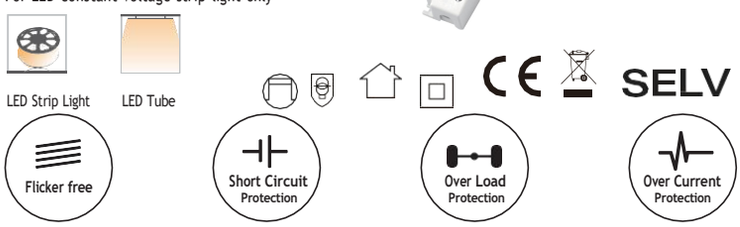
UCS80-1W24V

Product Features

- Current + Voltage Output Mode
- Short circuit, overcurrent, overload protection, V0 flame-retardant housing
- Slim-profile linear design for easy installation in confined spaces
- 50,000-hour lifespan with a 5-year warranty
- 100% full-load burn-in testing
- IP20 rating for indoor LED strip applications

Application

For LED constant voltage strip light only

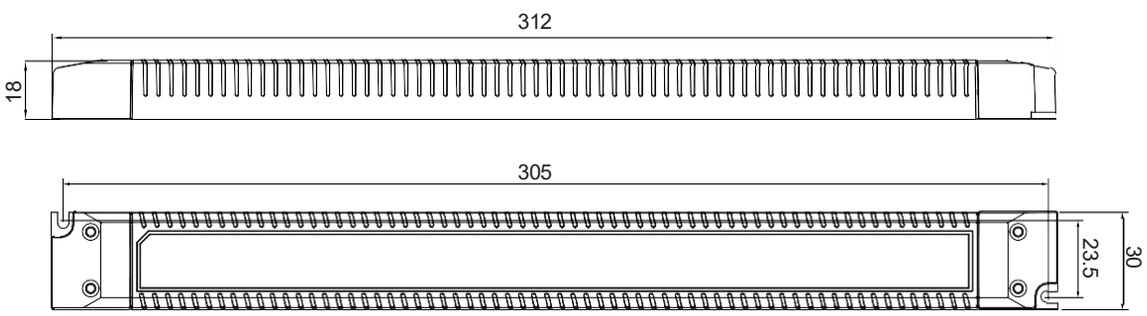


Technical Paramaters

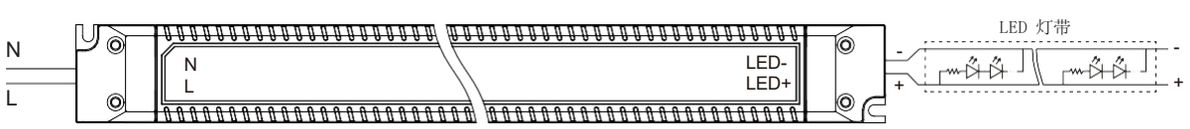
Model	UCS80-1W24V	
Input	Rated Voltage Range	110VAC-305VAC
	Rated Voltage	110VAC-277VAC
	Frequency Range(Hz)	50/60Hz
	Input Current	0.85Amax@115VAC, 0.45Amax@230VAC, 0.38Amax@277VAC
	Power Factor	≥0.97@110-277/VAC, Full load
	Efficiency	>90%@110VAC, >92%@277VAC, Full load
	THD(full load)	<10%(@load≥60%/115VC,230VAC; @load≥75%/277VAC)
	Standby power	<0.5W
	Leakage current	<0.25mA / 277VAC
	No load power	<0.5W
	Inrush Current	Cold start 50A(Test twidth=270us at 50% Ipeak)/230VAC; Per NEMA 410
Output	Output Voltage	24VDC
	Constant Current Range	16.8 ~24V
	Output Voltage Tolerance	±3%
	Output Current	3.3A
	Output Power Range	79.2W
	Strobe (depth of fluctuation)	IEC-Pst≤1 · CIE SVM≤0.4,Meets the flicker free standard (IEEE Std 1789-2015)
	Line regulation	±0.5% @Full load
	Load regulation	±1.5% @Full load
	Turn on delay Time	500ms, 80ms/115VAC, 230VAC
Protection	Short circuit	Hiccup Protection, Auto-recovery after Fault Clearance
	Overcurrent	Hiccup Protection, Auto-recovery after Fault Clearance
	Overload	Overload protection (≥110% rated power), Auto-recovery after Fault Clearance
	overvoltage	28~34V
Safety & EMC	Surge	L-N:1KV
	Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA
	Safety standard	UL8750, CSA C22.2 No. 250.13-12; ENEC BS EN/EN61347-1, BS EN/EN61347-2-13 independent,
		BS EN/EN62384; EAC TP TC 004,GB19510.1,GB19510.14,IS15885(Part2/Sec13) ,EN60335-1 Certification passed
	EMC	CCC (China) GB/T17743 · GB17625.1
		CE (European Union) EN55015 · EN61000-3-2 · EN61000-3-3 · EN61547
	EMI	RCM (Australia) EN55015 · EN61000-3-2 · EN61000-3-3 · EN61547
		EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547
Environment	Working Temp.	-20℃~50℃
	Storage Temp.	-40℃~85℃
	Storage Humidity	20-90%RH (No condensation)

