MUP96(60)AT-1W24(12)V-PA-MTR-BW

Product Features

- No flicker, smooth dimming
- High PF value
- Wide input voltage 120~277VAC
- Short circuit protection, overload protection, overcurrent protection
- Dial code to switch dimming mode
- Class 2 Output
- Safety according to UL8750 &UL 1310
- Suitable for Dry , Damp & Wet Locations

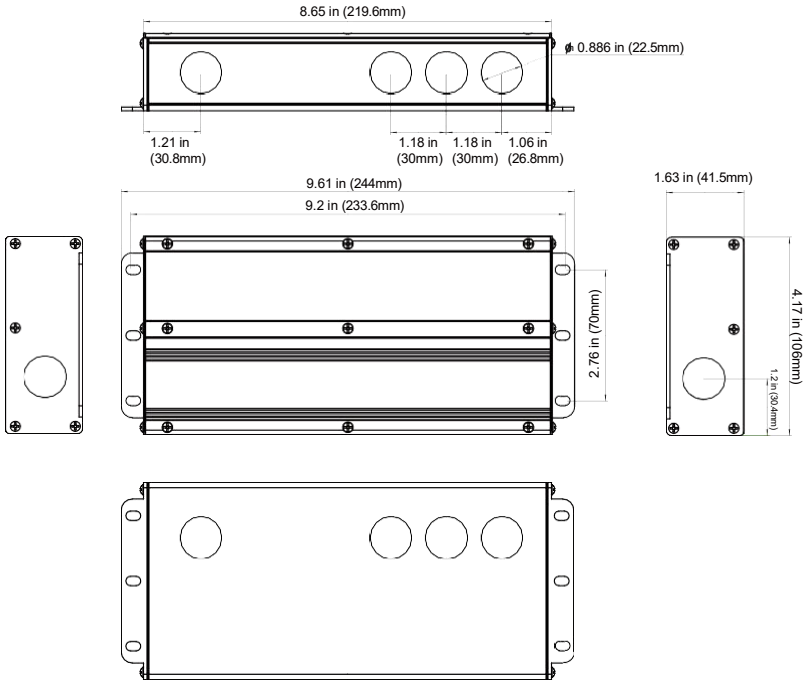
Application

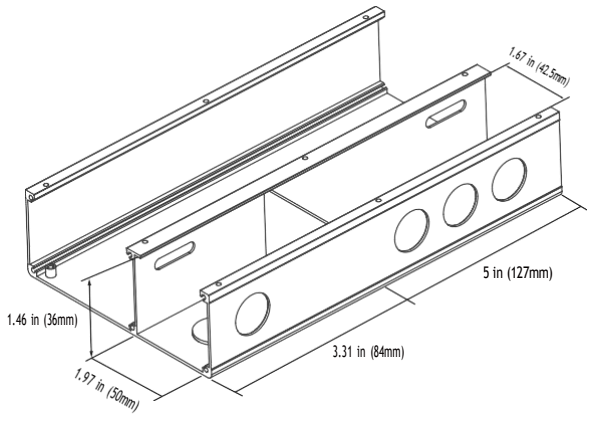
LED Strip Light

Technical Parameters

Model	MUP96(60)AT-1W24(12)V-PA-MTR-BW	96W 24V	60W 12V
Input	Efficiency	≥88%@120VAC, full load	
	Voltage	120VAC-277VAC	
	Frequency Range(Hz)	50/60Hz	
	Current(max)	0.95Amax @120VAC, 0.55Amax@230VAC, 0.45Amax@277VAC	0.65A@120VAC, 0.27A@277VAC, full load
	PF	≥0.95@120VAC, ≥0.9@277VAC, full load	
	THD	<20%@120VAC, full load	
	No load power	0.5W	
	Inrush Current(max)	Cold start, 30A@120VAC 250us,	
	Turn on delay Time	<0.75s, @120Vac (When the light begins to shine)	
Output	Current	4Amax	5Amax
	Voltage	24VDC	12VDC
	Voltage Range	21-26VDC ±5%	12-13VDC ±5%
	Power	96W Max	60W Max
	Channel	1	
	Ripple Current	≤300mV	
	PWM Frequency	20K Hz	
Function	Dimming Type	0/1-10V ,Potentiometer,PWM,Triac/ELV(@120VAC 60Hz), PA(AM Dimming)	
