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

c UL us LISTED E495946 FC Class P SELV RoHS Reach

Features

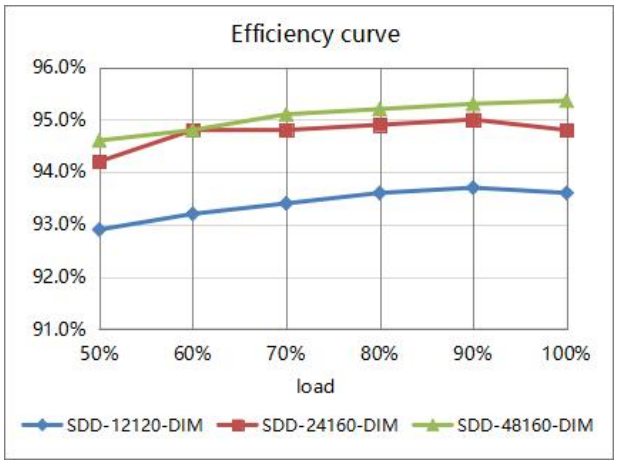
Output:	Constant Voltage
Input Range:	120VAC
PFC design:	Built-in active PFC function
Protections:	Short circuit/ Over load/ Over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	For dry and damp locations (US)
Design features:	1) Fine-tune output voltage can be adjusted 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

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

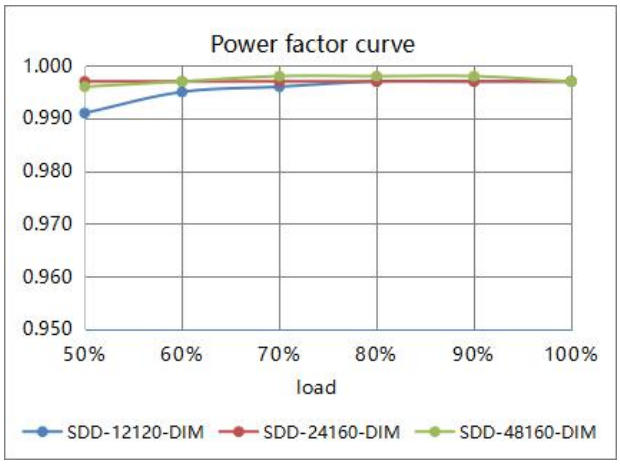
Specification

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 .			

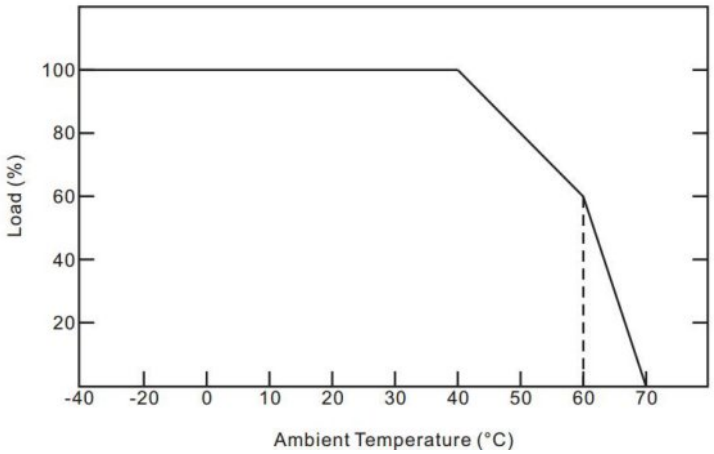
Efficiency Curve (efficiency vs output load)



