

OWP150D-1W36V

Summary

OWP150D-1W36V is a dimming driver that can provide constant voltage output. Complies with DALI standard protocol IEC 62386. LED driver featuring the dimming by DALI master/Touch DIM(PushDIM) switch, with smooth dimming curve and are flicker free.



Product Feature

- Single channel output with 36V Constant Voltage direct current
- With built-in active PFC function
- Meet DALI protocol IEC 62386-207
- Support Touch DIM(Push DIM) function
- Ultra-thin design, Waterproof level IP67
- Dimming effect smooth, Flicker free
- Protections: Short circuit, over load, over Current, lightning protection
- suitable for LED CV lighting, such as LED module, LED strip light, LED tube, and so on

Application



IP67 CE

RoHS SELV

Technical Parameters

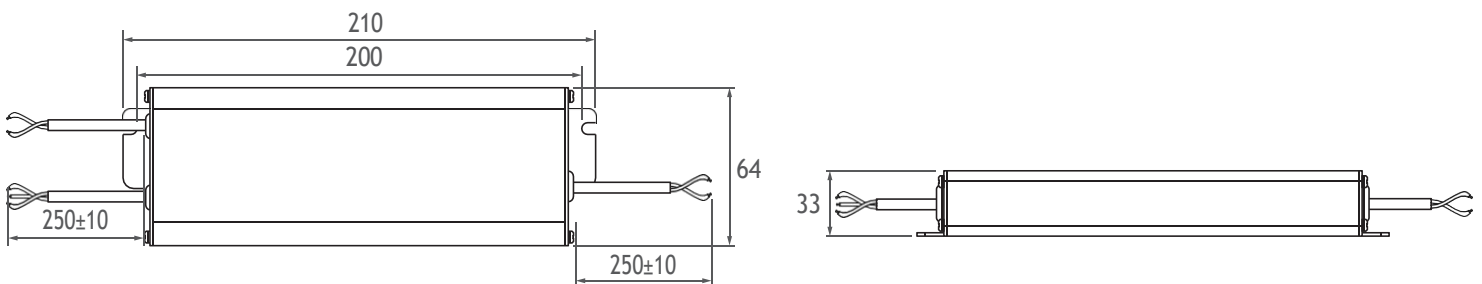
Model	OWP150D-1W36V		
Input	Efficiency	≥88%@120VAC, ≥90%@277VAC, full load	
	Voltage	120VAC-277VAC	
	Frequency Range(Hz)	50/60Hz	
	Current	1.74A@120VAC, 0.74A@277VAC	
	PF	≥0.95, full load	
	THD	<10%@120VAC, <15%@277VAC, full load	
	Inrush Current(max)	Cold start, 38A@120VAC 268us, 79A@277VAC 116us	
	Standby power	<0.5W@230VAC	
	No load power	<0.5W@230VAC	
	Start-up time	<0.75s, @230Vac (time-to-first-light)	
Output	Current	4.17A	
	Voltage	36V	
	Voltage Accuracy	±5%	
	Power	150W	
	PstLM	≤1	
	SVM	≤0.4	
	PWM dimming frequency	20KHz	
	Line Regulation	±1% @ full load	
Load Regulation	±0.5% @ full load		
Function	Dimming Types	DALI2.0	
	Dimming Range	0.1%-100%	
	Dimming Curve	Logarithm	
	Flicker	Flicker free	
	Push DIM (Touch DIM)	Support	
Protection	Short circuit	Shut down output, Auto-recovery after Fault Clearance	
	Over load	Protection when load power is ≥120%; output returns to normal after troubleshooting	
	Over Current	Shut down output, Auto-recovery after Fault Clearance	
Safety& EMC	Surge	L-N: 6000 V L-N-PE: 10000 V	
	Withstand Voltage	I/P-O/P: 3750VAC/1min/5mA I/P-PG: 1500VAC/1min/5mA	
	Safety Standards	CCC (China)	GB19510.1, GB19510.14
		TUV (Germany)	EN61347-1, EN61347-2-13, EN62493
		CE (European Union)	EN61347-1, EN61347-2-13, EN62384
	EMC	RCM (Australia)	AS 61347-1, AS 61347-2-13
		ENEC (Europe)	EN61347-1, EN61347-2-13, EN62384
CCC (China)		GB/T17743, GB17625.1	
EMC	CE (European Union)	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
	RCM (Australia)	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
	EMI	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	tc	85°C for safety & life
	Material	Metal
	IP rating	IP67
	Lifetime	50,000h@tc:85°C
	Warranty	5years
	Switch cycle	25,000 times
	Dimension	210*64*33mm(L*W*H)
	Packing(weight)	Net weight: 745g±5%/PCS; 20PCS/Carton; 15.4kg±5%/Carton; Carton Size:354*264*228mm (L*W*H)
Noise	In a quiet environment, No noise outside 100cm	
Remark	All parameters were measured at an input voltage of 230VAC/50Hz and an ambient temperature of 25 °C without any special instructions.	

