PUP20A-1WMC-430

Product Features

· Single-channel constant current output, multi-stage current selectable

· Supports 3-in-1 dimming (0-10V active signal, adjustable resistor, PWM signal) Type A

· Dimming range 0.1%-100% dimming, smooth dimming without step sense and stroboscopic

· Short circuit, overload, overvoltage protection, V0 flame retardant housing

· Life of 50,000 hours, 5 years warranty

· Customizable dimming curve

· Built-in PFC chip to improve energy efficiency and reduce pollution

· Suitable for LED indoor lamps, such as downlights, spotlights, panel lights, etc

Application

Down Light

Technical Paramaters

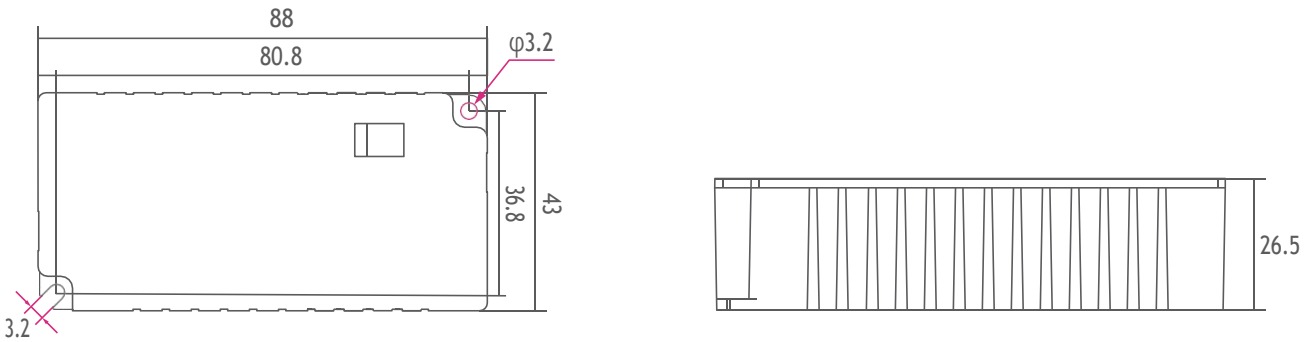
Model	PUP20A-1WMC-430	
Input	Input Voltage	120VAC-277VAC
	Frequency Range(Hz)	50/60Hz
	Input Current	0.22Amax@120VAC 0.1Amax@277VAC 0.12Amax@230VAC
	Power Factor	≥0.98@120VAC, Full load ≥0.93@277VAC, Full load
	Efficiency	≥84%@120VAC, Full load ≥84%@277VAC, Full load
	THD	≤10%@120VAC, Full load <15%@277VAC, Full load
	Standby power	<1W
	No-load power	<1W
	Inrush Current	Cold start, 4.6A@120VAC 30.4us 10.6A@277VAC 27.2us
Output	Output Power Range	0W-20W
	Voltage Accuracy	/
	Current Accuracy	±5%
	Output Voltage Output Current Output Power	250mA/9-45V/11.25W 300mA/9-45V/13.5W 350mA/9-45V/15.75W 400mA/9-45V/18W 280mA/9-45V/12.6W 330mA/9-45V/14.85W 380mA/9-45V/17.1W 430mA/9-45V/19.35W
	PstLM	≤1
	SVM	≤0.4
	Dimming frequency	/
	Line Regulation	±5% @Full load
	Load Regulation	±5% @Full load
	Turn on delay Time	0.75s, at230Vac (When the light begins to shine)
Function	Dimming Type	0-10V
	Dimming Range	0.1%-100% Dimming to OFF
	Dimming Curve	Linear
	Flicker free	Flicker free
Protection	Short circuit	There was no output due to short circuit. The output was normal after the fault was eliminated
	Over load	Reduce the current and recover automatically after the fault is eliminated
	Over Voltage	Reduce the current and recover automatically after the fault is eliminated
Safety& EMC	Surge	L-N 0.5KV
	Withstand Voltage	I/P-O/P: 3000Vac/1min/<5mA 0-10V(Signal port)-O/P:1500Vac/1min/<5mA
	Safety standards	EN61347-1, EN61347-2-13
Others	Working Temp.	-20℃~50℃ (-4°F-122°F)
	Storage Temp.	-40℃-85℃ (-40°F-185°F) 20-90%RH (No condensation)
	tc	90℃ [194°F]
	material	PC
	IP Rating	IP20
	Lifetime	50,000h@tc:90℃ [194°F]
	Switch Cycle	25,000times
	Body size	88*43*26.5mm (3.46*1.69*1.04 Inch) (L*W*H)
	Packing(weight)	Net weight: 177g (0.39lb) ±5%/PCS; 50PCS/Carton; 9.35kg (20.61lb) ±5%/Carton; Carton Size: 234*222*194mm (9.21*8.74*7.63 Inch) (L*W*H)