Power factor curve

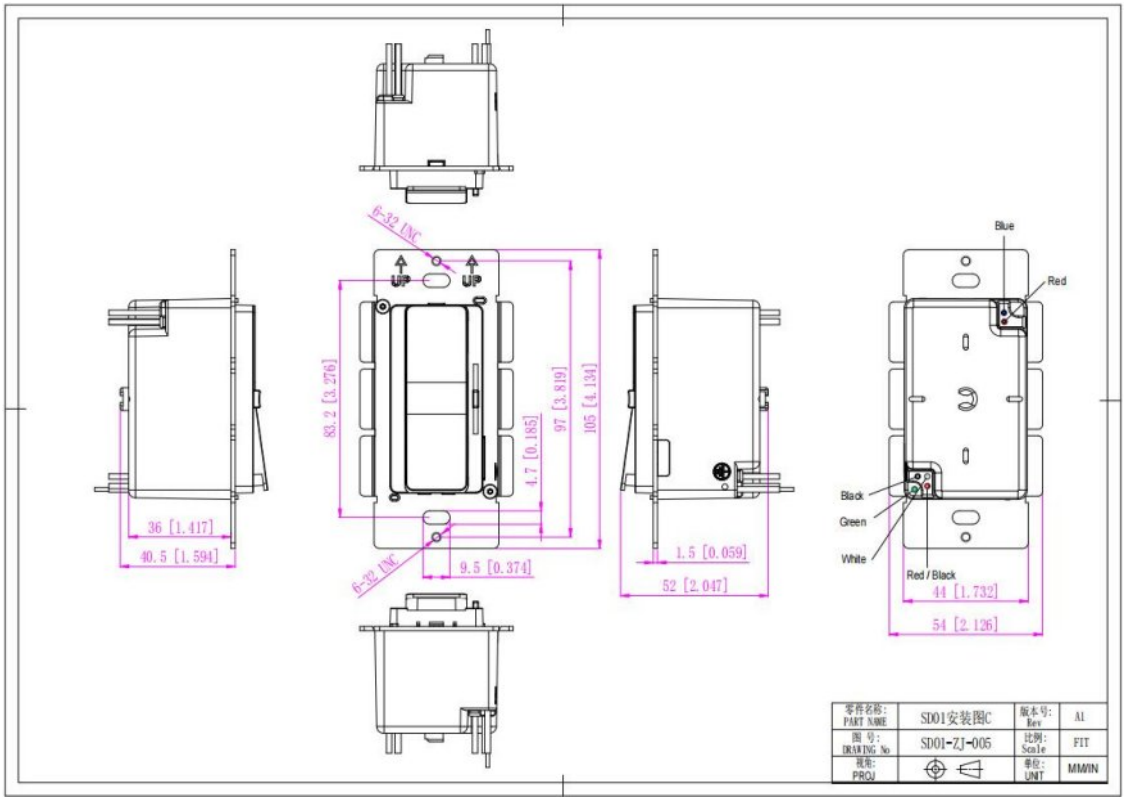


Derating Curve (Output power VS Ambient TEMP)



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



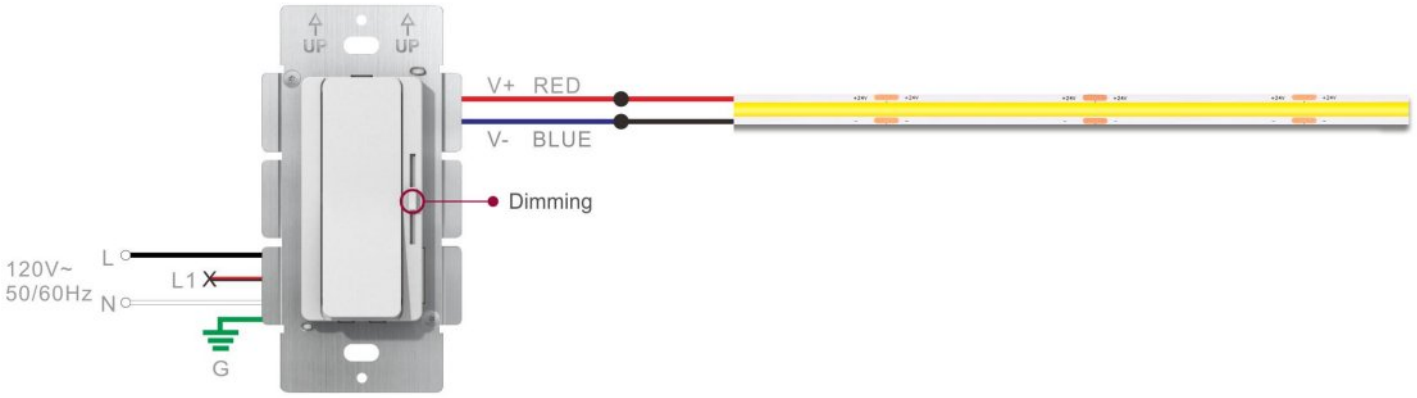
American Wire Gauge	
	SD01
Input wires	Black cable (L), Red black cable (L1) , White cable (N) and Green cable (FG) (4*18AWG)
Output wires	Red cable (V+), Blue cable (V-) (12V:2*16AWG, 24V/48V:2*18AWG)

