

Driver+ Dimmer (2 in 1) LED Constant Voltage Driver SDD-DIM series PWM output

SDD-DIM series EDD120-12DC

Whole Family: SDD-xxxxx-DIM 12V - 120W 24V / 48V - 160W



Class P

SELV

RoHS



The driver is inside

Features

Output:	Constant Voltage
Input Range:	120VAC
PFC design:	Built-in active PFC function
Protections:	Short circuit/ Over load/ Over temperature
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 function 3) 3-Way switches 4) Eliminated compatibility issues between drivers and switches
Dimming range:	0.3%-100%
Application:	Suitable for the application of LED lighting
Warranty:	5 years warranty
Others:	20KHZ PWM output with dimming curve is a gamma 2.2 curve Flicker-free

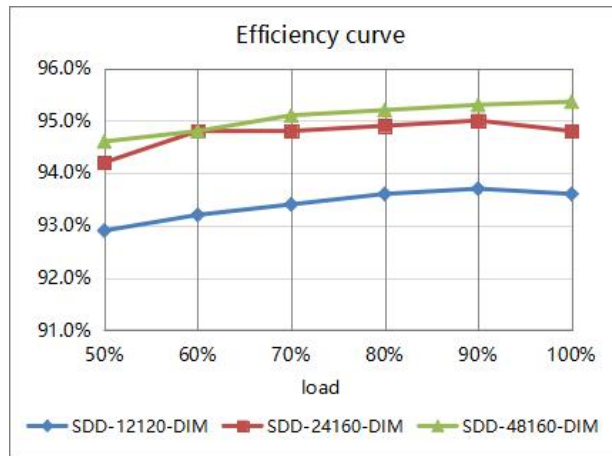
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Specification

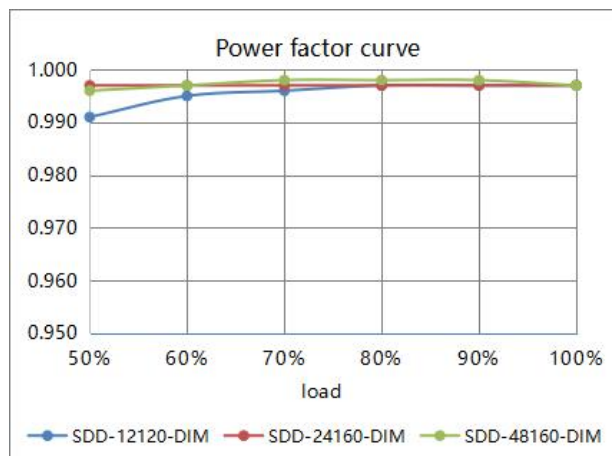
Model		SDD-120-12-DIM	SDD160-24-DIM	SDD-48160-DIM
Certificate		UL / cUL / FCC / Class P / SELV / RoHS / Reach		
Output	DC Rate Voltage	12V (12V-13.5V adjust by knob)	24V (24V-26V adjust by knob)	48V (48V-50V adjust by knob)
	Voltage Tolerance	±0.5V		
	Load Regulation	≤2%	≤1%	≤1%
	Line Regulation	≤0.5%		
	Rated current	10A	6.67A	3.33A
	Rated power	120W	160W	160W
	Voltage Ripple	3%	2%	1%
Input	Voltage Range	120VAC		
	Frequency Range	60Hz		
	Power Factor @ full load	0.99		
	THD(Typ.) @ full load	≤10%		
	Efficiency @ full load	93.3%	94.5%	95%
	AC Current (Max.)	1.1A	1.5A	1.5A
	Inrush Current (Typ.)	54A, 290us@50%Ipeak		
	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℃±10℃ shut down o/p voltage, automatically recover after cooling		
Environment	Working TEMP.	-40~+60℃ (see below derating curve)		
	Working Humidity	20 - 95%RH non-condensing		
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing		
	TEMP.coefficient	±0.03%/℃(0 - 50℃)		
	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-O/P:1.8KVAC I/P-F/G:1.8KVAC O/P-F/G:0.5KVAC (US)		
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 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	0.27KG		
	Dimension	105*54*52mm / 4.134"x2.126"x2.047" (Inch)		
	Packing			
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25℃ of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation .			

