

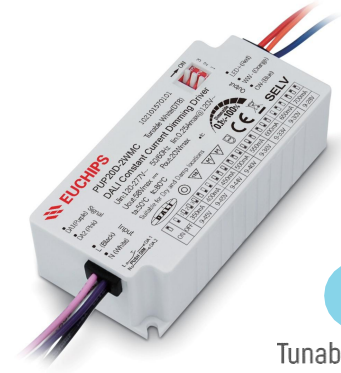
## PUP20D-2WMC

### Summary

PUP20D - 2 WMC is a can provide 450/500 350/400 / ma / 550/600/650/700

8-speed current LED driver, output current can be easily set by DIP switch

The dimming curve is smooth and flicker-free with DALI master /Touch DIM switch.



Tunable White(DT8)

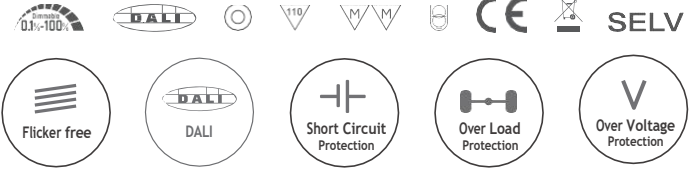
### Product Features

- Dual channel constant current output, multi-level current optional
- Support Touch-DIM function
- Input voltage: 120-277V
- Dimming range: 0.1-100%, smooth dimming effect, no stroboscopic
- Short circuit protection, overload protection, overvoltage protection
- Suitable for LED indoor lamps, such as downlights, spotlights, panel lights, etc

### Application



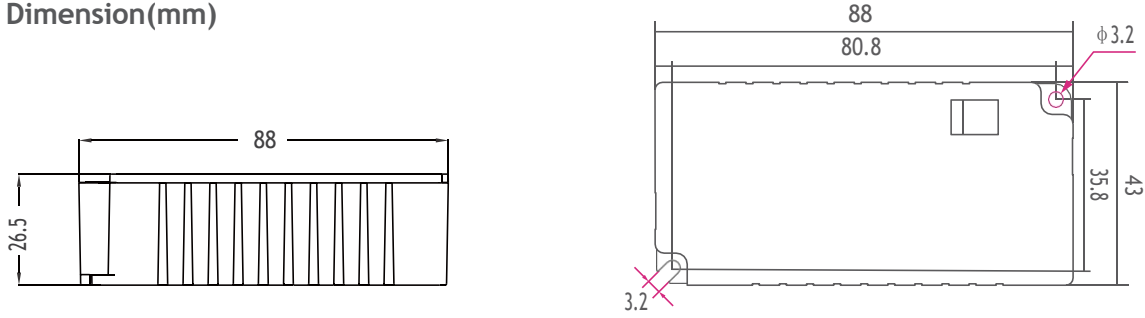
Down Light



### Technical Paramaters

Model	PUP20D-2WMC				
Input	Voltage	120VAC-277VAC			
	Frequency	47/63Hz			
	Efficiency	85%@120VAC, Full load			
	PF	≥0.97@120VAC, Full load, ≥0.9@277VAC, Full load			
	THD(full load)	<13%@120VAC, Full load, <20%@277VAC, Full load			
	Current	0.25Amax@120VAC, 0.15Amax@120VAC			
	Inrush Current	Cold start,0.62A@230VAC 240us			
	Standby Power	<1W			
	No load power	<1W			
Turn on delay Time	≤ 0.75 s, at230Vac (When the light begins to shine)				
Output	Current/Voltage/Power	350mA/9-45V/15.75W 400mA/9-45V/18W	450mA/9-44V/19.8W 500mA/9-40V/20W	550mA/9-36V/19.8W 600mA/9-33V/19.8W	650mA/9-30V/19.5W 700mA/9-28V/19.6W
	Channel	2			
	No load output voltage	58V Max			
	Ripple current	<5%			
	Current Accuracy	±5%			
	Output Voltage	±5%			
Protection	Over Voltage	Hiccup, recovers after fault condition is removed			
	Over load	Hiccup, recovers after fault condition is removed			
	Short circuit	Close output, recovers automatically after fault removed			
Safety & EMC	Surge	L-N: 2KV			
	Withstand Voltage	I/P-O/P: 2000VAC/1min/5mA ; I/P-DALI: 1500VAC/1min/5mA ; O/P-DIM( Signal port DALI): 1500VAC/1min/5mA			
	DALI standards	IEC 62386-101: 2014, IEC 62386-102: 2014; IEC 62386-207: 2009, DALI 2.0			
	Safety standards	EN61347, GB19510			
	EMI Eission	EN55015, EN61000-3-2			
	EMC Immunity	FCC class B(120V)/class A(277V)			
Function	Dimming type	DALI/Touch DIM (Push DIM)			
	Dimming range	0.1%-100% Dimming to off			
Others	Dimension	88*43*26.5mm (3.46*1.69*1.04 Inch) (L*W*H)			
	Pack Information	N.W: 146g(0.32 lb)±5%/PCS; 50PCS/Cartron; 7.8kg(17.2lb)±5%/Cartron; Carton Size: 234*222*194mm(9.21*8.74*7.63 Inch)(L*W*H)			
	IP rating	IP20			
	Working temp.	-20°C -50°C [-4°F -122°F]			
	tc	80°C [176°F]			
	Relative humidity	-40°C -85°C [-40°F -185°F] , 20-90%RH			
	Warranty	5 year			
	Lifetime	50,000h@tc:85°C [185°F]			
	Material	PC			
Switch cycle	>25,000 times				

