

PUS28D4-1HNC

Advantages

- Enable interoperability with diverse wireless sensors/network systems
- Reduce complexity and cost of fixture by eliminating auxiliary components ordinarily required for powering sensors, switching fixture off and monitoring energy use
- interface to any suitable sensor and ease of adjustable drive current

Product Feature

- Standard-compliant (ANSI C137.4 and DiiA) digital interface including:
 - Integrated DALI bus power supply (Part 250)
 - Memory Bank 1 extension, Energy Monitoring and Diagnostics (Parts 251, 252, 253)
- Energy metering and advanced diagnostics
- Continuous dimming down to 1%
- Drive current setting via NFC wireless programming
- 5-year limited warranty

Programming

Adjustable Light Output (ALO)

Adjustable Output Current (AOC)

Luminaire Maintenance

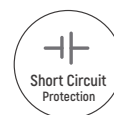
Luminaire (Fixture) Information (Luminaire Info)



Application



Down Light

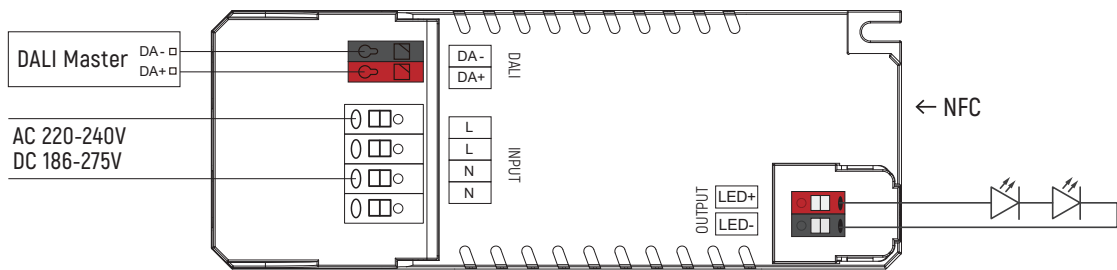


Technical Parameters

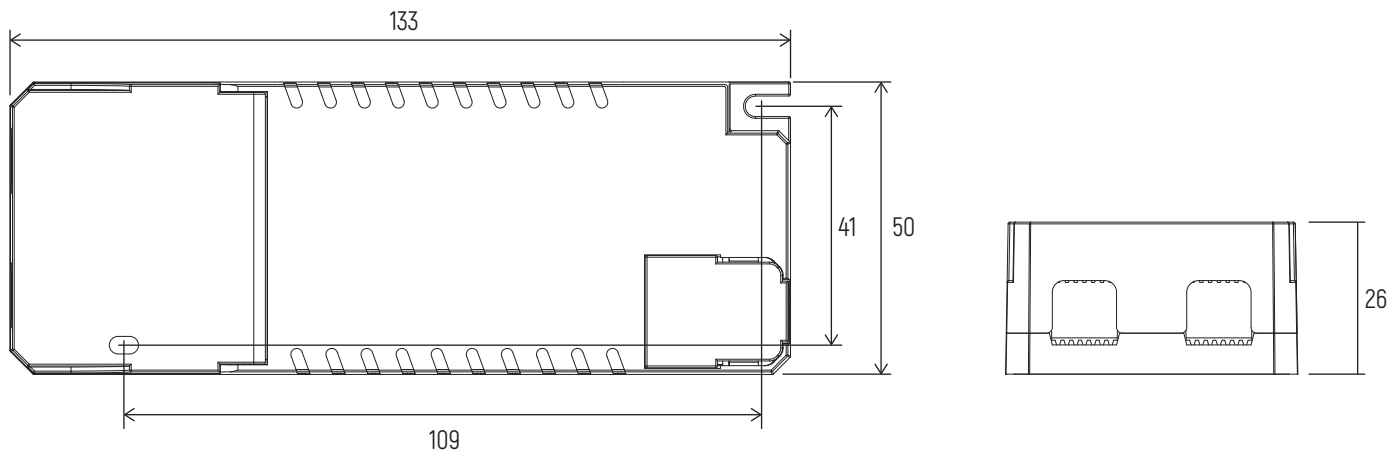
Model	PUS28D4-1HNC	
Input	Efficiency	>87%@230VAC, full load
	Rated Voltage	220-240VAC
	Voltage Range	198-264VAC
	Frequency Range(Hz)	50/60Hz
	Current	0.2A max@230VAC
	Power Factor	≥0.95@230VAC, full load
	THD(full load)	≤10%@230VAC
	Inrush Current(max)	Cold start, 17.1A@230VAC 20us
	Input voltage DC range	168-275VDC
	Input current (DC)	0.03A Max
Output	Current Range	300-800mA(NFC), (Default Current: 300mA)
	Output Current (DC)	80mA (Under DC input state)
	voltage range	24-52V
	Voltage	24-52VDC
	Output Power	28W Max
	Channel	1
	Current Tolerance	±5%
	Standby power	≤0.5W@When the bus is turned off
	No load power	≤1W
	No load output voltage	60V max
	Turn on delay Time	≤0.5s, @230Vac (When the light begins to shine)
Function	Dimming Type	DALI 2.0 D4i
	Dimming Range	1%-100%
	Dimming curve	Logarithm/Linearity
	Flicker	Flicker free
Protection	Short-circuit protection	Short circuit without output, troubleshooting results in normal output
	Overload protection	Current drops, troubleshooting output is normal

