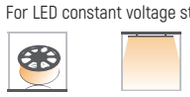
LCP150DM-4H24V

Product Features

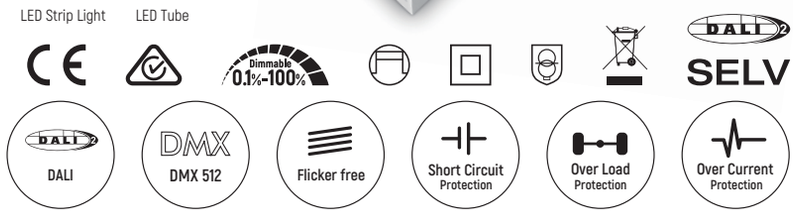
- 4 channels constant voltage output, maximum output current: 6.25A
- Meet DALI protocol IEC 62386 DALI2.0, RDM/DMX512
- Short circuit, overcurrent, overload protection
- Enclosure with V-0 Flame-Retardant Rating
- The dimming range is 0.5% to 100%, featuring smooth, step-free dimming and flicker-free operation
- The elongated housing design facilitates installation in narrow spaces.
- 50,000-hour lifespan with a 5-year warranty
- Dimming Type: DALI2.0 & DMX512
- IP20 protection rating, suitable for indoor Class I, II, and III luminaires

Application

For LED constant voltage strip light only



LED Strip Light LED Tube

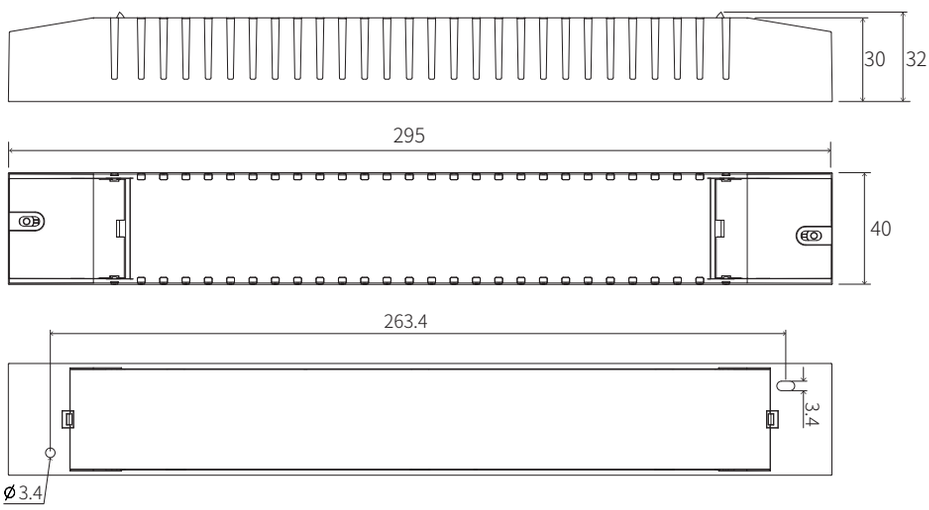


Technical Paramaters

Model	LCP150DM-4H24V	
Input	Rated Voltage	220VAC-240VAC
	Frequency Range(Hz)	50/60Hz
	Current	0.75Amax@230VAC
	Power Factor	≥0.98@230VAC, Full load
	Efficiency	≥93%@230V, Full load
	THD(full load)	<10%@230VAC, Full load
	Standby power	<0.5W
	No load power	<0.6W
	Inrush Current	Cold start, 57A@230VAC 250us
Output	Voltage	24VDC
	Voltage Tolerance	±0.5V
	Current	6.25A max (1.56A per Channel, 4 Channel, In all 6.25A)
	Power	150W
	Channel	4
	PWM Dimming frequency	3.3KHz
	Line regulation	±1% @Full load
	Load regulation	±2% @Full load
	Ripple Voltage	<1%
	Start-up Time	0.75s (When the light begins to shine)
Function	Dimming Type	DALI2.0/PUSH, DMX/RDM
	Dimming Range	0.5%-100%
	Dimming curve	DALI: Logarithm DMX: Linearity
	Flicker	Flicker free
Protection	Short circuit	Hiccup protection, No output, Auto-Recover when fault removed
	Overcurrent	Hiccup protection, No output, Auto-Recover when fault removed
	Overload	Hiccup protection, No output, Auto-Recover when fault removed
Safety & EMC	Surge	L-N:2KV
	Withstand Voltage	I/P-O/P: 3000Vac/1min/<5mA, O/P-DALI: 500Vac/1min/<1mA, O/P-DMX:500Vac/1min/<1mA
	Safety standard	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

