

EUPS12D-1HMC-200

Product Features

- Single-channel output, and the output current can be adjusted and selected by dip
- Comply with DALI protocol standard IEC62386
- Efficiency up to 81%
- Protection level IP20, suitable for indoor I II lamps
- Dimming range 0.1%-100% dimming, smooth dimming without step sense and stroboscopic
- Support PUSH DIM(Touch DIM) Dimming
- Built-in PFC chip to improve energy efficiency and reduce pollution
- Short circuit, overvoltage, overload, V0 class flame retardant housing
- Suitable for LED indoor lamps, such as downlights, panel lights, etc

Application



Down light

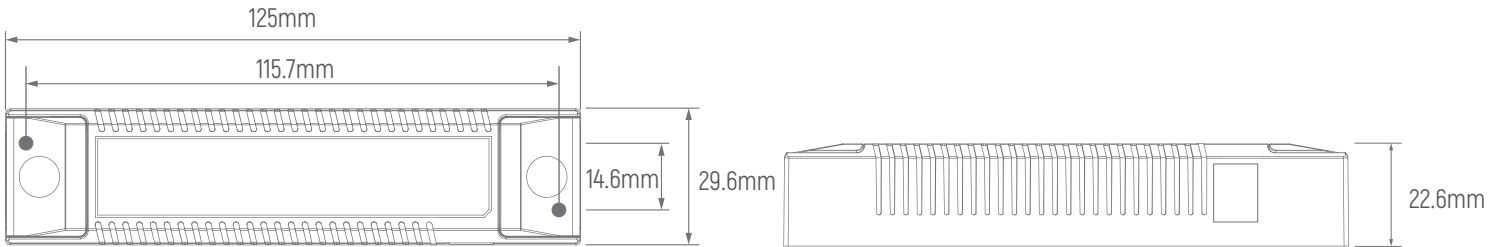


Technical Paramaters

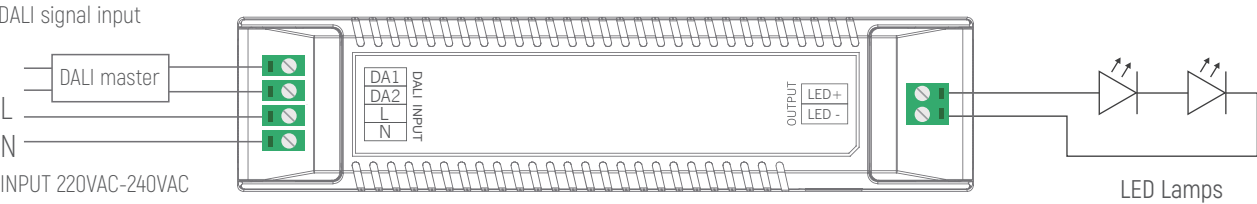
Model	EUPS12D-1HMC-200																																										
Input	Input Voltage	220VAC-240VAC																																									
	Frequency Range[Hz]	50/60Hz																																									
	Input Current	0.09Amax@230VAC																																									
	Power Factor	0.95@230VAC, Full load																																									
	Efficiency	81%@230VAC, Full load																																									
	THD	10%@230VAC, Full load																																									
	Standby power	<0.5W																																									
	Inrush Current	Cold start,4.68A@230V 22.4us																																									
Output	Output Current	200mA/9-45VDC/9W		220mA/9-45VDC/9.9W		240mA/9-45VDC/10.8W		260mA/9-45VDC/11.7W																																			
	Output Voltage	280mA/9-43VDC/12W		300mA/9-40VDC/12W		320mA/9-37VDC/11.8W		350mA/9-34DC/12W																																			
	Output Power																																										
	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>200mA</td><td>220mA</td><td>240mA</td><td>260mA</td><td>280mA</td><td>300mA</td><td>320mA</td><td>350mA</td><td></td></tr><tr><td colspan="2"></td><td>9-45VDC</td><td>9-45VDC</td><td>9-45VDC</td><td>9-45VDC</td><td>9-43VDC</td><td>9-40VDC</td><td>9-37VDC</td><td>9-34VDC</td><td></td></tr></table>							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	ON	OFF	200mA	220mA	240mA	260mA	280mA	300mA	320mA	350mA				9-45VDC	9-45VDC	9-45VDC	9-45VDC	9-43VDC	9-40VDC	9-37VDC	9-34VDC	
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	Output Power Range	0W-12W																																									
	PstLM	≤1																																									
	SVM	≤0.4																																									
	Dimming frequency	20KHz		Remark: Function default setting is: 200mA (@switch are all OFF state)																																							
Line Regulation	±1% @Full load																																										
