

## MUP288-3W48V-B

### Product Features

- Three-channel constant voltage output, per channel 2A Max
- Input Voltage Range 108-305Vac
- Protection: Overload; short circuit; Overcurrent
- Class 2 Output
- Safety according to UL8750 &UL 1310

### Application



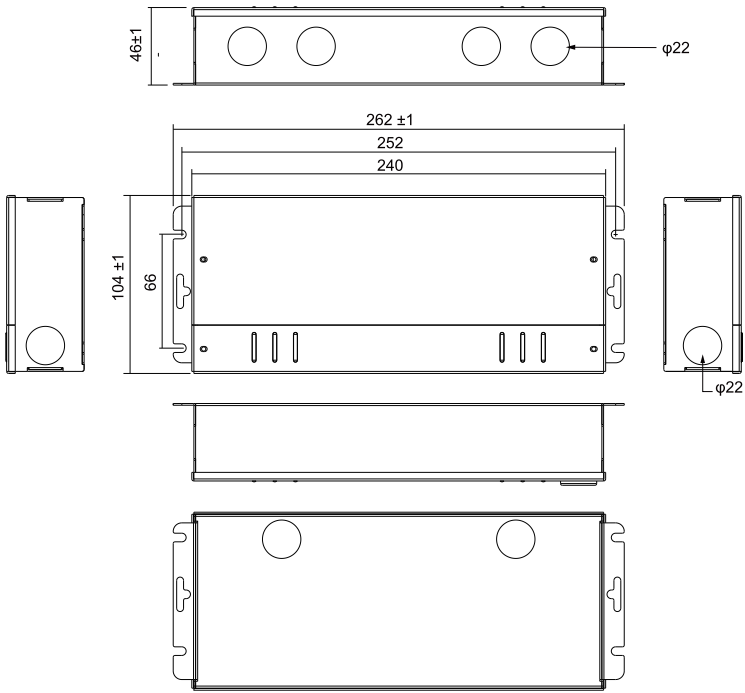
LED Strip Light



### Technical Parameters

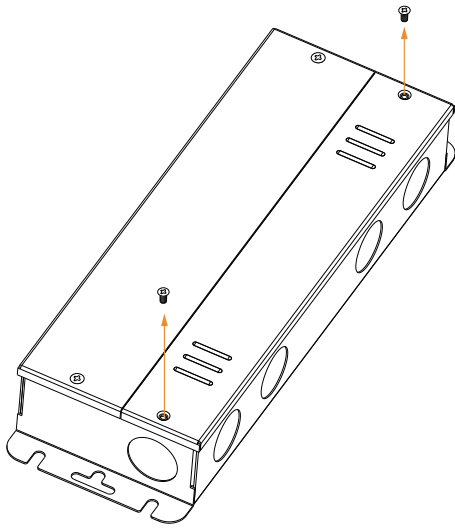
Model	MUP288-3W48V-B	
Input	Rated supply voltage	120-277VAC
	Input voltage range	108-305VAC
	Input voltage range [DC]	180-280VDC
	Input Current	2.8Amax @ 120VAC, 1.4max @ 230VAC, 1.2max @ 277VAC
	Input Frequency range	50/60Hz
	Inrush Current	Cold start, 50A@120VAC 500us, 100A@230VAC 500us, 100A@277VAC 100us
	Efficiency	>91.5%@120VAC, >93.5%@230VAC, >94.5%@277VAC, Full load
	THD	<10%@120VAC, <10%@230VAC, <10%@277VAC, Full load
	Power factor	>0.95@120VAC, >0.95@230VAC, >0.95@277VAC, Full load
	Standby power	<2W@120VAC
	No load power	<2W@120VAC
	Turn on time	<0.5s, @120Vac (time-to-first-light)
Output	Current	2Ax3
	Voltage	48VDC
	Voltage Accuracy	±3%
	Power	288W
	Output Channel	3
	Load Regulation	±3%
	Line Regulation	±3%
	Current Overshoot	5%
	No load output voltage	50VDC
Protection	Short-circuit	Shut down output, Auto-recovery after Fault Clearance
	Over Current	Hiccup Protection, Auto-recovery after Fault Clearance
	Overload	Hiccup Protection, Auto-recovery after Fault Clearance
Safety & EMC	Surge	L-N: 2000VAC, L-N-PG: 4000VAC, Ringwave, Combine wave
	Withstand Voltage	I/P-O/P:3750Vac/1min/<5mA, I/P-PG:1500Vac/1min/<5mA, O/P-PG:500Vac/1min/<5mA,
	Safety Standards	UL8750 UL1310 CSA25013.CSA; Class2
	EMC Emission	EN IEC 55015:2019/A11:2020; FCC Part 15; ClassA; ClassB
	EMC Immunity	EN 61547:2023; IEC 61000-4-2,3,4,5,6,8,11; EN 61000-3-2:2019; EN 61000-3-3:2013/A1:2019/A2:2021/AC:2022; ESD EN 61000-4-2
Others	RoHS	RoHS Directive 2011/65/EU, directives (EU)2015/863
	Working Temp.	-20 C ~60 C
	Storage Temp. Humidity	-40 C ~85 C, 20-90%RH
	tc	80 C for safety & for life
	Lifetime	50,000h@tc:80 C
	Warranty Condition	5 years
	Switch Cycle	>25,000 times
	IP Rating	IP20
	Material	Metal
Dimension	262*104*46mm (10.31*4.1*1.8 Inch) [L*W*H]	
Packing(weight)	Net weight: ---g(---lb)±5%/PCS; 8PCS/Carton; ---kg(--- lb)±5%/Carton; Carton Size: 445*277*124mm(17.6*10.9*4.88Inch)[L*W*H]	

