

MUP60-1W24V-T-BW

Product Features

- Single channel constant voltage output, Output Current 2.5A Max
- Protection: Overload, short circuit, Overcurrent, Over temperature
- Class 2 Output
- Safety according to UL8750 &UL 1310
- Lifetime: 50,000 h at $t_c = 90^{\circ}\text{C}$
- Warranty Condition 5 years @ $t_c 90^{\circ}\text{C}$
- Suitable for Dry , Damp & Wet Locations

Application



LED Strip Light



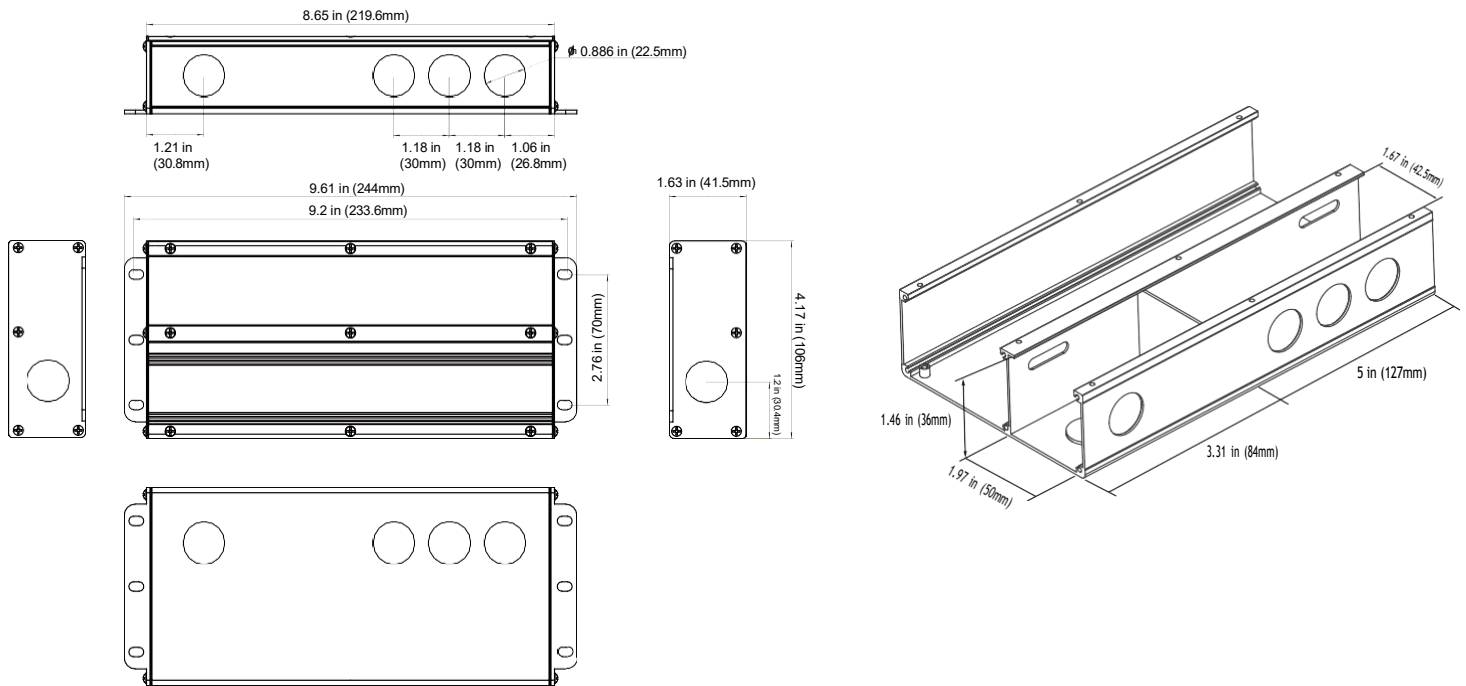
Class P Class 2



Technical Parameters

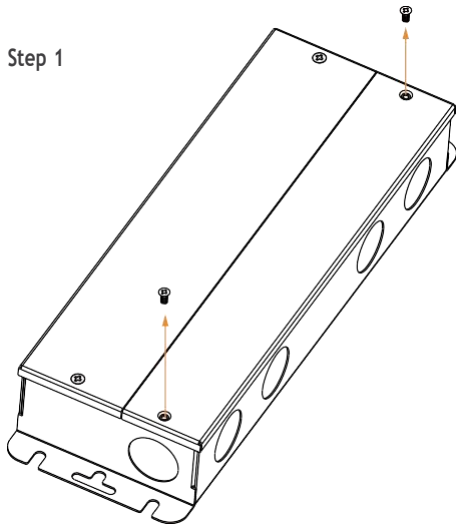
Model	MUP60-1W24V-T-BW	
Input	Voltage	120VAC-277VAC
	Frequency Range(Hz)	50/60Hz
	Efficiency	$\geq 88\%$ @120VAC, $\geq 89\%$ @230VAC, $\geq 90\%$ @277VAC, full load
	PF	≥ 0.95 @120V-277VAC, full load
	Current	0.72A max@120VAC, 0.35A max@230VAC, 0.28A max@277VAC, full load
	THD	$< 10\%$ @120-277VAC, full load
	Inrush current	Cold start, 18A@120VAC 200us, 36A@230VAC 200us, 46A@277VAC 210us,
	No load power	$< 0.5\text{W}$
	Turn on Time	$\leq 0.5\text{s}$, at 120-277VAC (When the light begins to shine)
Output	Voltage	24VDC
	Voltage Accuracy	$\pm 3\%$
	Output Current	2.5A
	Power	60W
	Channel	1
	Ripple Voltage	$\leq 240\text{mV(p-p)}$
Protection	Overload	Hiccup Protection, Auto-recovery after Fault Clearance
	Short circuit	No Output, Auto-recovery after Fault Clearance