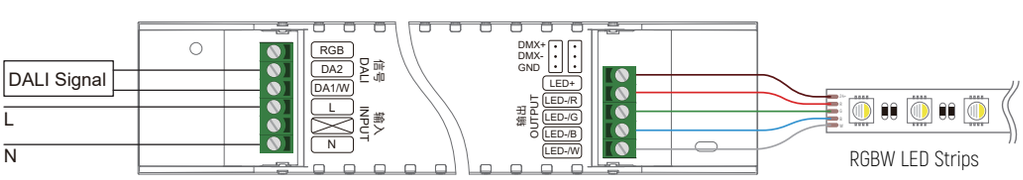
Environment	Working Temp.	-20°C~50°C
	Storage Temp.	-40°C~85°C
	Storage Humidity	20-90%RH (No condensation)
Others	RoHS	Comply with 2011/65/EU
	tc	80°C
	material	PC
	IP Rating	IP20
	Lifetime	50,000h@tc:80°C
	Warranty Condition	5years
	Switch Cycle	25,000times
	Body size	295*40*32mm (L*W*H)
	Packing(weight)	Net weight: 305g±5%/PCS; 50PCS/Carton; 15.7kg±5%/Carton; Carton Size: 434*302*174mm(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)

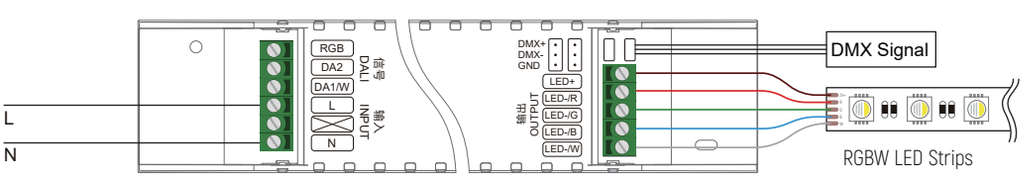


Wiring

DALI

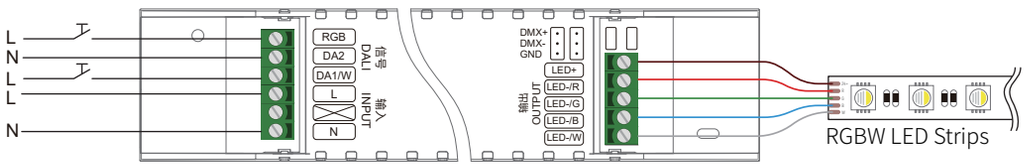


DMX/RDM



Push DIM Application

Push DIM



Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters.

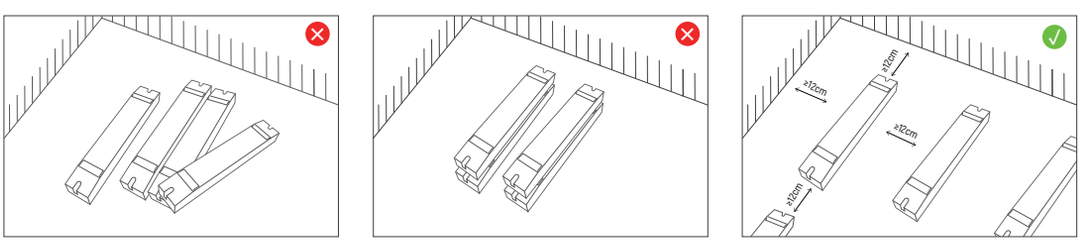
Push DIM Function

-Memory Function: The system retains the previous state after power is restored.
-PUSH Dimming Mode: Long-press the Push W button for 5 seconds or more to enter PUSH dimming mode.

