EULP80D-1WMC

Summary

EULP80D-1WMC is an 80W AC to DC LED driver that can output multiple current levels. The output current can be selected by switching. Non-isolated products, connected to DALI master or Touch DIM for smooth dimming effect.

Product Features

- Single channel constant current output, multi-level current optional
- Wide voltage input: 100VAC~277VAC
- Efficiency up to 93%
- Conforms to DALI-2 protocol standards
- Protection: short circuit, overvoltage
- Suitable for LED indoor lamps

Application

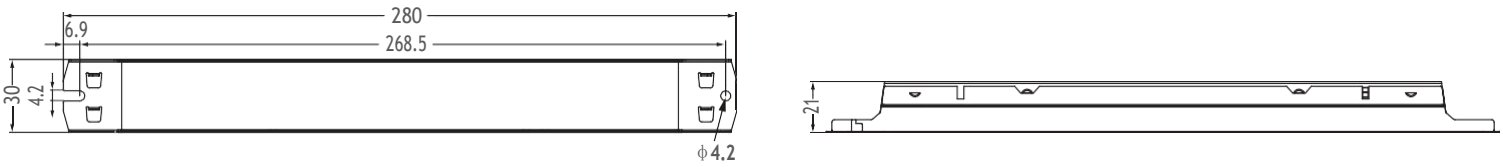
Down light

Flicker free | DALI | Short Circuit Protection | Over Voltage Protection

Technical Paramaters

Model	EULP80D-1WMC	
Input	Efficiency	≥90%@120VAC，≥93%@277VAC, Full load
	Voltage	100VAC-277VAC
	Frequency Range(Hz)	50/60Hz
	Power Factor	>0.98@120VAC , 0.9@277VAC Full load
	THD	10%@120VAC , 15%@277VAC Full load
	AC Current	0.9Amax@120VAC , 0.4Amax@277VAC
	Standby power	<0.5W
	Inrush Current(max)	Cold start , 17A@120VAC 250us 20A@277VAC 500us
Output	Current/Voltage/Power	150mA/100-200VDC/30W 250mA/100-200VDC/50W 300mA/100-200VDC/60W 365mA/100-200VDC/73W 200mA/100-200VDC/40W 280mA/100-200VDC/54W 350mA/100-200VDC/70W 400mA/100-200VDC/80W
	Channel	1
	Current Tolerance	±5% (150mA ±7%, 200mA ±7%)
	No load output voltage	280V
	Turn on delay Time	≤1 s, @120VAC @277VAC (When the light begins to shine)
Function	Dimming Type	DALI, Touch DIM
	Dimming Range	0.5%-100%
	Dimming curve	Logarithm
Protection	Short circuit	No output and self-recovery after removal
	Over Voltage	If no output is generated, power off and restart the device to rectify the fault
Safety & EMC	Surge	L-N:1kV L/N-PE:2kV
	Withstand Voltage	I-PE: 1500VAC/1min/5mA O-PE: 1500VAC/1min/5mA
	Safety Standards	IEC/EN61347-1, IEC/EN61347-2-13, GB19510.1, GB19510.14
	EMC Eission	EN55015, FCC part 15 Class B
	Insulation Resisance	5MΩ
Others	Working Temp.	-20°C~+55°C [-4°F~131°F]
	Storage Temp., Humidity	-40°C~+85°C [-40°F~185°F] , 5-95%RH
	tc	80°C [176°F]
	Material	Metal
	IP Rating	IP20
	Lifetime	50,000h@tc:80°C [176°F]
	Warranty Condition	5 year
	Switch Cycle	>25,000 times
	Packing(weight)	N.W: 220g(0.48 lb)±5%/PCS; 50PCS/Carton; 14.2kg(31.3 lb)±5%/Carton; Carton Size: 498*334*160mm(19.6*13.1*6.29 Inch)(L*W*H)
	Dimension	280*30*21mm (11.02*1.18*0.82 Inch) (L*W*H)

Dimension(mm)