**Dimension(mm)**

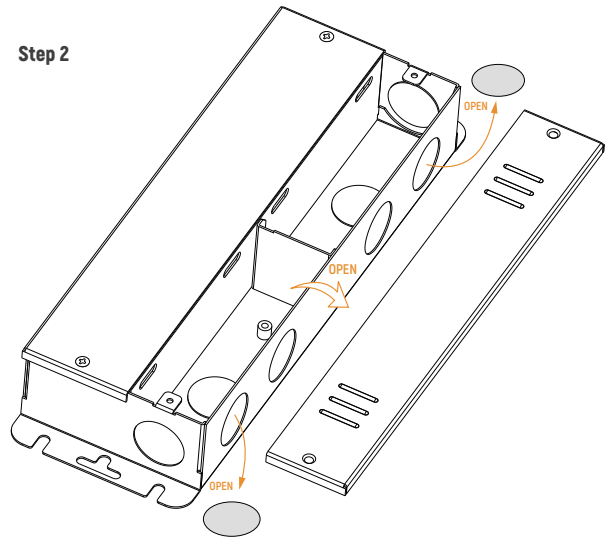


**Wiring**

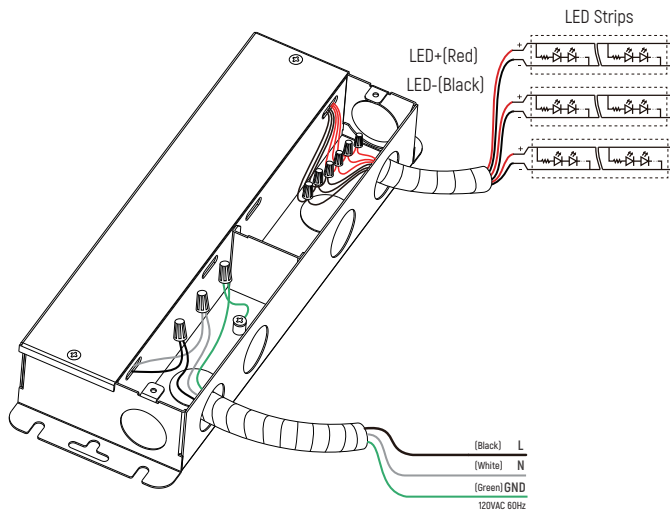
**Step 1**



**Step 2**



**Step 3 Using Triac MLV wiring diagram**

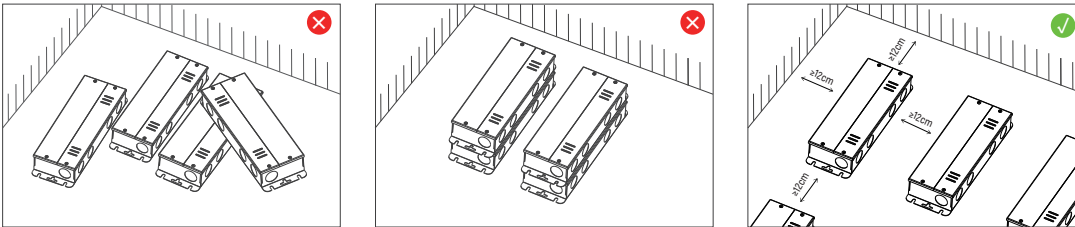


## Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current $I_{peak}$	50A (120V)	100A (277V)	Input Voltage 120V/277V
Inrush current $T_{width}$	500us (120V)	100us (277V)	Input Voltage 120V/277V, measured ta 50% $I_{peak}$

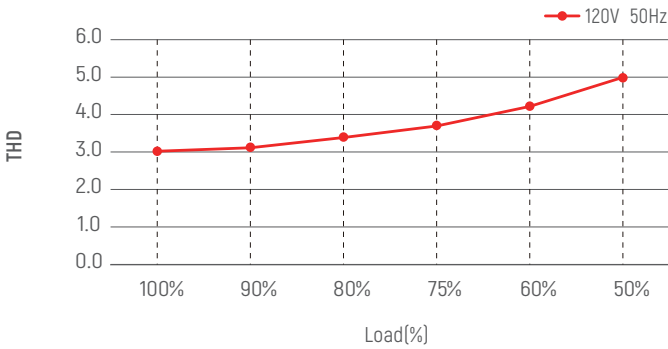
MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	3pcs	8pcs	C10	4pcs	8pcs
B13	3pcs	10pcs	C13	5pcs	10pcs
B16	4pcs	13pcs	C16	7pcs	13pcs
B20	6pcs	16pcs	C20	9pcs	16pcs
			D16	7pcs	13pcs

