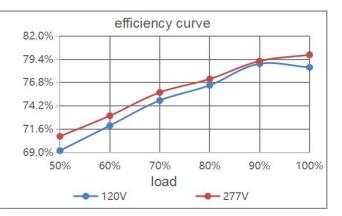
# Specification

Model		PYJD301200SC	PYJD302400SC	
Certificate		UL / cUL / FCC / Class 2 / CE / Class P / SELV / RoHS / Reach		
Output	DC Voltage	12V	24V	
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	2.5A	1.25A	
	Rated power	30W		
	Load Regulation	±2%	±1%	
Input	Voltage Range	100-277VAC		
	Frequency Range	47 - 63Hz		
	Power Factor (Typ.)@ full load	0.99@120VAC 0.98@277VAC	0.99@120VAC 0.97@277VAC	
	THD(Typ. ) @ full load	<20%		
	Efficiency(Typ.) @ full load	79%@120VAC 277VAC		
	AC Current (Max.)	0.5A@100VAC		
	Inrush Current (Typ.)	7A, 420us@50% 120VAC 277VAC		
	Leakage current	<0.5mA		
Protection	Short Circuit	Shut down o/p voltage, re-power on to recover after fault condition is removed		
	Over Load	≤120% shut down o/p voltage, recovers automatically after fault condition is removed		
	Over temperature	Shell surface temp.100 $^\circ\!{\rm C}\pm10^\circ\!{\rm C}$ shut down o/p voltage, automatically recover after		
		cooling		
Environment	Working TEMP.	-40∼+60°C (see below derating curve)		
	Working Humidity	20 - 95%RH non-condensing		
	Storage TEM.,Humidity	-40 - +80°C,10 - 95% RH non-condensing		
	TEMP.coefficient	±0.03%/°C(0 - 50°C)		
	Vibration 10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,		2min. each along X,Y,Z axes	
Safety & EMC	Safety standards UL8750 CAN/CSA-C22.2 No.250		)	
	Withstand voltage	I/P-O/P:1.8KVAC I/P-FG:1.8KVAC O/P-FG:1.8KVAC(US)		
	Isolation resistance	I/P-O/P: 100MΩ / 500VDC / 25°C / 70% RH		
	EMC Emission	FCC Part 15 ,Subpart B(US)		
Others	Net Weight	0.90Kg		
	Dimension	165*95.4*43.8mm (L*W*H)		
	Packing 415*245*270mm 20 pcs/CTN 19.8KG/CTN			
Notes	<ol> <li>All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature.</li> </ol>			
	<ol> <li>Tolerance: includes set up tolerance and load regulation .</li> </ol>			

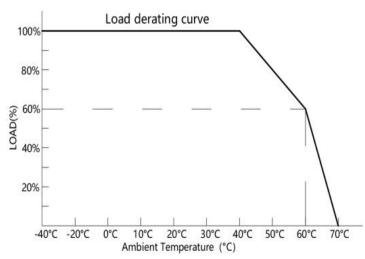


# Efficiency Curve (efficiency vs output load)





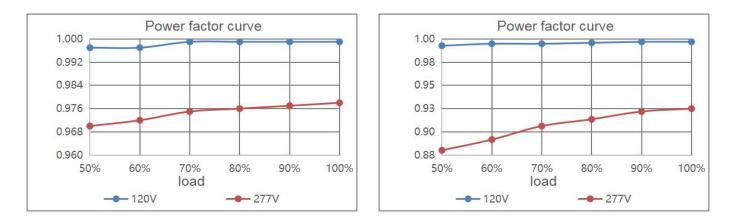
## Derating Curve (output load vs TEMP.)



1. To extend their life, please refer to the Derating Curve and derate according to the temperature.

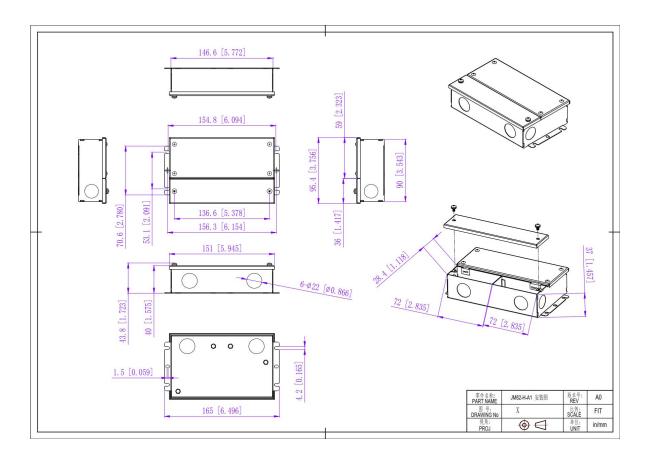
 Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

## Power factor curve





## **Mechanical Specification**



### 12V&24V Version

- 1. Input wire 18AWG, Black and White to be connected to AC L and N, Green wire go ground.
- 2. Output wire 18AWG, Red to LED Positive side (+), Black to LED Negative side (-).
- 3. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

#### Warm tips:

1. Any other requests for, we can customized.



## **Dimming Operation and Connecting Diagram**

#### **TRIAC/Phase cut dimming**

- 1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
- 2. Working with Forward phase, MLV and Reverse phase, ELV, TRIAC dimmers.
- 3. Min. loading is about 10%.
- 4. Please try to use dimmers with power at least 1.5 times as the output power of the driver.



### Triac



### Instruction

- 1. This driver should be installed by qualified and professional person.
- 2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
- 3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
- 4. If driver Cannot work normally, don't maintain privately.

Have any questions, please contact Zhuhai Shengchang.

Please visit our website or contact us for more information! www.scpower.net.cn/en