

## DD-DIM SERIES

LED Dimmer + Driver Combo DD-24096-DIM is a 2-in-1 constant voltage driver and dimmer for LED lighting, offering flicker-free 20kHz PWM output and a wide 0.3%-100% dimming range. It features adjustable voltage, color temperature control, and eliminates compatibility issues with switches. With high efficiency (up to 92%), built-in active PFC, and multiple protections, it ensures reliable performance. Designed for dry and damp locations, it operates silently via free air convection.

## 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	<ol style="list-style-type: none"><li>1. Fine-tune output voltage can be adjusted slightly</li><li>2. Preset dimmer with on/off switch</li><li>3. 3-Way switches</li><li>4. Dimming and color temperature adjustment function.</li><li>5. Eliminated compatibility issues between drivers and switches</li></ol>
DIMMING RANGE	0.3%-100%
APPLICATION	Suitable for the application of LED lighting
WARRANTY	5 years warranty
OTHERS	16KHZ PWM output with dimming curve is a gamma 2.2 curve   Flicker-free



The driver is inside



Class 2 TYPE HL SELV RoHS



ICES-005

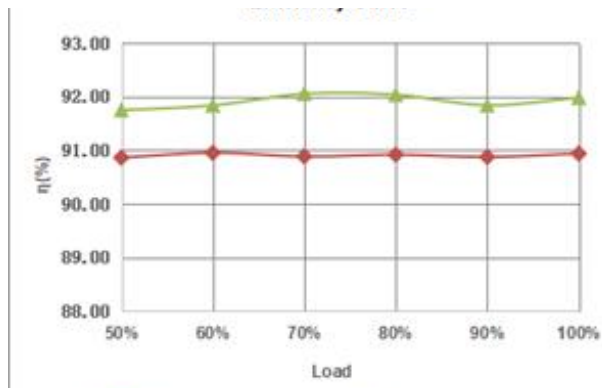


Class P

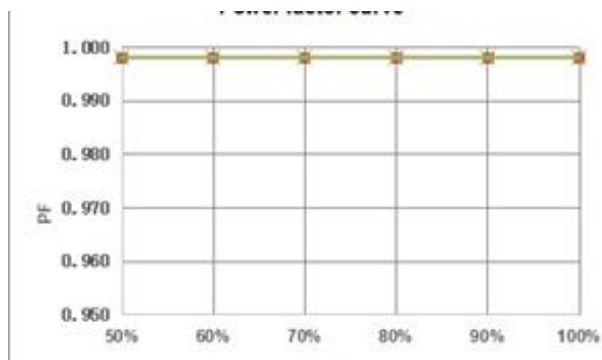
## SPECIFICATIONS

Model		DD-12096-DIM	DD-24096-DIM	DD-48096-DIM
Certificates		UL / cUL / FCC / Class P / SELV / RoHS / Reach		
Output	DC Voltage	24V (24V-26V adjust by knob)	48V (48V-50V adjust by knob)	
	Rated Current	4A	2A	
	Rated Power	96W	96W	
	Voltage Tolerance	±0.5V		
	Load Regulation	≤1%	≤1%	
	Line Regulation	≤0.5%		
Input	Frequency Range	60Hz		
	Voltage Range	120V		
	Power Factor (Typ.) @ full load	0.99		
	THD (Typ.) @ full load	≤10%		
	Efficiency (Typ.) @ full load	91%	92%	
	AC Current (Max.)	0.9A	0.9A	
	Inrush Current (Typ.)	50A, 150us@50% Ipeak		
	Leakage current	<0.5mA		
Protection	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.		
	Over Load	≥110% Constant current 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 cooling		
Environment	Working TEMP.	-40~+60°C (see below derating curve)		
	Working Humidity	20~95%RH, non-condensing		
	Storage TEMP. 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-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°C / 70% RH		
	EMC EMISSION	FCC/ICES do not request this test (US)		
Others	Net. Weight	0.25KG		
	Dimension	105*54*51mm / 4.134"x2.126"x1.996" (Inch)		
	packing			
Notes	1. All parameters if NOT specially mentioned are measured at 120VAC input , rated load and 25°C of ambient temperature. 2. To extend the driver's using life ,please reduce the loading at lower input voltage.			

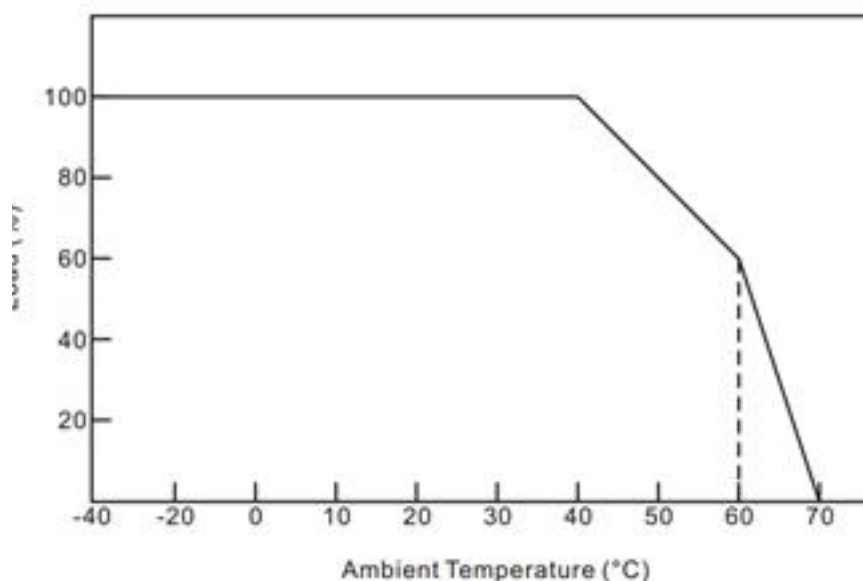
EFFICIENCY CURVE (EFFICIENCY VS OUTPUT LOAD)