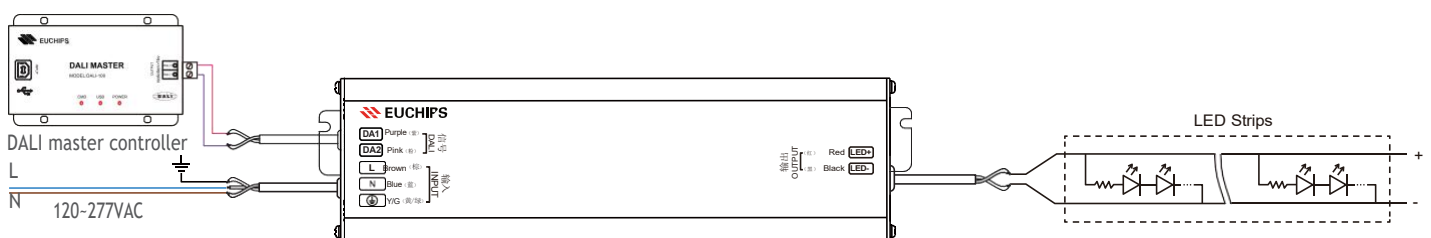
DALI

Parameter	Min.	Typ.	Max.
DALI Interface Standard	IEC62386-101, 102, 207, 209		
Dimming Range	1%	Logarithmic (default)	100%
DA1,DA2 Current	0		2mA

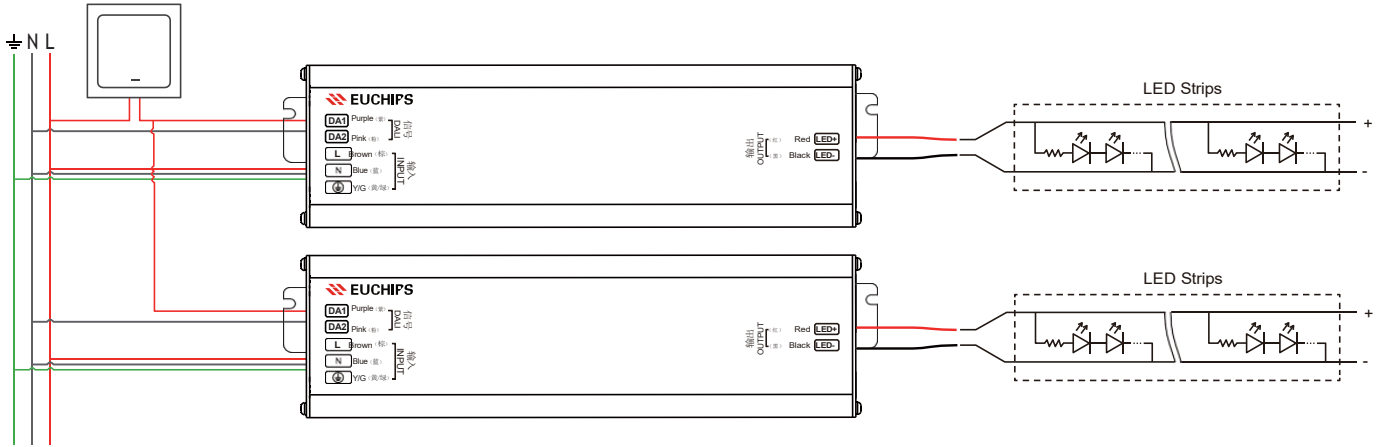
Dimension(mm)



