

**EUPS20T-1HMC**

**Product Features**

- Single channel constant current output, multi-level current optional
- Support Leading edge (Phase-Cut) and Trailing edge (ELV)
- Short circuit, overload, overvoltage, V0 flame retardant housing
- High voltage input: 220VAC ~ 240VAC
- Protection level IP20, suitable for indoor I II III lamps
- Dimming range 1%-100% dimming, smooth dimming without step sense and stroboscopic
- Built-in PFC chip to improve energy efficiency and reduce pollution
- Life of 50,000 hours, 5 years warranty
- Suitable for LED indoor lamps, such as downlights, panel lights, etc



Application



**Technical Parameters**

<b>Model</b>	EUPS20T-1HMC					
<b>Input</b>	Voltage	220VAC-240VAC				
	Frequency Range[Hz]	50/60Hz				
	Efficiency	≥80%@230VAC, full load				
	PF	≥0.95@230VAC, full load				
	Current	0.15A max				
	THD	<10%@230VAC, full load				
	Inrush current	Cold start, 6.8A@230VAC 12us				
	Standby power	≤1.5W				
	No load power	≤1.5W				
	Turn on Time	≤ 0.75 s, at230Vac (When the light begins to shine)				
<b>output</b>	Current/Voltage/Power	350mA/9-45VDC/15.75W	400mA/9-45VDC/18W	450mA/9-44VDC/20W	500mA/9-40VDC/20W	
		550mA/9-36VDC/20W	600mA/9-33VDC/20W	650mA/9-30VDC/20W	700mA/9-28VDC/20W	
	Channel	1				
	Current Accuracy	± 5% (accuracy below 200mA ± 7%)				
	Ripple current	±3%				
<b>Function</b>	No load output voltage	59VDC max				
	Dimming type	TRIAC/ELV				
	Dimming range	1% -100% dimming until turned off				
	Dimming curve	logarithm				
	Flicker	Flicker-free				
<b>Protection</b>	Short circuit	Hiccup Protection, Auto-recovery after Fault Clearance				
	Over load	Reduce current hiccup protection, troubleshoot and output normally				
	Over Voltage	Reduce current hiccup protection, troubleshoot and output normally				
<b>Safety&amp;EMC</b>	Surge	L-N:1KV				
	Safety standards	I/P-O/P: 3000VAC/1min/5mA				
	Safety standards	CCC	(China) GB19510.1, GB19510.14		TUV	(Germany) EN61347-1, EN61347-2-13, EN62493
		CB	(CB member states) IEC61347-1, IEC61347-2-13		CE	(European Union) EN61347-1, EN61347-2-13, EN62384
		RCM	(Australia) AS 61347-1, AS 61347-2-13		ENEC	(Europe) EN61347-1, EN61347-2-13, EN62384
	EMC Emission	CCC	(China) GB/T17743, GB17625.1			
		CE	(European Union) EN55015, EN61000-3-2, EN61000-3-3, EN61547			
		RCM	(Australia) EN55015, EN61000-3-2, EN61000-3-3, EN61547			
EMC	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547					
Insulation Resisance	5M Ω					
<b>Others</b>	Working temp.	-20°C-50°C				
	Storage Temp., Humidity	-40°C-85°C 20-90%RH (No condensation)				
	tc	90°C				
	Material	PC				

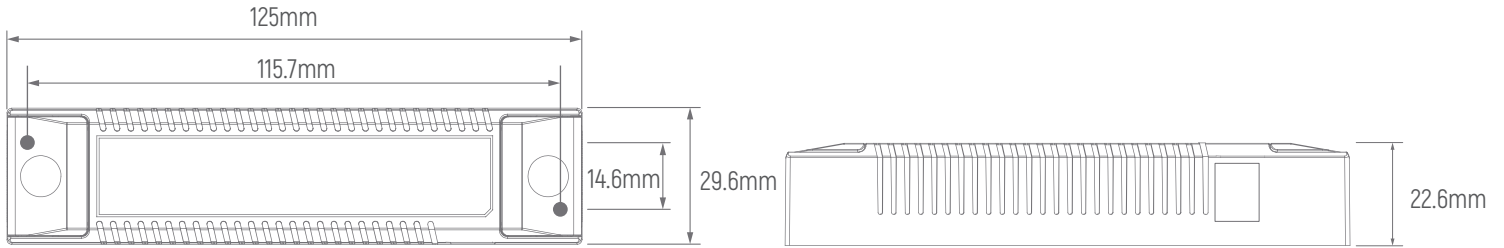
**Current selection table**

ON	OFF	1	2	3	4	5	6	7	8	9
		350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA	
		9-45V	9-45V	9-44V	9-40V	9-36V	9-33V	9-30V	9-28V	

