

Product introduction

JISIM JD1125 is a 24W constant current LED intelligent dimmable driver specifically designed for small aperture luminaires. It supports phase-cut dimming. The customized dimming curve provides a more comfortable viewing experience for the human eye. When not connected to an external signal, it can be used as a non-dimmable driver and it is suitable for small aperture downlights, spotlights, panel lights, linear lights. Paired with various intelligent control systems, it is widely used in smart homes, smart hotels, intelligent commercial spaces, smart offices, smart buildings, and other facilities.



Product Features

- Input voltage: 220-240Vac, global certification.
- V0 fire rating, Taiwan Chimei PC shell.
- Compact SELV independent dimming driver.
- Applicable to Class I/II/III indoor lighting fixtures.
- Smooth dimming, flicker-free, dimming range: 1-100%
- Compatible with most mainstream brand phase-cut dimmers on the market.
- DIP switch for multi-level current setting, with maximum output power of 24W.
- Up to 50,000 hours of service life with 5-year warranty (long-life capacitors).
- Small size, light weight, high power factor, high efficiency, and low harmonic.
- Supports forward and reverse edge phase-cut dimming functions.
- Standby power consumption <0.5W, compliant with ErP energy efficiency certification.

Technical Specifications

(All parameters not specially mentioned are measured at 230VAC input, full load and 25°C of ambient temperature)

Model	JD1125			Output Type	Constant Current
Input	DC Voltage Range	220-240V		Dimming Interface	Phase-Cut Dimming
	AC Voltage Range	220-240V		Output Feature	Isolation
	Rated Voltage	220Vac/230Vac/240Vac		IP Rating	IP20
	Input Frequency	50/60Hz		Insulation Rating	Class II (Suitable for class I II III light fixtures)
	Input Current	≤0.2A/230Vac(at full load)		No Load Output Voltage	≤59Vdc
	Input Power	Max.29W		Output Voltage Range	25-42Vdc
	Power Factor	PF>0.9C/230Vac(at full load)		Output Current Range	450-600mA
	THD	THD<25%/230Vac(at full load)		Output Power Range	11.25-24W
	Efficiency	≥84%(at full load)		Dimming Range	1~100% (Different dimmers have errors.)
	Inrush Current	Cold start 2.56A(Test twidth=26.8 us under 50% Ipeak@230Vac)		Ripple Current	<5%
Anti-Surge	L-N:4KV		Current Accuracy	±5%	
Leakage Current	<0.5mA/230Vac				
Protection	Overload Protection	Hiccup Mode (Auto-Recovery after Elimination)		Working Temperature	ta: -20°C~45°C
	Open Circuit Protection	≤59Vdc		Working Humidity	20~90%RH(No Condensation)
	Short Circuit Protection	Hiccup Mode (Auto-Recovery after Elimination)		Storage Temperature/Humidity	-40~85°C/5~95%RH
				Case Temperature	tc:75°C
				Life Time	>50000h@tc=75°C
Safety & EMC	Withstand Voltage	I/P-O/P: 3750Vac, 5mA, 60s			
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH			
	Safety Standards	CCC	China	GB19510.1, GB19510.14	
		CE	European Union	EN61347-1, EN61347-2-13, EN62493	
		KC	Korea	KC61347-1, KC61347-2-13	
		TUV	Germany	EN61347-1, EN61347-2-13, EN62493	
		ENEC	Europe	EN61347-1, EN61347-2-13, EN IEC62384	
		CB	CB Member States	IEC61347-1, IEC61347-2-13	
		RCM	Australia	AS/NZS61347.1, AS61347.2.13	
		BIS	India	IS15885(PART2)/SEC13	
	EMC Emission	EAC	Russia	IEC61347-1, IEC61347-2-13	
		UKCA	United Kingdom	BS EN61347-1, BS EN IEC61347-2-13, BS EN62493	
		CCC	China	GB/T17743, GB17625.1	
		CE	European Union	EN IEC55015, EN IEC61000-3-2, EN61000-3-3	
		KC	Korea	KSC9815, KSC9547	
RCM		Australia	EN IEC55015, EN IEC61000-3-2, EN61000-3-3		
UKCA		United Kingdom	BS EN IEC55015, BS EN IEC6100-3-2, BS EN61000-3-3		
EMC Immunity	EN61000-4-2,3,4,5,6,8,11,EN61547				
ErP	Power Consumption	Standby Power Consumption	<0.5W		
	Flicker/ Stroboscopic Effect	IEEE1789	Meet IEEE Std1789-2015		
		CIESVM	Pst≤1, SVM≤0.4		
DF	Phase Factor	DF≥0.9			
Test Equipment	AC Source	PS-61005	Withstand Voltage Tester	TH9302D	Other
	DC Electronic Load	IT8512A+	Thermostatic Humidity Chamber	HT-H-802	
	Spectrum Analyzer	KH3932	Intelligent Electrical Parameter Meter	PF9800	LED Load
	Surge Generator	SUG61005TB(7.5KV)-2216	Oscilloscope	TBS1102B	
	Stroboscope	LANSHU-201B	Digital Wattmeter	PM2818C	