	Dimming Range	0.1%-100%(0-10V), 1%-100%(Triac/ELV)	
	Dimming curve	Logarithm (for 0-10V & Triac/ELV) Linear (suitable for PA dimming)	
	Flicker	Flicker free	
Protection	Short Circuit	Output shut down, Auto-recover after Fault Fixed	
	Overload	Hiccup Protection, Auto-recover after Fault Fixed	
	Overcurrent	Current drops, Auto-recover after Fault Fixed	
Safety&EMC	Surge	L-N: 2.5kVAC L-N-PE: 2.5kVAC	
	Withstand Voltage	I/P-O/P: 3000Vac/1min/5mA I/P-PE:1500Vac/1min/<5mA O/P-PE:500Vac/1min/<5mA Signal-O/P: 1500VAC/1min/5mA	
	Safety standards	UL8750 UL1310	
	EMC Eission	FCC PART15B	
	EMC Immunity	IEC 61000-4-2-3-4-5-6-8-11	
	Insulation Resisance	5Mfi	
Others	Working Temp.	-20℃~+60℃[-4˚F~140˚F]	
	Storage Temp., Humidity	-40℃~+90℃ [-40˚F~194˚F], 20-90%RH	
	tc	90℃ [194˚F] for safety & 80℃[185˚F] for life	
	Material	Metal	
	IP Rating	IP20	
	Lifetime	50,000h@tc:80℃[176˚F]	
	Warranty	5 years	
	Switch Cycle	25,000 times	
	Packing(weight)	Net weight: TBDg (TBD lb)±5%/PCS; TBD PCS/Carton;TBDkg(TBD lb)±5%/Carton;	
		Carton Size: 312*283*178mm(12.28*11.14*7.0lnch)(L*W*H)	
	Dimension	244*106*41.5mm (9.61*4.17*1.63 lnch)(L*W*H)	

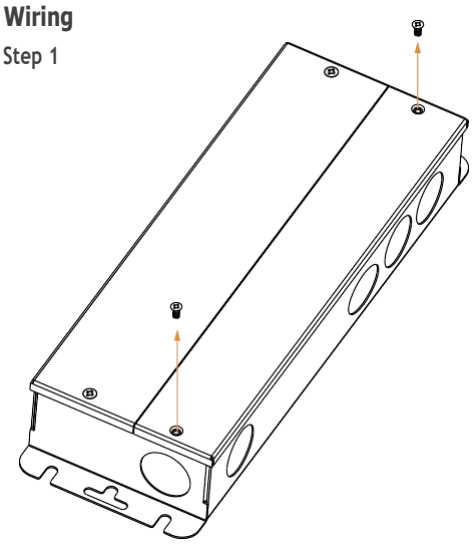
尺寸 Inch (mm)