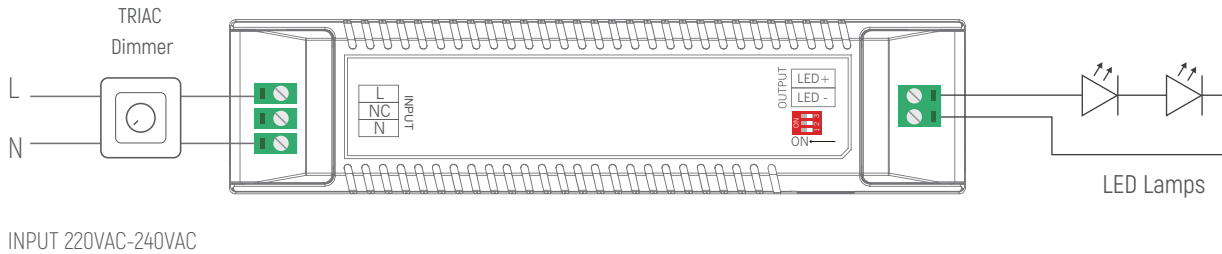
Note: The factory default setting current is 350mA (1, 2, 3 are in OFF state)

Others	IP rating	IP20
	Lifetime	50,000h@tc:90°C
	Warranty	5 years
	Switch cycle	>25,000times
	Dimension	125*29.6*22.6mm(L*W*H)
	Packing size	Net weight: 100g±5%/PCS; 120PCS/Carton; 12.5kg±5%/Carton; Carton Siz: 433*230*200mm(L*W*H)
Remarks	All parameters were measured at an input voltage of 230VAC/50Hz and an ambient temperature of 25 °C without any special instructions.	

**Dimension(mm)**



**Wiring Diagram**

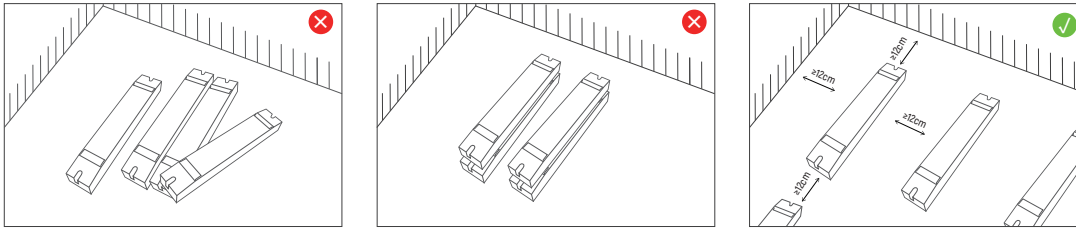


**Max. quantity of drivers per miniature circuit breaker**

Specification item	Value	Condition
Inrush current $I_{peak}$	6.8A	Input Voltage 230VAC
Inrush current $T_{width}$	12us	Input Voltage 230VAC, measured to 50% $I_{peak}$

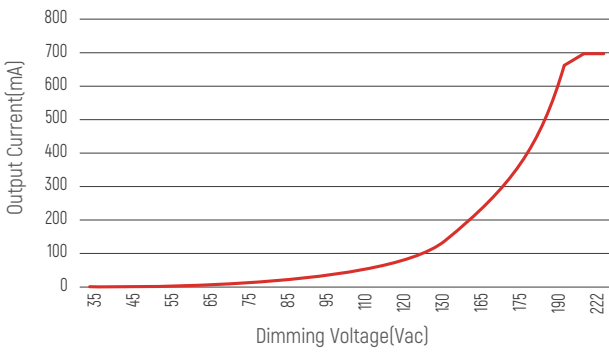
MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	66pcs	C10	66pcs
B13	86pcs	C13	86pcs
B16	106pcs	C16	106pcs
B20	133pcs	C20	133pcs
		D16	106pcs