DALI Wiring

DALI Signal Input

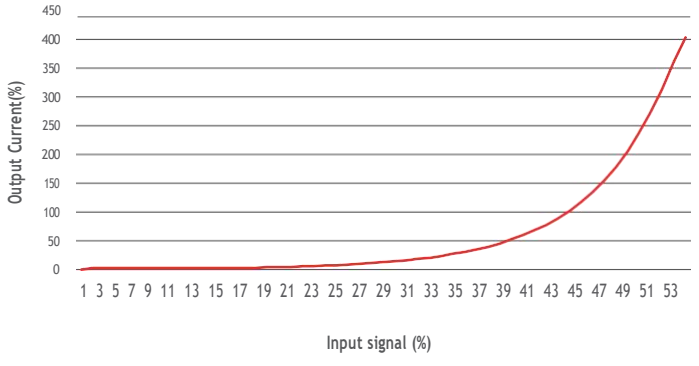
Current Selection Table

EULP80D-1WMC is a multi-current dimming driver, output current level selectable by DIP S.W., as the following:

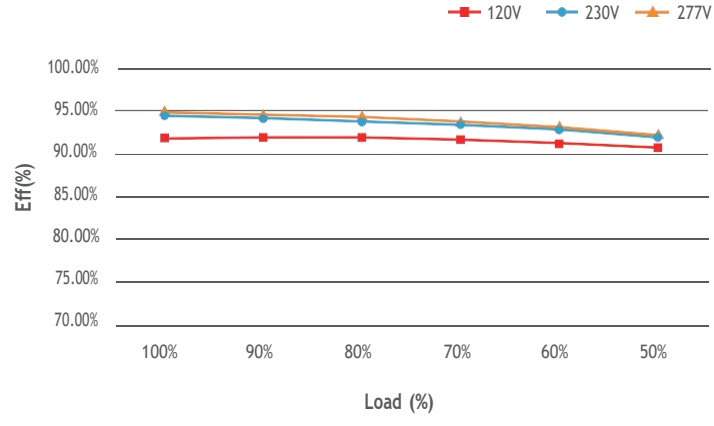
ON / OFF	1 2 3	150mA	200mA	250mA	280mA	300mA	350mA	365mA	400mA
		100-200V	100-200V	100-200V	100-200V	100-200V	100-200V	100-200V	100-200V

Remark: Function default setting is: 150mA(@switch are all OFF state)

