

Dimming Waterproof LED Driver(Constant Voltage)



LUMINGLITE

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LMDV-45-12 LMDV-45-24

LMDV-45-12/24

Feature

- Constant voltage design
- With soft-on and fade-in dimming function, enhancing your visual comfort.
- Dimming from 0~100%, down to 0.1%
- 0-10V dimming: 0-10V/Potentiometer/PWM 3 in 1
- No flicker
- SELV output(<60V)
- Faster star-up times≤1s
- No load power consumption≤2W
- Open circuit, short circuit, overload protection
- Efficiency :83%(AC230 full load)
- 5 years warranty
- Applied to LED advertising signs,cabinet



Technical Specs



	LMDV-45-12	LMDV-45-24
OUTPUT		
Output Voltage	12Vdc	24Vdc
Output Voltage Range	12Vdc±5%Vdc	24Vdc±5%Vdc
Output Current	3.75A Max	1.875A Max
Output Power	45W	
Output Power Range	0-45W	
Dimming Range	0~100%, down to 0.1%	
Output Ripple & Noise	≤600mV	
PWM Frequency(max)	20KHz	
INPUT		
Input Voltage Range	200Vac-240Vac	
Input Frequency Range	50 ~ 60HZ	
Input Current	≤0.3A(200-240Vac)	
Surge Current (cold start)	46A @230Vac	
Power Efficiency (typ)	83%	
PF	>0.95	
Leakage Current	<0.75mA/240Vac	
PROTECTION		
Over-Current Protection	Shut down the output when current load ≥ 110% , and recover automatically.	
Short-Circuit Protection	Hiccup Mode and recover automatically.	
Over-Voltage Protection	Shut down the output when non-load voltage ≥13V, and recover automatically.	Shut down the output when non-load voltage≥ 26V, and recover automatically.
ENVIRONMENT		
Working Temperature	-30°C~+50°C	
Working Humidity	10%~95%RH	
Approved Enviroments Location	for dry, damp ,wet locations	
Storage Temperature	~35°C~+65°C	
Storage Humidity	10% ~95%RH	
IP Rating	IP67(note 1)	
Vibration	10~500Hz, 1.0mm, 15 minutes(for X,Y,Z each axis)	
Tcase	+85°C	
SAFETY&EMC		
LVD	EN61347-1,EN61347-2-13,EN62493	
Dielectric Strength (Hi-Pot)	I/P-O/P	3.75KVAC/ 5mA/ 1min
	I/P-Case	1.5KVAC/ 5mA/ 1min
Insulation Resistance	100MΩ / 500VDC/ 1min	
Grounding Resistance	≤0.5Ω	
EMC	EN55015,EN61000-3-2,EN61000-3-3,EN61547	
OTHERS		
MTBF	200Khrs. MIL-HDBK-217F(25°C)	
LIFE TIME	50,000 hours at Tc ≤ 80°C maximum case hot spot temperature	
Dimmer Compatibility	0/1-10V Dimming	
Minimum load available for Dimming (Use DVCL-153P)	5%	
Dimensions	239*35*20mm(L*W*H)	
Weight	0.33 kg	
Outer Box Specifications	510*275*175mm(L*W*H) / 50pcs/ctn	
	Total 5 layer, each layer 10 pcs / G.W17.4kg/N.W16.5KG(1±10%) kg	

Remarks:

Note 1: IP67 can be used in dry, damp, wet locations. Avoid installing in submerged environments or applications where drivers will come into direct contact with prolonged flowing or dipping water.
 Test environment temperature: 25 ± 2°C;
 Ripple and noise measurement methods: terminal to parallel 47uF electrolytic capacity and 0.1uF ceramic capacity, in 20 MHz Bandwidth measurement.
 "The driver is suitable for connecting resistor current-limiting LED fixture (e.g. LED strip). The inrush current will be dozens of times increased if connecting built-in constant current IC current-limiting LED fixtures, the driver will activate the overloaded protection (hiccup flickering)."