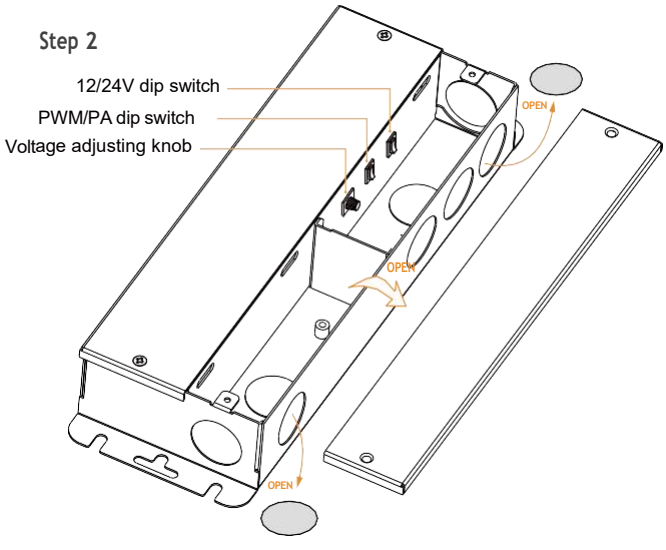


Wiring

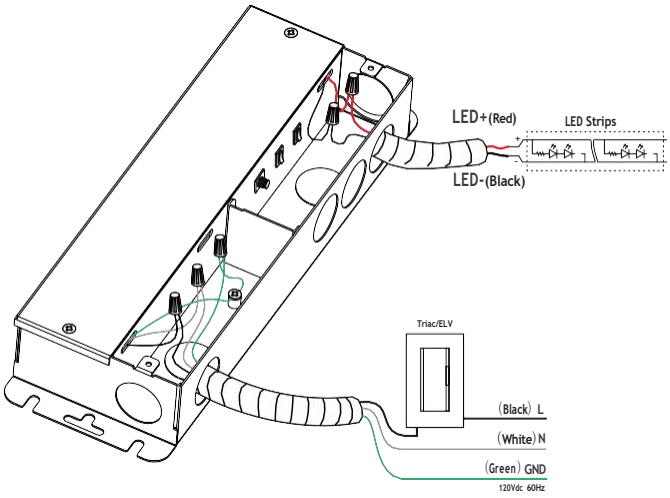
Step 1



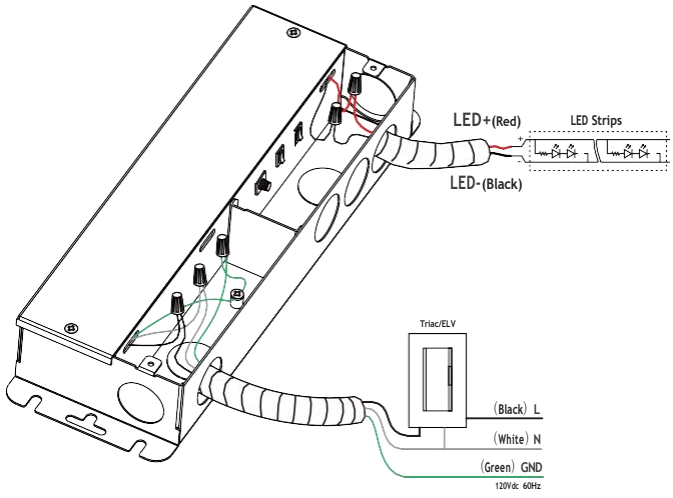
Step 2



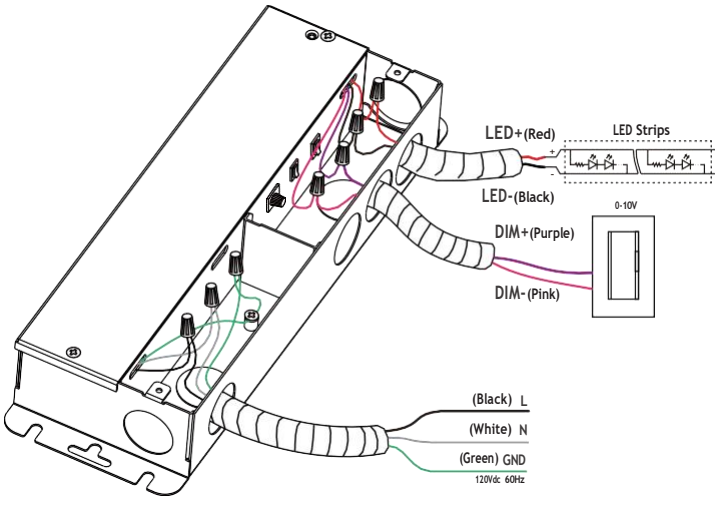
Step 3 UsingTriac MLV wiring diagram



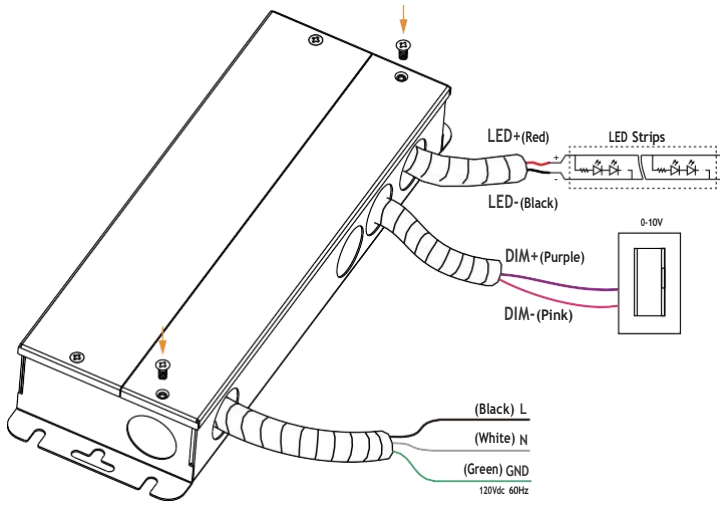
Step 4 UsingTriac ELV wiring diagram



Step 5 0-10V wiring diagram



Step 6



Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Condition
Inrush current I_{peak}	30A (120V)	Input Voltage120V