Push RGB Button
-Long Press: Adjust RGB (color) values.
-Short Press: Set RGB (color) and brightness to maximum.
-Double-Click: Toggle the Push W button's control channel between RGB (color) and W (white light).

Push W Button
-Note: At any given time, the Push W button can only adjust either W (white light) brightness or RGB (color) brightness, as determined by the double-click function of the Push RGB button.
-Short Press: Turn the corresponding channel ON or OFF.
-Long Press: Adjust the brightness of the corresponding channel.
-The brightness level is maintained upon release.
-Each subsequent long press reverses the adjustment direction (e.g., from increasing to decreasing brightness).
-Double-Click: Set the corresponding channel to maximum brightness.

Installation Precautions



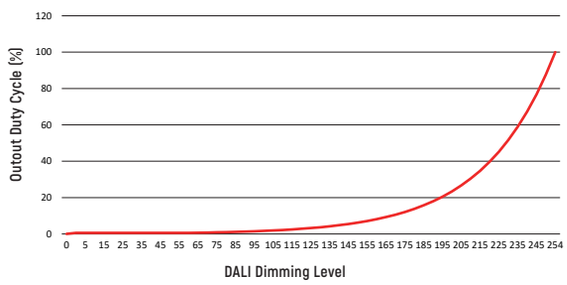
Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

Max. quantity of drivers per miniature circuit breaker

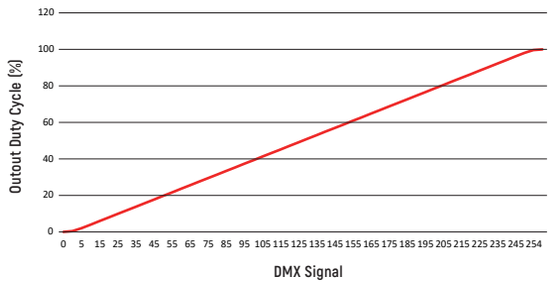
Specification item	Value	Condition
Inrush current I_{peak}	57A	Input Voltage 230VAC
Inrush current T_{width}	250us	Input Voltage 230VAC, measured ta 50% I_{peak}