Phase-Cut Dimmable LED Driver

LED Current Settings

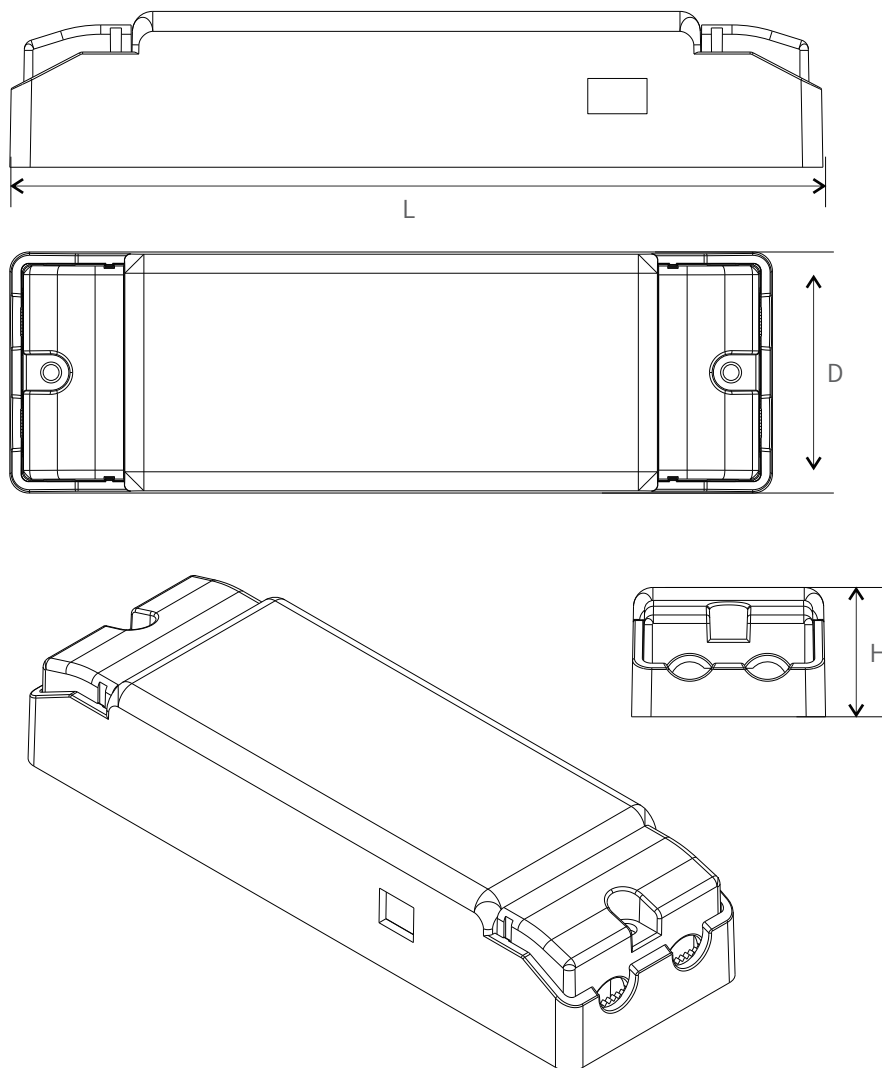
Number	Output				Switch Position	
	Current (mA)	Voltage (VDC)	NO Load Output Voltage (VDC)	Power (W)	1	2
1	450	25-42	59	18.9	/	/
2	500	25-42		21	ON	/
3	550	25-42		23.1	/	ON
4	600	25-40		24	ON	ON

