

## EULP96-1W24V-S

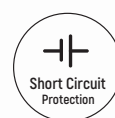
### Product Feature

- Input voltage range :120-277Vac
- Protection: Overload, short circuit, overcurrent, over-temperature
- Lifespan: 50,000 hours @ tc 70 °C
- Class 2 output
- Complies with UL8750 and UL 879 safety standards
- It is suitable for both dry and damp places
- It is suitable for indoor LED lighting applications

### Application



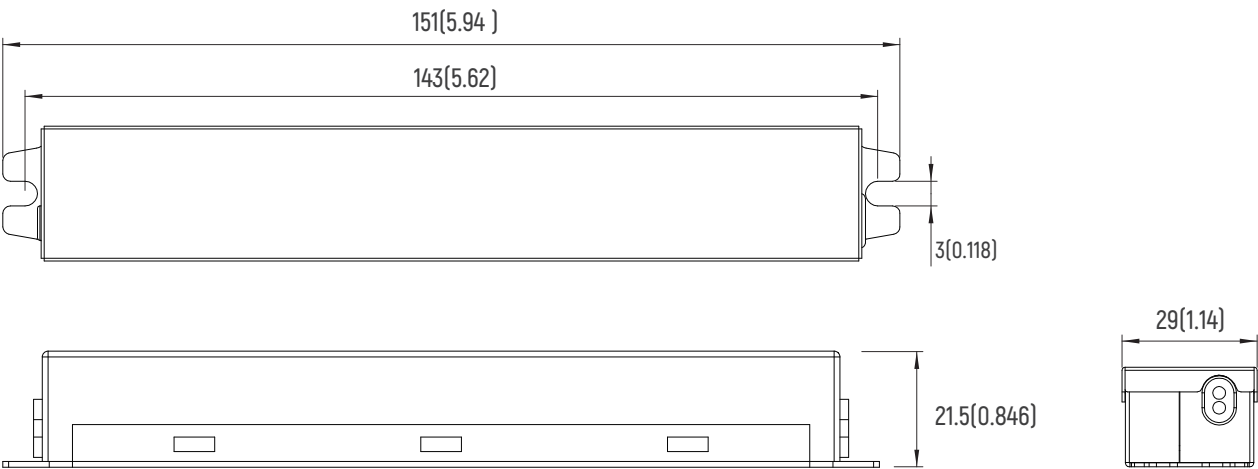
LED Strip Light



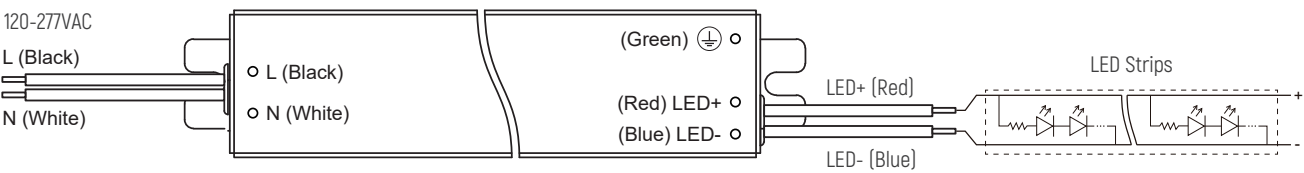
### Technical Parameters

| Model      | EULP96-1W24V-S          |                                                                                                                              |
|------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Input      | Voltage                 | 120~277 Vac                                                                                                                  |
|            | Frequency Range(Hz)     | 50/60Hz                                                                                                                      |
|            | Efficiency              | ≥90%@120VAC , full load    ≥92%277VAC , full load                                                                            |
|            | PF                      | >0.95@120VAC , full load    >0.95@277V , full load                                                                           |
|            | Current                 | 1.1Amax @120VAC    0.45Amax@277VAC , full load                                                                               |
|            | THD                     | <15%@120VAC ,    <20%@277VAC , full load                                                                                     |
|            | Inrush current          | Cold start , 7.8A@120VAC 148us , 8.6A@277VAC 120us                                                                           |
|            | No load power           | ≤2.5W@120VAC                                                                                                                 |
|            | Turn on delay Time      | 0.5s, at120Vac (When the light begins to shine)                                                                              |
| output     | Channel                 | 1                                                                                                                            |
|            | Voltage                 | 24V                                                                                                                          |
|            | Current                 | 4A                                                                                                                           |
|            | Output Voitage          | 24V±2%                                                                                                                       |
|            | Power                   | 96W                                                                                                                          |
|            | Ripple Voitage          | ≤700mV                                                                                                                       |
| Protection | Over load               | Current reduction hiccup protection, self-recovery after fault elimination                                                   |
|            | Short circuit           | Turn off the output and it will recover automatically after the fault is eliminated                                          |
|            | Over current            | Current reduction hiccup protection, self-recovery after fault elimination                                                   |
|            | Over temperature        | Current reduction hiccup protection, self-recovery after fault elimination                                                   |
| Safety&EMC | Surg                    | L-N : 2kV, L-N-PG : 2kV                                                                                                      |
|            | Ring Wave               | L-N : 2.5kV, L-PE : 2.5kV, N-PE : 2.5kV                                                                                      |
|            | Withstand Voltage       | I/P-O/P:2000Vac/1min/<5mA , I/P-G:1500Vac/1min/<5mA , O/P-G:500Vac/1min/<5mA                                                 |