Load Regulation	±0.5% @Full load																																										
Turn on Time	0.75s, at230Vac (When the light begins to shine)																																										
Function	Dimming Type	DALI2.0 / PUSH DIM																																									
	Dimming Range	0.1%-100% Dimming to OFF																																									
	Dimming Curve	Logarithm																																									
	Flicker free	Flicker free																																									
Protection	Short circuit	Hiccups, troubleshooting after self-recovery																																									
	Over Current	/																																									
	Over load	Load power ≥130% protection; Current down, troubleshooting output normal																																									
	Over Voltage	Hiccups, troubleshooting after self-recovery																																									
	Over temperature	/																																									
Safety& EMC	Surge	L-N:1KV																																									
	Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA I/P-DALI(Signal port):1500VAC/1min/5mA O/P-DALI(Signal port):1500Vac/1min/<5mA																																									
	Safety Standards	CCC [China]	GB19510.1, GB19510.14, GB 17625.1, GB/T 17743			TUV [Germany]		EN61347-1, EN61347-2-13, EN62493																																			
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	EMC Emission	CCC [China]	GB/T17743, GB17625.1, GB/T 19510.1, GB/T 19510.213																																								
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Environment	Working Temp.	-20°C~50°C
	Storage Temp.	-40°C~85°C
	Storage Humidity	20-90%RH (No condensation)
Others	RoHS	RoHS 2.0 (EU) 2015/863
	tc	85°C
	material	PC
	IP Rating	IP20
	Lifetime	50,000h@tc:85°C
	Warranty Condition	5years
	Switch Cycle	25,000times
	Body size	125*29.6*22.6mm (L*W*H)
	Packing[weight]	Net weight: 72g±5%/PCS; 120PCS/Carton; 9.14kg±5%/Carton; Carton Size: 433*230*200mm(L*W*H)
	Noise	In a quiet environment, no noise beyond 30-50cm
Remark	All parameters were measured at an input voltage of 230VAC/50Hz and an ambient temperature of 25 °C without any special instructions.	

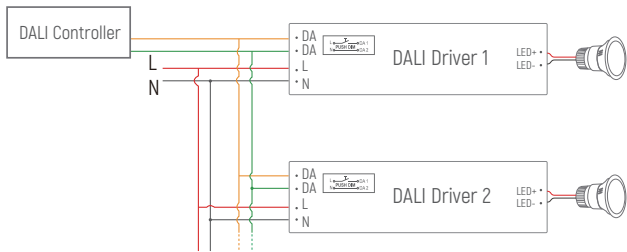
Dimension(mm)



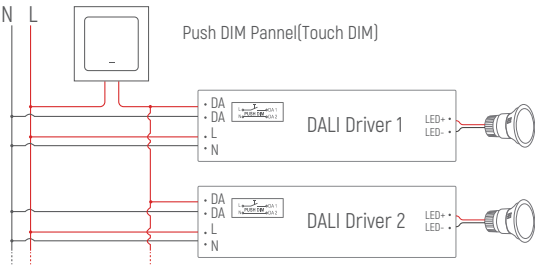
Wiring Diagram



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

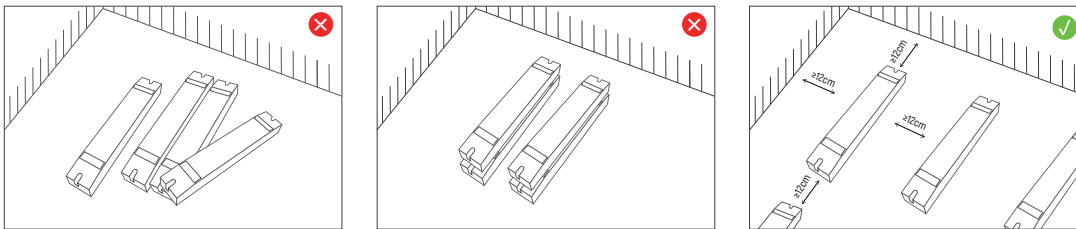
1. Press the Touch DIM switch for 8s or more,the driver can be controlled via Touch DIM switch.
2. Short press the Touch DIM switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing 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.

Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Condition
Inrush current I_{peak}	4.68A	Input Voltage 230VAC
Inrush current T_{width}	22.4us	Input Voltage 230VAC, measured ta 50% I_{peak}

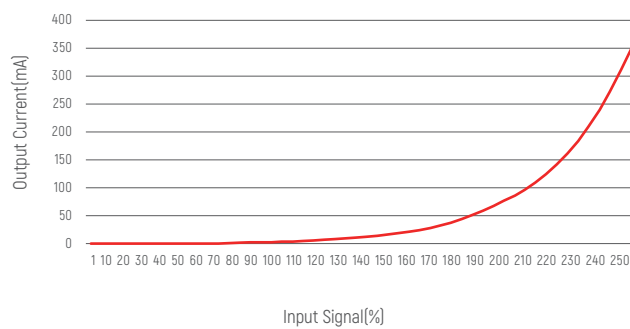
MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	142pcs	C10	142pcs
B13	185pcs	C13	185pcs
B16	228pcs	C16	228pcs
B20	285pcs	C20	285pcs
		D16	228pcs

Installation Precautions

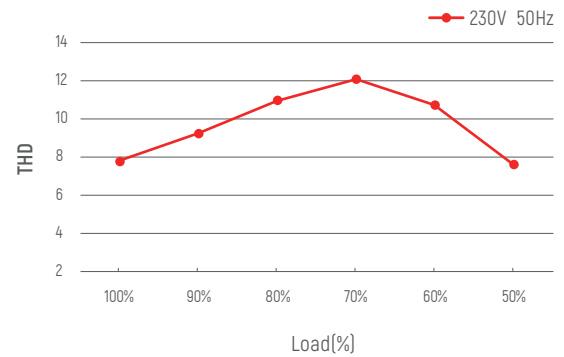


Please do not stack the products. The distance between two products should be $>12\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.