Wiring Diagram



Push DIM(Touch DIM) Diagram



Note: Only open-circuit press-type switches (without indicator lights) can be used. When using synchronous wiring, the length of the wire between each device should not exceed 20 meters

Push DIM(Touch DIM) Function

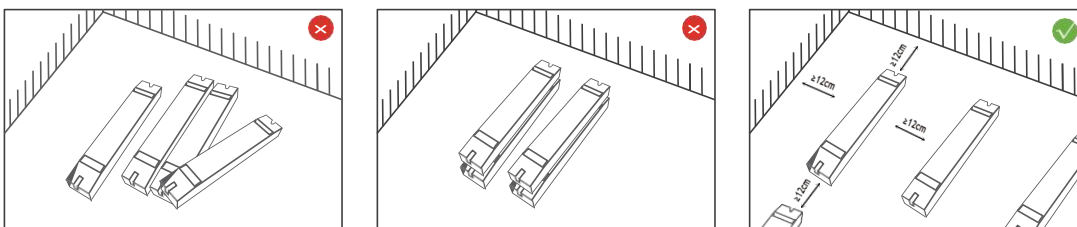
1. Press and hold Touch DIM for at least 8 seconds to switch to Touch DIM mode.
2. Short press the Touch DIM switch (<0.5 seconds) to control the brightness of the light.
3. Press and hold the Touch DIM switch (>0.5 seconds) to adjust the brightness of the light fixture. The brightness changes with each press of the switch.
4. Double click the Touch DIM switch (<0.3 seconds), and all connected lights will reach their brightest state.
5. The brightness adjustment range is 0.1% -100%.
6. Equipped with power-off memory function, it will restore to the previous power-off state when powered on again.ame circuit)

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current I_{peak}	38A	79A	Input Voltage 120V/277V
Inrush current T_{width}	268us	277us	Input Voltage 120V/277V measured ta 50% I_{peak}

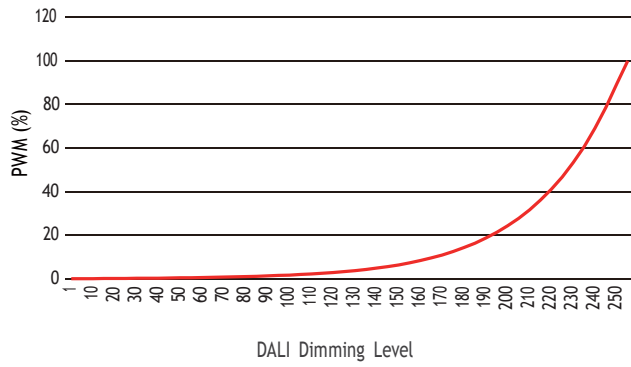
MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	5pcs	9pcs	C10	5pcs	13pcs
B13	7pcs	12pcs	C13	7pcs	17pcs
B16	9pcs	14pcs	C16	9pcs	21pcs
B20	11pcs	18pcs	C20	11pcs	27pcs
			D16	9pcs	21pcs