◀ * Factory default.

1. Please disconnect the AC input before adjusting the output current via the DIP switch, If not, it may damage the lighting fixture.
2. No Overload, The output power should be less than or equal to 24W.

2D Diagram

Length(L)	Width(D)	Heigh(H)	Weight(W)
120mm	38mm	23mm	80.8±10g



Phase-Cut Dimmable LED Driver

Wiring Diagram



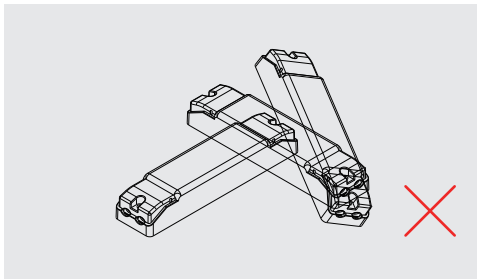
Installation Instructions

Interface	Marking	Description	wire cross Section	wire Stripping Length
Input	L	Input terminal of AC live wire	0.75...1.5mm ² (16-18AWG)	5...6mm
	N	Input terminal of AC neutral wire	0.75...1.5mm ² (16-18AWG)	5...6mm
Output	LED+	Positive electrode output of the driver	0.5...1.0mm ² (17-20AWG)	5...6mm
	LED-	Negative electrode output of the driver	0.5...1.0mm ² (17-20AWG)	5...6mm

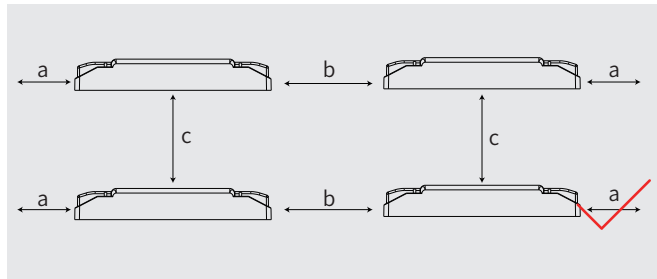
Connection instructions

1. Rated torque: 0.35~0.40N.m
2. All connections must be as short as possible to ensure good EMI performance.
3. No secondary switches are allowed.
4. The driver output does not support hot swap
5. Incorrect wiring can damage the LED.
6. The power cable should be kept at a certain distance from the driver and other connecting cables (5-10cm recommended)