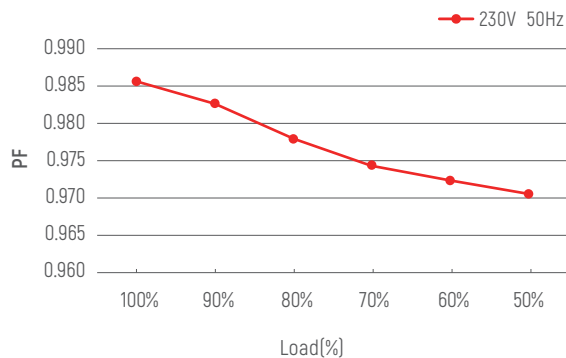
DALI Dimming Curve



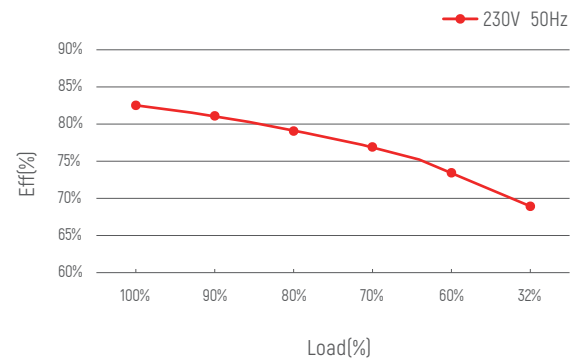
THD vs Load Curve



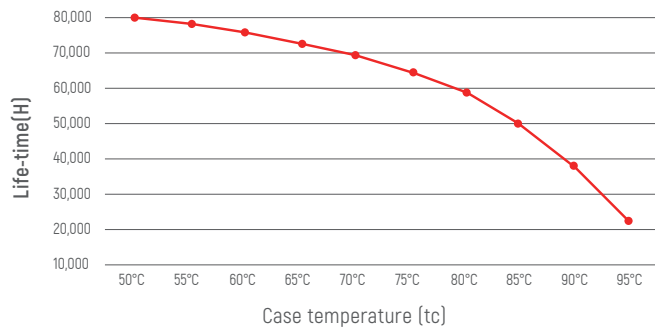
PF vs Load Curve



Efficiency vs Load Curve



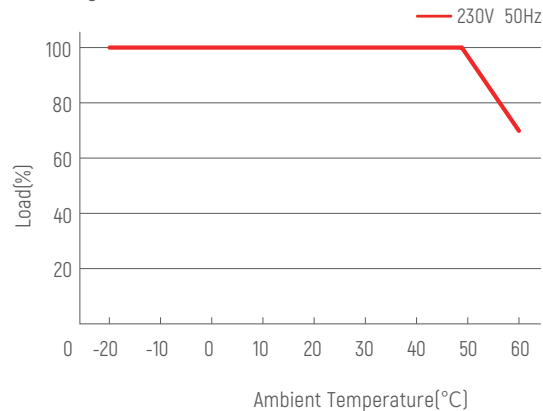
Life-time vs. case temperature



The life-time of the led driver is shown in the figure above (calculated based on the 90% survival rate).

The relation of tc to ta 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. - To avoid hot swapping, power off and restart the driver before connecting the LED load.
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.

EUPS12D-1HMC-200

产品特点

- 单通道输出，输出电流可通过拨码调节选择
- 遵循DALI协议标准 IEC62386-101 102 207
- 效率高达 81%
- 防护等级IP20，适用于室内 I II 类灯具
- 调光范围0.1%-100%调光，调光平滑无阶梯感无频闪
- 支持 PUSH DIM(Touch DIM) 调光
- 内置PFC芯片，提高能源利用率，减少污染
- 短路、过压、过载、V0级阻燃外壳
- 适用于LED室内灯具,比如筒灯，面板灯等