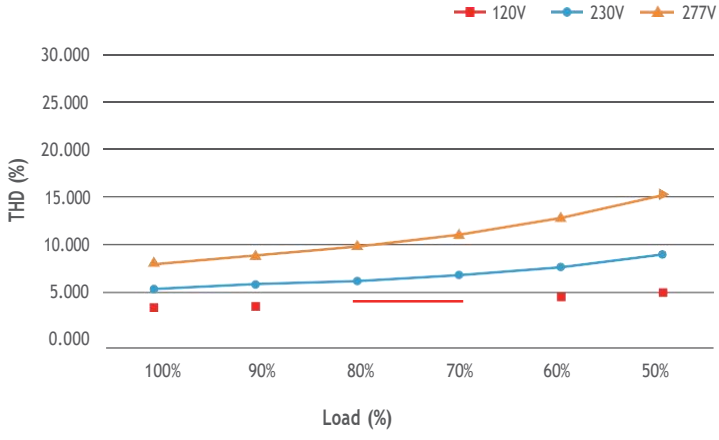
Dimming Curve



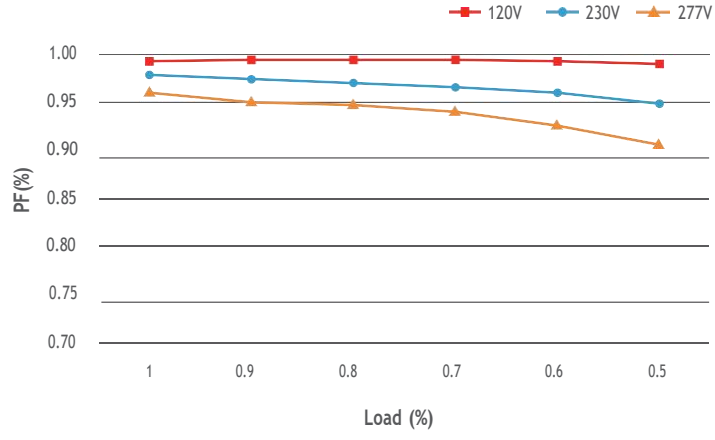
Efficiency vs Load Curve



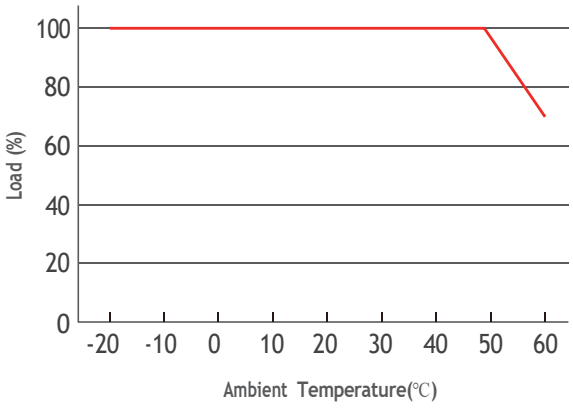
THD vs Load Curve



PF vs Load Curve

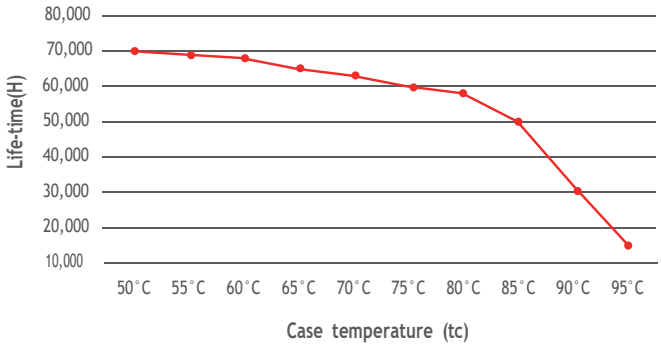


Derating Curve

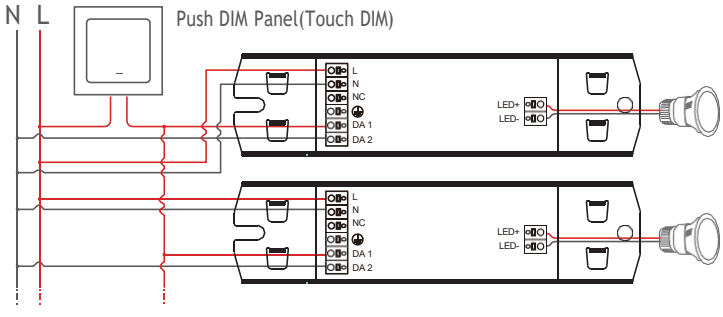


Life-time vs. case temperature

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



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

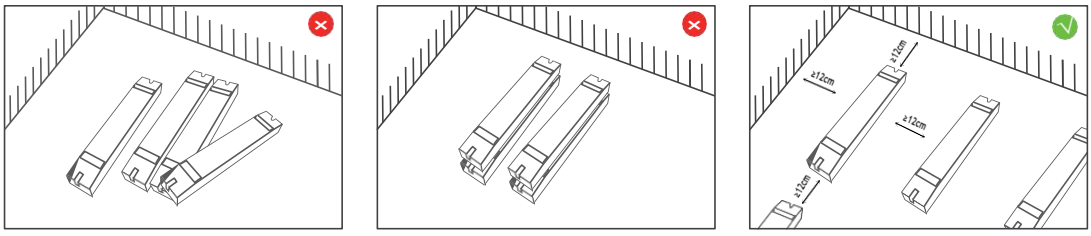
1. Press the Push DIM (Touch DIM) switch for 8s or more,the driver can be controlled via Push DIM switch.
2. Short press the Push DIM (Touch DIM) switch (<0.5s) to control the lamp on or off.
3. Long press the Push DIM (Touch DIM) switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Push DIM (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 Push DIM (Touch DIM) switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current Ipeak	17A (120V)	20A (277V)	Input Voltage120V/277V
Inrush current Twidth	250us (120V)	500us (277V)	Input Voltage120V/277V, measured ta 50% Ipeak

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	11pcs	7pcs	C10	11pcs	12pcs
B13	14pcs	9pcs	C13	14pcs	16pcs
B16	17pcs	12pcs	C16	17pcs	20pcs
B20	22pcs	15pcs	C20	22pcs	25pcs
			D16	17pcs	40pcs

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- 2.5mm² 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.