Safety& EMC	Surge	L-N: 1kV
	Withstand Voltage	I/P-O/P:3000Vac/1min/<5mA, O/P-DALI[Signal port]:1500Vac/1min/<5mA
	Safety Standards	EN61347, GB19510
	EMC Emission	EN55015, EN61000-3-2
	EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547
	Insulation Resisance	5MΩ
Others	Working Temp.	-20°C~+50°C
	Storage Temp., Humidity	-40°C~80°C, 5%-90%RH
	tc	85°C
	Material	PC
	IP Rating	IP20
	Lifetime	50,000h@tc:80°C
	Warranty Condition	5years
	Switch Cycle	>25,000 times
	Dimension	135*50*26mm (L*W*H)
	Packing(weight)	Net weight: 140g±5%/PCS; 60PCS/Carton; 8.9kg±5%/Carton; Carton Size:430*231*172mm(L*W*H)

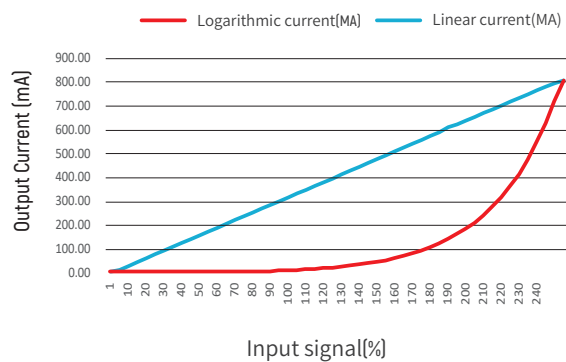
Wiring Diagram



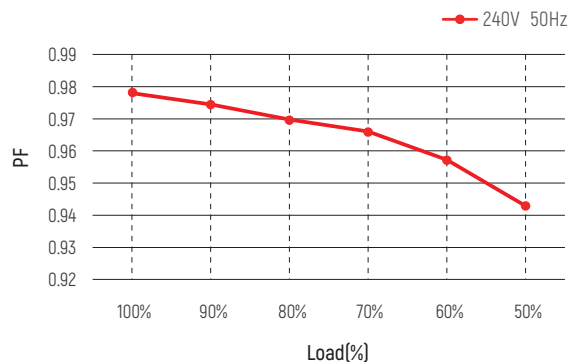
Dimension(mm)