应用



筒灯

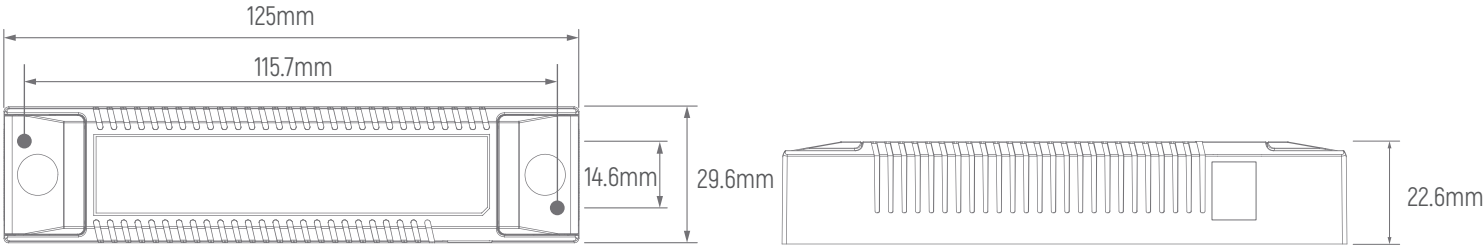


技术参数

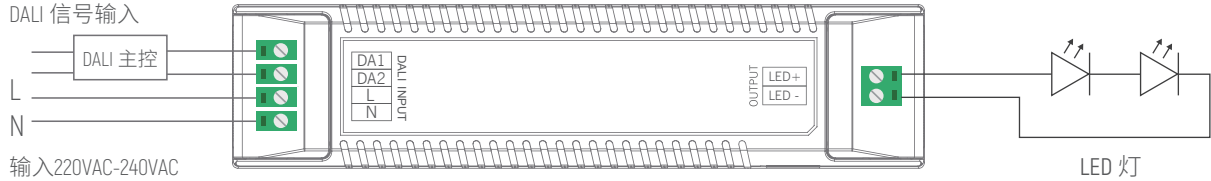
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	输出电流精度	±5%		电流选择表 <table><tr><td> </td><td> </td><td> 1 2 3 </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr><tr><td>输出功率范围</td><td colspan="2">0W-12W</td></tr><tr><td>PstLM</td><td colspan="2">≤1</td></tr><tr><td>SVM</td><td colspan="2">≤0.4</td></tr><tr><td>调光频率</td><td colspan="2">20KHz</td></tr><tr><td>线性调整率</td><td colspan="2">±1% @满载</td></tr><tr><td>负载调整率</td><td colspan="2">±0.5% @满载</td></tr><tr><td>启动时间</td><td colspan="9">0.75s, at230Vac(当灯光开始亮起)</td></tr><tr><td rowspan="4">功能</td><td>调光方式</td><td colspan="9">DALI2.0 / PUSH DIM</td></tr><tr><td>调光范围</td><td colspan="9">0.1%-100% 变暗直至关闭</td></tr><tr><td>调光曲线</td><td colspan="9">对数</td></tr><tr><td>频闪</td><td colspan="9">无频闪</td></tr><tr><td rowspan="5">保护</td><td>短路保护</td><td colspan="9">打嗝, 排除故障后自恢复</td></tr><tr><td>过流保护</td><td colspan="9">/</td></tr><tr><td>过载保护</td><td colspan="9">负载功率≥130%保护; 电流下降, 排除故障输出正常</td></tr><tr><td>过压保护</td><td colspan="9">打嗝, 排除故障后自恢复</td></tr><tr><td>过温保护</td><td colspan="9">/</td></tr><tr><td rowspan="8">安规与电磁兼容</td><td>雷击浪涌</td><td colspan="9">L-N:1KV</td></tr><tr><td>耐压标准</td><td colspan="9">I/P-O/P: 3000VAC/1min/5mA I/P-DALI[Signal port]:1500VAC/1min/5mA O/P-DALI[Signal port]:1500Vac/1min/<5mA</td></tr><tr><td rowspan="3">安全规范</td><td colspan="4">CCC [中国] GB19510.1, GB19510.14, GB 17625.1, GB/T 17743</td><td colspan="5">TUV [德国] EN61347-1, EN61347-2-13, EN62493</td></tr><tr><td colspan="4">CB [CB成员国] IEC61347-1, IEC61347-2-13</td><td colspan="5">CE [欧盟] EN61347-1, EN61347-2-13, EN62384</td></tr><tr><td colspan="4">RCM [澳洲] AS 61347-1, AS 61347-2-13</td><td colspan="5">ENEC [欧洲] EN61347-1, EN61347-2-13, EN62384</td></tr><tr><td rowspan="3">电磁兼容</td><td colspan="9">CCC [中国] GB/T17743, GB17625.1, GB/T 19510.1, GB/T 19510.213</td></tr><tr><td colspan="9">CE [欧盟] EN55015, EN61000-3-2, EN61000-3-3, EN61547</td></tr><tr><td colspan="9">RCM [澳洲] EN55015, EN61000-3-2, EN61000-3-3, EN61547</td></tr><tr><td>EMC抗扰度</td><td colspan="9">EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547</td></tr></table>									1 2 3									输出功率范围	0W-12W		PstLM	≤1		SVM	≤0.4		调光频率	20KHz		线性调整率	±1% @满载		负载调整率	±0.5% @满载		启动时间	0.75s, at230Vac(当灯光开始亮起)									功能	调光方式	DALI2.0 / PUSH DIM									调光范围	0.1%-100% 变暗直至关闭									调光曲线	对数									频闪	无频闪									保护	短路保护	打嗝, 排除故障后自恢复									过流保护	/									过载保护	负载功率≥130%保护; 电流下降, 排除故障输出正常									过压保护	打嗝, 排除故障后自恢复									过温保护	/									安规与电磁兼容	雷击浪涌	L-N:1KV									耐压标准	I/P-O/P: 3000VAC/1min/5mA I/P-DALI[Signal port]:1500VAC/1min/5mA O/P-DALI[Signal port]:1500Vac/1min/<5mA									安全规范	CCC [中国] GB19510.1, GB19510.14, GB 17625.1, GB/T 17743				TUV [德国] EN61347-1, EN61347-2-13, EN62493					CB [CB成员国] IEC61347-1, IEC61347-2-13				CE [欧盟] EN61347-1, EN61347-2-13, EN62384					RCM [澳洲] AS 61347-1, AS 61347-2-13				ENEC [欧洲] EN61347-1, EN61347-2-13, EN62384					电磁兼容	CCC [中国] GB/T17743, GB17625.1, GB/T 19510.1, GB/T 19510.213									CE [欧盟] EN55015, EN61000-3-2, EN61000-3-3, EN61547									RCM [澳洲] EN55015, EN61000-3-2, EN61000-3-3, EN61547									EMC抗扰度	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547								
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	过载保护	负载功率≥130%保护; 电流下降, 排除故障输出正常																																																																																																																																																																																																																																		
	过压保护	打嗝, 排除故障后自恢复																																																																																																																																																																																																																																		
	过温保护	/																																																																																																																																																																																																																																		
安规与电磁兼容	雷击浪涌	L-N:1KV																																																																																																																																																																																																																																		
	耐压标准	I/P-O/P: 3000VAC/1min/5mA I/P-DALI[Signal port]:1500VAC/1min/5mA O/P-DALI[Signal port]:1500Vac/1min/<5mA																																																																																																																																																																																																																																		
	安全规范	CCC [中国] GB19510.1, GB19510.14, GB 17625.1, GB/T 17743				TUV [德国] EN61347-1, EN61347-2-13, EN62493																																																																																																																																																																																																																														
		CB [CB成员国] IEC61347-1, IEC61347-2-13				CE [欧盟] EN61347-1, EN61347-2-13, EN62384																																																																																																																																																																																																																														
		RCM [澳洲] AS 61347-1, AS 61347-2-13				ENEC [欧洲] EN61347-1, EN61347-2-13, EN62384																																																																																																																																																																																																																														
	电磁兼容	CCC [中国] GB/T17743, GB17625.1, GB/T 19510.1, GB/T 19510.213																																																																																																																																																																																																																																		
		CE [欧盟] EN55015, EN61000-3-2, EN61000-3-3, EN61547																																																																																																																																																																																																																																		
		RCM [澳洲] EN55015, EN61000-3-2, EN61000-3-3, EN61547																																																																																																																																																																																																																																		
EMC抗扰度	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547																																																																																																																																																																																																																																			