	Overcurrent	Hiccup Protection, Auto-recovery after Fault Clearance
	Over temperature	Output power drops to 50% at $75-80^{\circ}\text{C}$ ambient ($T_c = 95^{\circ}\text{C}-100^{\circ}\text{C}$), recovering automatically when temperature normalizes.
Safety&EMC	Surge	L-N 6kV L/N-G 6kV
	Withstand Voltage	I/P-O/P: 3000Vac/1min/ $< 5\text{mA}$
	Safety standards	EN61347-1, EN61347-2-13; UL8750:2015 Ed.2+R:07Dec2022, UL1310, CSA-C22.2 No. 250.13:2022 Ed.5
	EMI Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3; FCC Part 15 Class B(120V)/Class A(277V)
	EMS Immunity	EN61547, EN61000-4-2, 3, 4, 5, 6, 8, 11
	Insulation Resisance	5M Ω
Others	Working temp.	$t_a: -40 \dots +60^{\circ}\text{C} (-40^{\circ}\text{F}-140^{\circ}\text{F})$
	t_c	$90^{\circ}\text{C} (194^{\circ}\text{F})$ for safety & life
	Storage Temp Humidity	$-40^{\circ}\text{C}-85^{\circ}\text{C} (-40^{\circ}\text{F}-185^{\circ}\text{F})$, 20-90%RH
	Lifetime	50,000h@ $t_c: 90^{\circ}\text{C} (194^{\circ}\text{F})$
	Warranty	5 years
	IP rating	IP65
	Material	Metallic
	Switch cycle	> 25000 times
	Dimension	244*106*41.5mm (9.61*4.17*1.63 Inch)(L*W*H)
	Packing size	Net weight: TBDg (-- lb) $\pm 5\%$ /PCS; 12PCS/Cartron;--kg(-- lb) $\pm 5\%$ /Cartron; Carton Size: 314*263*249mm(12.36*10.35*9.8 Inch)(L*W*H)

Dimension Inch (mm)