Installation Precautions

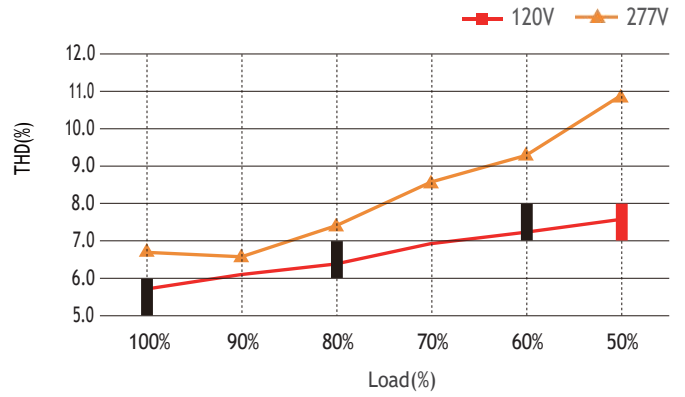


Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

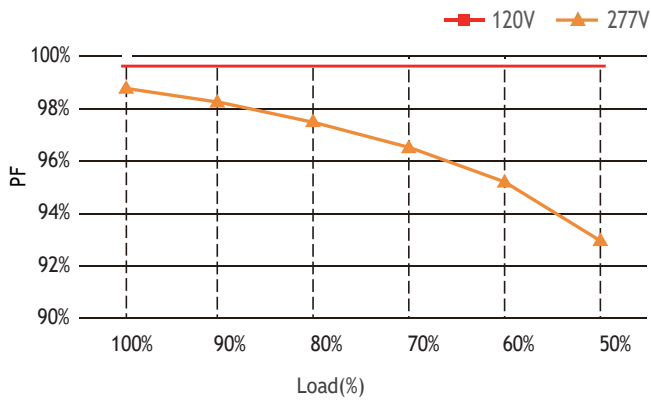
Dimming Curve



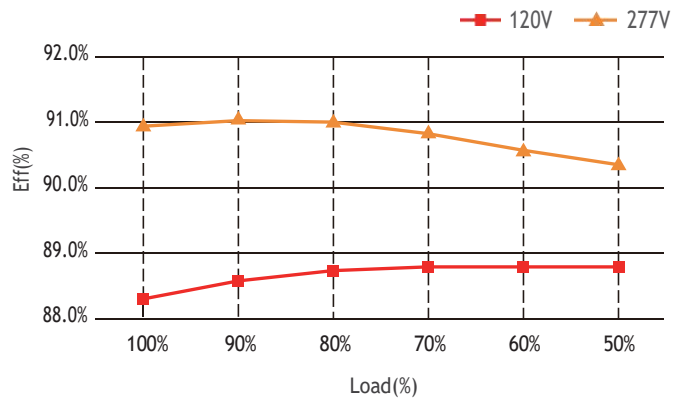
THD vs Load



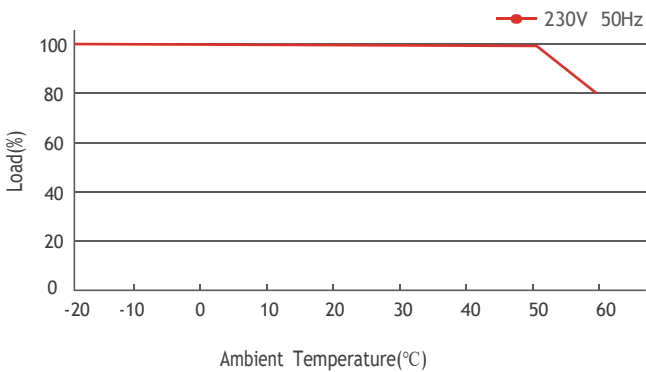
PF vs Load



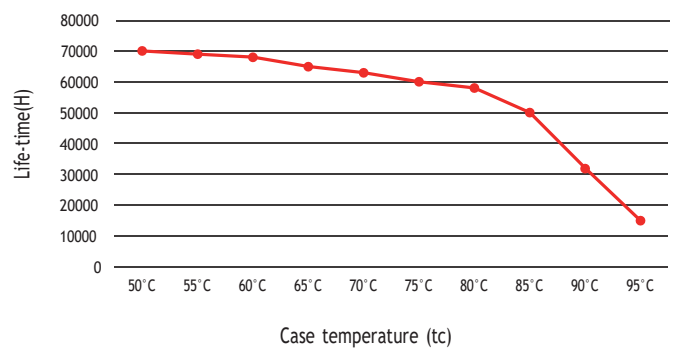
Efficiency vs Load%



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 t_c to t_a temperature depends on the luminaire design.

Cautions

This product must be installed and adjusted by a qualified professional.		
1	Confirmation of installation conditions	<ul style="list-style-type: none"> · 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	<ul style="list-style-type: none"> · 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	<ul style="list-style-type: none"> · 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 mm², (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.
4	Wiring confirmation	<ul style="list-style-type: none"> · Before power on debugging, ensure that the wiring is secure and avoid poor contact to prevent unstable current or equipment damage.
5	Repair suggestions	<ul style="list-style-type: none"> · 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. Normal wear and tear or aging during regular product use.
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.

※ Remedies: Repair or replacement is the only remedy provided by EUCHIPS to the customer, and EUCHIPS 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.