

## EULP96-1W24V-T

### Summary

EULP96-1W24V-T is a constant voltage output LED driver.

The compact body is easy to install in small spaces, with stable output and high efficiency.

### Product Feature

- Supply Voltage: 120-277Vac
- Protection: Short circuit, Overload, Overcurrent, Over-temperature
- 50,000Hour Life @ tc 90°C
- Class 2 output
- Safety according to UL8750 &UL 1310
- Suitable for Dry , Damp Locations
- Suitable for indoor LED lighting applications

### Application



LED Strip Light



Flicker free



Short Circuit Protection



Overload Protection



Overcurrent Protection



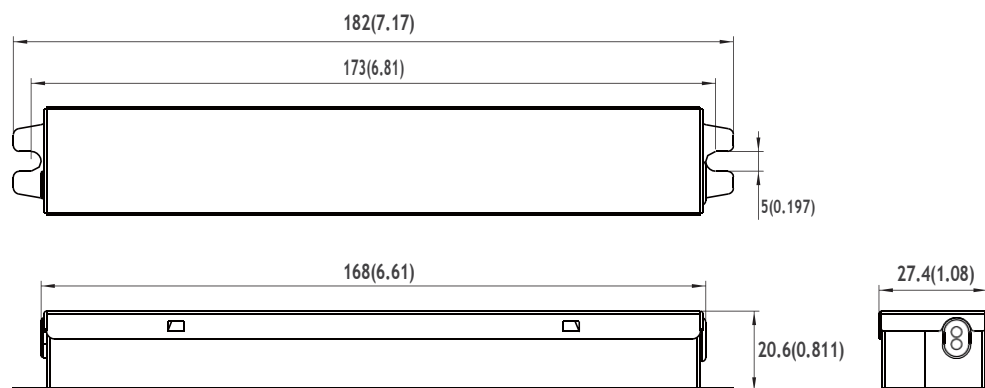
Temperature Protection



### Technical Parameters

Model	EULP96-1W24V-T	
Input	Voltage	120-277 Vac
	Frequency Range(Hz)	50/60Hz
	Efficiency	≥91%@120VAC、≥93%230VAC,277VAC
	PF	>0.95@120V、230V、277V full load
	Current	1.1Amax @120VAC 0.6Amax@230VAC 0.45Amax@277VAC
	THD	<10%@full load
	Inrush current	Cold start,26.4A@120VAC 196us, 59.6A@277VAC 196us
	No load power	≤0.5W
	Turn on Time	≤0.75S
Output	Voltage	24V
	Voltage Accuracy	±3%
	Current	4A
	Power	96W
	Channel	1
	Ripple Voltage	≤240mV(p-p)
Protection	Overload	Hiccup Protection, Auto-recovery after Fault Clearance
	Short circuit	Hiccup Protection, Auto-recovery after Fault Clearance
	Overcurrent	The protection is triggered when the current exceeds 4.17A (below 100W) @24V, entering hiccup mode, and will automatically recover after the fault is resolved.
	Over-temperature	Built-in temperature sensor: If the internal temperature exceeds the rated set value (100°C), the drive will enter a protective state (output derated by 50%). When the temperature returns to normal, the drive resumes normal output.
Safety&EMC	Surg	L-N 4KV ; L-N-PG 4KV
	Withstand Voltage	I/P-O/P:3000Vac/1min/<5mA · I/P-PG:1800Vac/1min/<5mA · O/P-PG:500Vac/1min/<5mA
	Safety standards	UL8750, UL1310 · EN61347-1,EN61347-2-13
	EMC Eission	EN55015, FCC PART15 ClassB
	Insulation Resisance	5Mfi
Others	Working temp.	ta:-40~+60°C (-40°F-140°F)
	Storage Temp., Humidity	-40°C-85°C(-40°F-185°F), 20-90%RH
	tc	90°C(194°F) @120Vac
	Lifetime	50,000h@tc:90°C(194°F)
	Warranty	5years
	IP rating	IP20
	Material	Metal
	Switch cycle	>25000 times
	Dimension	182*27.4*20.6mm(7.17*1.08*0.811 Inch)(L*W*H)
	Packing size	Net weight: 208g (0.459 lb)±5%/PCS; 60PCS/ Carton; 12.9kg(28.44 lb)±5%/Carton; Carton Size: 392*247*154mm(15.43*9.72*6.06 Inch)(L*W*H)

Dimension: mm (Inch)



## Wiring Diagram



## Metal case

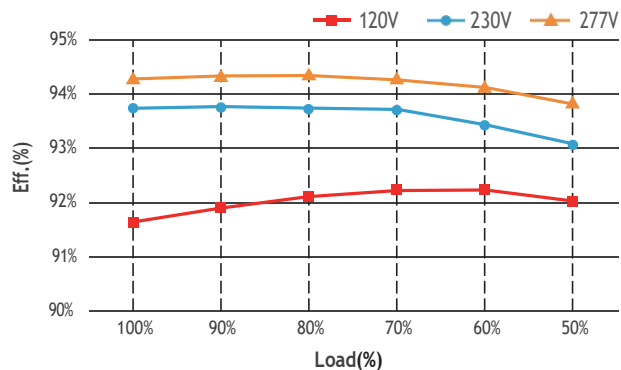
All material to be ROHs compliant to Directive 2002/95/EC