Current Selection Table

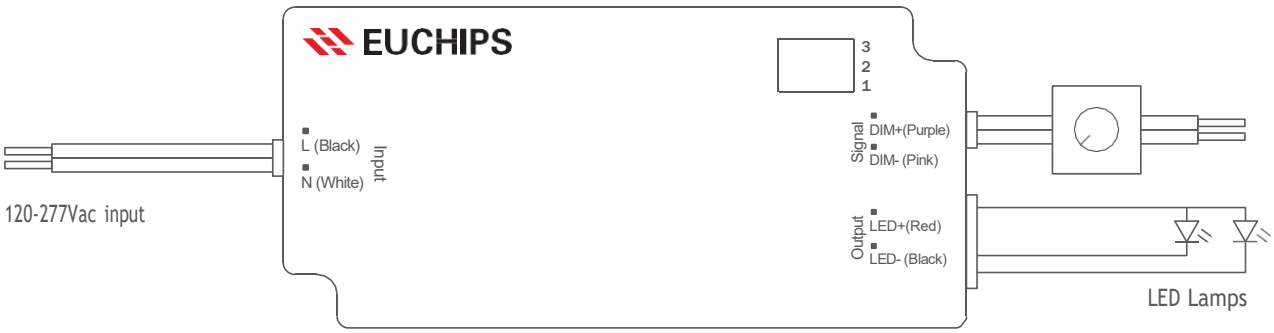
ON	OFF	250mA 9-45V	280mA 9-45V	300mA 9-45V	330mA 9-45V	350mA 9-45V	380mA 9-45V	400mA 9-45V	430mA 9-45V

Remark: Function default setting is: 250mA (@switch are all OFF state)

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 Black :150mm, 18AWG

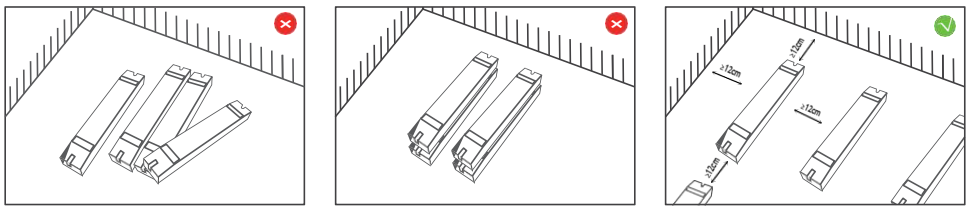
Dimming: Purple and pink :160mm, 20AWG

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current Ipeak	4.6A (120V)	10.6A (277V)	Input Voltage120V/277V
Inrush current Twidth	30.4us (120V)	27.2us (277V)	Input Voltage120V/277V, measured ta 50% Ipeak

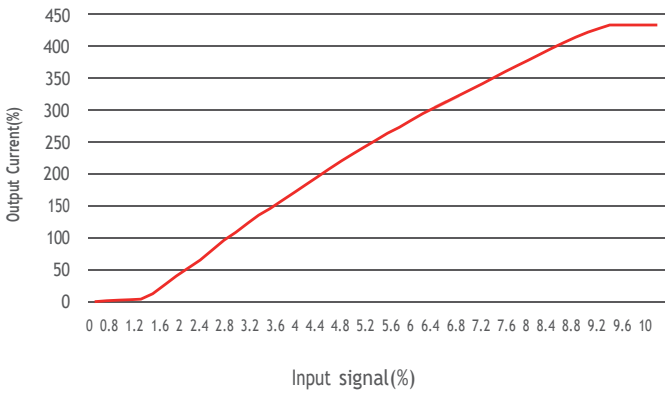
MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	45pcs	100pcs	C10	45pcs	100pcs
B13	59pcs	130pcs	C13	59pcs	130pcs
B16	72pcs	160pcs	C16	72pcs	160pcs
B20	90pcs	200pcs	C20	90pcs	200pcs
			D16	72pcs	160pcs

