

OWP150A-1W24V

Summary

OWP150A-1W24V is a waterproof constant voltage output LED dimming driver. Supports 0/1-10V active signals, adjustable resistors, PWM, achieving smooth dimming effect.

Product Features

- Single channel constant voltage output, output current is 6.25A max
- Dimming range 0.1% -100% dimming, smooth dimming without any step or flicker
- Built in PFC chip to improve energy efficiency and reduce pollution to the power grid
- Waterproof rating IP67, suitable for outdoor lighting
- Protection: Overload, overcurrent, short circuit protection
- Lifespan of 50000 hours, 5-year warranty



RoHS

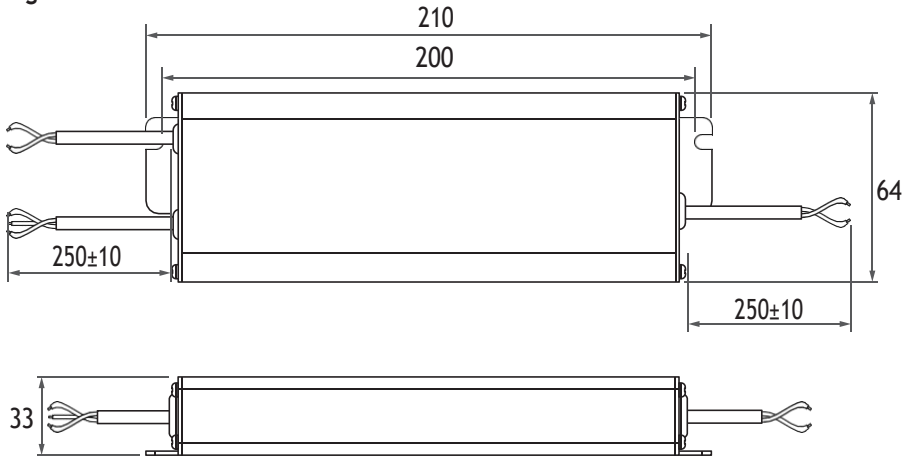
IP67

CE

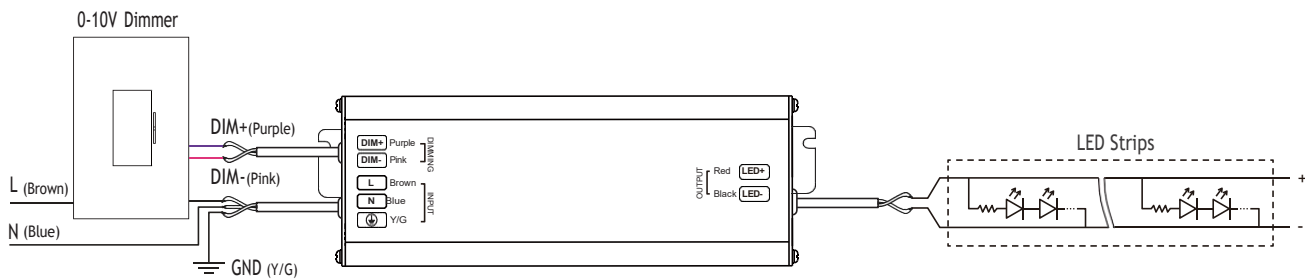
Technical Paramaters

Model	OWP150A-1W24V	
Input	Efficiency	≥88%@120VAC, ≥90%@277VAC, full load
	Frequency	50/60Hz
	Voltage	120VAC-277VAC
	Power Factor	0.95@120VAC, 0.95@277VAC, full load
	THD(full load)	10%@120VAC, 10%@277VAC, full load
	Current	1.74Amax@120VAC, 0.74A@277VAC
	Inrush Current	Cold start, 38A@120VAC 268us, 79A@277VAC 116us
	Standby Power	<0.5W
	No load power	<1W
	Turn on delay Time	0.75s (@120VAC, When the light begins to shine)
Output	Current	6.25A
	Voltage	24VDC
	Voltage Accuracy	±5%
	Power	150W
	Channel	1
	Over power limit	≥120%
	Ripple	≤720mV
	Frequency	20KHz PWM
Protection	Short Circuit	Turn off output, self recover after troubleshooting
