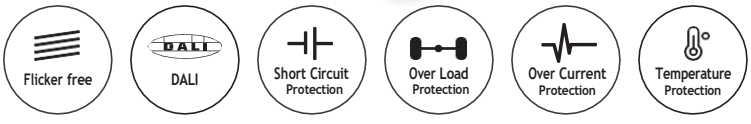
MUP96D4-1W24V-BW

Product Features

· Single channel constant voltage output, Output Current 4A Max
· Input Voltage Range 108-305Vac
· Following the DALI protocol standard IEC62386-101 102 207
· Dimming effect smooth, flicker free
· 100% output when no dimming signal input, can be used as normal power supply
· Protection: Overload, short circuit, Overcurrent, Over-temperature
· Safety according to UL8750 &UL 1310
· Class 2 Output
· Metal Junction Box Design
· Suitable for Dry , Damp & Wet Locations

Application

LED Strip Light

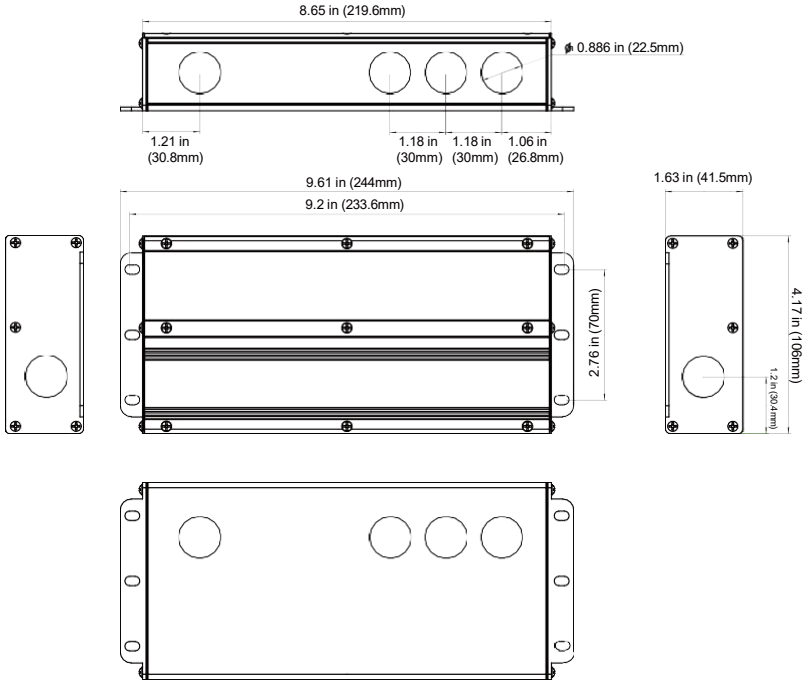


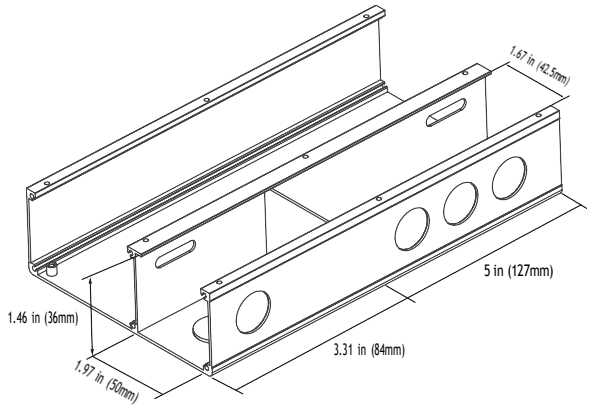
Technical Paramaters

Model	MUP96D4-1W24V-BW	
Input	Efficiency	≥89%@120VAC, ≥91%@277VAC, full load
	Voltage	120VAC-277VAC
	Frequency Range(Hz)	50/60Hz
	AC Current(max)	0.9Amax @120VAC, 0.5Amax@230VAC, 0.4Amax@277VAC
	PF	≥0.98@120VAC, ≥0.95@277VAC, full load
	THD	<10%@120VAC, <15%@277VAC, full load
	Inrush Current(max)	Cold start,12A@120VAC 85us 61A@277VAC 220us
	Standby power	<1W@120VAC
	No load power	<1W@120VAC
	Start-up time	<0.7s, @120Vac (When the light begins to shine)
Output	Current	4A
	Voltage	24VDC
	Voltage Range	24VDC ±5%
	Power	96W
	Channel	1
	Load Regulation	±5%
	Line Regulation	±1%
	Power limit	≥120%