Installation Precautions

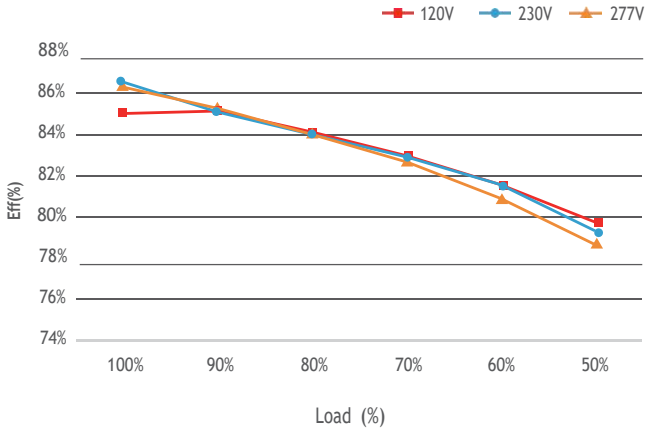


Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

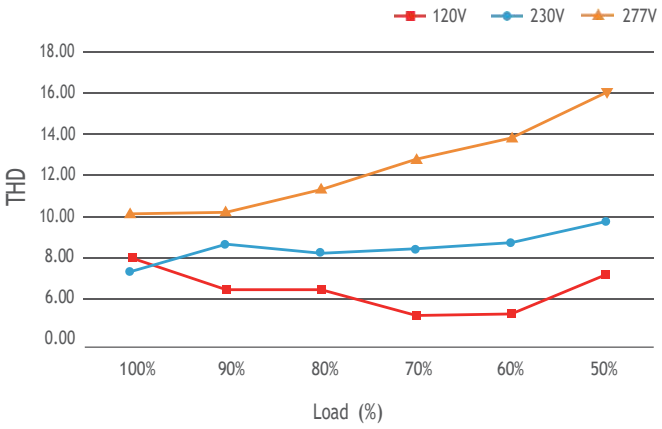
Dimming Curve



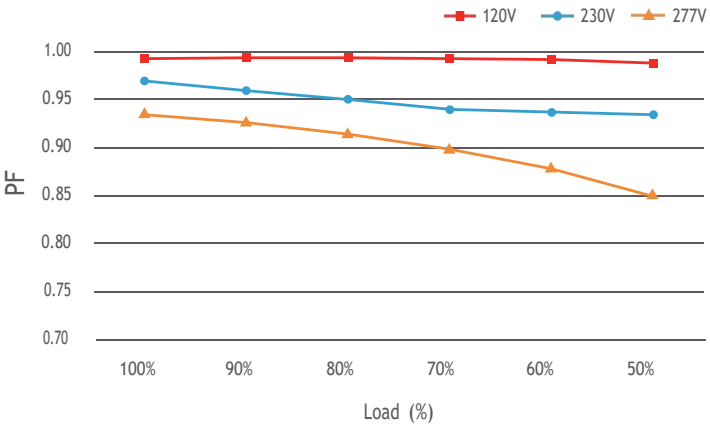
Efficiency vs Load Curve



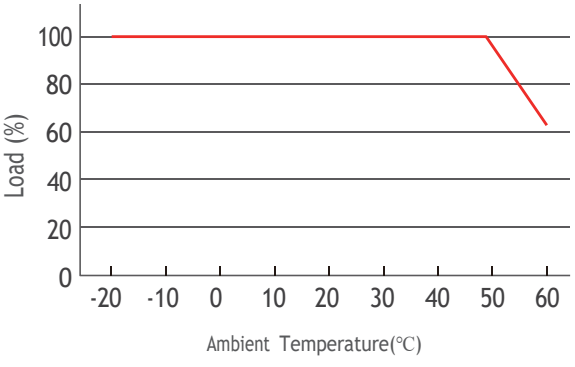
THD vs Load Curve



PF vs Load Curve

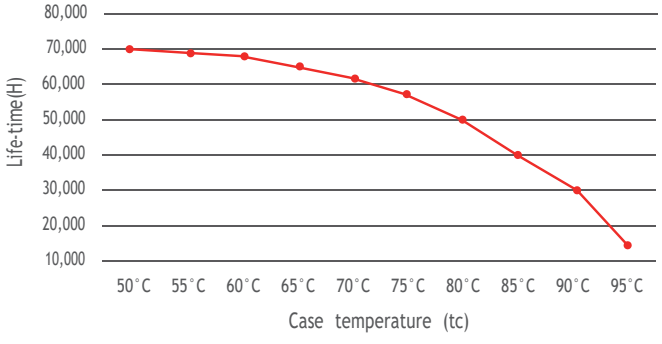


Derating Curve



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.



Cautions

This product must be installed and adjusted by a qualified professional.		
1	Confirmation of installation conditions	· **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	· 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	· 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 mm^2 , (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. · To avoid hot swapping, power off and restart the driver before connecting the LED load.
4	Wiring confirmation	· Before power on debugging, ensure that the wiring is secure and avoid poor contact to prevent unstable current or equipment damage.
5	Repair suggestions	· 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.