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	18pcs
		D16	21pcs

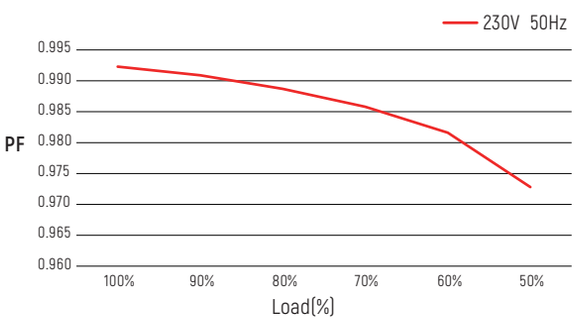
DALI Dimming Curve



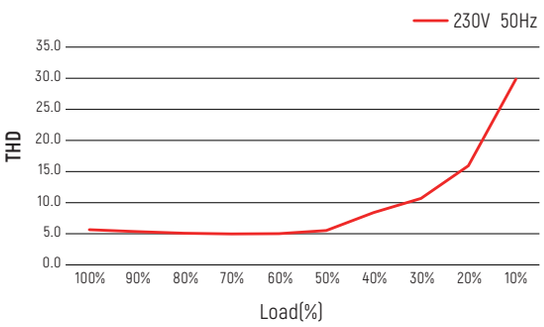
DMX Dimming Curve



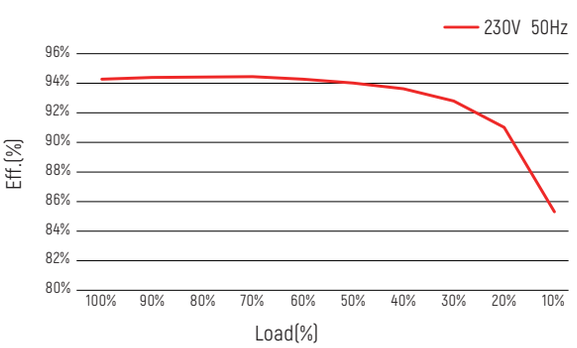
PF vs Load Curve



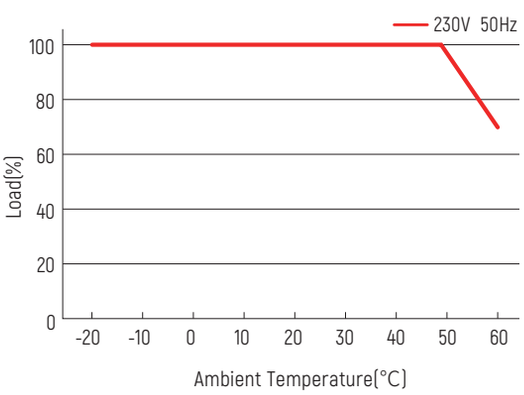
THD vs Load Curve



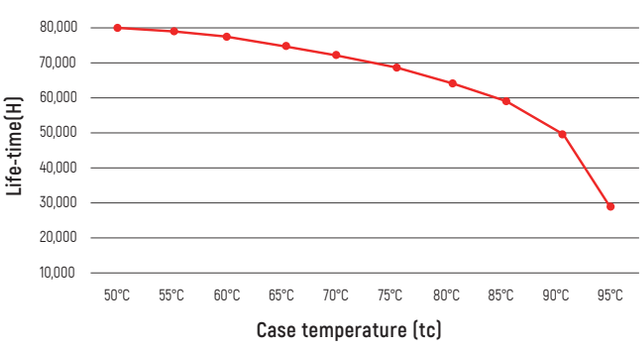
Efficiency vs Load Curve



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.

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.

LCP150DM-4H24V

产品特点

- 4通道恒压输出，最大输出电流6.25A
- 遵循DALI协议标准 IEC62386 DALI2.0, RDM/DMX512
- 短路、过流、过载保护，V0级阻燃外壳
- 调光范围0.5%-100%调光，调光平滑无阶梯感无频闪
- 内置PFC芯片，提高能源利用率，减少对电网的污染
- 长条形外壳设计，便于安装狭窄空间内
- 寿命50，000小时，5年质保
- 调光信号DALI2.0 & DMX512
- 防护等级IP20，适用于室内 I II III类灯具