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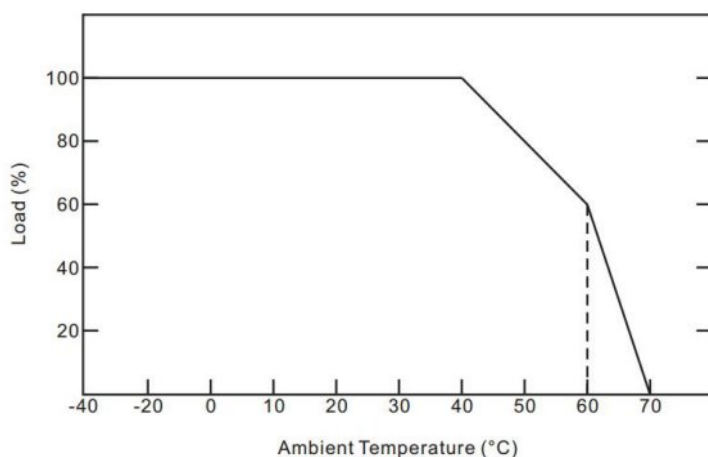
Efficiency Curve (efficiency vs output load)



Power factor curve



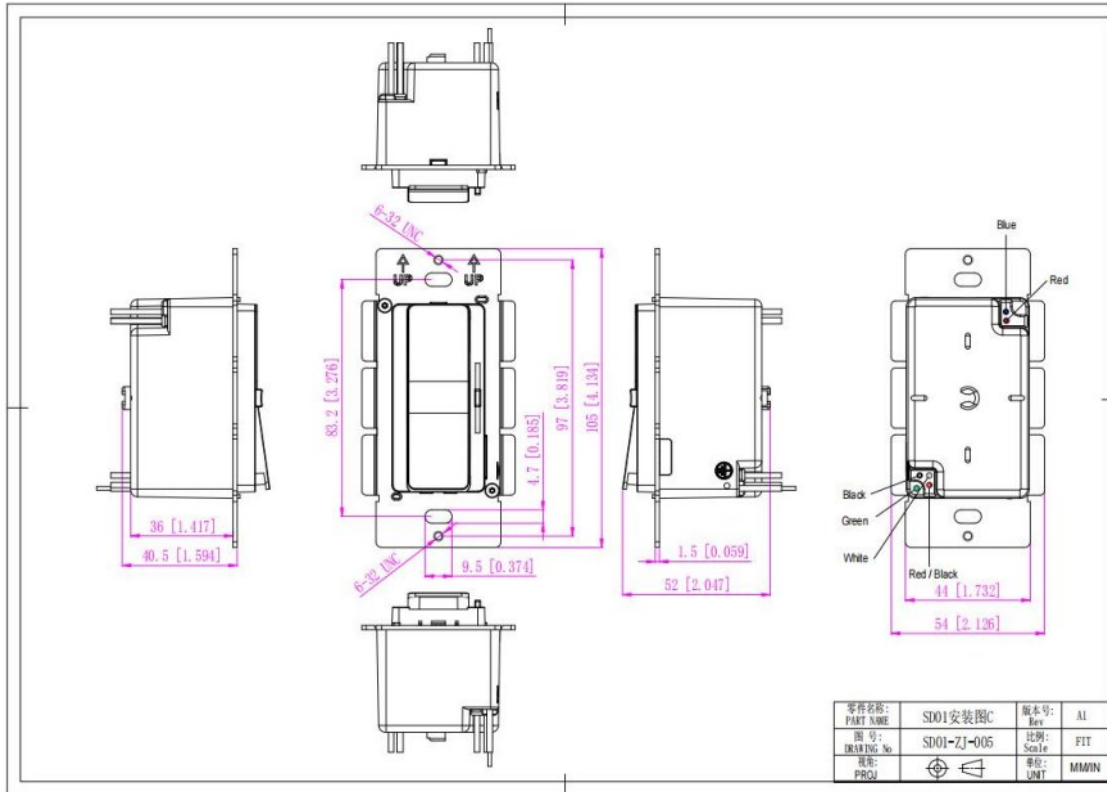
Derating Curve (Output power VS Ambient TEMP)



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

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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-) (12V:2*16AWG, 24V/48V:2*18AWG)