**Dimension(mm)**

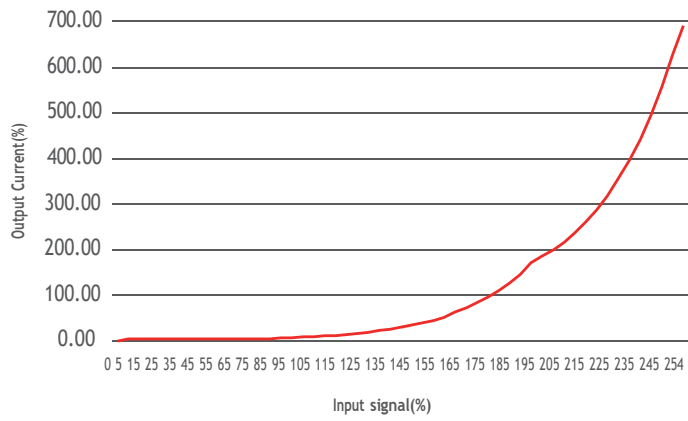


**Wring Diagram**

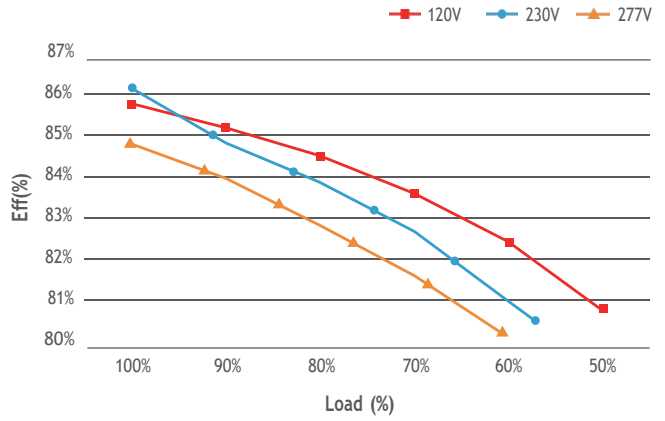
Plastic case  
 All materials comply with the ROHs requirements of Directive 2002/95/EC  
 The cable must be UL certified  
 Input: Black and white :150mm, 18AWG  
 Output: Red and blue :150mm, 18AWG  
 Dimming: Purple and pink :160mm, 20AWG