应用

仅用于LED恒压灯带


LED灯带

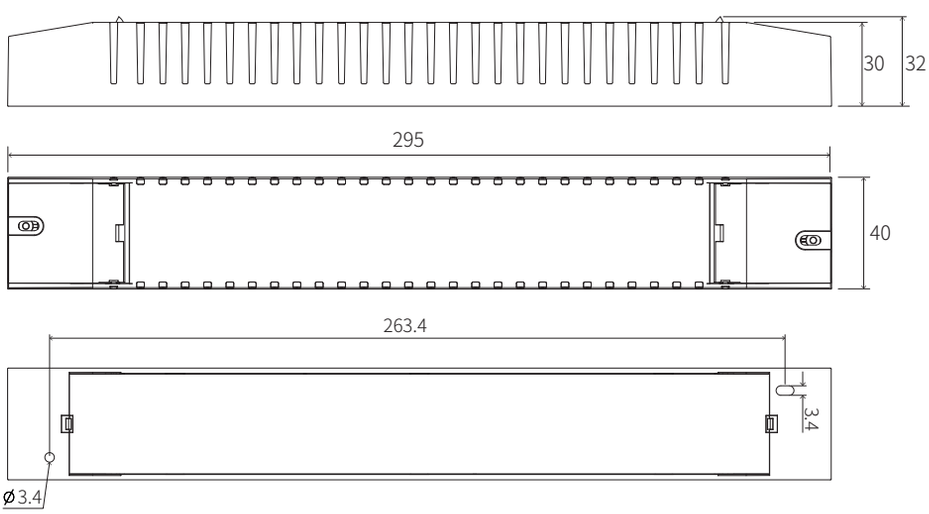

LED硬灯条

技术参数

产品型号	LCP150DM-4H24V	
输入	输入电压	220VAC-240VAC
	频率范围	50/60Hz
	输入电流	0.75Amax@230VAC
	功率因数	≥0.98@230VAC, 满载
	效率	≥93%@230V， 满载
	谐波THD	<10%@230VAC, 满载
	待机功耗	<0.5W
	空载功耗	≤0.6W
	浪涌电流	冷启动, 57A@230VAC 250us
输出	电压	24VDC
	电压精度	±0.5V
	电流	6.25A [每通道1.56A, 4 通过, 总共6.25A]
	功率	150W
	通道	4
	PWM调光频率	3.3KHz
	线性调整率	±1% @满载
	负载调整率	±2% @满载
	纹波电压	<1%
	启动延时	≤0.75 s (When the light begins to shine)
功能	调光方式	DALI2.0/PUSH & DMX/RDM
	调光范围	0.5%-100% 变暗直至关闭
	调光曲线	DALI: (对数) DMX: (线性)
	频闪	无频闪
保护	短路保护	打嗝，关闭输出，排除故障后自恢复
	过流保护	打嗝，关闭输出，排除故障后自恢复
	过载保护	打嗝，关闭输出，排除故障后自恢复
安规与电磁兼容	雷击浪涌	L-N:2KV
	耐压标准	I/P-O/P: 3000Vac/1min/<5mA,O/P-DALI: 500Vac/1min/<1mA, O/P-DMX:500Vac/1min/<1mA
	安全规范	CCC (中国) GB19510.1，GB19510.14 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
		CE (欧盟) EN55015，EN61000-3-2，EN61000-3-3，EN61547
		RCM (澳洲) EN55015，EN61000-3-2，EN61000-3-3，EN61547
	EMC电磁抗扰度	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547

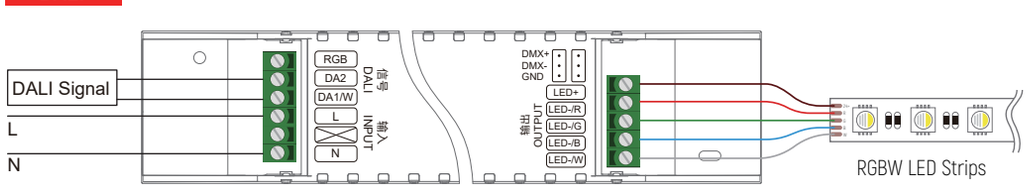
环境	工作温度	-20°C~50°C
	储存温度	-40°C~85°C
	储存湿度	20-90%RH (无凝露)
其他	RoHS	遵守 2011/65/EU
	tc	80°C
	材质	PC
	防水等级	IP20
	寿命	50,000小时@tc:80°C
	质保	5年
	开关周期	25,000次
	裸机尺寸	295*40*32mm （长*宽*高）
	包装尺寸(重量)	净重：305g±5%/PCS; 50PCS/Carton;15.7kg±5%/Carton; Carton Size: 434*302*174mm(L*W*H)
	噪音	安静环境下，30-50cm以外无噪音
备注	全部参数无特别说明，均在输入电压230VAC/50Hz和25°C的环境温度下测得。	

尺寸图(mm)

