

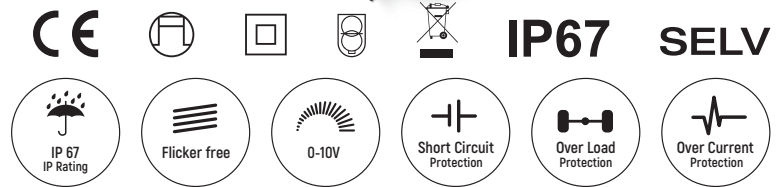
## OWP480A-1W24V

### Summary

OWP480A-1W24V is a waterproof constant voltage output LED dimming driver. Supports 0/1-10V active signals, achieving smooth dimming effect.

### Product Features

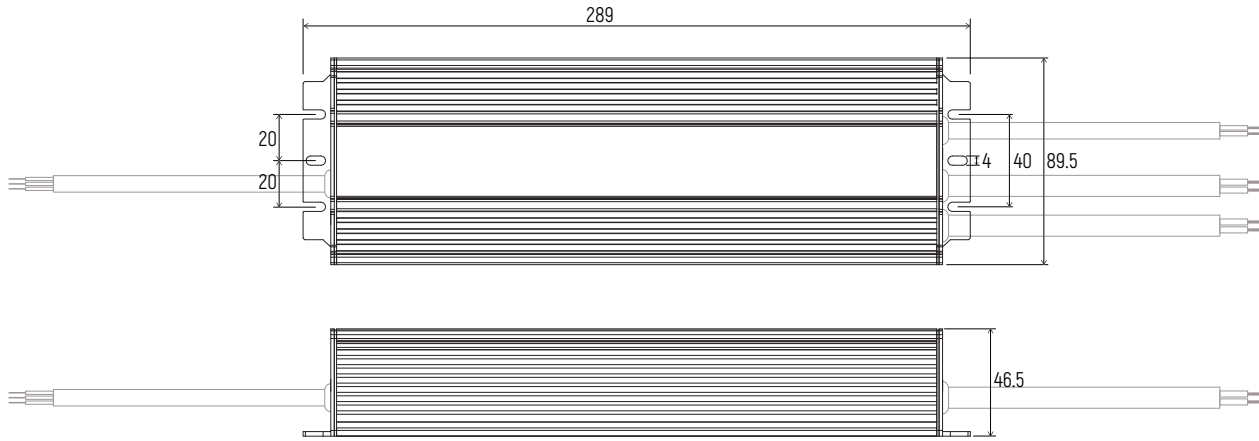
- Single channel constant voltage output, output current is 20A max
- Dimming range 1% -100% dimming, smooth dimming without any step or flicker
- Built in PFC chip to improve energy efficiency and reduce pollution to the power grid
- Waterproof rating IP67, suitable for outdoor lighting
- Protection: Overload, overcurrent, short circuit protection
- Lifespan of 50000 hours, 5-year warranty