|            | Safety standards        | UL8750 listed Class 2                                                                                                        |
|            | EMC Eission             | FCC PART15 ClassA                                                                                                            |
|            | Insulation Resisance    | 5MΩ                                                                                                                          |
| Others     | Working temp.           | ta:-20~+50°C , [-4°F-122°F]                                                                                                  |
|            | tc                      | 90°C [194°F]                                                                                                                 |
|            | Storage Temp., Humidity | -20°C ~90°C [-4°F-122°F] , 20-90%RH                                                                                          |
|            | Lifetime                | 50,000h@tc:70°C (158°F)                                                                                                      |
|            | Warranty                | 5years                                                                                                                       |
|            | IP rating               | IP20                                                                                                                         |
|            | Material                | Metal                                                                                                                        |
|            | Switch cycle            | >25000 times                                                                                                                 |
|            | Dimension               | 151*29*21.5mm [5.94*1.14*0.846 Inch] [(L*W*H)]                                                                               |
|            | Packing size            | NW:191g[0.42 lb]±5%/PCS ;60PCS/Cartron;11.96kg[26.36 lb]±5%/Cartron; Carton Size: 323*239*150mm[12.7*9.4*5.9 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 Black, N White: 200mm , 18AWG

$\oplus$  Green :0.15mm<sup>2</sup>, 25mm single-core wire

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

Mounting instructions

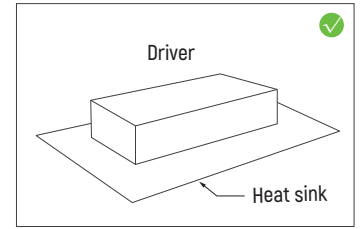
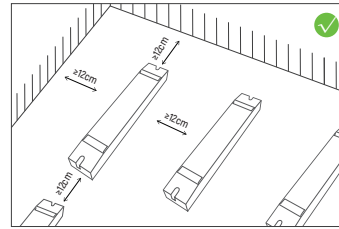
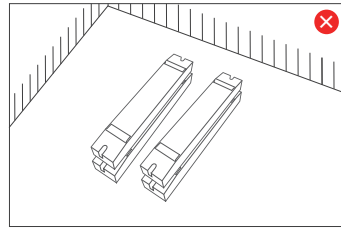
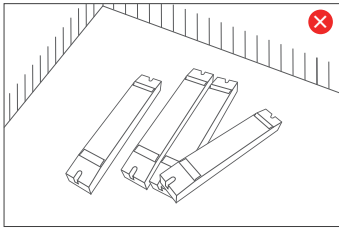
The EULP96-1W24V-S driver chassis must be secured to a flat surface using two mounting tabs, as shown in the figure above. It is recommended to install the EULP96-1W24V-S on a metal base with dimensions no smaller thar 195×55×2mm (7.68×2.17×0.08 inches).

Max. quantity of drivers per miniature circuit breaker

| Specification item                | Value        | Value        | Condition                                                 |
|-----------------------------------|--------------|--------------|-----------------------------------------------------------|
| Inrush current I <sub>peak</sub>  | 7.8A (120V)  | 8.6A (277V)  | Input Voltage120V/277V                                    |
| Inrush current T <sub>width</sub> | 148us (120V) | 120us (277V) | Input Voltage120V/277V, measured at 50% I <sub>peak</sub> |

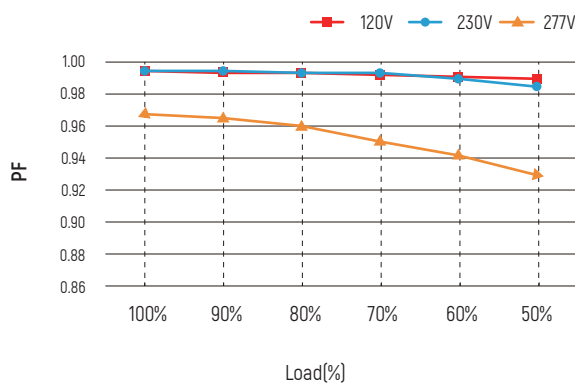
| MCB | Input Voltage 120V Drivers | Input Voltage 277V Drivers | MCB | Input Voltage 120V Drivers | Input Voltage 277V Drivers |
|-----|----------------------------|----------------------------|-----|----------------------------|----------------------------|
| B10 | 9pcs                       | 22pcs                      | C10 | 9pcs                       | 22pcs                      |
| B13 | 11pcs                      | 28pcs                      | C13 | 11pcs                      | 28pcs                      |
| B16 | 14pcs                      | 35pcs                      | C16 | 14pcs                      | 35pcs                      |
| B20 | 18pcs                      | 44pcs                      | C20 | 18pcs                      | 44pcs                      |
|     |                            |                            | D16 | 14pcs                      | 35pcs                      |