## Installation Precautions

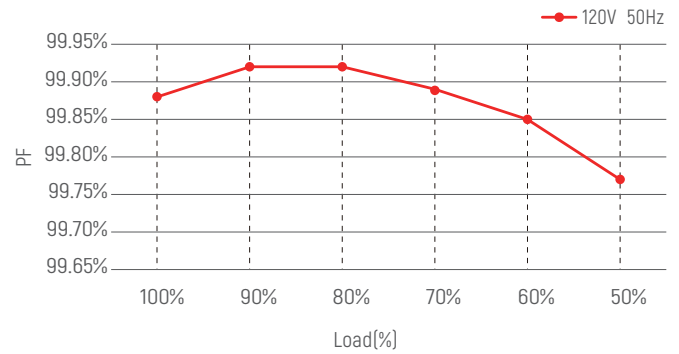


Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

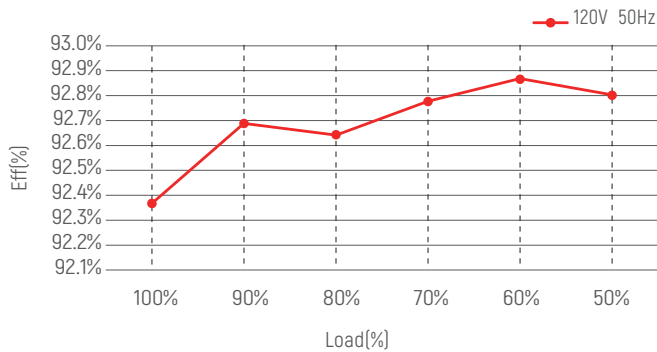
### THD vs Load Curve



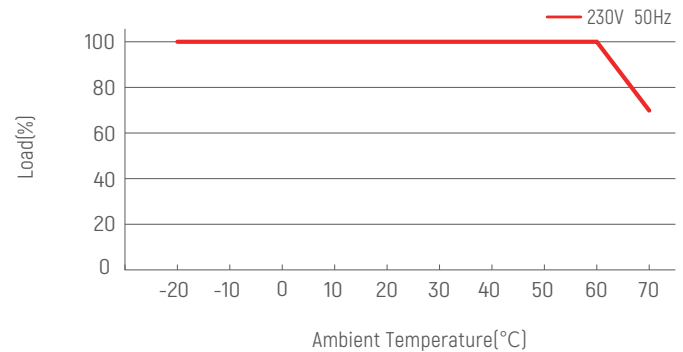
### PF vs Load Curve



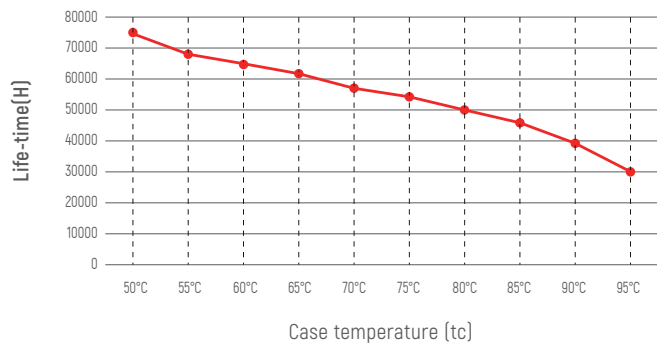
### Efficiency vs Load Curve



### 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  $t_c$  to temperature depends also 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"> <li>· <b>Waterproof and Protection:</b> 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.</li> <li>· <b>Heat dissipation requirements:</b> 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.</li> </ul>
2	Power check	<ul style="list-style-type: none"> <li>· Before use, check the product parameters and confirm that the output voltage and current of the LED power supply meet the requirements</li> </ul>
3	Safe wiring	<ul style="list-style-type: none"> <li>· 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<sup>2</sup>, (Please refer to the silk screen printing or wiring diagram in the instruction manual for specific wire diameter requirements).</li> <li>· If the power supply (metal casing) is installed on a grounded lighting component or equipment, the power supply needs to be grounded.</li> </ul>
4	Wiring confirmation	<ul style="list-style-type: none"> <li>· Before power on debugging, ensure that the wiring is secure and avoid poor contact to prevent unstable current or equipment damage.</li> </ul>
5	Repair suggestions	<ul style="list-style-type: none"> <li>· 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.</li> </ul>

※ 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.