

EUPA40D-1HMC

Summary

EUPA40D-1HMC is an LED driver that can provide 8 levels of current: 650/700/750/800/850/900/950/1000.

The output current can be easily set through DIP dip switches, dimmed with DALI main control/Touch DIM switches, and the curve is flat Smooth and without flickering.

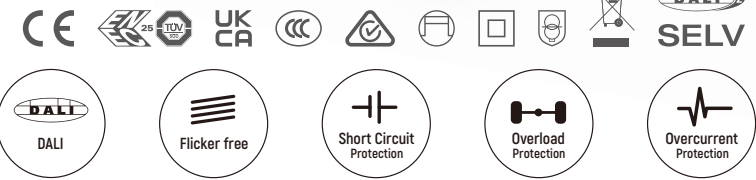
Product Features

- Single channel constant current output, multi-level current optional
- Following the DALI protocol standard IEC62386-207 Ed2.0
- Support Touch DIM function
- High voltage input: 220VAC~240VAC
- Efficiency up to 88%
- Built in active PFC function
- Short circuit protection, overload protection, overvoltage protection
- Suitable for LED indoor lighting fixtures, such as tube lights, spotlights, panel lights, etc

Application



Down Light

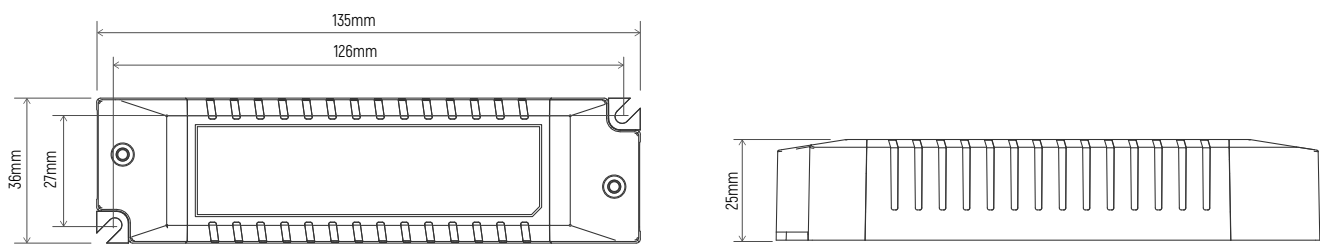


Technical Paramaters

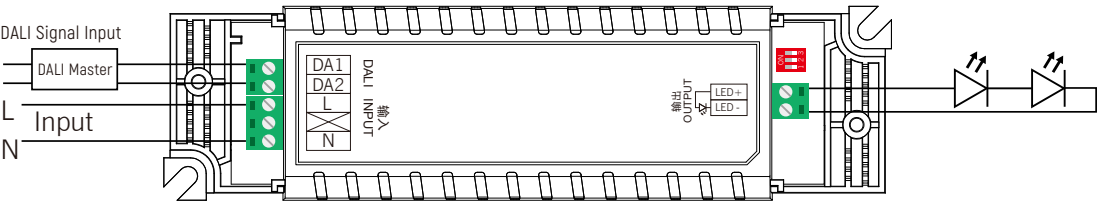
Model	EUPA40D-1HMC																																																																											
Input	Voltage	220VAC-240VAC																																																																										
	Frequency Range(Hz)	50/60Hz																																																																										
	Current	0.20Amax@230VAC																																																																										
	Power Factor	≥0.95@230VAC, Full load																																																																										
	Efficiency	88%@230VAC, Full load																																																																										
	THD	<10%@230VAC, Full load																																																																										
	Standby power	<0.5W																																																																										
	Inrush Current	Cold start,40A@230VAC 200us																																																																										
output	Current/Voltage/Power	650mA/9-45VDC/29.25W 850mA/9-45VDC/38.25W		700mA/9-45VDC/31.5W 900mA/9-44VDC/39.6W		750mA/9-45VDC/33.75W 950mA/9-42VDC/40W		800mA/9-45VDC/36W 1000mA/9-40VDC/40W																																																																				
	Current accuracy	±5%		Current selection table <table><tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr><tr><td>ON</td><td>OFF</td><td>1</td><td>2</td><td>3</td><td></td><td></td><td></td><td>1</td><td>2</td><td>3</td></tr><tr><td></td><td></td><td>650mA</td><td>700mA</td><td>750mA</td><td>800mA</td><td>850mA</td><td>900mA</td><td>950mA</td><td>1000mA</td><td></td></tr><tr><td></td><td></td><td>9-45V</td><td>9-45V</td><td>9-45V</td><td>9-45V</td><td>9-45V</td><td>9-44V</td><td>9-42V</td><td>9-40V</td><td></td></tr><tr><td colspan="11">Note: The factory default setting current is 650mA (1, 2, 3 are in OFF state)</td></tr><tr><td colspan="11"></td></tr></table>							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	ON	OFF	1	2	3				1	2	3			650mA	700mA	750mA	800mA	850mA	900mA	950mA	1000mA				9-45V	9-45V	9-45V	9-45V	9-45V	9-44V	9-42V	9-40V		Note: The factory default setting current is 650mA (1, 2, 3 are in OFF state)																					