## Installation Precautions

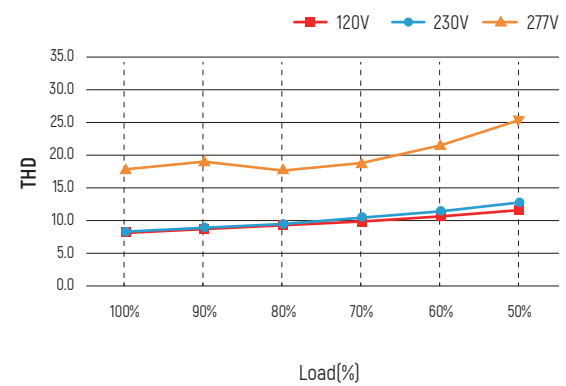


Please do not stack the products. The distance between two products should be  $\geq 12\text{cm}$  so as not to affect heat dissipation and the lifespan of the products.

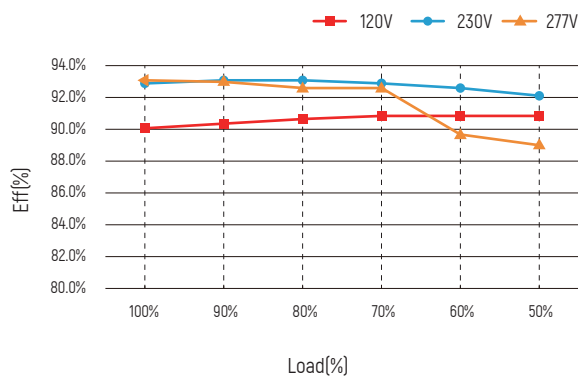
## PF vs. Load



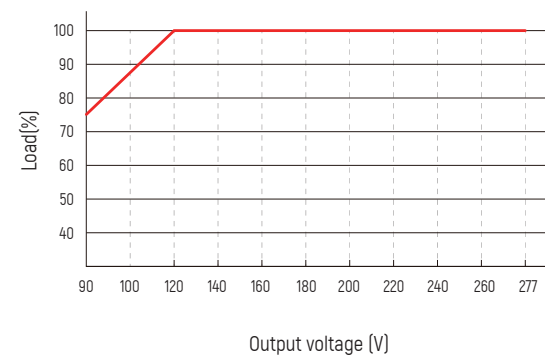
## THD vs. Load



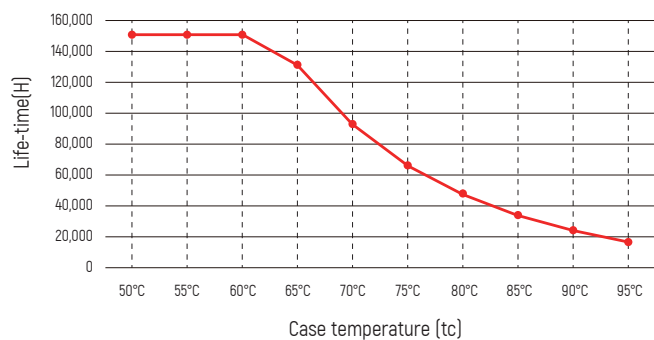
## Efficiency vs. Load



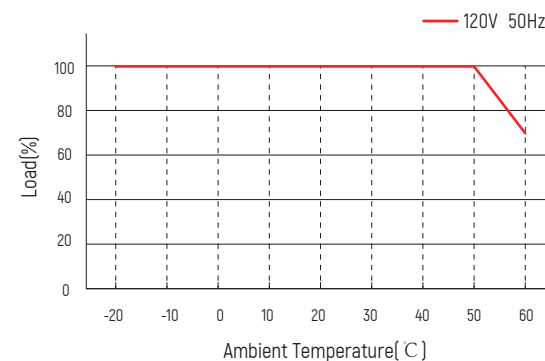
## Derating Curve



## Life-time vs. case temperature



## Derating Curve



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> <li>· To avoid hot swapping, power off and restart the driver before connecting the LED load.</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.