Inrush current T_{width}	250us (120V)	Input Voltage120V, measured ta 50% I_{peak}

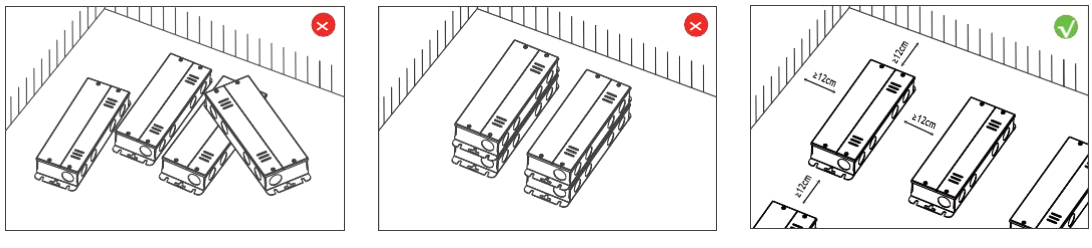
96W 24V

MCB	Input Voltage 120V Drivers	MCB	Input Voltage 120V Drivers
B10	10pcs	C10	10pcs
B13	13pcs	C13	13pcs
B16	16pcs	C16	16pcs
B20	21pcs	C20	21pcs
		D16	16pcs

60W 12V

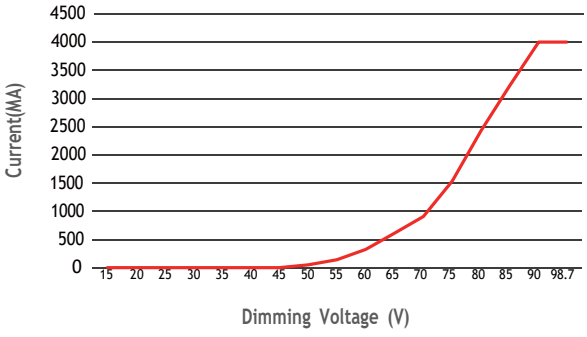
MCB	Input Voltage 120V Drivers	MCB	Input Voltage 120V Drivers
B10	10pcs	C10	15pcs
B13	13pcs	C13	20pcs
B16	17pcs	C16	24pcs
B20	21pcs	C20	30pcs
		D16	24pcs