	Ripple	≤720mV
	PWM Frequency	3.3K Hz
Function	Dimming Type	DALI-2
	Dimming Range	1%-100%
	Dimming curve	Logarithm
	Flicker	Flicker free
Protection	Short Circuit	Hiccup Protection, Auto-recovery after Fault Clearance
	Overload	Hiccup Protection, Auto-recovery after Fault Clearance
	Overcurrent	Hiccup Protection, Auto-recovery after Fault Clearance
	Over-temperature	Reduce the output power, Auto-recovery after Fault Clearance
Safety&EMC	Surge	L-N: 2.5kV L-N-PG: 2.5kV
	Withstand Voltage	I/P-O/P: 2000Vac/1min/<5mA I/P-PG:1500Vac/1min/<5mA O/P-PG:500Vac/1min/<5mA I/P-DIM(Signal port):1500Vac/1min/<5mA
	Safety standards	UL8750 UL1310 CSA25013.CSA Class P
	EMC Eission	EN55015,EN61000-3-2 Class C,IEC61000-3-3
	EMC Immunity	FCC class B(120V)/class A(277V)
	Insulation Resisance	5MΩ

Others	Working Temp.	-20℃~+60℃ (-4°F-140°F)
	Storage Temp., Humidity	-40℃~85℃, 20-95%RH (-40°F-185°F)
	tc	70℃ (158°F)
	Material	Metal
	IP Rating	IP65
	Lifetime	50,000小时@tc:70℃ (158°F)
	Warranty Condition	5 years
	Switch Cycle	25,000 times
	Packing(weight)	Net weight: TBDg (-- lb)±5%/PCS; 12PCS/Carton;--kg(-- lb)±5%/Carton; Carton Size: 314*263*249mm(12.36*10.35*9.8 Inch)(L*W*H)
	Dimension	244*106*41.5mm (9.61*4.17*1.63 Inch)(L*W*H)

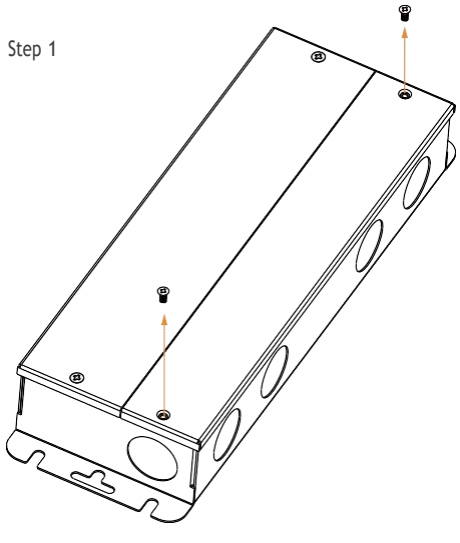
Dimension Inch (mm)