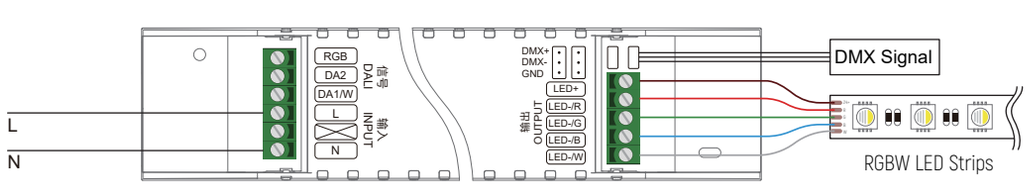


接线图

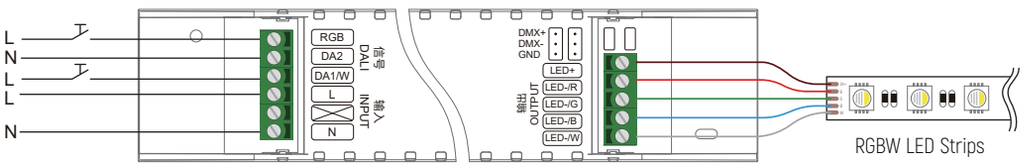
DALI



DMX/RDM



Push DIM



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.

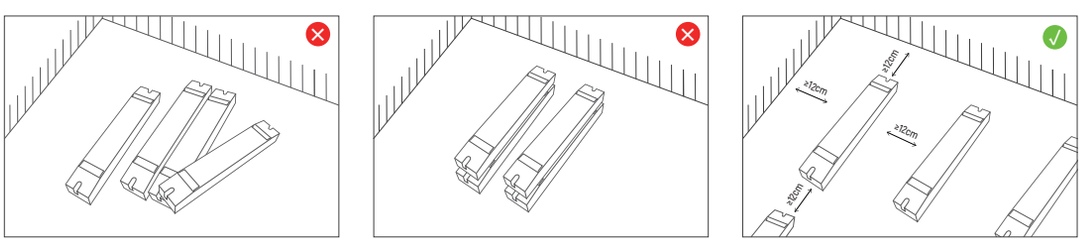
Push DIM 功能

-Push有记忆功能 重新上电恢复之前状态
-长按Push W开关5s及以上进入PUSH调光模式

Push RGB按键
-长按调节RGB(颜色)颜色值，短按RGB(颜色)颜色值及亮度达到最大。
-通过双击PUSH RGB按键,切换Push W按键当前对应的通道RGB(颜色)或W(白光)。

Push W按键
-该按键用于调节W(白光)亮度与RGB(颜色)亮度,某时刻只能调节其中一种,通过双击PUSH RGB按键切换.
-短按Push W 开关:对应通道打开或关灭
-长按Push W开关:对应通道进行亮度调节，释放时停在当前亮度，每次松开再按都往相反的方向调。
-双击Push W开关:对应通道开到最亮

安装规范要求



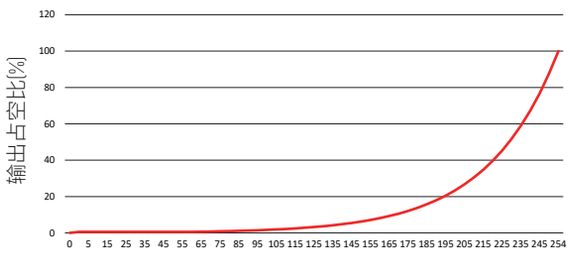
请勿将产品堆叠摆放，产品与产品间隔距离应≥12cm，避免影响产品散热和使用寿命。

断路器带载说明

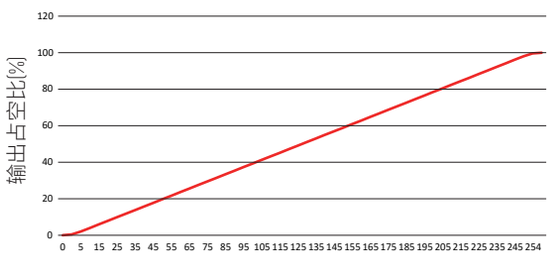
规范项	值	备注
浪涌电流 Ipeak	57A	输入电压230VAC
浪涌电流 Twidth	250us	输入电压230VAC, 在50%Ipeak下测试