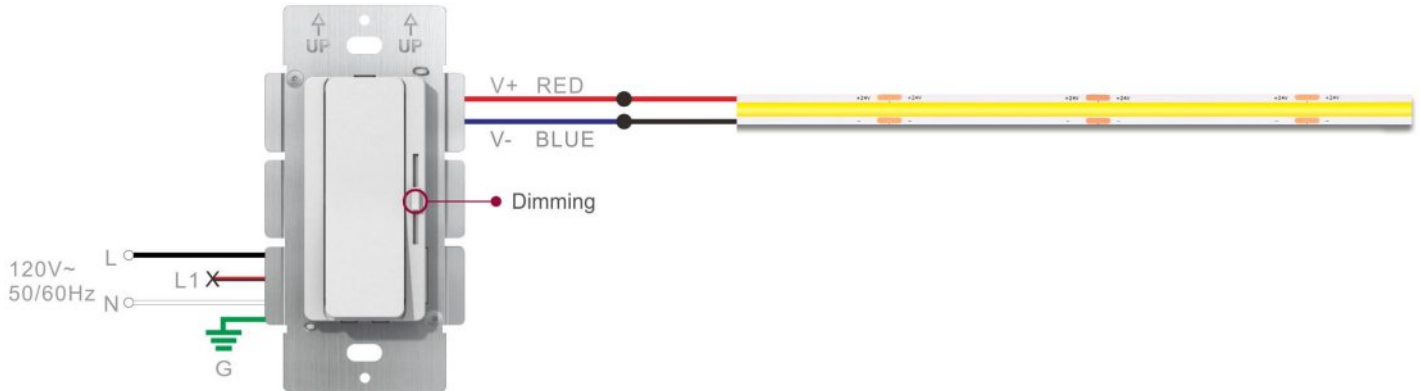
Warm tips:

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

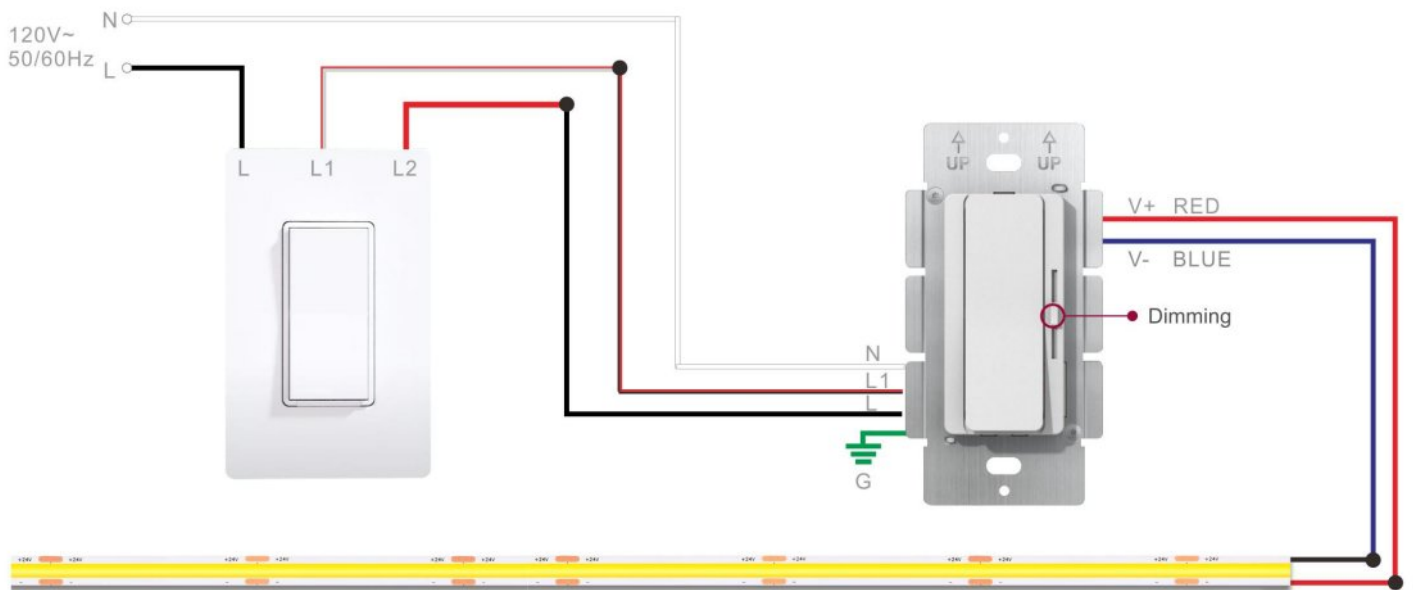
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Dimming Operation and Connecting Diagram

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



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



Note: Dimmer's panel is not replaceable.

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Knob to adjust the voltage

Clockwise rotation of the high voltage

**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.

Have any questions, please contact with SCPOWER/SURETRON.

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