POWER FACTOR CURVE



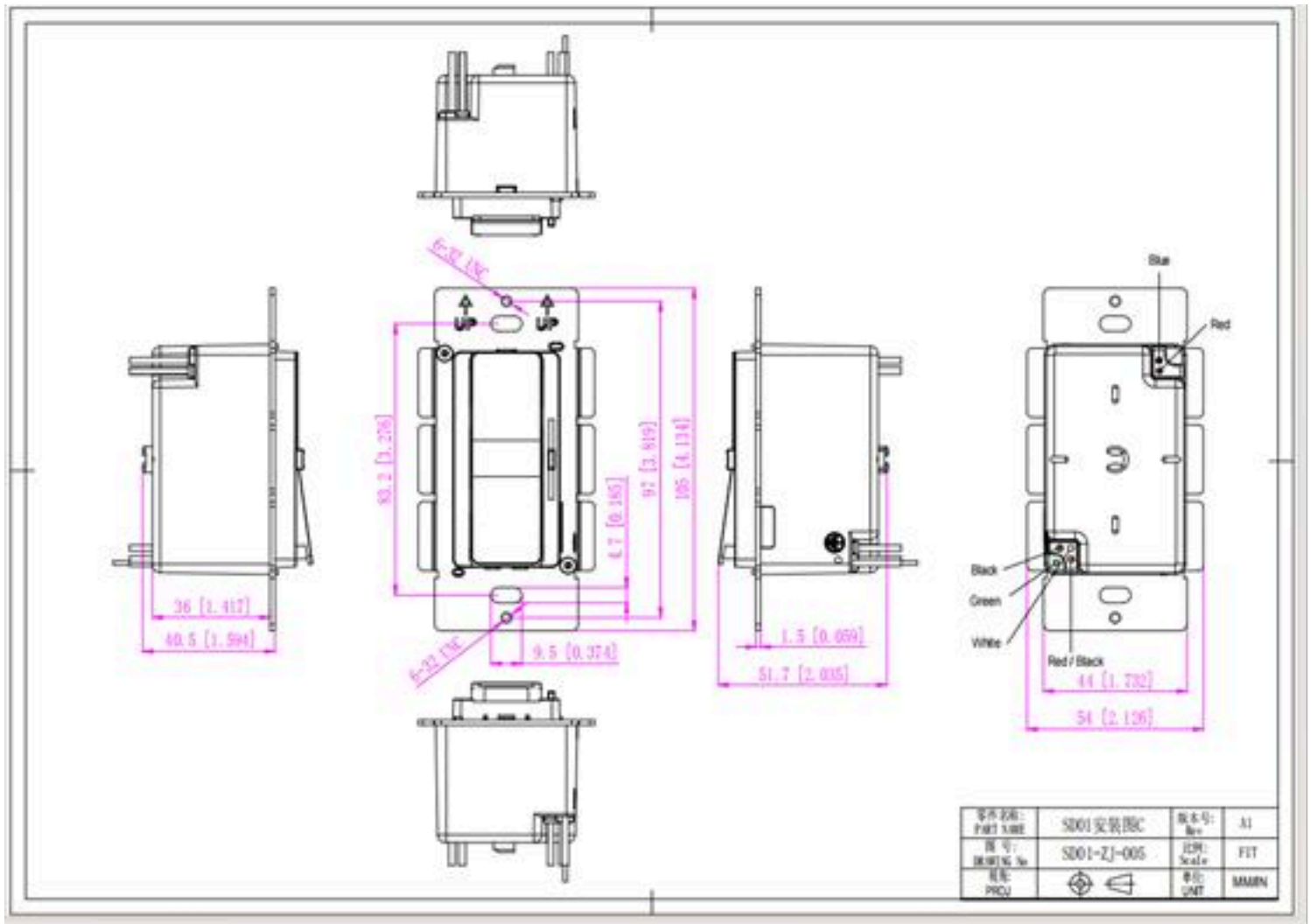
DERATING CURVE (OUTPUT LOAD VS TEMP.)



