

Driver+ Dimmer 2 in 1 Constant Voltage SDD-DIM series for 1CH Dimming PWM

SDD-DIM series

Whole Family: SDD-xx096-DIM 24V / 48V - 96W



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



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Specification

Model		SDD-24096-DIM	SDD-48096-DIM	
Certificate		UL / cUL / FCC / Class P / SELV / RoHS / Reach		
Output	DC Rate Voltage	24V (24V-26V adjust by knob)	48V (48V-50V adjust by knob)	
	Voltage Tolerance	±0.5V		
	Load Regulation	≤1%	≤1%	
	Line Regulation	≤0.5%		
	Rated current	4A	2A	
	Rated power	96W	96W	
Input	Voltage Range	120VAC		
	Frequency Range	60Hz		
	Power Factor @ full load	≥0.99		
	THD(Typ.) @ full load	≤10%		
	Efficiency @ full load	91.0%	92.0%	
	AC Current (Max.)	0.9A	0.9A	
	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 $^\circ\!\mathrm{C}$ ±10 $^\circ\!\mathrm{C}$ shut down o/p voltage, automatically recover after cooling		
	Working TEMP.	-40~+60°C (see below derating curve)		
Environment	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-O/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°C of 2. 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-) (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



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.