LCP150AD-1H24V



Product Feature

· Single channel constant voltage output, maximum output current 6.25A
· Short circuit, overload, overcurrent protection, V0 flame retardant housing
· Protection level IP20, suitable for indoor Ⅰ Ⅱ Ⅲ lamps
· Dimming range 0.1%-100% dimming, smooth dimming without step sense and stroboscopic
· Life of 50,000 hours, 5 years warranty
· Customizable dimming curve
· Long strip shape design, easy to install in narrow space
· Built-in PFC chip to improve energy efficiency and reduce pollution
· 5-in-1 dimming: DALI2.0, Push DIM, 0/1-10V, PWM signal, adjustable resistance

Application

For LED constant voltage strip light only



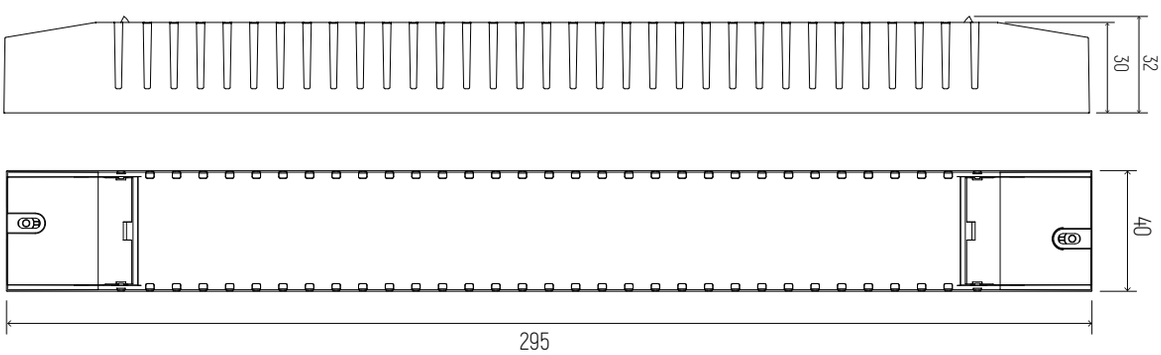


Technical Parameters

Model	LCP150AD-1H24V	
Input	Input Voltage	220VAC-240VAC
	Frequency Range(Hz)	50/60Hz
	Input Current	0.75Amax@230VAC
	Power Factor	≥0.95@230VAC, Full load
	Efficiency	≥92%@230VAC, Full load
	THD	≤10%@230VAC, Full load
	Standby power	<1W
	No-load power	<1W
	Inrush Current	Cold start,50A@230V 100us
Output	Output Voltage	24VDC
	Voltage Accuracy	±5%
	Output Current	6.25A Max.
	Current Accuracy	±5%
	Output Power	150W Max.
	Output Power Range	0W~150W
	PstLM	≤1
	SVM	≤0.4
	Dimming frequency	20KHz
	Line Regulation	±5% @Full load
	Load Regulation	±5% @Full load
	Turn on delay Time	<0.75s, at230Vac (When the light begins to shine)
Function	Dimming Type	DALI2.0 / 0/1-10V / PWM / PUSH / Adjustable resistance
	Dimming Range	0.1%-100% Dimming to OFF
	Dimming Curve	Logarithm
	Flicker free	Flicker free
Protection	Short circuit	No output. The system recovers after the fault is rectified
	Over Current	No output. The system recovers after the fault is rectified
	Over load	No output. The system recovers after the fault is rectified
	Over Voltage	/
	Over temperature	/
Safety& EMC	Surge	L-N:2KV
	Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA I/P-(0/1-10V): 1500VAC/1min/5mA O/P-DALI&0-10V: 1500VAC/1min/5mA
	Safety Standards	CCC (China) GB19510.1，GB19510.14 TUV (Germany) EN61347-1，EN61347-2-13，EN62493
		CB (CBmember states) IEC61347-1，IEC61347-2-13 CE (European Union) EN61347-1，EN61347-2-13，EN62384
		RCM (Australia) AS 61347-1，AS 61347-2-13 ENEC (Europe) EN61347-1，EN61347-2-13，EN62384
	EMC Emission	CCC (China) GB/T17743，GB17625.1
		CE (European Union) EN55015，EN61000-3-2，EN61000-3-3，EN61547
		RCM (Australia) EN55015，EN61000-3-2，EN61000-3-3，EN61547
	EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547

