

**PWM** output

## **SDD-DIM** series

Whole Family: SDD-xx060-DIM 12V / 24V / 48V - 60W



MAX

# FC Class P SELV RoHS Reach





The driver is inside

#### **Features**

Output: Constant Voltage

Input Range: 120VAC

PFC design: Built-in active PFC function

Short circuit/ Over load/ Over temperature Protections:

Heat dissipation: Cooling by free air convection Waterproof performance: For dry and damp locations (US)

Design features: 1) Fine-tune output voltage can be adjusted slightly

2) Preset dimmer with on/off switch

3) 3-Way switches

4) Eliminated compatibility issues between drivers and switches

0.3%-100% Dimming range:

Suitable for the application of LED lighting Application:

Warranty: 2 years warranty

Others: 16 KHZ PWM output with dimming curve is a gamma 2.2 curve Flicker-free

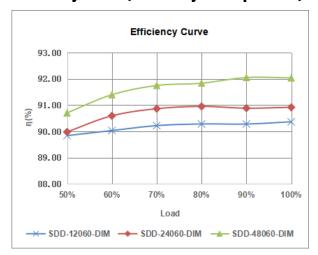


## **Specification**

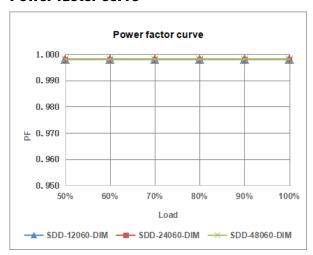
Model		SDD-12060-DIM	SDD-24060-DIM	SDD-48060-DIM	
Certificate		UL / cUL / FCC / Class P / SELV / RoHS / Reach			
Output	DC Rate Voltage	12V (12V-13.5V adjust by knob)	24V (24V-26V adjust by knob)	48V (48V-50V adjust by knob)	
	Voltage Tolerance	±0.5V			
	Load Regulation	≤2%	≤1%	≤1%	
	Line Regulation	≤0.5%			
	Rated current	5A	2.5A	1.25A	
	Rated power	60W	60W	60W	
Input	Voltage Range	120VAC			
	Frequency Range	60Hz			
	Power Factor @ full load	0.99			
	THD(Typ.) @ full load	≤10%			
	Efficiency @ full load	90.0%	91.0%	92.0%	
	AC Current (Max.)	0.6A	0.6A	0.6A	
	Inrush Current (Typ.)	50A, 150us@50% lpeak			
	Leakage current	<0.5mA			
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed			
	Over Load	≥110% Hiccup mode, recovers automatically after fault condition is removed			
	Over temperature	Shell surface temperature 100 °C ±10 °C shut down o/p voltage, automatically recover after			
	Over temperature	cooling			
Environment	Working TEMP.	-40~+50°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, 2G 12min./1 cycle, period for 72 min. each along X,Y,Z axes			
Safety & EMC	Safety standards	UL8750 CAN/CSA-C22.2 No.250.13 (US)			
	Withstand voltage	I/P-0/P:1.8KVAC I/P-F/G:1.8KVAC 0/P-F/G:0.5KVAC (US)			
	Isolation resistance	I/P-0/P:100M Ω / 500VDC / 25°C / 70% RH			
	EMC Immunity	FCC/ICES do not request this test (US)			
	EMC Emission	FCC Part15 Subpart B ANSI C63.4:2014 (US)			
Others	Net Weight	0.25KG			
	Dimension	105*54*51mm / 4.134"x2.126"x1.996" (Inch)			
	Packing				
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25 ℃ of ambient temperatu				
	2. Tolerance: includes s	et up tolerance and load regu	lation .		