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

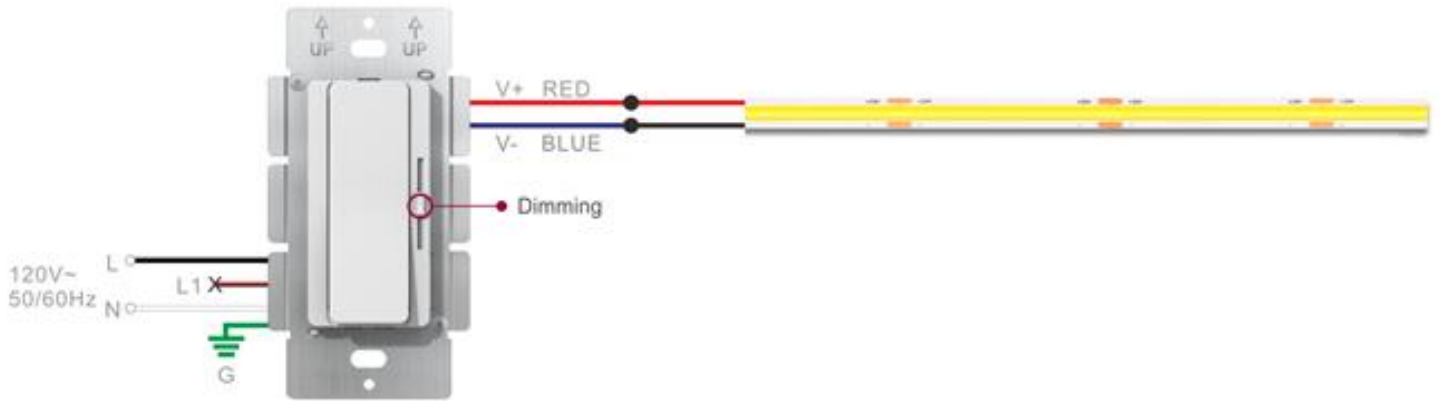
<b>Input Wires</b>	Black cable (L), Red black cable (L) , White cable (N) and Green cable (FG) (4*18AWG)
<b>Output Wires</b>	Red cable (V+) ,White/Gray cable(CW-),Yellow cable( WW-) (3*18AWG)

### Warm tips:

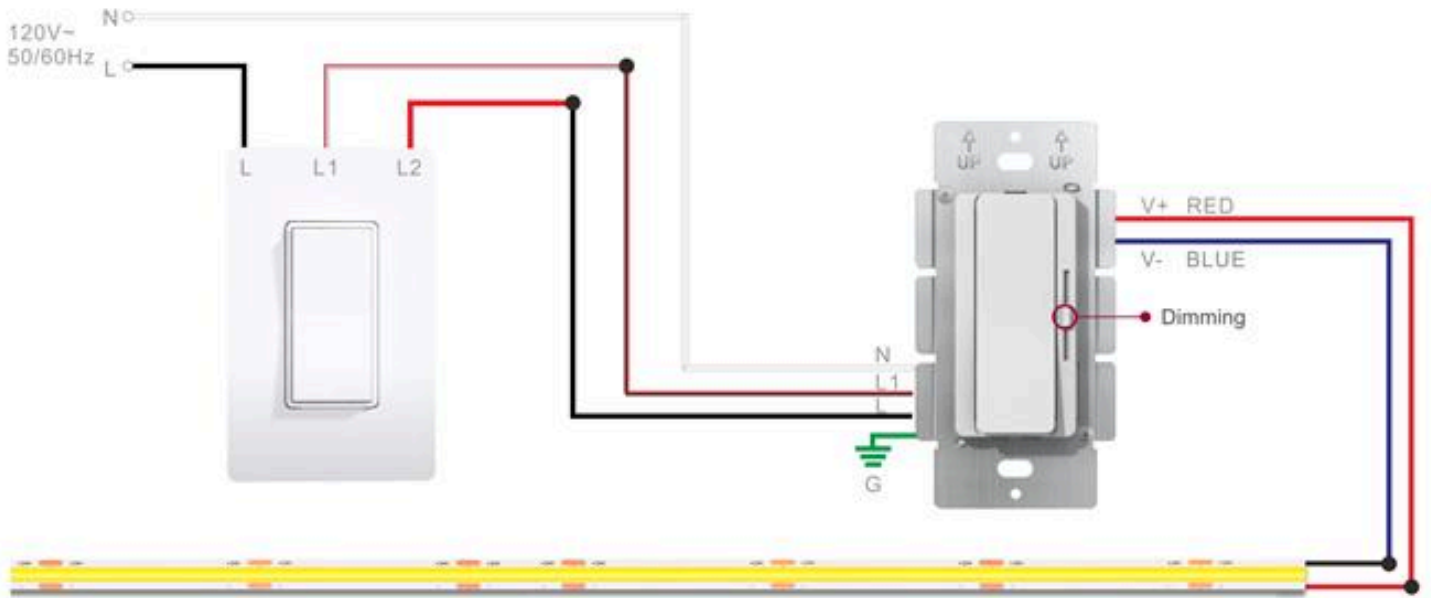
1. Any other requests, we can customize.
2. Please ensure that the connection is correct.

## CONNECTING DIAGRAM

### 1. DD-DIM model for standard dimming system



### 2. DD-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



### Instruction:

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 SUCCAR LED

Please visit our website or contact us for more information! [www.succarled.com](http://www.succarled.com)