环境	工作温度	-20 C ~50 C
	储存温度	-40 C ~85 C
	储存湿度	20-90%RH (无凝露)
其他	RoHS	RoHS 2.0 (EU) 2015/863
	tc	85 C
	材质	PC
	防水等级	IP20
	寿命	50,000小时@tc:85 C
	质保	5年
	开关周期	25,000次
	裸机尺寸	125*29.6*22.6mm(长*宽*高)
	包装尺寸(重量)	净重: 72g±5%/PCS; 120PCS/Carton; 9.14kg±5%/箱; 外箱尺寸: 433*230*200mm(长*宽*高)
	噪音	安静环境下, 30-50cm以外无噪音
备注	全部参数无特别说明, 均在输入电压230VAC/50Hz和25°C的环境温度下测得。	

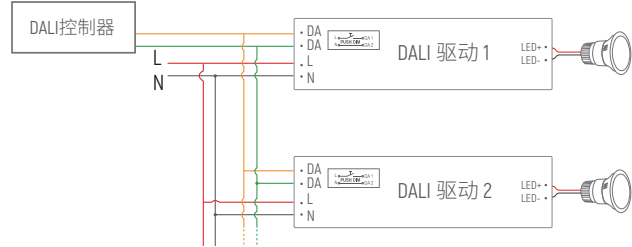
产品尺寸(mm)