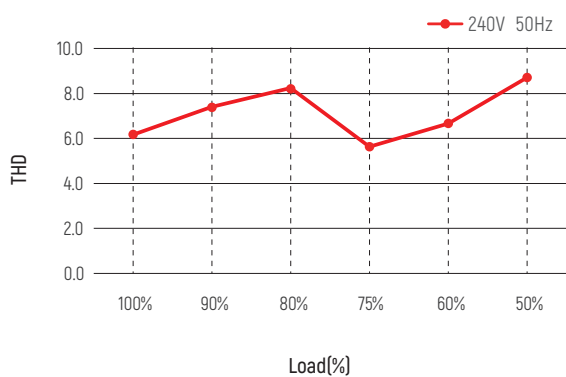
Dimming Curve



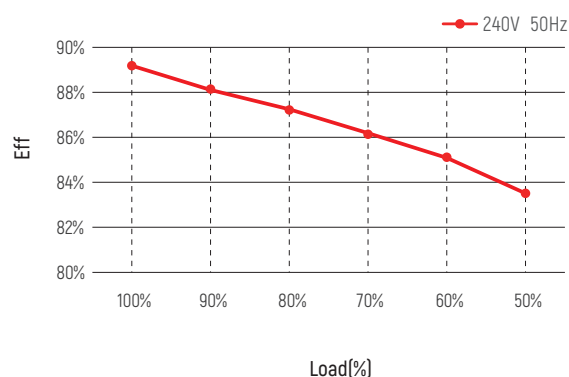
PF vs Load



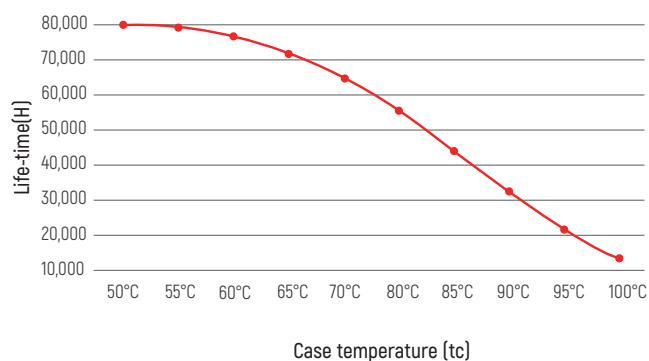
THD vs Load



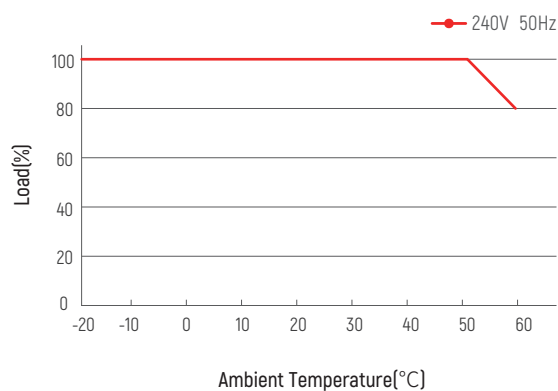
Eff. vs Load



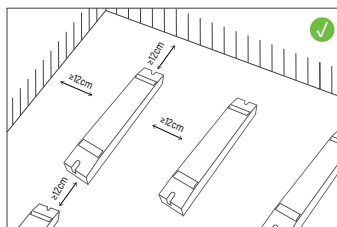
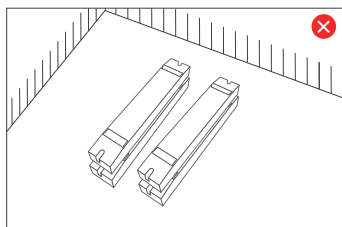
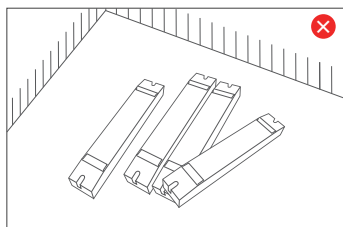
Life-time vs. case temperature



Derating Curve



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}	17.1A (230V)	Input Voltage 230V
Inrush current T_{width}	20us (230V)	Input Voltage 230V, measured ta 50% I_{peak}

MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	50pcs	C10	50pcs
B13	65pcs	C13	65pcs
B16	80pcs	C16	80pcs
B20	100pcs	C20	100pcs
		D16	80pcs

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.

