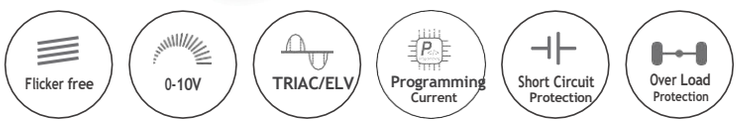
EULP60ATS-1WPC-WS-1600

Product Features

- Single channel output, output current can be Programmable by software
- Support 0/1-10V ,Potentiometer,PWM,Triac/ELV Dimming
- TRIAC and ELV dimming at 120 Vac only
- Protections: Overload and short-circuit
- UL Class P, Class 2 Output
- Safety according to UL8750 & UL 1310
- Suitable for Dry , Damp Locations
- Suitable for indoor LED lighting application

Application

Down Light

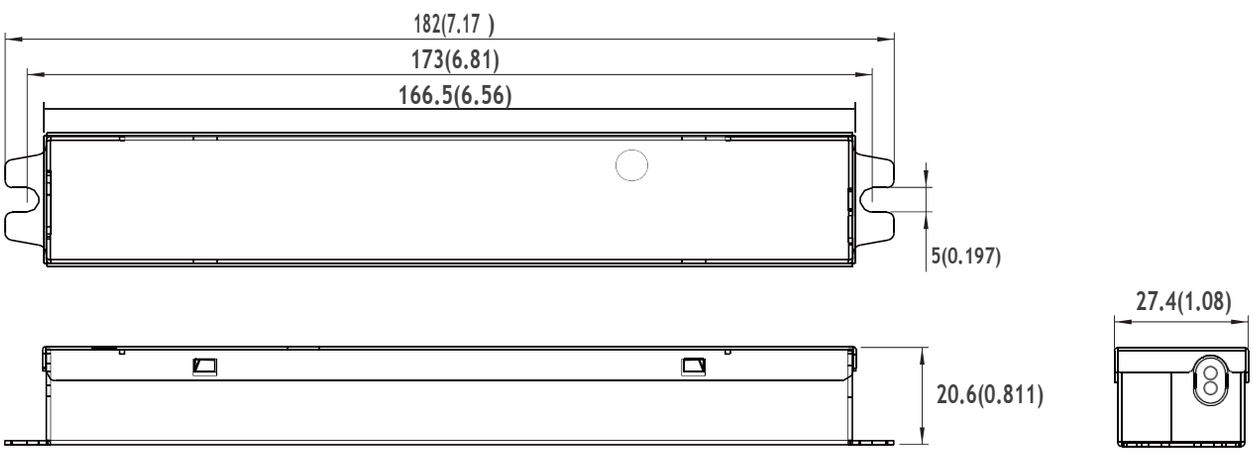


Technical Parameters

Model	EULP60ATS-1WPC-WS-1600	
Input	Efficiency	>84%@120VAC, >86%@277VAC Full load
	Frequency	0/50/60Hz
	Voltage	120VAC-277VAC
	Voltage(DC)	120VDC-280VDC
	PF	0.95@120VAC, 0.9@277VAC, Full load
	THD(full load)	10%@120VAC, 15%@277VAC, Full load
	Current	0.66Amax@120VAC, 0.28A@277VAC
	Current(DC)	0.61Amax@120VDC, 0.32A@277VDC
	Inrush Current	18.5A@120VAC 288us 43.8A@277VAC 300us
	Standby Power	<1W@120VAC
	No load power	<2W@120VAC
Output	Current	200-1600mA (Default current: 950mA)
	Voltage	24-42V *(Triac dimming above 20V has better dimming effect)
	Power	60W max *(Triac dimming with a load of 20W or more has better dimming effect)
	Channel	1
	No load output voltage	59V Max
	Current Accuracy	±5%
	LF current ripple(<120Hz)	5%@24-42V, 1600mA
	Auxiliary Power (Vaux)	CV:12V(0-100mA) In Triac dimming mode, no load is required.
	Turn on time	≤ 0.75s, at 230Vac (when the light is on)
Protection	Overload	Current reduction protection, returns to normal after fault cleared.
	Short circuit	Turn off the output, and it will recover automatically after the fault is removed
Function	Dimming type	0-10V ,Potentiometer,PWM,Triac/ELV(@120VAC 60Hz)
	Dimming range	3%-100%
	Dimming curve	0-10V: linear/Logarithmic curve programmable, Triac/ELV: Logarithmic
	Flicker	Flicker free
Safety & EMC	Surge	L-N:2.5KV (ANSI/IEEE C62.41.1-2002 & c62.41.2-2002 category A, 2.5 kV ringwave)
	Withstand Voltage	I/P-O/P: 2000Vac/1min/<5mA, I/P-PG:1500Vac/1min/<5mA, O/P-PG: 500Vac/1min/<5mA, O/P-DIM(Signal port):500Vac/1min/<5mA
	Safety standards	UL8750/UL1310/CSA25013,CSA class P
	EMI Eission	EN55015,EN61000-3-2 Class C,IEC61000-3-3
	EMC Immunity	FCC class B(120V)/class A(277V)