Warm tips:

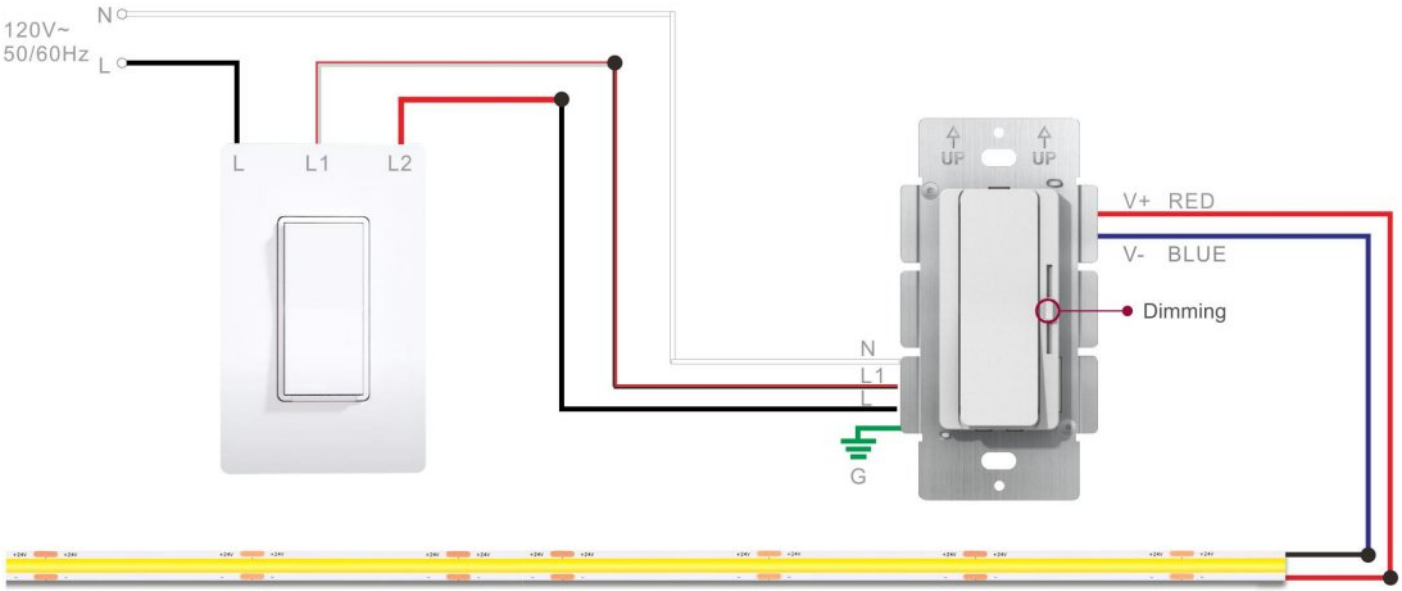
1. Any other requests for, we can customize.
2. Please ensure that the connection is correct.

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



Note: Dimmer's panel is not replaceable.

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