PUS28D4-1HNC

产品优势

- 实现与各种无线传感器/网络系统的互操作性
- 可减少为传感器供电、切换所需辅助组件，降低灯具的复杂性与成本
- 与传感器适配性高，易于调节驱动电流

产品特性

- 符合标准 (ANSI C137.4和DiiA) 的数字接口，包括：
 - 集成DALI总线电源 (第250部分)
 - 存储器组1扩展，能量监测和诊断 (第251、252、253部分)
- 能源计量和高级诊断
- 持续调光至1%
- 通过NFC无线编程进行驱动电流设置
- 5年有限保修*

编程

- 可调光输出 (ALO)
- 可调输出电流 (AOC)
- 灯具维护
- 灯具 (固定装置) 信息 (灯具信息)



应用

筒灯

无频闪

电流可编程

短路保护

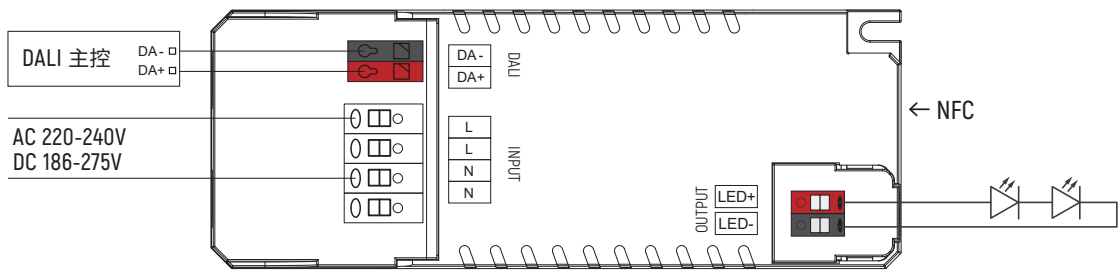
过载保护

技术参数

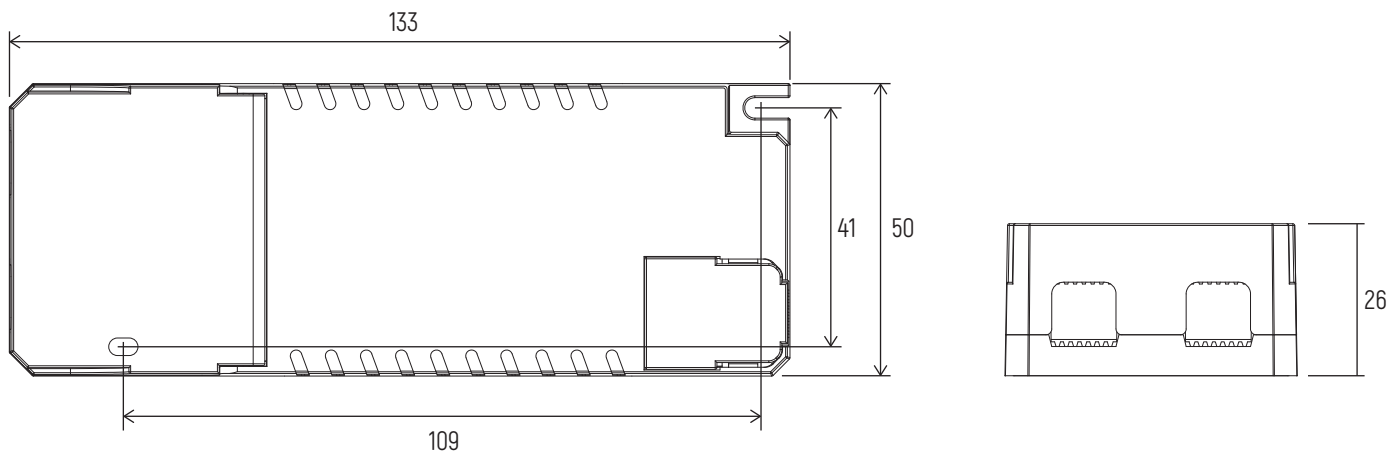
产品型号	PUS28D4-1HNC	
输入	效率	>87%@230VAC, 满载
	额定电压范围	220-240VAC
	电压范围	198-264VAC
	频率(Hz)	50/60Hz
	电流	0.2Amax@230VAC
	PF	≥0.95@230VAC, 满载
	THD	<10%@230VAC
	浪涌电流	冷启动 ,17.1A@230VAC 20us
	电压DC范围	168-275VDC
	电流[DC]	0.03A Max
输出	电流范围	300-800mA(NFC), (默认电流: 300mA)
	电流[DC]	80mA (直流输入状态下)
	电压范围	24-52V
	电压	24-52VDC
	输出功率	28W Max
	输出通道	1
	电流精度	±5%
	待机功耗	≤0.5W@关闭总线状态下
	空载功耗	≤1W
	空载输出电压	60VDC max
	启动延时	<0.5s, @230Vac[当灯光开始亮起]
功能	调光方式	DALI 2.0 D4i
	调光范围	1%-100%
	调光曲线	对数/线性
	频闪	无频闪
保护	短路保护	短路无输出，排除故障输出正常
	过载保护	电流下降，排除故障输出正常