**Installation Precautions**

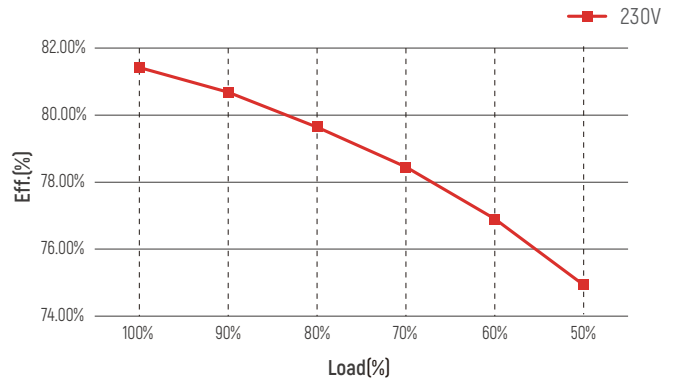


Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

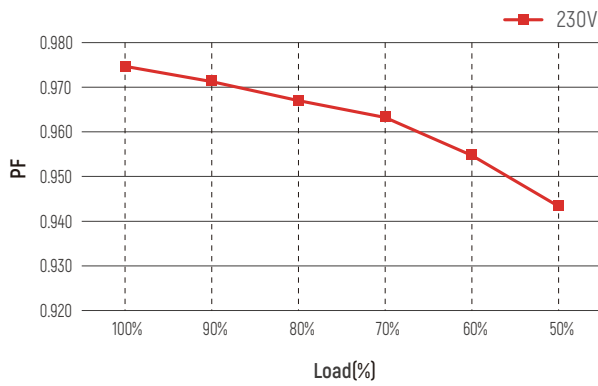
**Dimming curve**



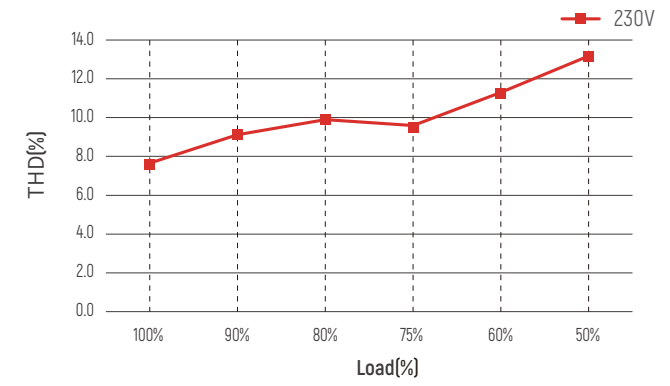
**Efficiency vs. Load**



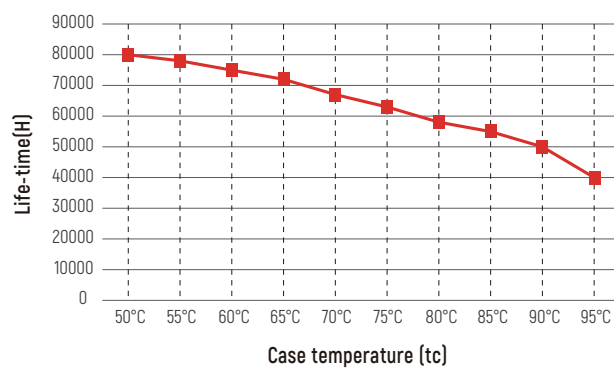
**PF vs. Load**



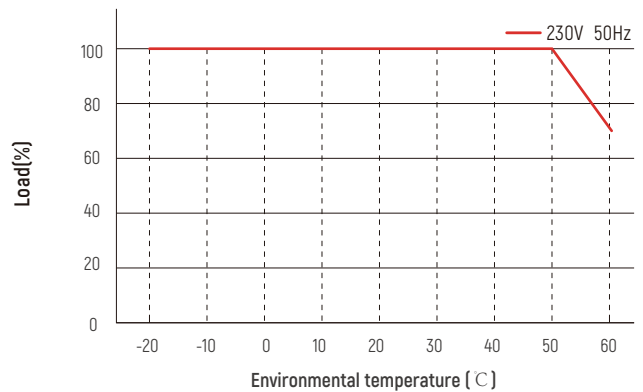
**THD vs. Load**



**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 tc 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.