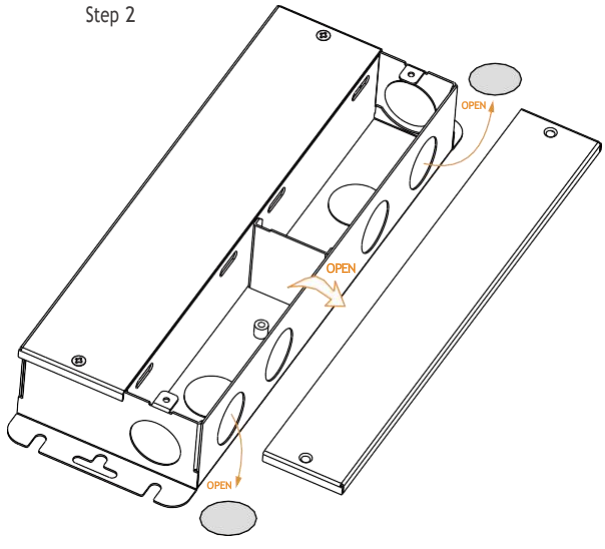


Wiring

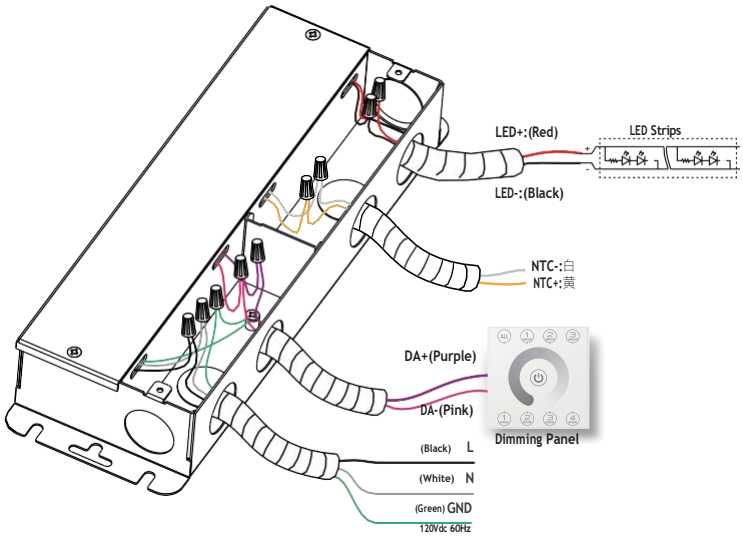
Step 1



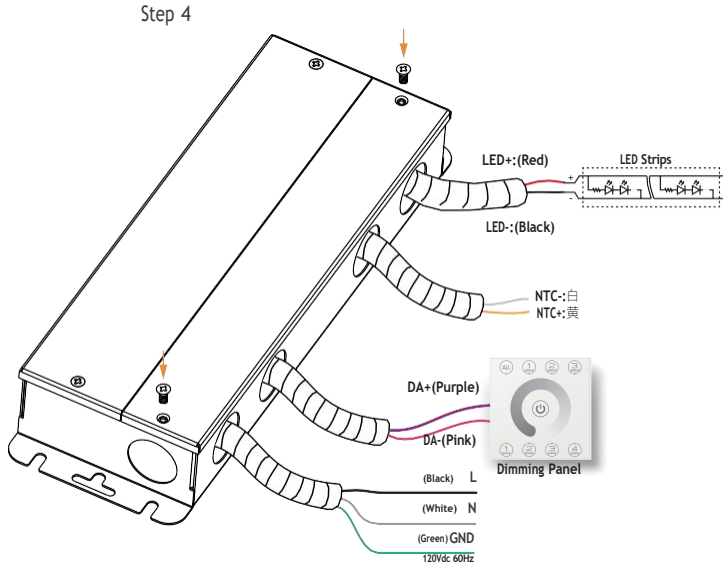
Step 2



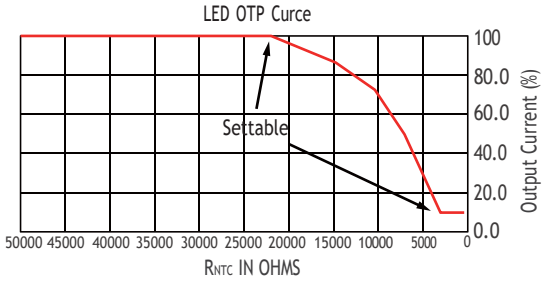
Step 3 wiring diagram



Step 4



LED Thermal Protection (NTC) Characteristic(Optional)



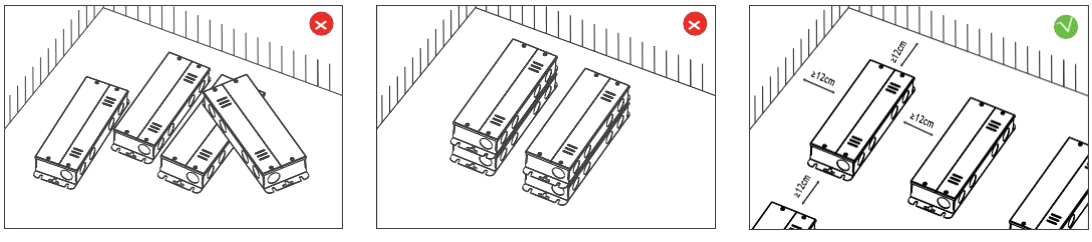
Graphs for reference. The derating limits can be programmed using the Light Touch. In the end application, care must be taken to place the NTC thermistor close to the hottest spot on the LED module.
If LED thermal protection is not required the NTC port on the LED power supply connector can be left open.

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current I_{peak}	12A (120V)	61A (277V)	Input Voltage120V/277V
Inrush current T_{width}	85us (120V)	220us (277V)	Input Voltage120V/277V, measured ta 50% I_{peak}

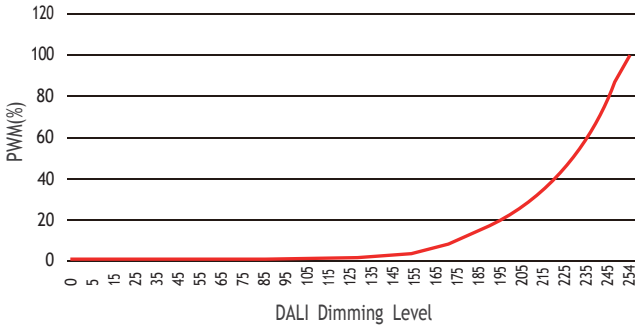
MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	11pcs	6pcs	C10	11pcs	10pcs
B13	14pcs	7pcs	C13	14pcs	13pcs
B16	17pcs	9pcs	C16	17pcs	16pcs
B20	22pcs	12pcs	C20	22pcs	20pcs
			D16	17pcs	32pcs