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	ON	OFF	1								2	3				1	2	3																																																										
			650mA								700mA	750mA	800mA	850mA	900mA	950mA	1000mA																																																											
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PstLM	≤1																																																																											
SVM	≤0.4																																																																											
Line Regulation	±5% @Full load																																																																											
Load Regulation	±5% @Full load																																																																											
Startup delay	0.5s, at230Vac(When the light begins to shine)																																																																											
Function	Dimming type	DALI2.0																																																																										
	Dimming range	0.5%-100%																																																																										
	Dimming curve	logarithm																																																																										
	Flicker	Flicker-free																																																																										
Protection	Short circuit	Hiccup Protection, Auto-recovery after Fault Clearance																																																																										
	Overcurrent	Hiccup Protection, Auto-recovery after Fault Clearance																																																																										
	Over load	Load voltage>45V protection; Current drops, troubleshooting output is normal																																																																										
	Surge	L-N:1KV																																																																										
Safety&EMC	Withstand Voltage	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	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																																																																									
	EMI	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547																																																																										

Environment	Working temp.	-20℃~50℃
	Storage Temp., Humidity	-40℃~85℃, 20-90%RH (No condensation)
Others	ROHS	Comply with 2011/65/EU
	tc	90℃
	Material	PC
	IP rating	IP20
	Lifetime	50,000h@tc:90℃
	Warranty	5 years
	Switch cycle	>25,000times
	Dimension	135*36*25mm(L*W*H)
	Packing size(weight)	Net weight:150g±5%/PCS; 80PCS/Carton; 12kg±5%/Carton; Carton Size: 456*342*162cm(L*W*H)
	Noise	In a quiet environment, there is no noise outside 30-50cm
Remarks	All parameters were measured at an input voltage of 230VAC/50Hz and an ambient temperature of 25 °C without any special instructions.	

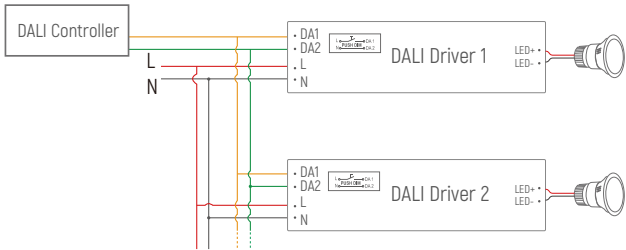
Dimension(mm)