	Over Current	Reduce current protection, restore normal operation after troubleshooting
	Over Load	Reduce current protection, restore normal operation after troubleshooting
Safety & EMC	Surge	L-N: 6KV L-N-PG: 10KV
	Withstand Voltage	I/P-O/P: 3750Vac/1min/<5mA, I/P-PG:1500Vac/1min/<5mA
	Safety standards	EN61347, GB19510
	EMI Eission	EN55015, EN61000-3-2 GB17743 GB17625.2
	Insulation Resisance	5MΩ
Function	Dimming Type	0-10V
	Dimming Range	0.1%-100%
	Dimming curve	Logarithm
	Flicker	Flicker free
其它	IP Rating	IP67
	Working Temp.	-20-+50 ℃
	Storage Temp., Humidity	-40-+85℃, 20-90% RH
	tc	85℃
	Lifetime	50,000h@tc:85℃
	Warranty Condition	5years
	Switch Cycle	>25,000 times
	Material	Metal
	Dimension	210*64*33mm(L*W*H)
	Packing(weight)	Net weight: 745g±5%/PCS; 20PCS/Carton; 15.4kg±5%/Carton; Carton Size:347*257*214mm(L*W*H)

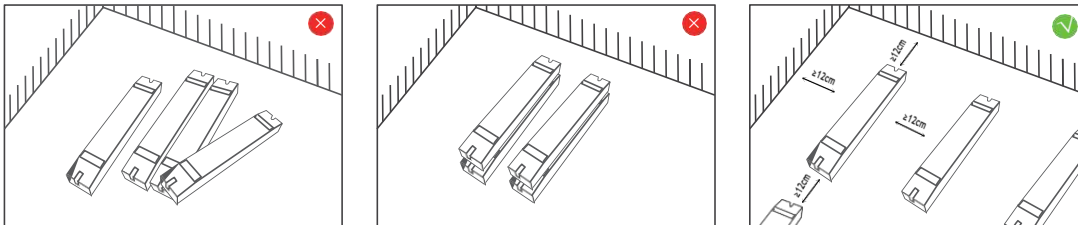
## Wiring Diagram



## Dimension(mm)



## Installation Precautions



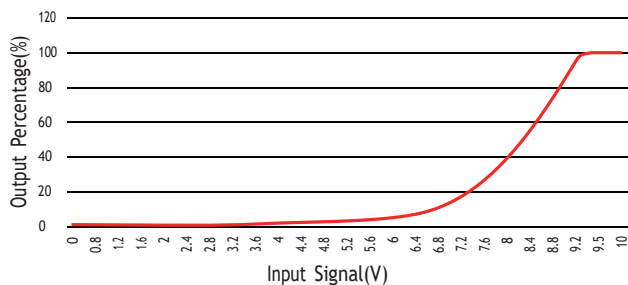
Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

## Max. quantity of drivers per miniature circuit breaker

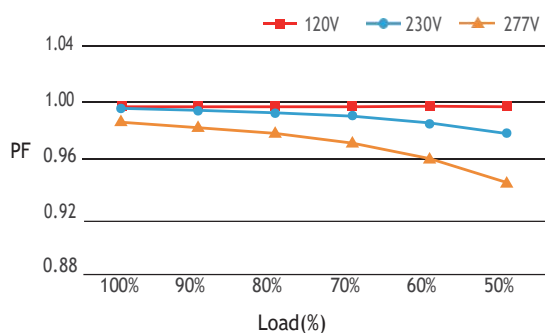
Specification item	Value	Value	Condition
Inrush current $I_{peak}$	38A (120V)	79A (277V)	Input Voltage 120V/277V
Inrush current $T_{width}$	268us (120V)	116us (277V)	Input Voltage 120V/277V, measured to 50% $I_{peak}$