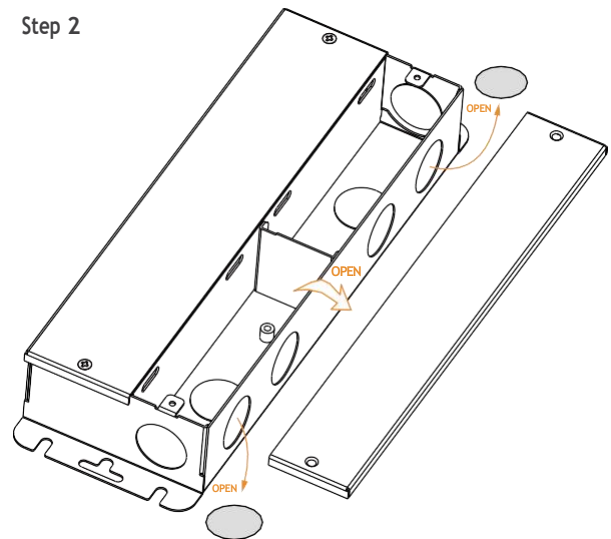


Wiring Diagram

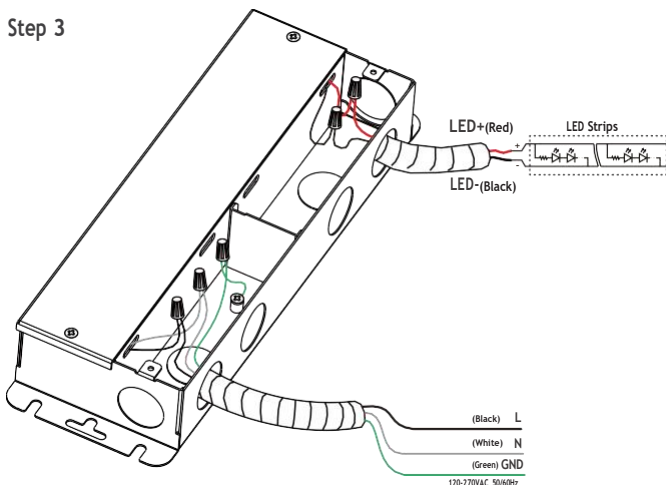
Step 1



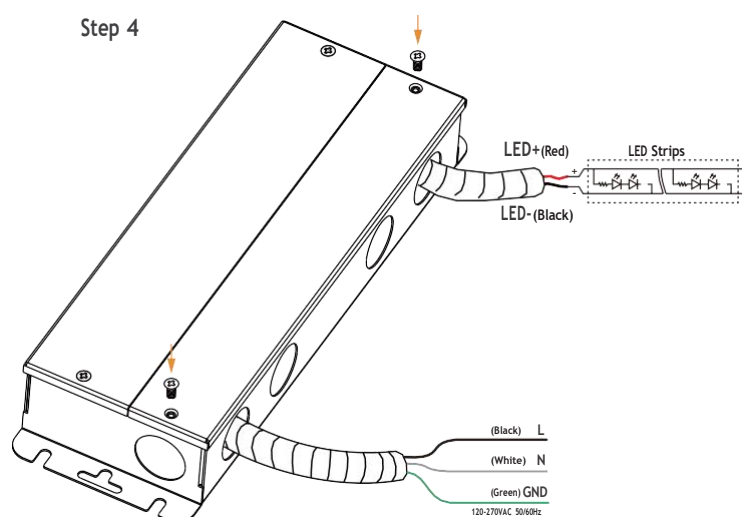
Step 2



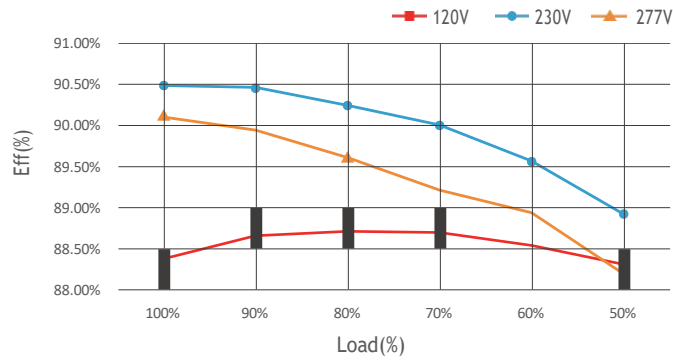
Step 3



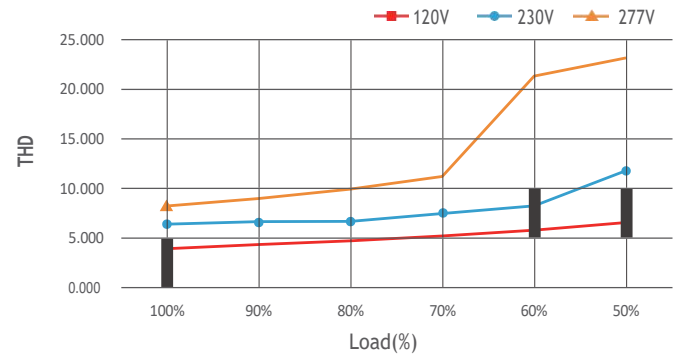
Step 4



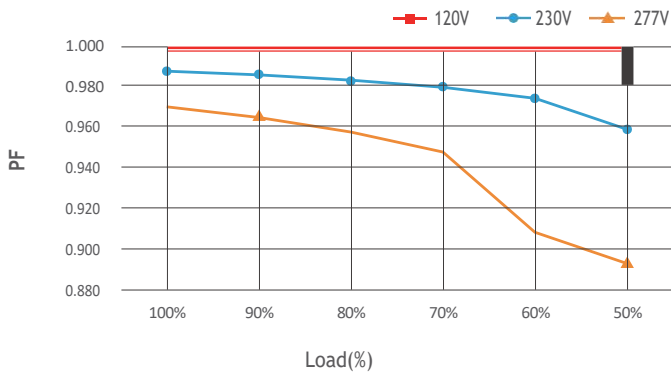
Efficiency vs Load Curve



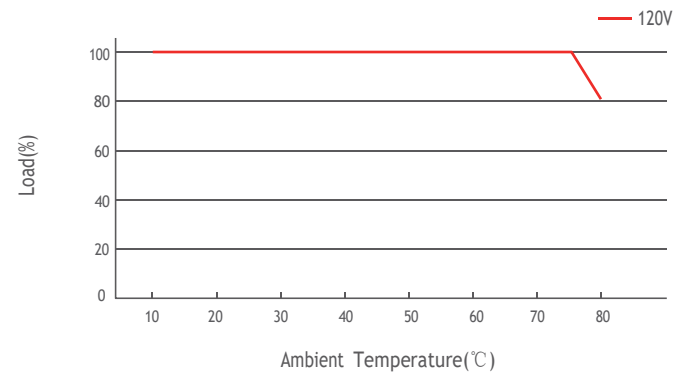
THD vs Load Curve



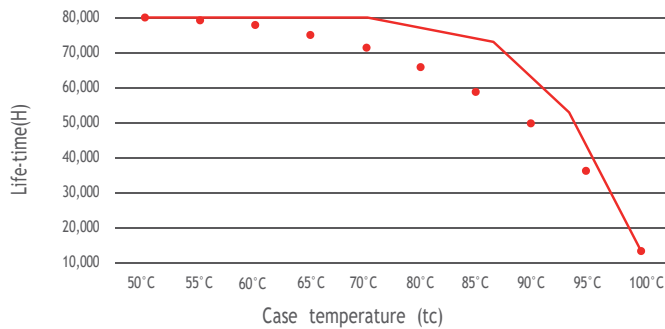
PF vs Load Curve



Derating Curve



Life-time vs. case temperature



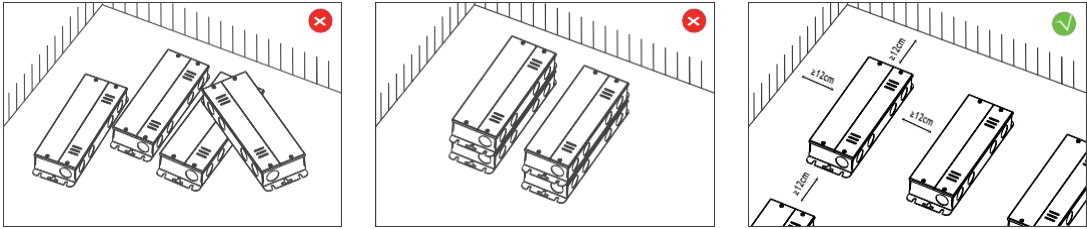
The life-time of the led driver is shown in the figure above (calculated based on the 90% survival rate).
The relation of t_c to t_a temperature depends also on the luminaire design.

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Value	Condition
Inrush current I_{peak}	18A (120V)	36A (230V)	46A (277V)	Input Voltage 120V/230V/277V
Inrush current T_{width}	200us (120V)	200us (230V)	210us (277V)	Input Voltage 120V/230V/277V, measured at 50% I_{peak}

MCB	Input Voltage 120V Drivers	Input Voltage 230V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 230V Drivers	Input Voltage 277V Drivers
B10	13pcs	11pcs	8pcs	C10	13pcs	18pcs	14pcs
B13	18pcs	14pcs	10pcs	C13	18pcs	24pcs	18pcs
B16	22pcs	18pcs	13pcs	C16	22pcs	30pcs	22pcs
B20	27pcs	22pcs	16pcs	C20	27pcs	37pcs	28pcs
				D16	22pcs	45pcs	44pcs

Installation Precautions



Please do not stack the products. The distance between two products should be $\geq 12\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.

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 $0.75\text{-}2.5\text{ mm}^2$, (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.
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.