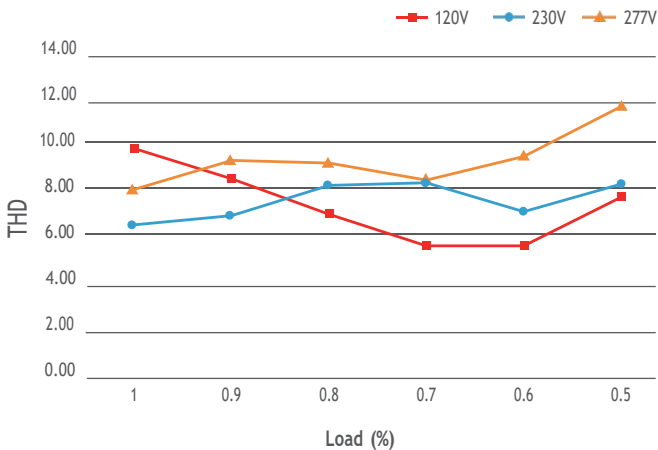
**Dimming Curve**



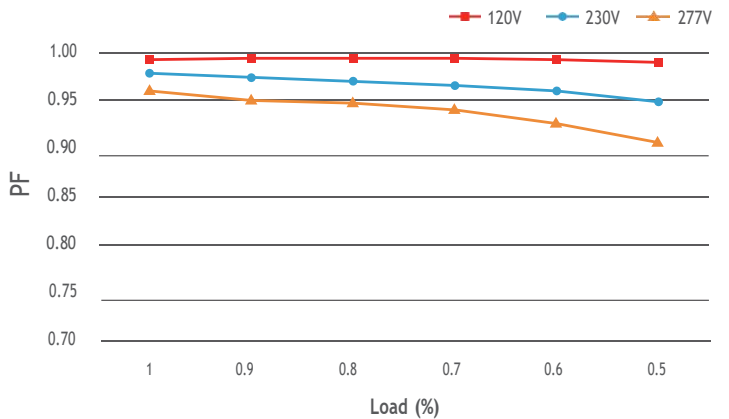
**Efficiency vs Load Curve**



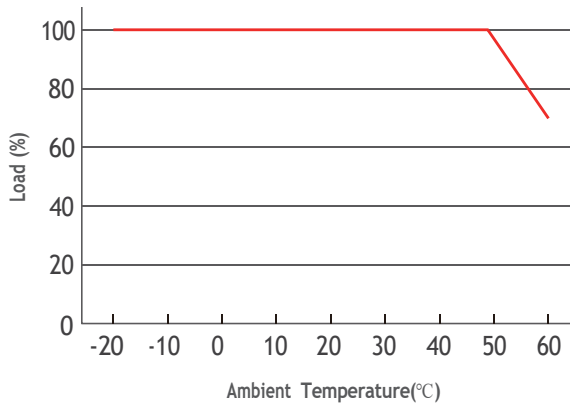
**THD vs Load Curve**



**PF vs Load Curve**



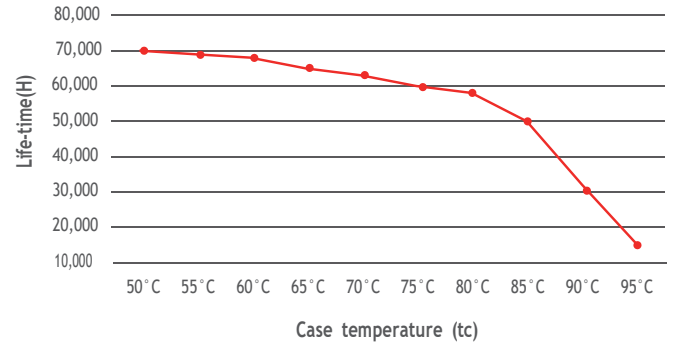
**Derating Curve**



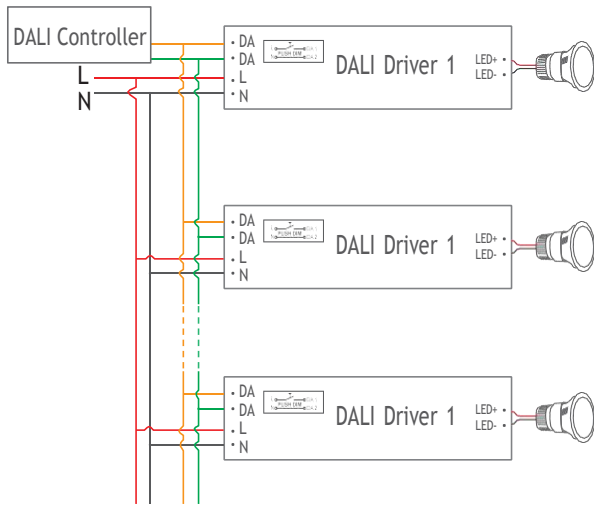
**Life-time vs. case temperature**

The life-time of the led driver is shown in the figure above (calculated based on the 90% survival rate).