Installation Precautions

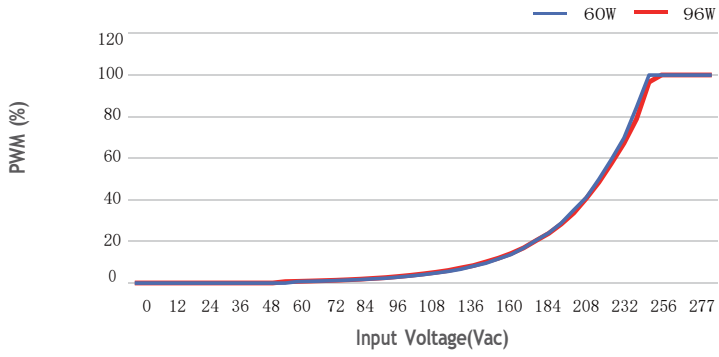


Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

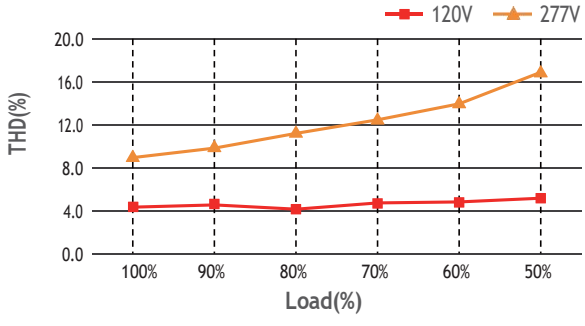
0-10V Dimming Curve



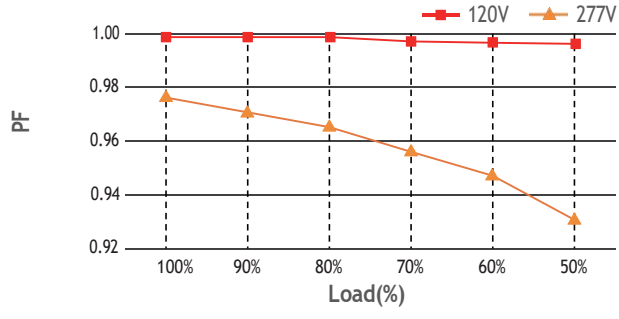
Phase-Cut Dimming Curve



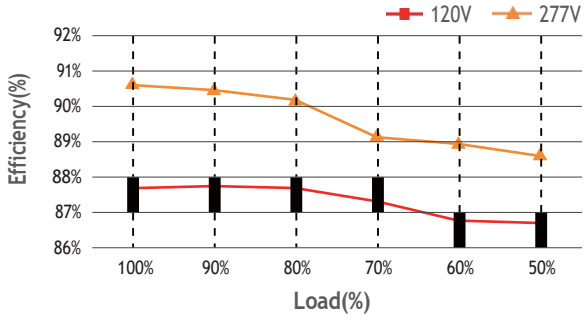
THD vs Load



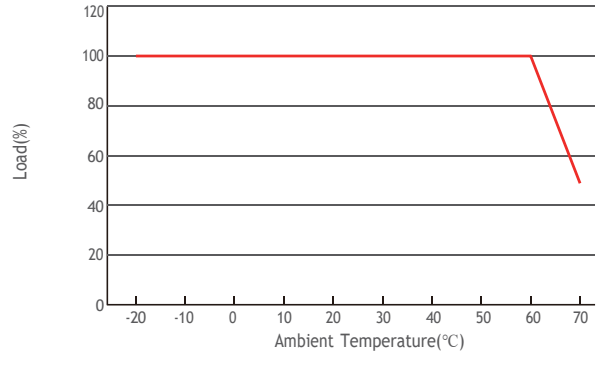
PF vs Load



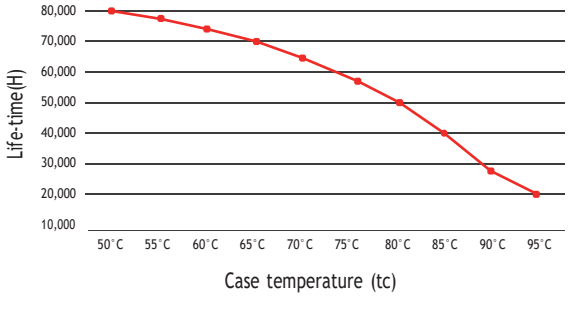
Efficiency vs Load%



Derating Curve



Life-time vs. case temperature



The lifetime of the LED driver is shown in the figure above
(calculated based on 90% reliability).
The relationship between tc and ta also depends 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.
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.

Revision history

Change date	Version	Item	From	To
2026.06.02	V1.0	First release		