

EULP60-1W12V-T

Summary

EULP60-1W12V-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

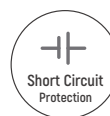
Application



LED Strip Light



Flicker free



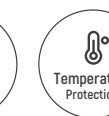
Short Circuit Protection



Overload Protection



Overcurrent Protection



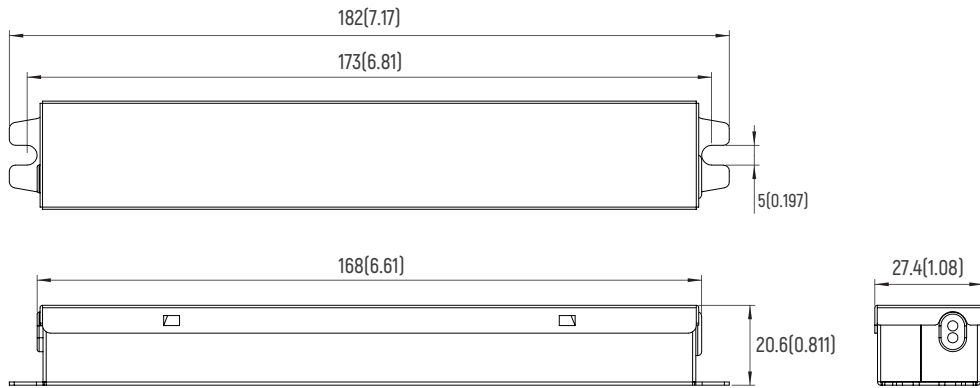
Temperature Protection



Technical Parameters

Model	EULP60-1W12V-T	
Input	Voltage	120~277 Vac
	Frequency Range[Hz]	50/60Hz
	Efficiency	≥88%@120VAC、 ≥91%230VAC,277VAC
	PF	>0.95@120V/230V/277V, Full load
	Current	0.7Amax @120VAC 0.36Amax@230VAC 0.3Amax@277VAC, Full load
	THD	<10%@full load
	Inrush current	Cold start, 25.8A@120VAC 300us , 43.2A@230vac 180uS , 59.9A@277vac 300uS
	No load power	≤0.5W
	Turn on Time	≤0.75S
Output	Voltage	12V
	Voltage Accuracy	±3%
	Current	5A
	Power	60W
	Channel	1
	Ripple Voltage	≤120mV(p-p)
Protection	Overload	Hiccup Protection, Auto-recovery after fault elimination.
	Short circuit	Hiccup Protection, Auto-recovery after fault elimination.
	Overcurrent	Protection triggered when output current ≥130% @12V, entering hiccup mode. Auto-recovery after fault elimination.
	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 Emission	EN55015, FCC PART15 ClassB
	Insulation Resisance	5M Ω
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/Cartron; 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

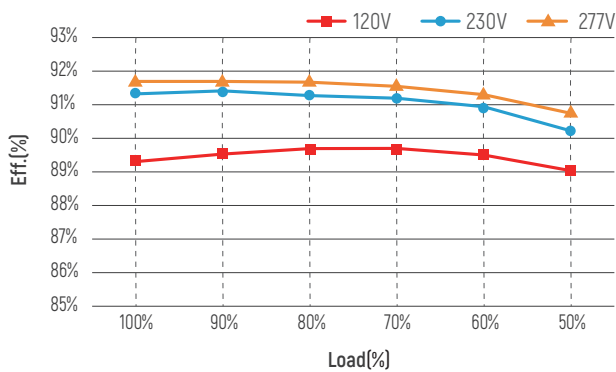
All material to be ROHs compliant to Directive 2002/95/EC

Wires to be Stranded with UL approval

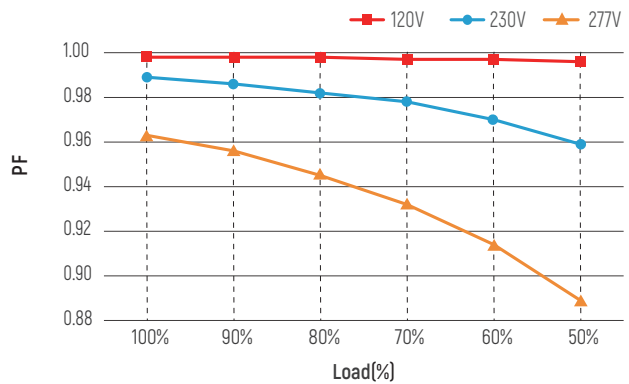
Input: L Brown, N Blue, ⚬ Y/G: 200mm, 18AWG