Installation Precautions



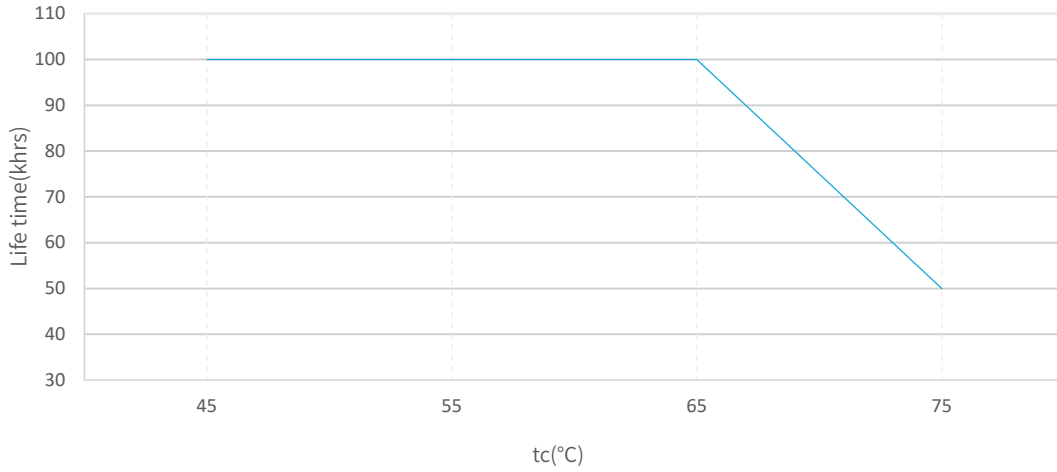
Do not stack the products. The distance between adjacent products should be more than 5 cm to avoid affecting the heat dissipation and service life of the products.