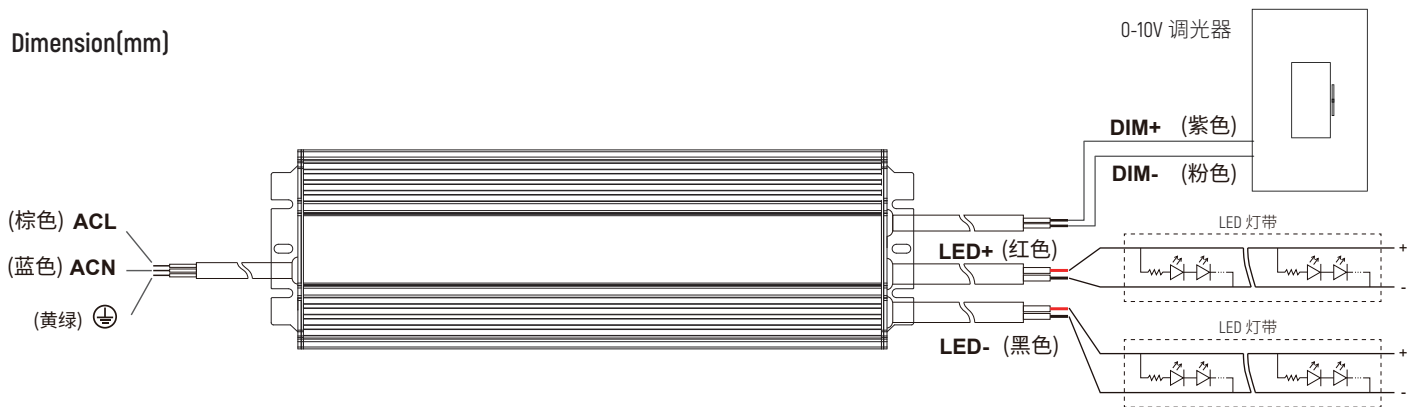
### Technical Parameters

Model	OWP480A-1W24V	
Input	Efficiency	≥91%@120VAC, ≥94%@230&277VAC, full load
	Frequency	50/60Hz
	Voltage	120VAC-277VAC
	Power Factor	≥0.95@120VAC, ≥0.90@277VAC, full load
	THD(full load)	<10%@120VAC, <15%@277VAC, full load
	Current	4.6A@120VAC, 2.4A@230VAC, 2.0A@277VAC
	Inrush Current	Cold start, 27.1A@120VAC 850us, 60.3A@277VAC 152us
	Standby Power	<2.0W@120VAC
	No load power	<2.0W@120VAC
	Turn on delay Time	<0.75s (@120VAC, When the light begins to shine)
Output	Current	20.0A
	Voltage	24VDC
	Voltage Accuracy	±5%
	Power	480W
	Channel	1
	Over power limit	≥125%
	Ripple	≤720mV
	Frequency	3.3KHz PWM
Protection	Short Circuit	No output. It will recover automatically after troubleshooting
	Over Current	No output. It will recover automatically after troubleshooting
	Over Load	No output. It will recover automatically after troubleshooting
Safety & EMC	Surge	L-N: 6KV L-N-PG: 10KV
	Withstand Voltage	I/P-O/P: 3750Vac/1min/5mA I/P-PE:1500Vac/1min/<5mA O/P-PE:500Vac/1min/<5mA Signal-O/P: 1500VAC/1min/5mA
	Safety standards	EN61347-1, EN61347-2-13, UL8750, UL1310
	EMI Emission	EN55015, FCC Part 15 Class B
	Insulation Resistance	5MΩ
Function	Dimming Type	0-10V
	Dimming Range	1%-100%
	Dimming curve	Logarithm
	Flicker	Flicker free
其它	IP Rating	IP67
	Working Temp.	-20~+50°C [-4°F~122°F]
	Storage Temp., Humidity	-40~+85°C [-40°F~185°F], 20~90% RH
	tc	85°C
	Lifetime	50,000h@tc:85°C[185°F] 90%Load @120VAC
	Warranty Condition	5years
	Switch Cycle	>25,000 times
	Material	Metal
	Dimension	289*89.5*46.5mm[11.37*3.52*1.831] [L*W*H]
	Packing(weight)	Net weight: 1800g(3.97lb)±5%/PCS; 5 PCS/Cartron; 9.5kg(20.9lb)±5%/Cartron; Cartron Size:332*284*134mm[13.1*11.2*5.3] [L*W*H]

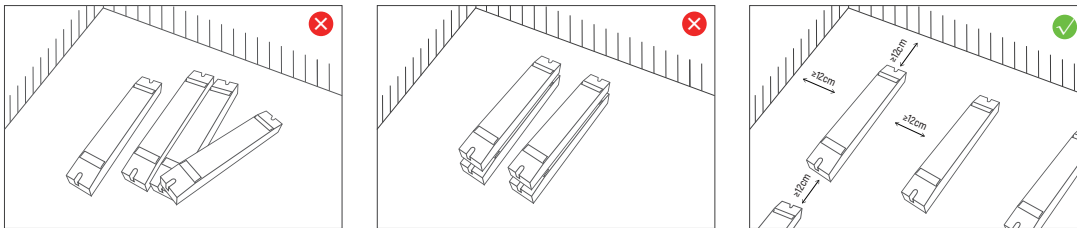
## Wiring Diagram



## Dimension(mm)



## Installation Precautions



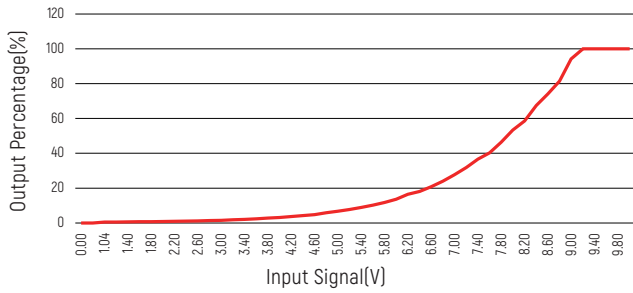
Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