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	5pcs	9pcs	C10	5pcs	13pcs
B13	7pcs	12pcs	C13	7pcs	17pcs
B16	9pcs	14pcs	C16	9pcs	21pcs
B20	11pcs	18pcs	C20	11pcs	27pcs
			D16	9pcs	21pcs

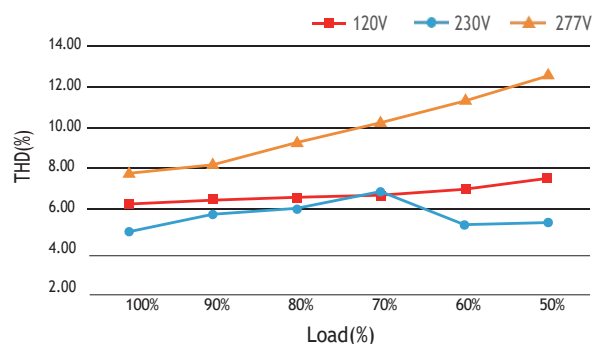
## 0-10V调光曲线



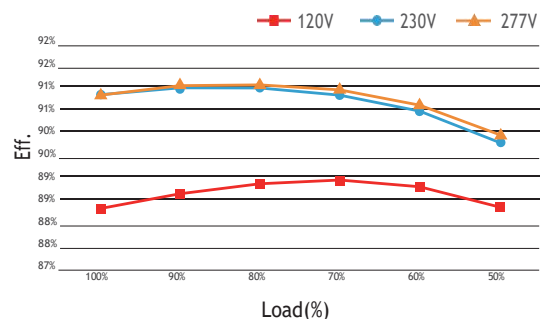
## PF vs Load Curve



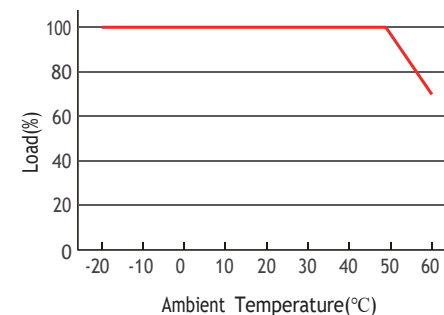
## THD vs Load Curve



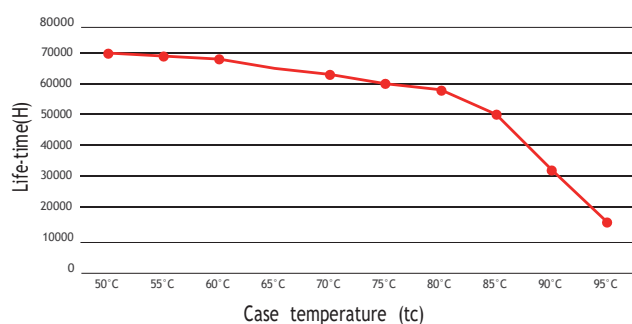
## Efficiency vs Load Curve



## 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.

## Cautions

1. This product should be installed by qualified personnel.
2. Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
3. Please make sure LED power supply output voltage, current is used to meet the product requirements.
4. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
5. Due to safety concerns, PVC or rubber cord of 0.75- 2.5mm<sup>2</sup> is recommended for input and output terminal(s)(excluding signal terminals). Flat power cord is not suitable. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
6. In case of malfunction, do not repair it yourself.

※ 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:

1. Beyond warranty periods.
2. Any artificial damage caused by high voltage, overload, or improper operations
3. Products with severe physical damage.
4. Damage caused by natural disasters and force majeure.
5. Warranty labels and barcodes have been damaged.
6. No any contract signed by EUCHIPS.

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