Wires to be Stranded with UL approval

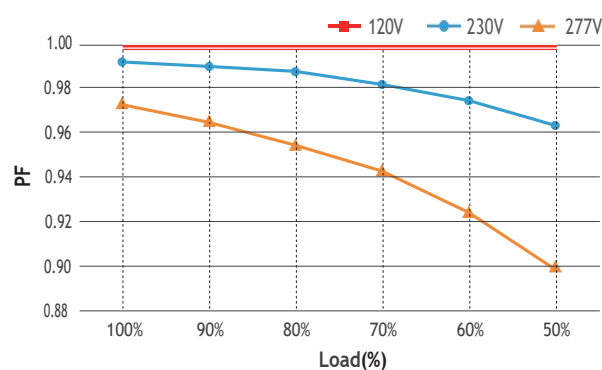
Input: L Brown, N Blue,  $\perp$  Y/G: 200mm , 18AWG

Output: LED+ Red & LED- Black: 200mm , 18AWG

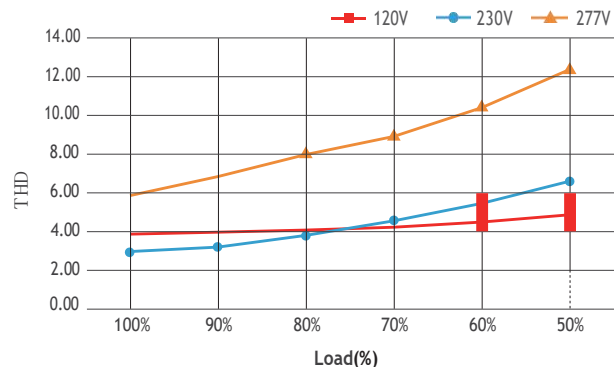
## Efficiency vs. Load



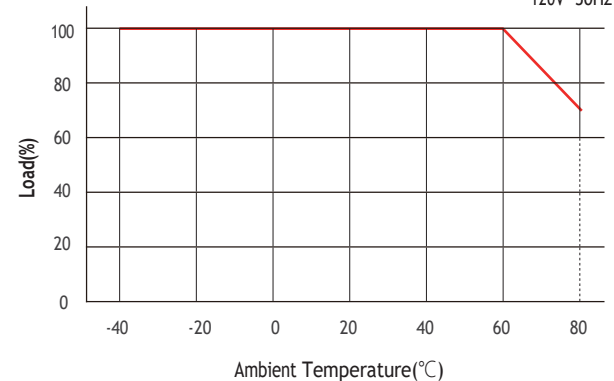
## PF vs. Load



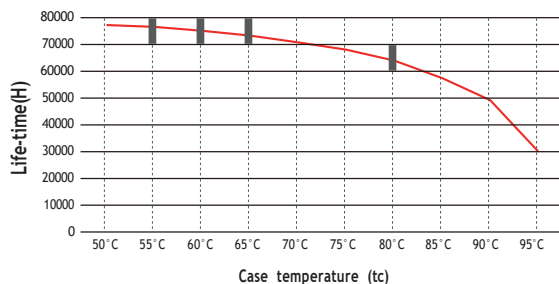
## THD vs. Load



## Derating Curve

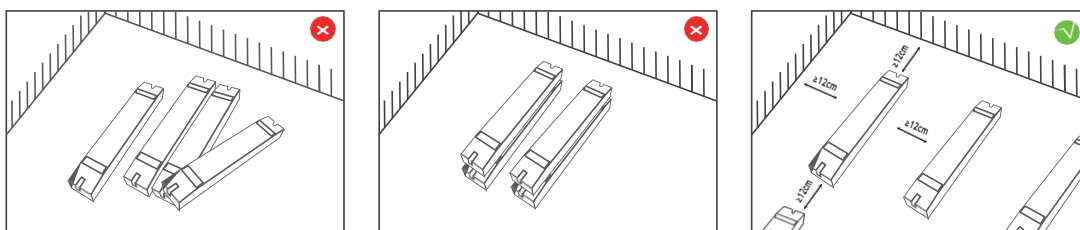


Life-time vs. case temperature



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

## 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.

## Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current $I_{peak}$	26.4A (120V)	59.6A (277V)	Input Voltage 120V/277V
Inrush current $T_{width}$	196us (120V)	196us (277V)	Input Voltage 120V/277V, measured to 50% $I_{peak}$

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	9pcs	6pcs	C10	9pcs	11pcs
B13	11pcs	9pcs	C13	11pcs	15pcs
B16	14pcs	11pcs	C16	14pcs	18pcs
B20	18pcs	13pcs	C20	18pcs	23pcs
			D16	14pcs	35pcs

## 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 <math>0.75\text{-}2.5\text{ mm}^2</math>, (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.