安规与 电磁兼容	雷击浪涌	L-N: 1kV
	耐压	I/P-O/P:3000Vac/1min/<5mA, O/P-DALI(Signal port):1500Vac/1min/<5mA
	安全标准	EN61347, GB19510
	电磁兼容	EN55015, EN61000-3-2
	EMC抗扰度	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547
	绝缘阻抗	5MΩ
其他	工作温度	-20℃~+50℃
	储存温度、湿度	-40℃~85℃, 20%-90%RH
	tc	85℃
	材质	PC
	防水等级	IP20
	寿命	50,000h@tc:80℃
	质保	5年
	开关周期	>25,000 次
	尺寸	133*50*26mm [长*宽*高]
	包装尺寸(重量)	净重:140g±5%/PCS; 60PCS/Carton; 8.9kg±5%/箱; 外箱尺寸: 430*231*172mm[长*宽*高]

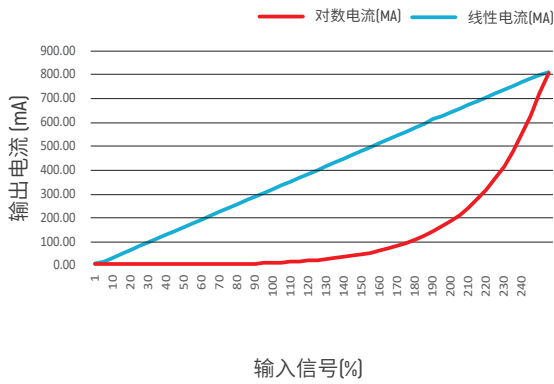
接线图



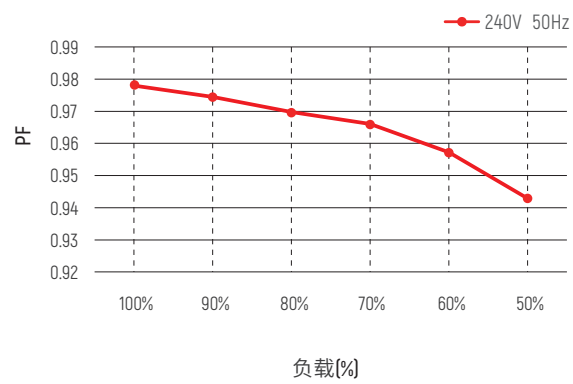
Dimension(mm)