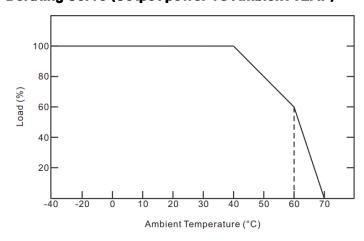
#### **Efficiency Curve (efficiency vs output load)**



#### **Power factor curve**



## **Derating Curve (Output power VS Ambient TEMP)**

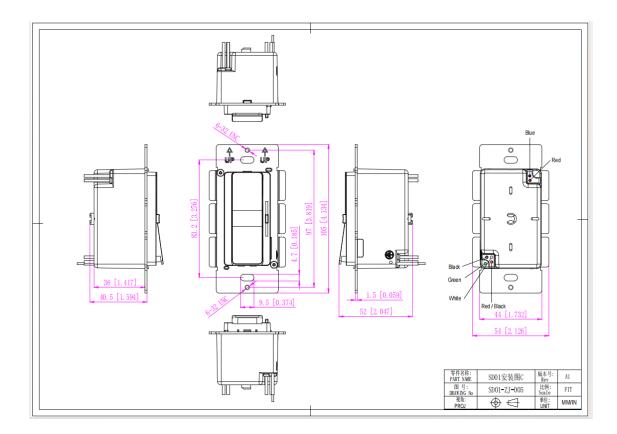


- 1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
- 2. The output current of the LED driver should be selected according to the rated current of the lamp and the ambient temperature.

  Normally, we recommend the power supply to reserve a certain amount of load to extend LED driver's life.



## **Mechanical Specification**



American Wire Gauge					
	SD01				
Input wires	Black cable (L), Red black cable (L1) , White cable (N) and Green cable (FG) (4*18AWG)				
Output wires	Red cable (V+), Blue cable (V-) (2*18AWG)				

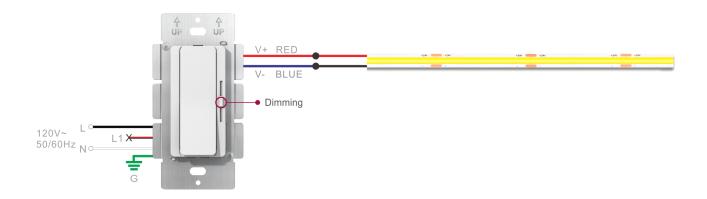
## Warm tips:

- 1. Any other requests, we can customize.
- 2. Please ensure that the connection is correct.

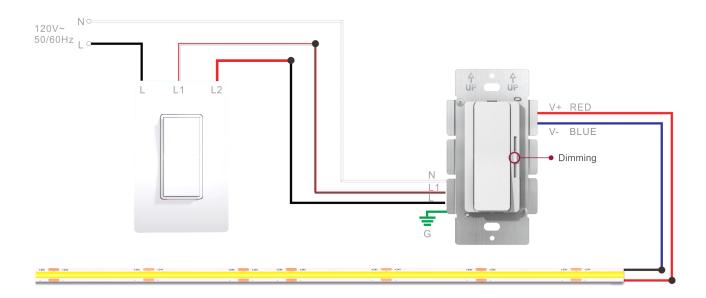


## **Dimming Operation and Connecting Diagram**

#### ①Wiring diagram of SDD-DIM model for standard dimming system



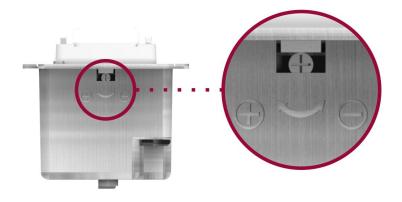
#### ② Wiring diagram of SDD-DIM model for 3-way dimming system





### Knob to adjust the voltage

Clockwise rotation of the high voltage





12V output volt. : 12-13. 5V 24V output volt. : 24-26V 48V output volt. : 48-50V

Have any questions, please contact with SCPOWER/SURETRON.

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

#### **Instructions**

- 1. This driver+dimmer 2 in 1 should be installed by qualified and professional person.
- 2. Please make sure the driver+dimmer 2 in 1 is installed with adequate ventilation around it to allow for heat dissipation.
- 3. Ensure that connection is correct to avoid LED light or driver+dimmer 2 in 1 be damaged.
- 4. If the driver+dimmer 2 in 1 cannot work normally, don't maintain privately.