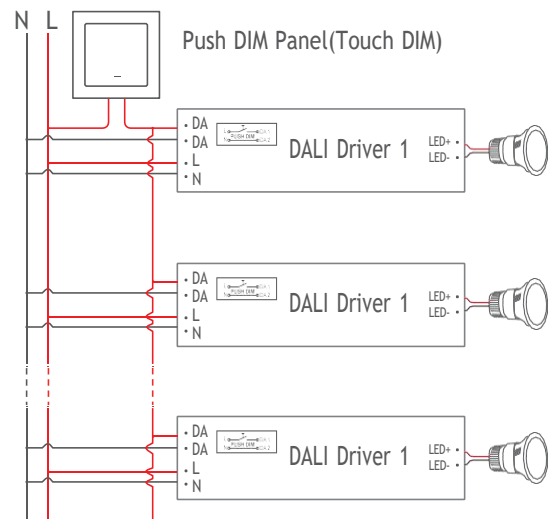
The relation of  $t_c$   $t_a$  temperature depends also on the luminaire design.



**DALI Diagram**



**Touch DIM(Push DIM) Diagram**



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

**Push DIM Function**

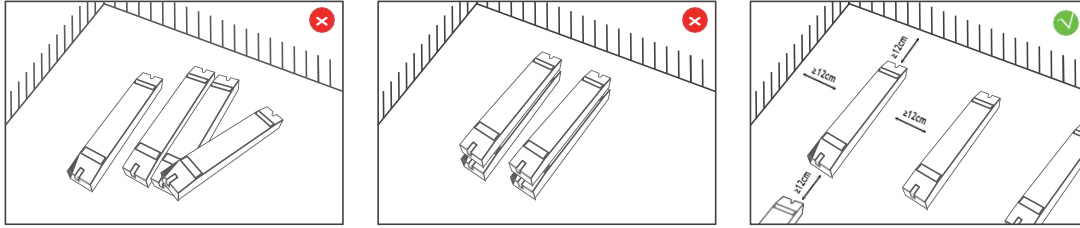
1. Press the Push DIM (Touch DIM) switch (<0.5 seconds) to control the light on or off.
2. Long press the Push DIM (Touch DIM) switch (>0.5 seconds) to adjust the brightness of the lamp. The light is dimmed or brightened, and the switch changes with each press.
3. Double click Push DIM (Touch DIM) switch (<0.3 seconds), all connected lamps will reach the brightest state.
4. Brightness adjustment range is 1%-100%.
5. With the power failure memory function, the power will be restored to the state of the last power failure.

**Max. quantity of drivers per miniature circuit breaker**

Specification item	Value	Value	Condition
Inrush current Ipeak	4A (120V)	8A (277V)	Input Voltage 120V/277V
Inrush current Twidth	8us (120V)	14us (277V)	Input Voltage 120V/277V, measured ta 50% Ipeak

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	33pcs	55pcs	C10	33pcs	55pcs
B13	43pcs	72pcs	C13	43pcs	72pcs
B16	53pcs	88pcs	C16	53pcs	88pcs
B20	66pcs	111pcs	C20	66pcs	111pcs
			D16	53pcs	88pcs

## 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.

## 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.

### Non-warranty regulations:

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

- 1, has exceeded the warranty service period;
- 2, high voltage, overload, improper operation and other man-made damage;
- 3, the product shape is seriously damaged or deformed;
4. Damage caused by natural disasters and force majeure;
- 5, product warranty label and product unique bar code damage;
6. No contract or invoice voucher signed by Oche.

- Repair or replacement is the only remedy Oches has for the customer. Oches shall not be liable for any consequential damages, except to the extent of applicable law.
- Oches reserves the right to amend or adjust this warranty, which shall be published in writing.

## Cautions

1. This product should be installed by qualified personnel.
2. This product is non waterproof, need to avoid sun and rain. In case of outdoor use, please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
4. Please make sure LED power supply output voltage, current is used to meet the product requirements.
5. 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.
6. 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.
7. In case of malfunction, do not repair it yourself.