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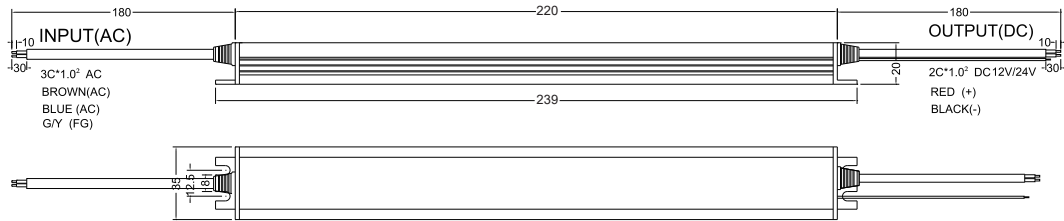
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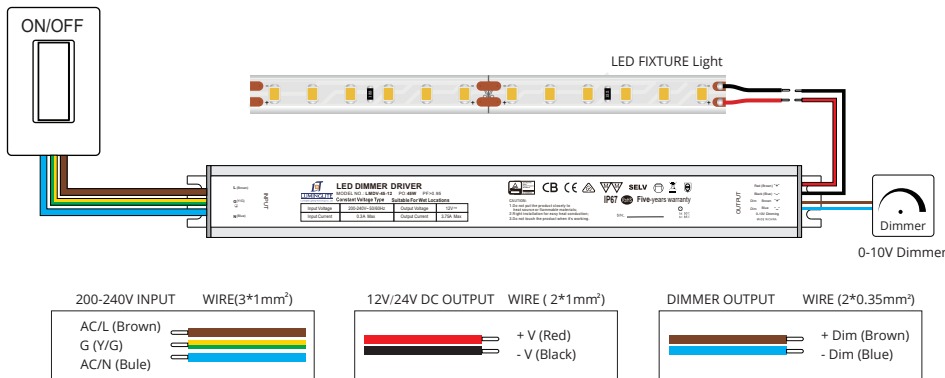
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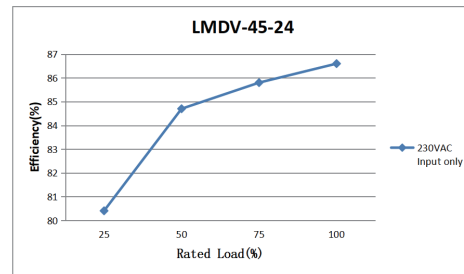
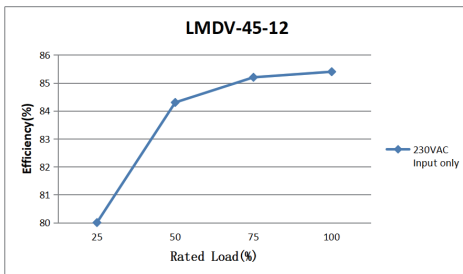
Profile Drawing



Wiring Diagram

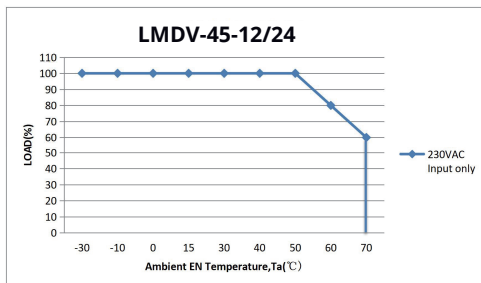


OUTPUT LOAD vs Efficiency (Input only 230VAC)



OUTPUT LOAD vs Temperature (Input only 230VAC)

The LMDV-45-12/24 series can be operated with cooling air temperatures between -30°C- 50°C by linearly de-rating the total maximum output power (or current) by 2.0%/°C from 50°C to 70°C (see figure).



Attentions

- Please ensure that the ground wire is properly grounded and ensure it does not come into contact with the neutral wire.
- Please make the power supply installed in a well-ventilated place, to ensure that the environment temperature is appropriate.
- Do not overload the power supply with multiple appliances.
- Please do not touch the metal shell surface to avoid high temperature scald.
- Do not install in the minefield or high pressure area.
- Do not attempt to repair privately. Please contact the supplier if you have any questions.

Tips

- To be installed by a certified electrician. Please read and follow the instructions carefully before installing. Ensure all contact points are connected firmly.
- Please pay attention to the using environment, and conduct regular check and maintenance to eliminate safety risks.