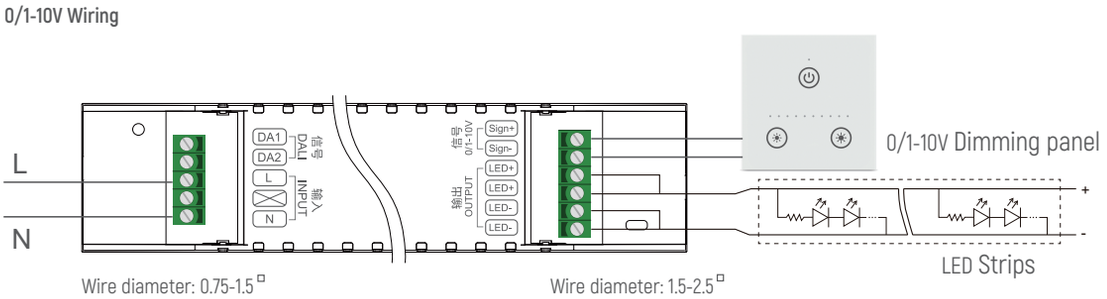
Environment	Working Temp.	-20°C~50°C
	Storage Temp.	-40°C~85°C
	Storage Humidity	20-90%RH (No condensation)
Others	RoHS	Comply with 2011/65/EU
	tc	80°C
	material	PC
	IP Rating	IP20
	Lifetime	50,000h@tc:80°C
	Warranty Condition	5years
	Switch Cycle	25,000times
	Body size	295*40*32mm (L*W*H)
	Packing(weight)	Net weight: 340g±5%/PCS; 50PCS/Carton; 17.5kg±5%/Carton; Carton Size: 434*302*174mm(L*W*H)
	Noise	In a quiet environment, no noise beyond 30-50cm
Remark	All parameters were measured at an input voltage of 230VAC/50Hz and an ambient temperature of 25 ℃ without any special instructions.	

Dimension(mm)