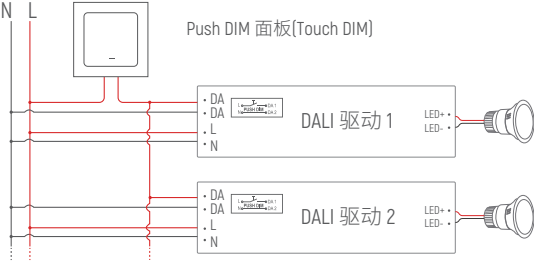
接线图



DALI应用接线图



Push DIM(Touch DIM) 接线图



备注: 只能使用开路的按压式开关(不带指示灯)。采用同步连线时每个设备和设备之间的线长不超过20米。

Push DIM 功能

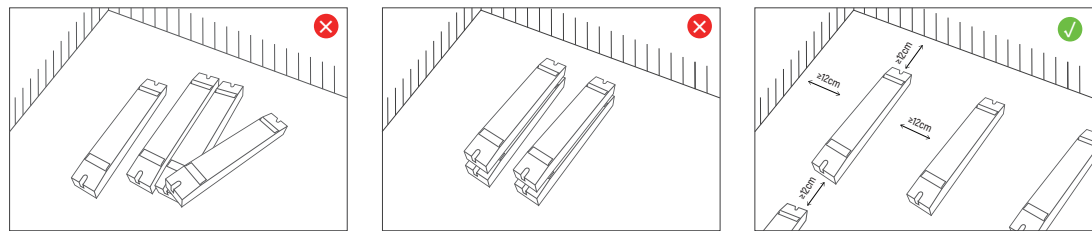
- 1.长按8s进入Touch DIM模式。
- 2.短按Touch DIM 开关 (<0.5秒) 进行灯的亮暗控制。
- 3.长按Touch DIM 开关 (>0.5秒) 进行灯具的亮度调节, 光是调亮还是调暗, 随着每次按压的开关变化而变换。
- 4.双击Touch DIM 开关 (<0.3秒), 连接的所有灯具将达到最亮状态。
- 5.亮度调节范围为1%-100%。
- 6.具有断电记忆功能, 重新上电将恢复到上一次断电的状态。

断路器带载说明

规范项	值	备注
浪涌电流 I _{peak}	4.68A	输入电压230VAC
浪涌电流 T _{width}	22.4us	输入电压230VAC, 在50%I _{peak} 下测试

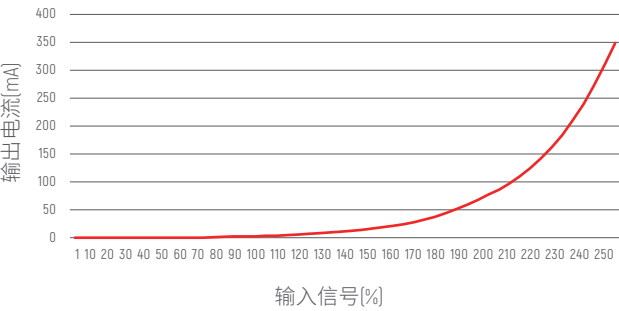
MCB	输入电压230V 驱动器数量	MCB	输入电压230V 驱动器数量
B10	142pcs	C10	142pcs
B13	185pcs	C13	185pcs
B16	228pcs	C16	228pcs
B20	285pcs	C20	285pcs
		D16	228pcs