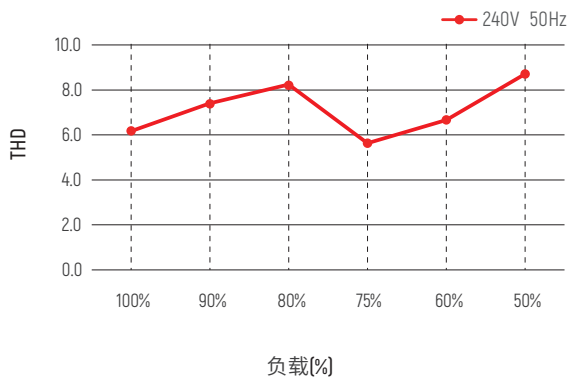
调光曲线



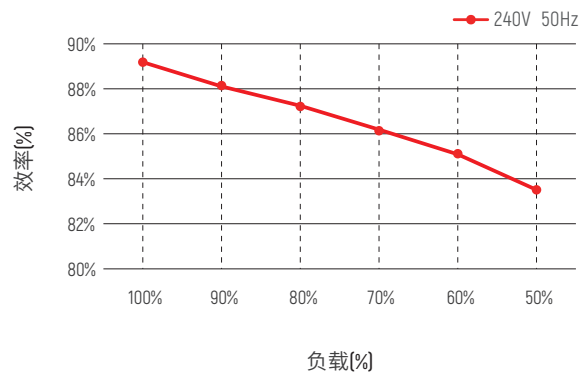
PF vs 负载



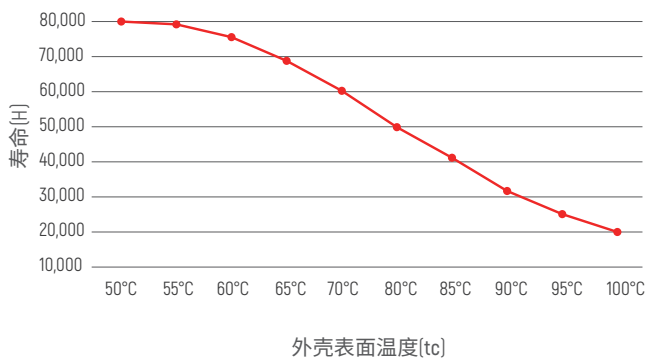
THD vs 负载



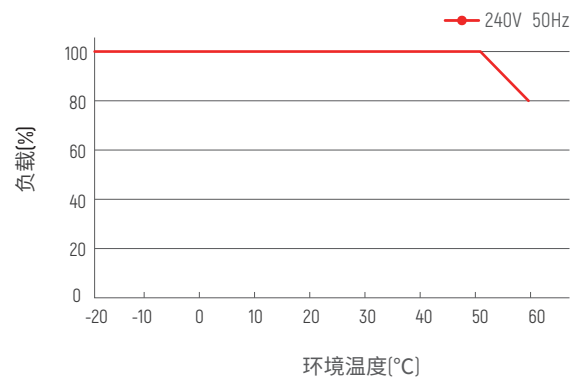
Eff. vs 负载



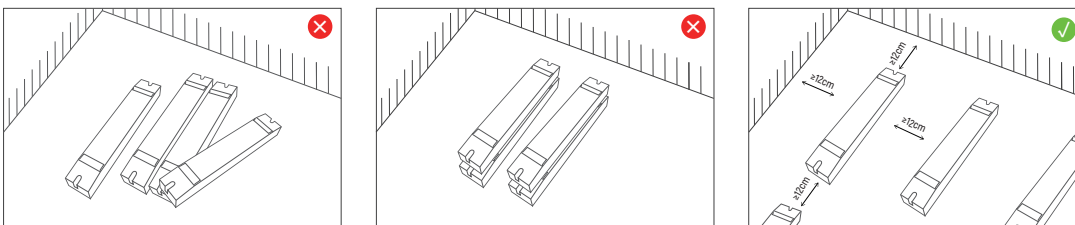
寿命 vs tc温度



降额曲线



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 $\geq 12\text{cm}$ ，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 I _{peak}	17.1A (230V)	输入电压230V
浪涌电流 T _{width}	20us (230V)	输入电压230V, 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	50pcs	C10	50pcs
B13	65pcs	C13	65pcs
B16	80pcs	C16	80pcs
B20	100pcs	C20	100pcs
		D16	80pcs

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。