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

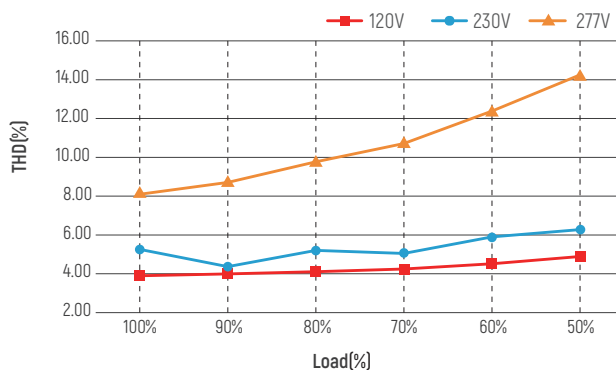
Efficiency vs. Load



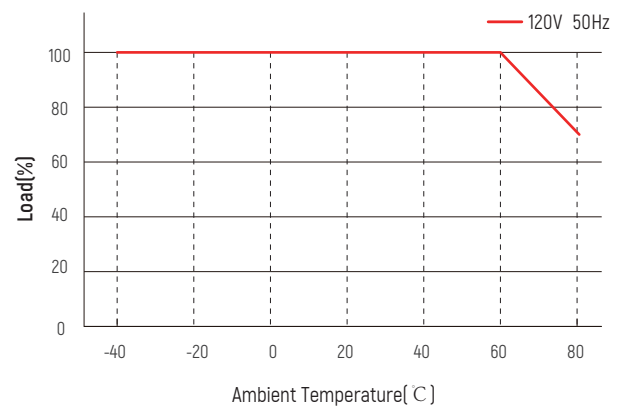
PF vs. Load



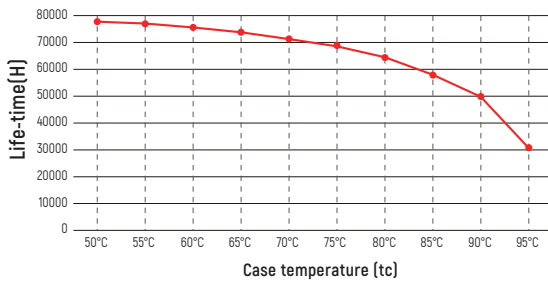
THD vs. Load



Derating Curve

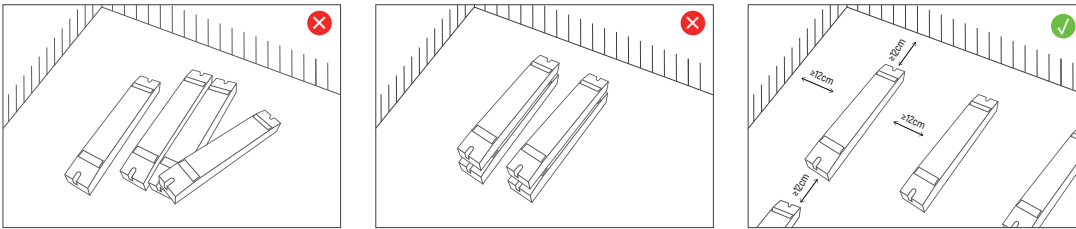


Life-time vs. case temperature



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 t_a 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}	25.8A (120V)	59.9A (277V)	Input Voltage 120V/180/277V
Inrush current T_{width}	300us (120V)	300us (277V)	Input Voltage 120V/180/277V, measured to 50% I_{peak}

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	10pcs	4pcs	C10	14pcs	7pcs
B13	13pcs	5pcs	C13	18pcs	9pcs
B16	16pcs	7pcs	C16	22pcs	11pcs
B20	20pcs	8pcs	C20	28pcs	14pcs
			D16	22pcs	23pcs

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.