安装规范要求

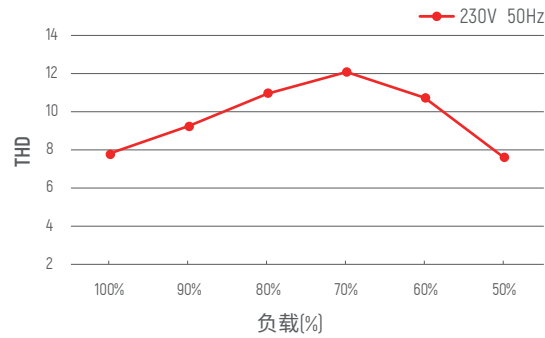


请勿将产品堆叠摆放, 产品与产品间隔距离应≥12cm, 避免影响产品散热和使用寿命。

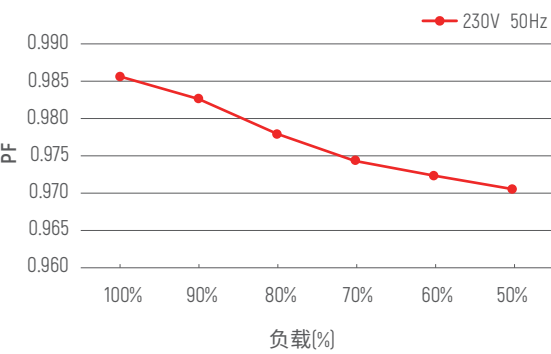
DALI 曲线



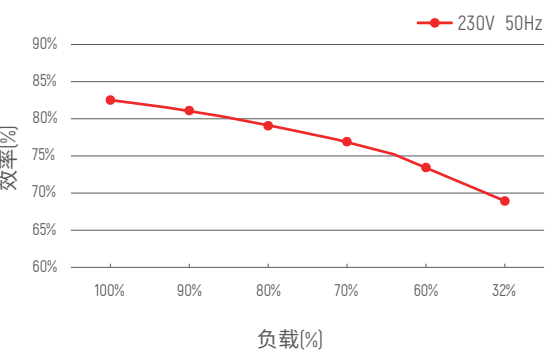
THD vs 负载曲线



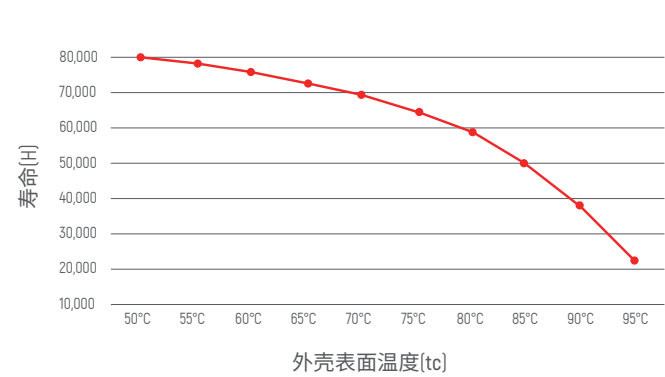
PF vs 负载曲线



效率 vs 负载曲线

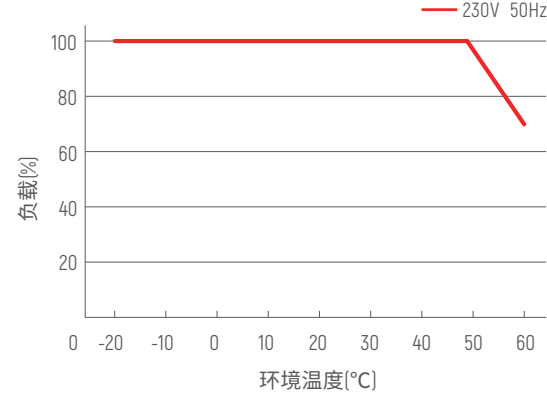


寿命 vs tc温度



LED驱动器的使用寿命如上图所示（根据90%的带载率计算）。
tc-ta温度的关系也取决于灯具的设计。

降额曲线



注意事项

本产品应由具备专业资格的人员进行调试与安装		
1	安装条件确认	· 防水与防护 :根据电源的防水和防护要求,选择合适的位置安装。无防水功能的产品应避免日晒雨淋,户外安装时请使用防水箱保护。 · 散热要求 :驱动电源应避免暴露在高温环境中。请确保工作环境温度在推荐范围内。为确保驱动电源正常散热,安装时应选择通风良好的地方。良好的散热条件有助于延长产品寿命。
2	电源检查	·使用前,检查产品参数,确认LED电源的输出电压、电流符合要求
3	安全接线	·需使用符合规格的线缆,确保导线的截面与驱动电源要求匹配。通常为 0.75 - 2.5 mm ² 的实心线缆, [具体线径要求请参阅丝印或说明书接线图]。 ·若电源(金属外壳)安装在已接地的灯具部件或设备上,需要对电源进行接地处理。 ·避免热插拔,连接 LED 负载前应断电并重启驱动。
4	接线确认	·通电调试前,确保接线牢固,避免接触不良,以防电流不稳或设备损坏。
5	维修建议	·如产品发生故障,请勿私自维修。如有疑问,请联系供应商或销售处理。

※本说明书如有更新,恕不另行通知。如产品功能与说明书不符,以实际产品为准。

保修条例

1. **保修期**:自产品出厂之日起,享有 **5年保修期**。
2. **保修服务**:在保修期内,如因产品质量问题,欧切斯将提供**免费修理或更换**服务。

非保修条例

以下情况不在免费保修或更换服务范围内:

1. 超出保修期。
2. 由于过高电压、超负载、操作不当等人为原因造成的损坏。
3. 产品外观严重损坏或变形。
4. 产品正常使用过程中产生的磨损或老化。
5. 自然灾害或不可抗力因素造成的损坏。
6. 产品的质量检验标签损坏 (QC PASS)。
7. 未提供与欧切斯签订的合同或有效发票凭证。

※补救措施:修理或更换是欧切斯对客户的最唯一补救方式,且欧切斯不承担因修理或更换产生的附带损害赔偿赔偿责任,除非在适用法律范围内。

※保修条款的调整:欧切斯保留修改或调整保修条款的权利,并以书面形式发布为准。