Others	Working Temp.	(-20~+50) ℃ [-4°F~122°F]
	Storage Temp., Humidity	-40℃~85℃ (-40°F-185°F), 20-90%RH
	tc	90℃ [194°F] for safety & 75℃[167°F] for life [Tested on a 280×230×1.5mm iron plate.]
	Material	Metal
	IP Rating	IP20
	Lifetime	50,000h@tc:75℃[167°F] [Tested on a 280×230×1.5mm iron plate.]
	Warranty Condition	5 years
	Switch Cycle	>25,000 times
	Packing(weight)	Net weight: 210g(0.46lb)±5%/PCS; 60PCS/Carton; 13.1kg(28.9lb)±5%/Carton; Carton Size: 392*247*154mm(15.5*9.73*6.1 Inch)(L*W*H)
	Dimension	182*27.4*20.6mm (7.17*1.08*0.811 Inch)(L*W*H)

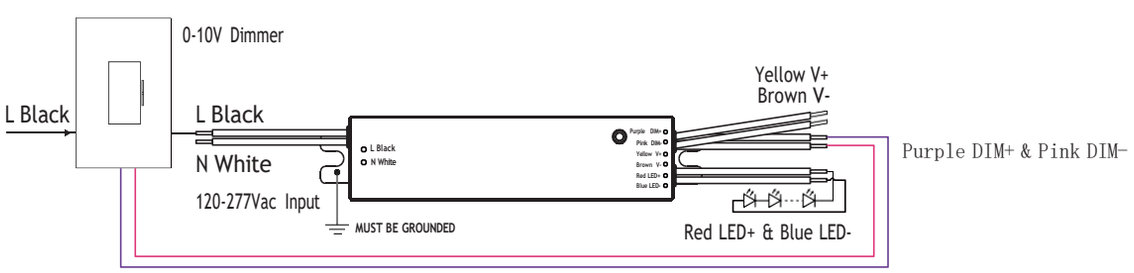
Dimension mm (Inch)



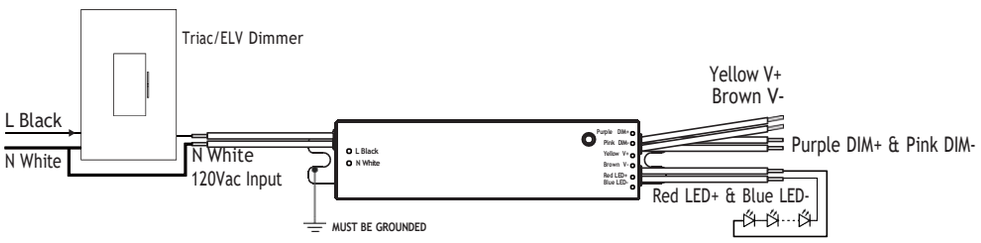
Wring Diagram

Metal case
All material to be ROHs compliant to Directive 2002/95/EC
Wires to be Stranded with UL approval
Input: Black & White: 200mm , 18AWG
Output: Red & Blue: 200mm , 18AWG
Dimming: Purple & Pink: 200mm , 20AWG
Auxiliary Power: Yellow & Brown: 200mm , 20AWG

0-10V Wiring



Triac/ELV Wiring



Mode switching

1. Dimming Mode Switching Window: Operation is only allowed within 30 seconds after power-on, and the device must remain powered off for at least 5 seconds before re-powering.
2. Activation Condition: The target action must be continuously maintained for 5 seconds to take effect.
3. Device Limitation: Only one dimming mode can be used at a time (e.g., if 0-10V mode is selected, a TRIAC dimming knob cannot be connected simultaneously. If TRIAC mode is selected, the 0-10V signal must remain disconnected and insulated).
4. Mode Persistence: Once a dimming mode is activated, it remains in effect until the next mode switch.