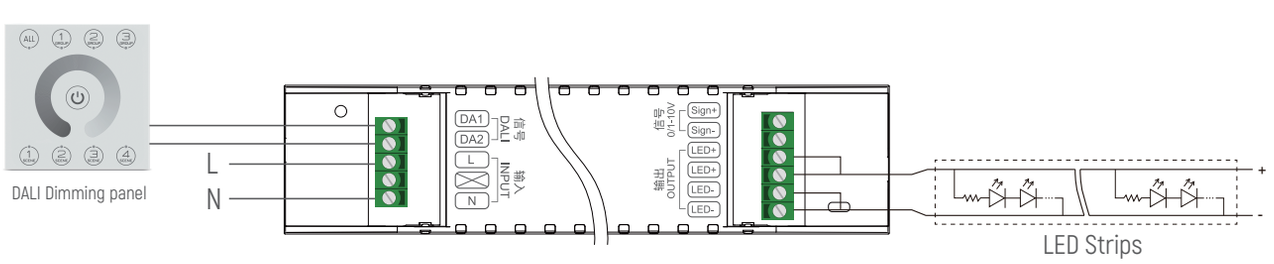


Wiring Diagram

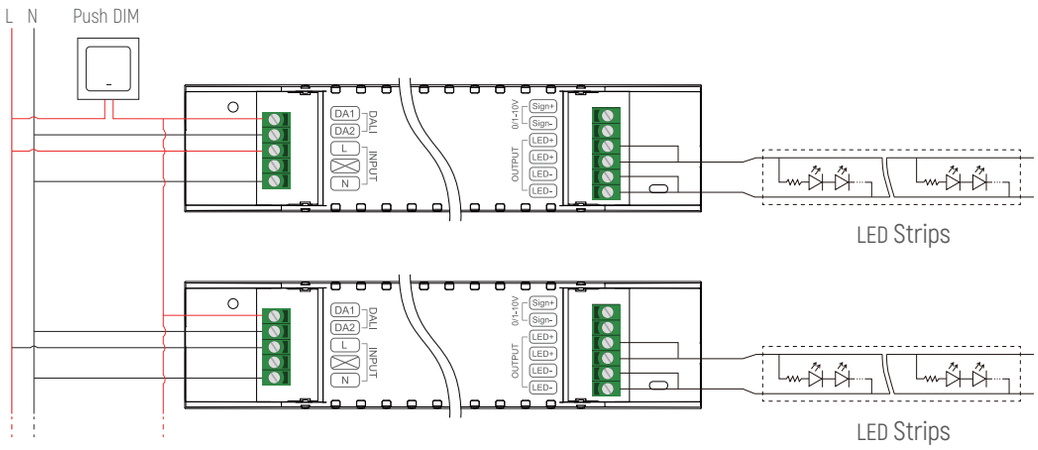
0/1-10V Wiring



DALI Wiring



Push DIM(Touch DIM) Diagram

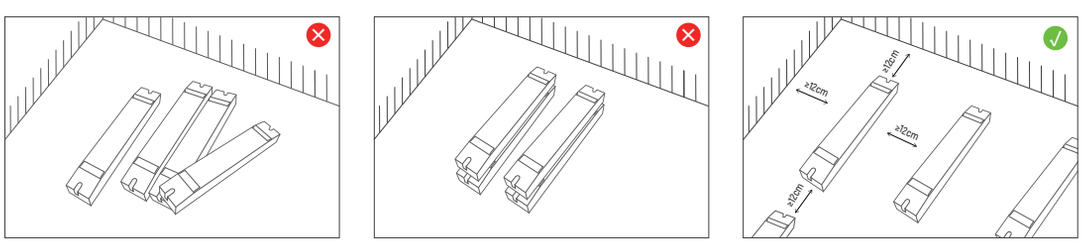


Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters.

Push DIM Function

1. Press the Push DIM (Touch DIM) switch for 8s or more,the driver can be controlled via Push DIM switch.
2. Short press the Touch DIM switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Touch DIM switch (<0.3s), then all lamps connected on the device will be set maximum brightness.
5. The brightness adjustment range is 1%-100%, and the light can be turned off through short pressing when doing the adjustment with long pressing Touch DIM switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

Installation Precautions



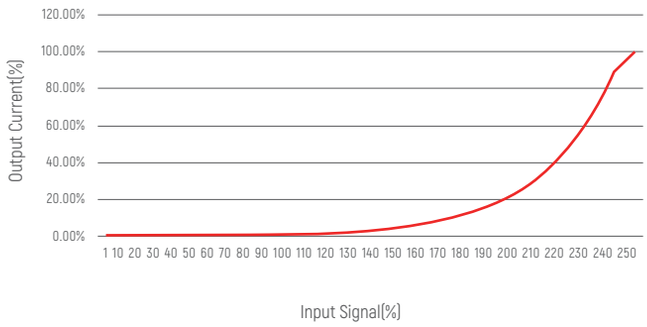
Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

Max. quantity of drivers per miniature circuit breaker

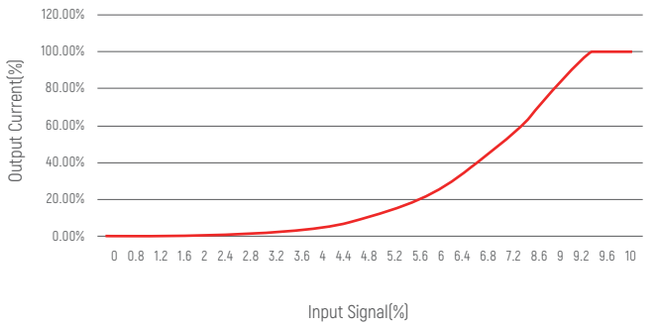
Specification item	Value	Condition
Inrush current I_{peak}	50A	Input Voltage 230VAC
Inrush current T_{width}	100us	Input Voltage 230VAC, measured ta 50% I_{peak}

MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	13pcs	C10	13pcs
B13	17pcs	C13	17pcs
B16	21pcs	C16	21pcs
B20	26pcs	C20	26pcs
		D16	21pcs

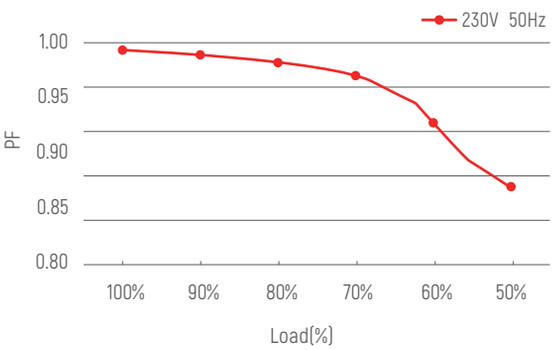
DALI Dimming Curve



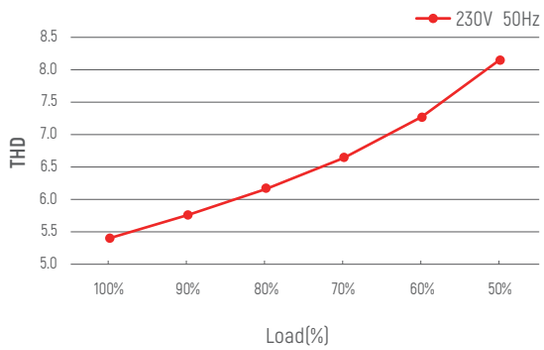
0/1-10V Dimming Curve



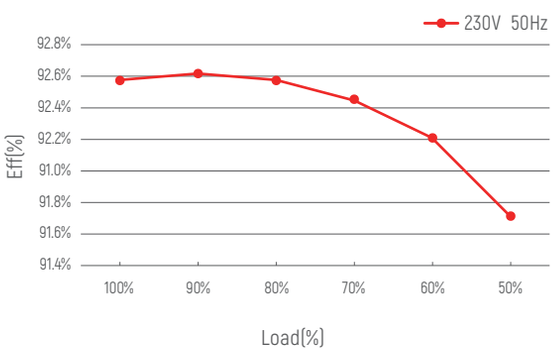
PF vs Load Curve



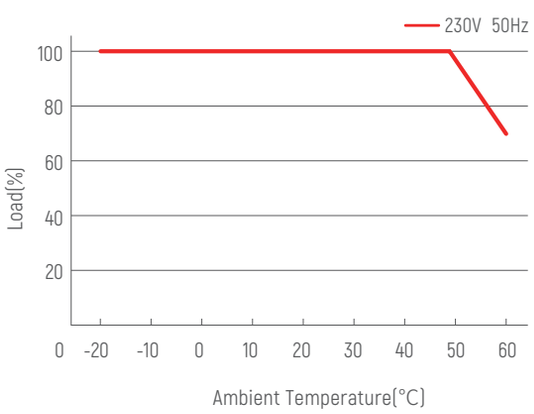
THD vs Load Curve



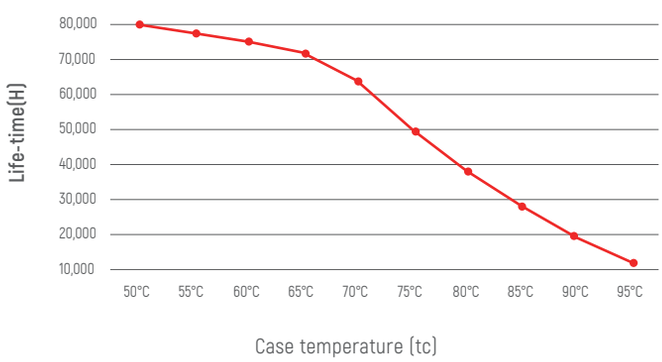
Efficiency vs Load Curve



Derating Curve

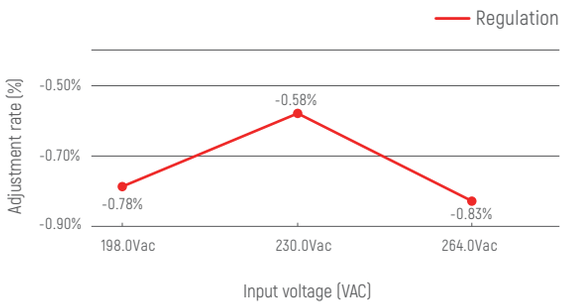


Life-time vs. case temperature

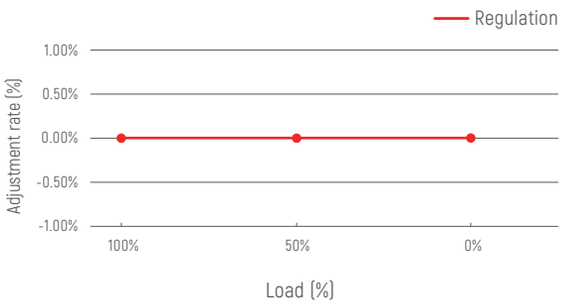


The life-time of the led driver is shown in the figure above
(calculated based on the 90% survival rate).
The relation of tc ta temperature depends also on the luminaire design.

Load adjustment rate curve



Load adjustment rate curve



Cautions

This product must be installed and adjusted by a qualified professional.		
1	Confirmation of installation conditions	· **Waterproof and Protection:** Install in a suitable location according to the waterproof and protection requirements of the power supply. Products without waterproof function should be protected from direct sunlight and rain. When installing outdoors, please use a waterproof box for protection. · **Heat dissipation requirements:** The drive power supply should avoid exposure to high temperature environments. Please ensure that the working environment temperature is within the recommended range. To ensure proper heat dissipation of the drive power supply, a well ventilated area should be selected for installation. Good heat dissipation conditions can help extend product lifespan.
2	Power check	· Before use, check the product parameters and confirm that the output voltage and current of the LED power supply meet the requirements