Others	RoHS	Comply with 2011/65/EU
	tc	85℃
	material	Metal
	IP Rating	IP20
	Lifetime	50,000h@tc:75℃
	Warranty Condition	5years
	Switch Cycle	25,000times
	Body size	312*30*18mm (L*W*H)
	Packing(weight)	Net weight: 110 g±5%/PCS; 80 PCS/Carton; 9.3 kg±5%/Carton; Carton Size: 456*342*162mm(L*W*H)
	Noise	In a quiet environment · No noise outside 30-50cm
Remark	All parameters were measured at an input voltage of 230VAC/50Hz and an ambient temperature of 25 ℃ without any special instructions.	

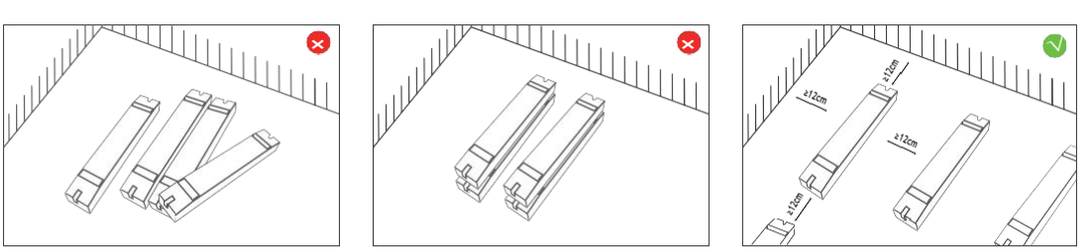
Dimension(mm)



Wiring



Installation Precautions



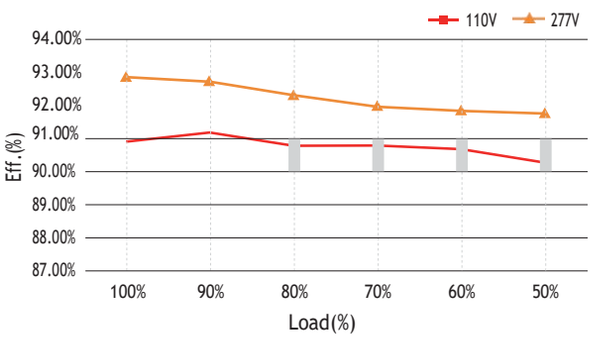
Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

Max. quantity of drivers per miniature circuit breaker

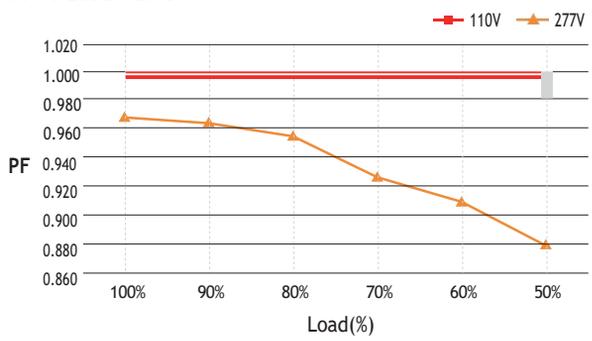
Specification item	Value	Condition
Inrush current I_{peak}	12.6A	Input Voltage 230VAC
Inrush current T_{width}	260us	Input Voltage 230VAC, measured ta 50% I_{peak}

MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	5pcs	C10	9pcs
B13	7pcs	C13	12pcs
B16	9pcs	C16	15pcs
B20	11pcs	C20	19pcs
		D16	31pcs