Dimming Mode Operation Steps Reference Table		
Target mode	Action requirements	Effective verification
0-10V mode	Control voltage ≤ 5V (hold for 5 seconds)	0-10V Mode: Normal Dimming
TRIAC/ELV Mode	Adjust the knob to 80%~50% brightness (hold for 5 seconds)	Triac/ELV Mode: Normal Dimming

Phase-cut Dimmers Compatibility Table

Mfg.	Model	Model	Max Brightness	Smoothness
Lutron	SELV-300P-WH	1.94%	yes	Good
	DVCL-153PR-1WH	1.90%	yes	Good
	MACL-153MR-WH	1.89%	yes	Good
	DVWCL-153PH-WH	1.89%	yes	Good
	CTCL-153-PDH-WH	1.90%	yes	Good
	DVLV-603P	1.90%	yes	Good
	SCL-153P-WH	1.86%	yes	Good
	DVSCCL-153P-SW	1.92%	yes	Good
	RRD-PRO	1.94%	yes	Good
	DVCL-153P	1.94%	yes	Good
	STCL-153MW-WH	1.87%	yes	Good
	TGCL-153PH-WH	3.46%	yes	Good
	AYCL-253P-WH	1.93%	yes	Good
	PD-5NE-WH	1.93%	yes	Good

Note: "The list above recommends dimmers for TRIAC testing. Unlisted TRIAC dimmers should only be used after verification through actual testing to ensure no abnormalities. 0-10V dimming has no compatibility issues."

Configurable functions

-Data log reading: SKU, serial number, batch number, FW revision version
-Output current regulation (factory default: 950)
-Dimming depth editing (factory default: see technical parameter table, editable range 10% Max)
-Dimming curve editing. Built in linear and logarithmic fixed curves, can be directly selected for use. At the same time, it has built-in custom curves and supports editing curves.
-Support parameter copying/replication and batch editing.

EU-PROG User Manual, Please click the link to view.
https://v2.fangcloud.com/share/2549f7729789c1c5ad5be53728

EU-PROG Programming connector

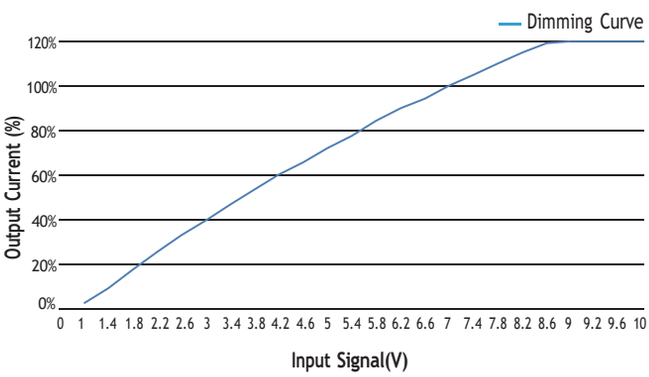
Interface

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Value	Condition
Inrush current I_{peak}	18.5 (120V)	43.8 (277V)	Input Voltage120V/277V
Inrush current T_{width}	288(120V)	300 (277V)	Input Voltage120V/277V, measured at 50% I_{peak}

MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers	MCB	Input Voltage 120V Drivers	Input Voltage 277V Drivers
B10	14pcs	6pcs	C10	15pcs	10pcs
B13	19pcs	7pcs	C13	19pcs	13pcs
B16	23pcs	9pcs	C16	24pcs	16pcs
B20	29pcs	12pcs	C20	30pcs	20pcs
			D16	24pcs	32pcs

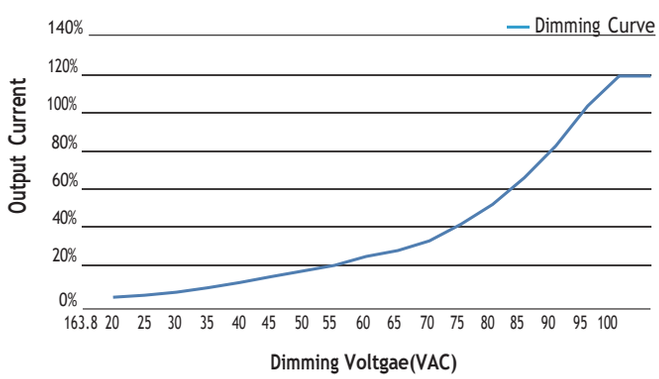
0-10V Dimming Curve



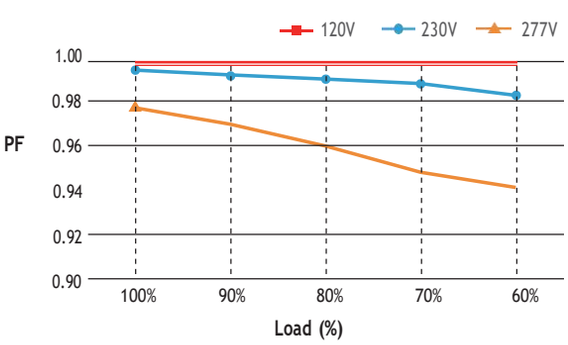
Dimming 0% (Vdim=0-0.80V)