MCB	输入电压120V 驱动器数量	MCB	输入电压277V 驱动器数量
B10	5pcs	C10	9pcs
B13	7pcs	C13	12pcs
B16	9pcs	C16	15pcs
B20	11pcs	C20	18pcs
		D16	21pcs

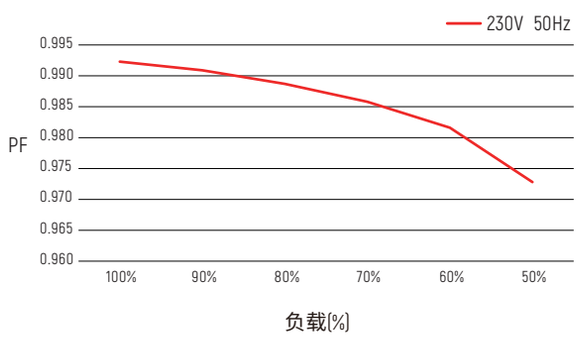
DALI 调光曲线



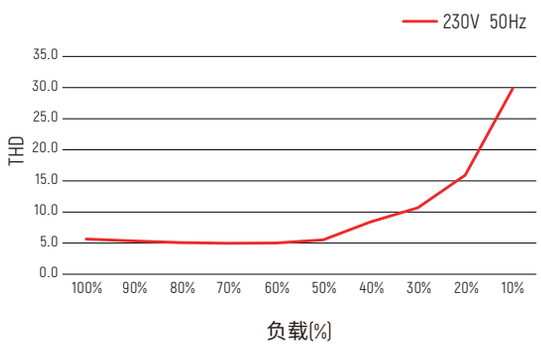
DMX 调光曲线



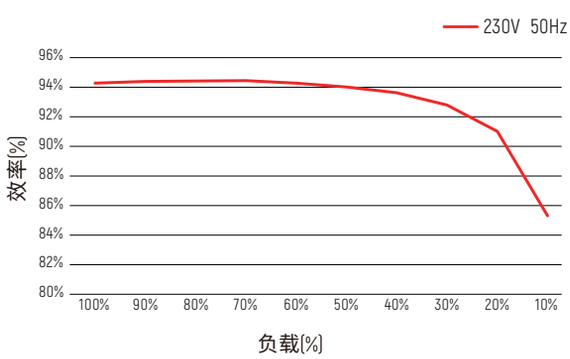
PF vs 负载曲线



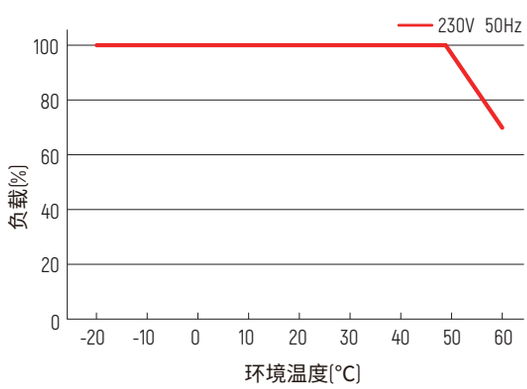
THD vs 负载曲线



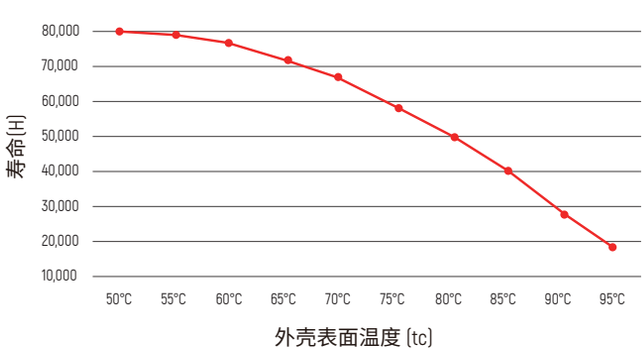
效率 vs 负载曲线



降额曲线



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。

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。