

Driver + Dimmer 2 in 1 Constant Voltage EDD-DC series 120W 160W **PWM output**

EDD160-DC

Models EDD160-12DC EDD160-24DC EDD160-48DC



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



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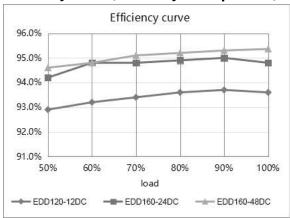
Specification

Model Certificate		ED160-12DC	EDD160-24DC	EDD160-48DC	
		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%lpeak			
	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 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				
	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 °C of ambient temperature.				
	2. Tolerance: includes set up tolerance and load regulation.				

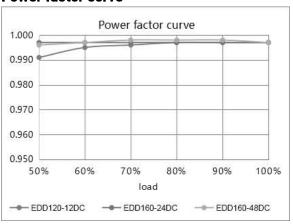


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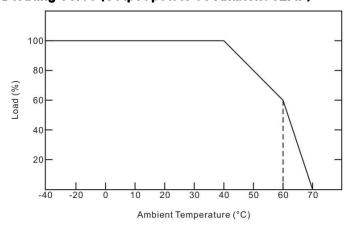
Efficiency Curve (efficiency vs output load)



Power factor curve



Derating Curve (Output power VS Ambient TEMP)



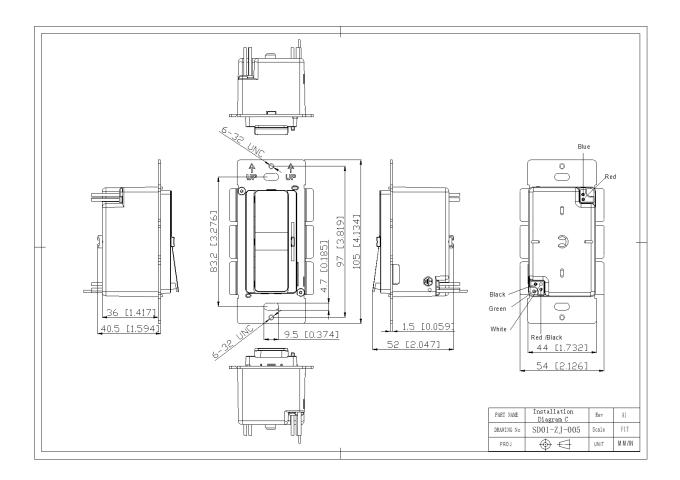
- 1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
- 2. The output current of the LED driver should be selected according to the rated current of the lamp and the ambient temperature.

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



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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:

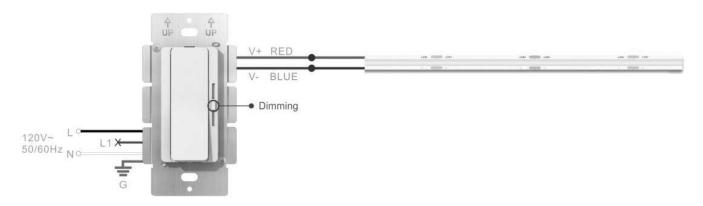
- 1. Any other requests for, we can customize.
- 2. Please ensure that the connection is correct.



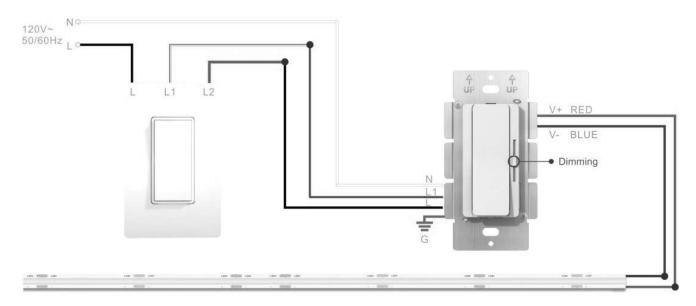
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Connecting Diagram

① EDD-DC model for standard dimming system



② EDD-DC model for 3-way dimming system



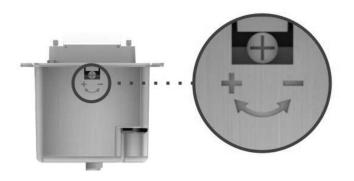
Note: Dimmer's panel is not replaceable.



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Knob to adjust the voltage

Clockwise rotation of the high voltage





Output Volt. Adjustment

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

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 EMCOD.

Please visit our website or contact us for more information! www.emcod.com