dimensions for safe installation should be: a>5cm; b>5cm; c>5cm

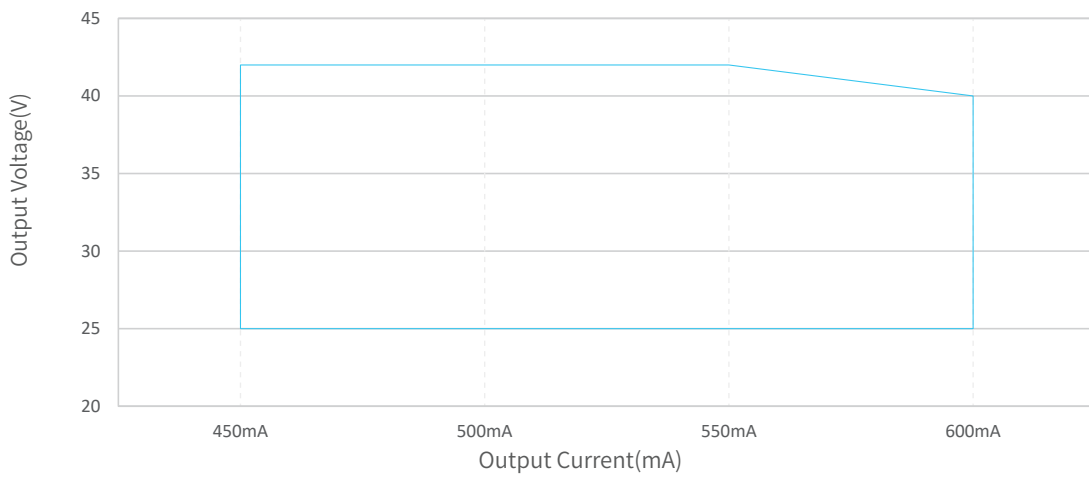
Product Characteristic Curves

Life Time VS Tcase

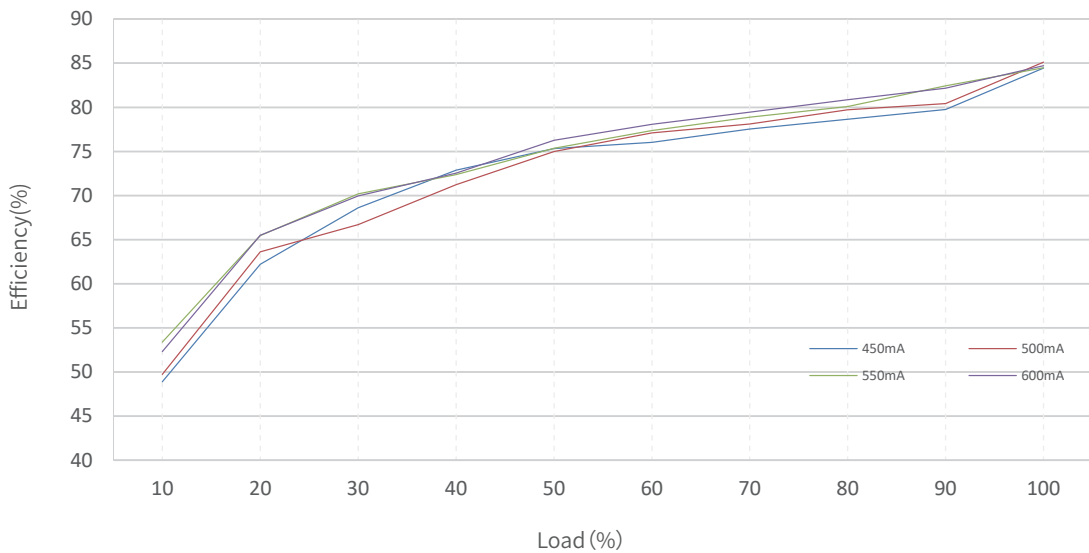


The life-time of the LED driver is shown in the figure above calculated (based on the 75% survival rate). The relation of tc to ta temperature depends also on the luminaire design.

Operating Window



Efficiency VS Load@230Vac



Phase-Cut Dimmable LED Driver

Packaging Image



Packaging Size



Packaging Details	Carton Size	Packing Units	Weight
Inner Packaging Box	124x41x30mm	1pcs	92.6±10g
Small Carton Packaging	350 x 197 x 167mm	48pcs	4.75kg
Large Carton Packaging	420 x 360 x 365mm	192pcs	19.88kg

Packaging instructions:

Each large carton packaging contains 4 small carton packagings, Each small carton packaging contains 48 inner packaging boxes.

Cautions



- ▶ This product is used as a component in conjunction with a lighting fixture. Due to the influence of EMC from the lighting fixture and wiring, customers should perform EMC testing to confirm the entire product set.
- ▶ No operation with power on. Installation and debugging should be performed by qualified professionals. Please read the product manual carefully before installation.
- ▶ This product can only be used outside the light body, Cannot be used inside of the light, and it must be used within the specified working environment.
- ▶ This product is not waterproof and should be avoided from direct sunlight and rain. If installed outdoors, please use a waterproof case.
- ▶ Good heat dissipation conditions are beneficial to the product's lifetime. Please install the product in a suitable environment, and strictly prohibit using double-sided tape to attach the casing or circuit board.
- ▶ Please check the parameters of the LED driver to ensure they meet the application requirements of the lighting fixture.
- ▶ Please install according to the standard wire gauge specified in the manual to avoid malfunctions caused by inappropriate wiring.
- ▶ Before powering on, please ensure that the wiring is correct to prevent damage to the driver or lighting fixture caused by incorrect wiring.
- ▶ If a malfunction occurs, please do not attempt to repair it yourself, if you have any questions, please contact the manufacturer.
- ▶ The manual is for reference only. Please refer to the actual product. Any changes to this product will not be notified separately.
- ▶ For more information, please send an email to fei.l@jisim-tech.com.

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Warranty Terms

- ▶ The product is warranted for 5 years. (The life and MTBF of the product are for reference only, and do not represent a warranty statement.)
- ▶ During the warranty period, if any quality issues arise, JISIM will provide free repair or replacement services.

Non-Warranty Terms

The following situations are not covered by the free warranty or replacement service:

- ▶ The warranty period has expired.
- ▶ Damage caused by human factors such as overvoltage, overload, or improper operation.
- ▶ Deformation or damage to the exterior appearance.
- ▶ Damage caused by natural disasters or other irresistible human factors.
- ▶ The warranty label has been torn off or removed.
- ▶ No contract or invoice proof is provided.

Notice:

1. Repair or replacement provided is the only remedy for customers. JISIM is not liable for any incidental or consequential damage unless it is within the law.
2. JISIM has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