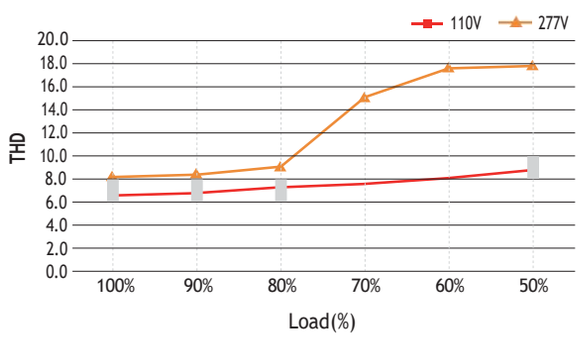
Efficiency vs Load Curve



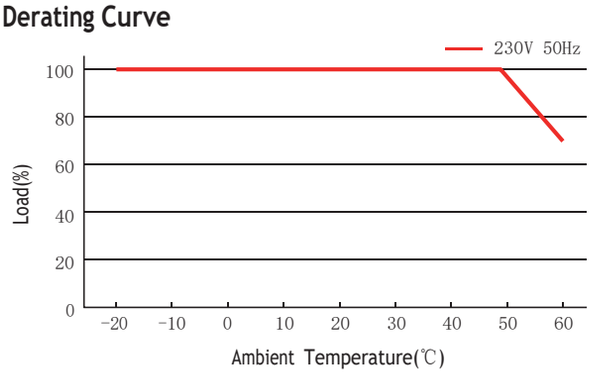
PF vs Load Curve



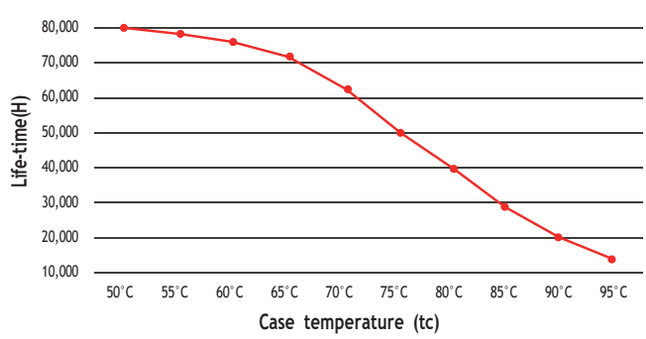
THD vs Load Curve



Derating Curve

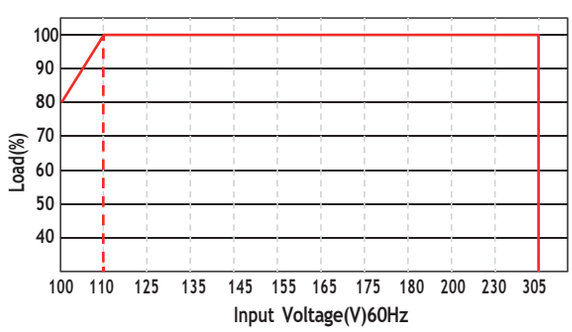


Life-time vs. case temperature



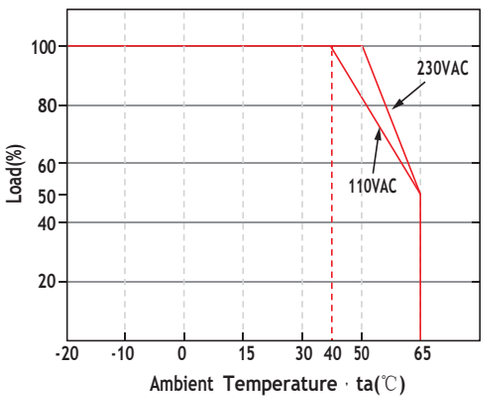
The life-time of the led driver is shown in the figure above
(calculated based on the 90% survival rate).
The relation of tc ta temperature depends also on the luminaire design.

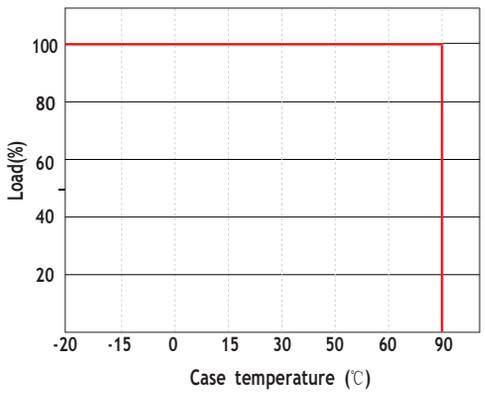
Static Characteristic Curve



※Output derating is required under low input voltage conditions.

Life-time vs tc temperature





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.