Note: Full brightness value and curve programmable

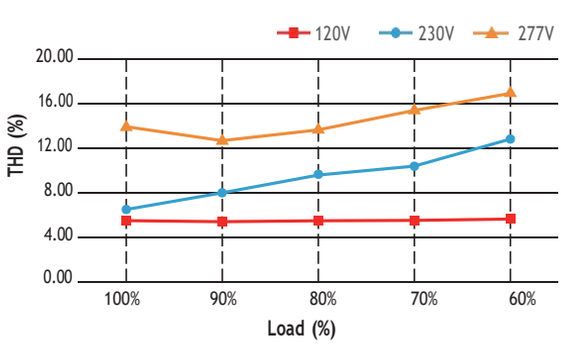
Triac Dimming Curve



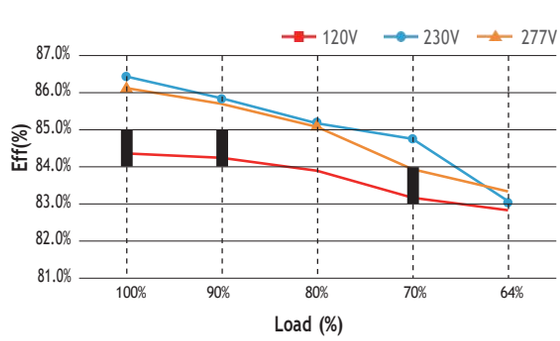
PF vs Load Curve



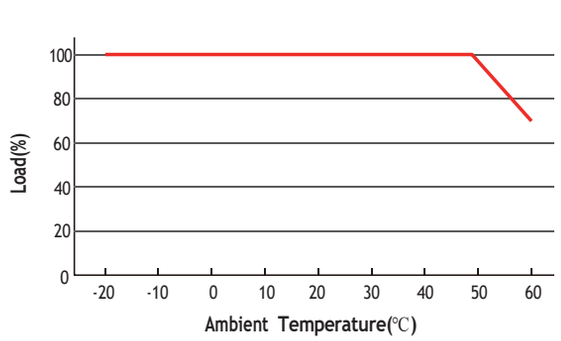
THD vs Load Curve



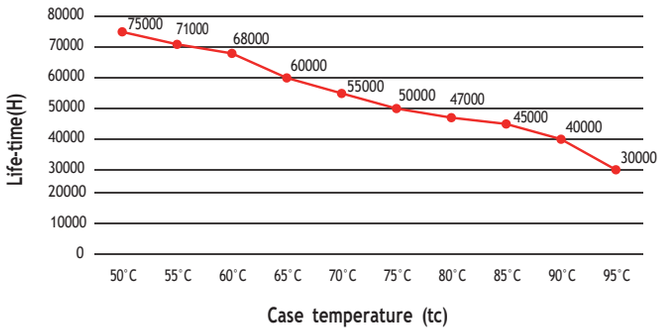
Efficiency vs Load Curve



Derating Curve

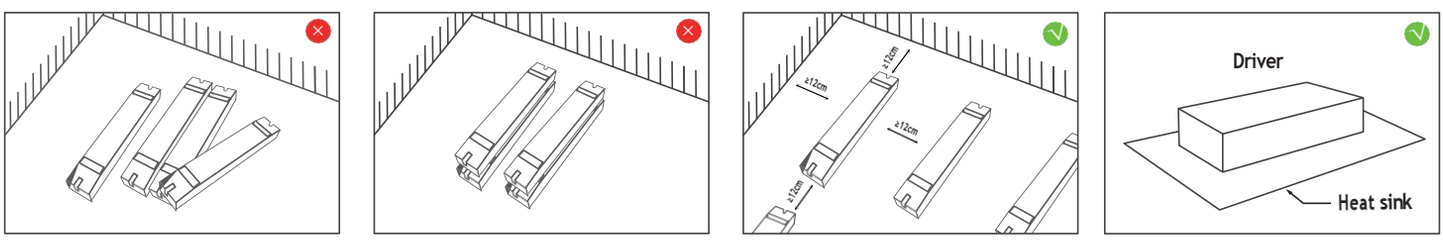


Life-time vs. case temperature



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
NOTE:With baseplate dimension of 280mm*230mm*1.5mm

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.
"To ensure efficient heat transfer, the power supply top cover must be in close contact with the heat sink, with no gaps on the mating surfaces to prevent an air layer from affecting heat dissipation.

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
2026.08.01	V1.0	First release		