## Max. quantity of drivers per miniature circuit breaker

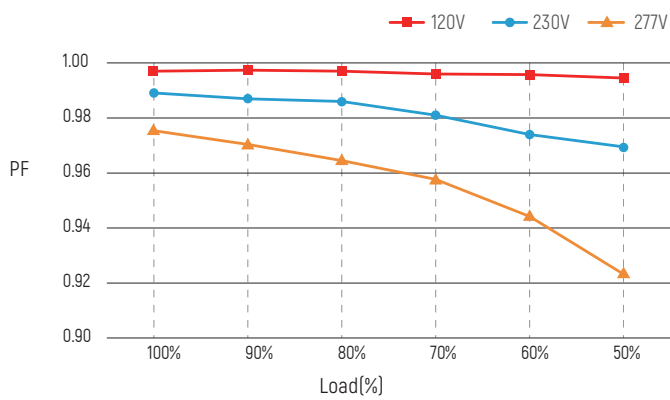
Specification item	Value	Value	Condition
Inrush current $I_{peak}$	27.1A (120V)	79A (277V)	Input Voltage 120V/277V
Inrush current $T_{width}$	850us (120V)	116us (277V)	Input Voltage 120V/277V, measured to 50% $I_{peak}$

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	2pcs	5pcs	C10	2pcs	5pcs
B13	2pcs	6pcs	C13	2pcs	6pcs
B16	3pcs	8pcs	C16	3pcs	8pcs
B20	4pcs	10pcs	C20	4pcs	10pcs
			D16	3pcs	8pcs

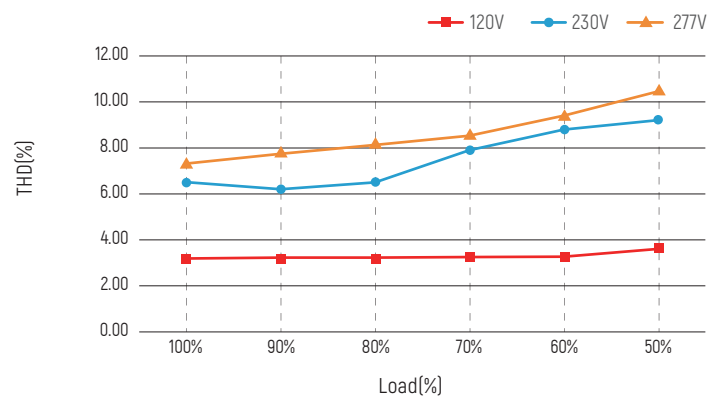
## 0-10V调光曲线



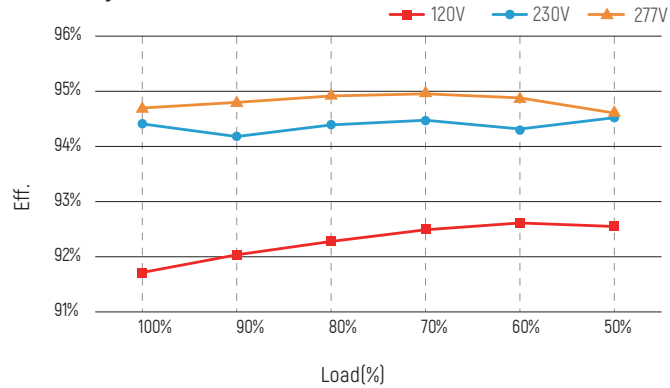
## PF vs Load Curve



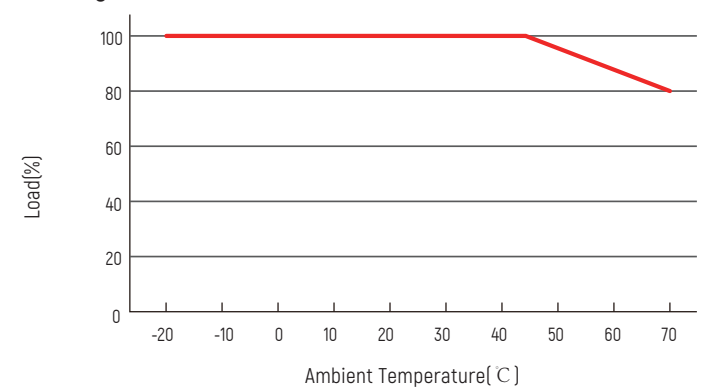
## THD vs Load Curve



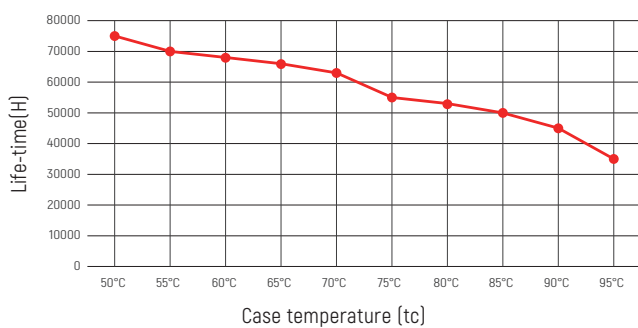
## Efficiency vs Load Curve



## 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.