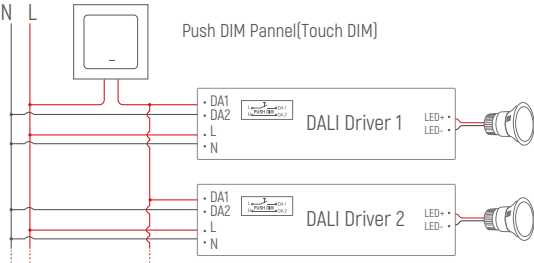
DALI Wiring



DALI Wiring Diagram



Push DIM(Touch DIM) Diagram

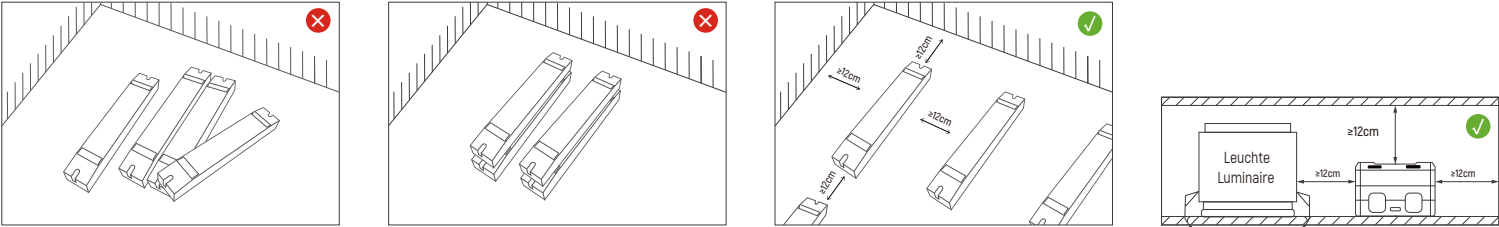


Remarks: use only open push switch (without indicator light). When using synchronous connection, the line length between each device and equipment shall not exceed 20 meters.

Push DIM Function

1. Press the Touch DIM switch for 8s or more,the driver can be controlled via Touch DIM switch.
2. Short press the Touch DIM switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Touch DIM switch (<0.3s), then all lamps connected on the device will be set maximum brightness.
5. The brightness adjustment range is 1%-100%, and the light can be turned off through short pressing when doing the adjustment with long pressing Touch DIM switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

Installation Precautions



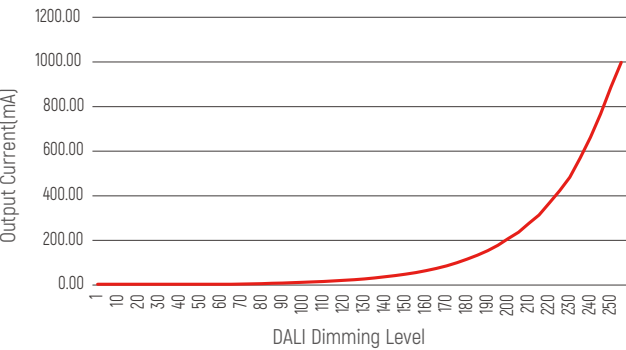
Please do not stack the products. The distance between two products should be >12cm so as not to affect heat dissipation and the lifespan of the products.

Max. quantity of drivers per miniature circuit breaker

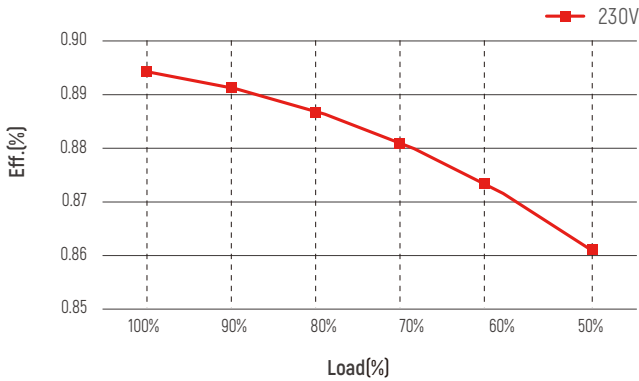
Specification item	Value	Condition
Inrush current I _{peak}	40A (230V)	Input Voltage 230V
Inrush current T _{width}	200us (230V)	Input Voltage 230V, measured at 50% I _{peak}

MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	10pcs	C10	17pcs
B13	13pcs	C13	22pcs
B16	16pcs	C16	27pcs
B20	20pcs	C20	34pcs
		D16	54pcs

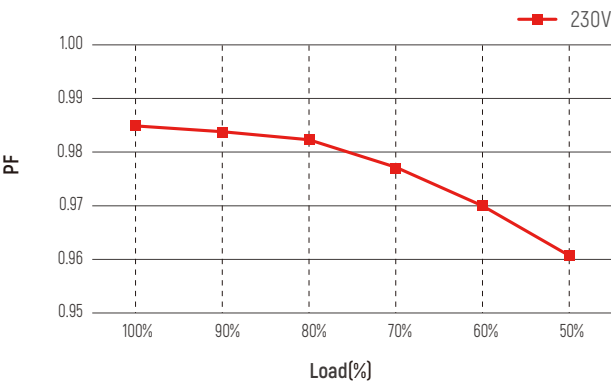
Dimming curve



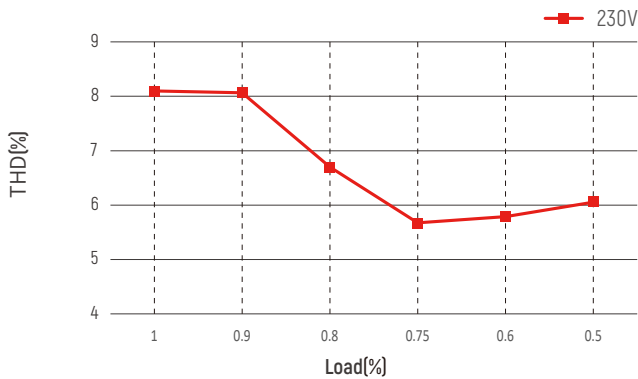
Efficiency vs. Load



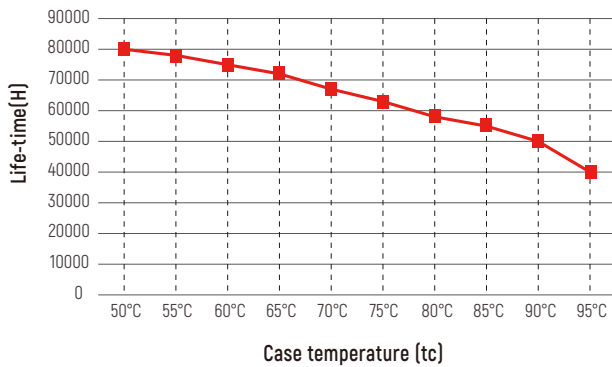
PF vs. Load



THD vs. Load

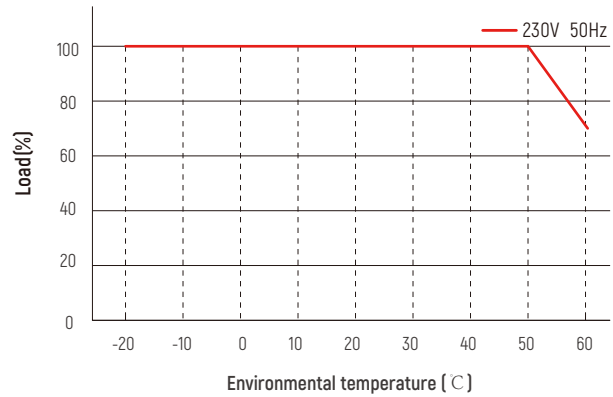


Life-time vs. case temperature



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 temperature depends also on the luminaire design.

Derating Curve



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 mm², (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

- Warranty periods from the date of delivery : 5 years.
- 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:

- Exceeding the warranty period.
- Damage caused by human factors such as high voltage, overload, and improper operation.
- The appearance of the product is severely damaged or deformed.
- Normal wear and tear or aging during regular product use.
- Damage caused by natural disasters or force majeure factors.
- The quality inspection label of the product is damaged (QC PASS).
- 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.