3	Safe wiring	· Use cables that meet the specifications to ensure that the cross-section of the wire matches the requirements of the driving power supply. Solid cables typically measuring 0.75-2.5 mm ^{2}, (Please refer to the silk screen printing or wiring diagram in the instruction manual for specific wire diameter requirements). · If the power supply (metal casing) is installed on a grounded lighting component or equipment, the power supply needs to be grounded. · To avoid hot swapping, power off and restart the driver before connecting the LED load.
4	Wiring confirmation	· Before power on debugging, ensure that the wiring is secure and avoid poor contact to prevent unstable current or equipment damage.
5	Repair suggestions	· If the product malfunctions, please do not repair it without authorization. If you have any questions, please contact the supplier or sales team for assistance.

※ The contents of this manual are updated without prior notice. If the function of the product you are using is inconsistent with the instructions,the function of the product shall prevail. Please contact us if you have any questions .

Warranty Agreement

1. Warranty periods from the date of delivery : 5 years.
2. Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

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

1. Exceeding the warranty period.
2. Damage caused by human factors such as high voltage, overload, and improper operation.
3. The appearance of the product is severely damaged or deformed.
4. Wear or aging that occurs during normal use of the product.
5. Damage caused by natural disasters or force majeure factors.
6. The quality inspection label of the product is damaged (QC PASS).
7. No contract or valid invoice proof signed with EUCHIPS has been provided.

※Remedial measures: Repair or replacement is the only remedy provided by Oches to the customer, and Oches shall not be liable for incidental damages arising from repair or replacement, unless within the scope of applicable law.

※Adjustment of Warranty Terms: EUCHIPS reserves the right to modify or adjust the warranty terms, which shall be published in writing.