Installation Precautions

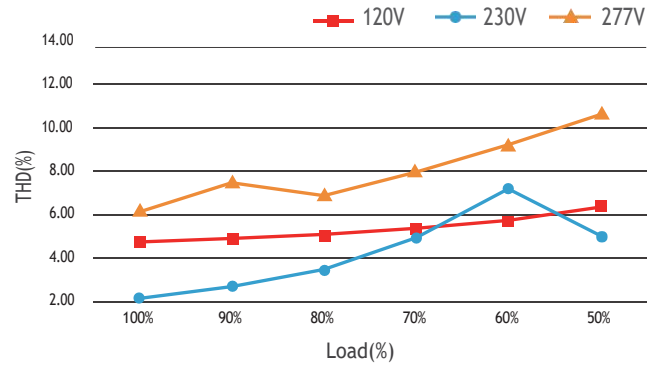


Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

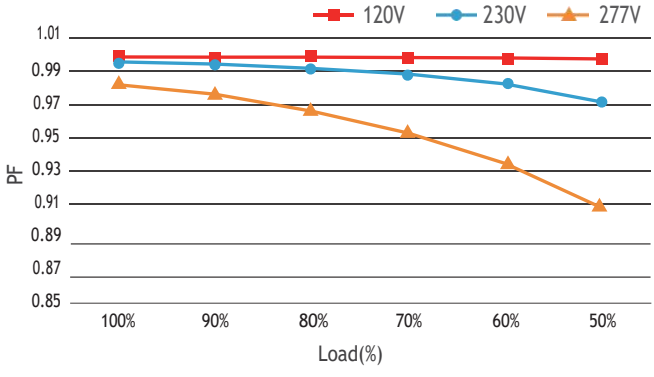
0-10V Dimming Curve



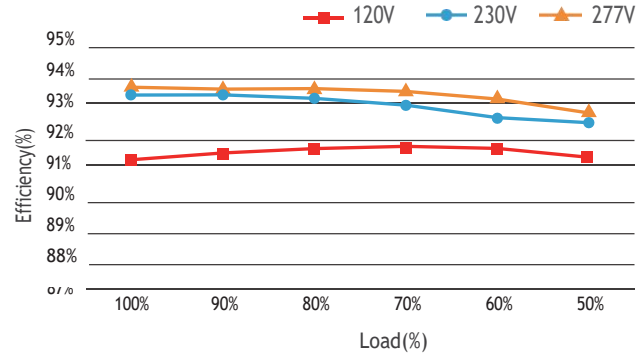
THD vs Load



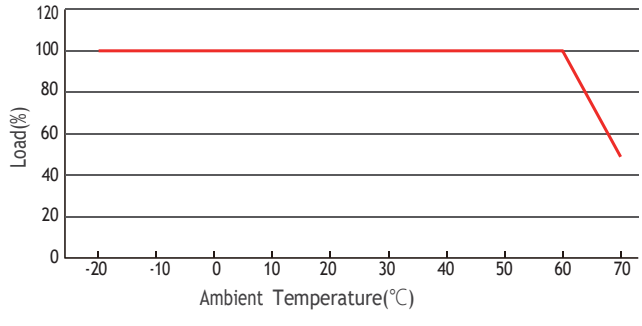
PF vs Load



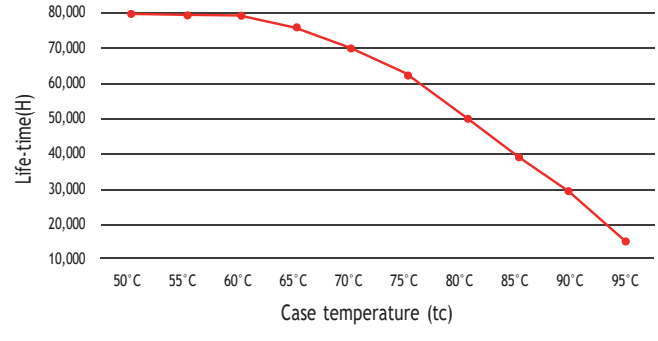
Efficiency vs Load%



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.
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.