

SCS40-1HMC

Summary

SCS40-1HMC is a 40W constant current LED driver, and the output current can be adjusted by dip

The end cover shells on both sides of the shell can be disassembled, and the independent type and the built-in type can be switched.

Product Features

- Single channel constant current output
- Short circuit, overload, overvoltage and over-temperature protection, V0 grade flame-retardant housing
- Efficiency up to 93%
- End cover shell disassembly design, easy to install in narrow spaces
- No load power consumption ≤ 0.5W
- Lifespan of 50,000 hours, 5-year warranty
- Protection level IP20, suitable for indoor Class II lighting fixtures

Application



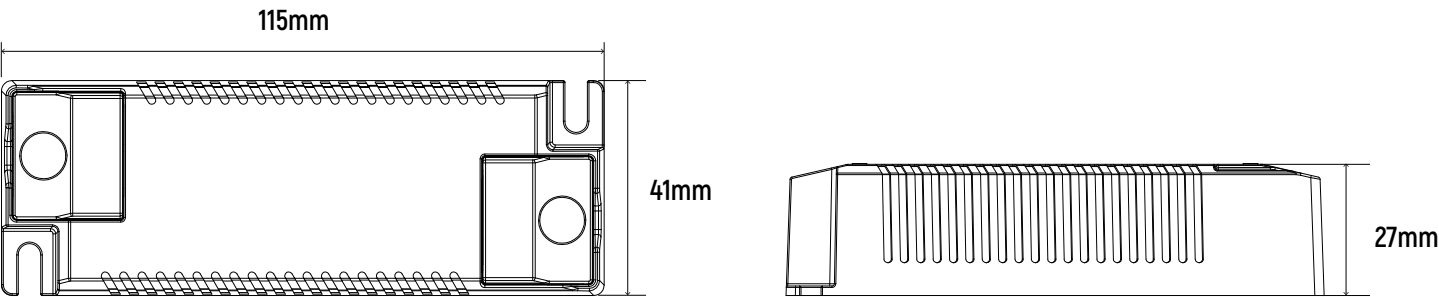
Down Light

Technical Paramaters

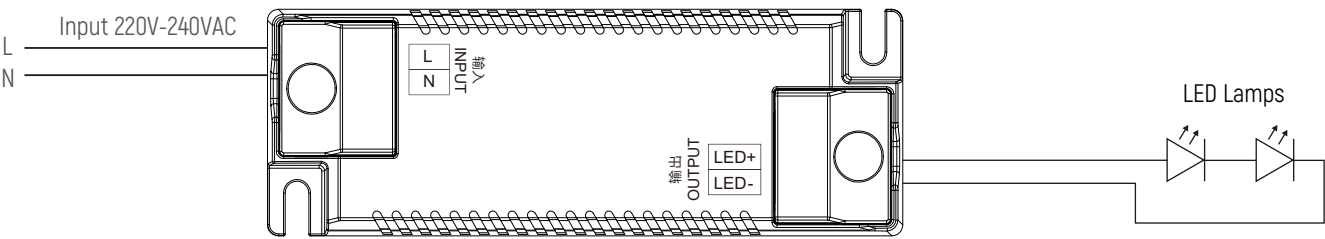
Model	SCS40-1HMC				
Input	Input Voltage	220VAC-240VAC			
	Frequency Range[Hz]	50/60Hz			
	Input Current	0.25Amax@230VAC			
	Power Factor	0.97@230VAC, Full load			
	Efficiency	>93%@230VAC, Full load			
	THD	<10%@230VAC, Full load			
	Standby power	/			
	No load power	<0.5W			
	Inrush Current	Cold start, 35A@230VAC 100us			
Output	Current/Voltage/power	900mA/25-42VDC/37.8W	950mA/25-42VDC/39.9W	1000mA/25-42VDC/42W	1050mA/25-40VDC/42W
	Output power range	22.5W-42W			
	Current Accuracy	±5%			
	Line Regulation	±3%			
	Load Regulation	±3% @Full load			
	Pst LM	≤1			
	SVM	≤0.4			
	Turn on delay Time	0.5s, @230Vac (When the light begins to shine)			
	Current selection meter	ON OFF 900mA 950mA 1000mA 1050mA 25-42VDC 25-42VDC 25-42VDC 25-40VDC Note: The factory default setting current is 900mA(12 are in the OFF state).			
Protection	Short circuit Protection	There is no output. After troubleshooting, the output is normal			
	OverVoltage Protection	There is no output. After troubleshooting, the output is normal			
	Overload Protection	There is no output. After troubleshooting, the output is normal			
	Over Temperature	There is no output. It can be restored after the fault is removed and the power is restored			
Safety& EMC	Surge	L-N:1KV			
	Withstand Voltage	I/P-O/P: 3750VAC/1min/5mA			
	Safety Standards	CCC [China]	GB19510.1, GB19510.14	TUV [Germany]	EN61347-1, EN61347-2-13, EN62493
		CB [CBmember 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	BIS [India]	IS15885
		CE [European Union]	EN55015, EN61000-3-2, EN61000-3-3, EN61547	KC [Korea]	K00032 KN61000-3-2 KN61000-3-3
		RCM [Australia]	EN55015, EN61000-3-2, EN61000-3-3, EN61547	UKCA [UK]	BS EN61347-1, BS EN61347-2-13, BS EN62384
	EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547			
Environment	Working Temp.	-30°C-55°C			
	Storage Temp.	-40°C-85°C			
	Storage Humidity	20-90%RH (No condensation)			

Others	RoHS	Comply with 2015/863/EU
	tc	85 C
	Material	PC
	IP Rating	IP20
	Lifetime	50,000h@tc:85 C
	Warranty Condition	5years
	Switch Cycle	25,000times
	Body size	115*41*27mm (L*W*H)
	Packing(weight)	Net weight: 88g±5%/PCS; 100PCS/Carton; 9.5kg±5%/Carton; Carton Size: 475*220*165mm(L*W*H)
	Noise	In a quiet environment , No noise outside 30-50cm
	Comply with certification	CB, CE, CCC, BIS, KC, RCM, UKCA
	Input Wire	0.75...1.5mm ² (Wire outer diameter: Max:7mm, Min3mm)
	Output Wire	0.5...1.5mm ² (Wire outer diameter: Max:7mm, Min2mm)
Remark	All parameters were measured at an input voltage of 230VAC/50Hz and an ambient temperature of 25 °C without any special instructions.	

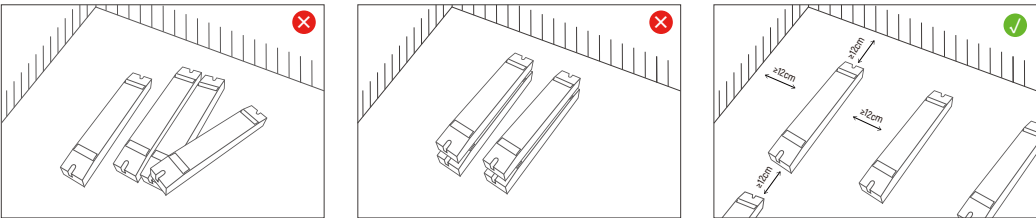
Dimension(mm)



Wiring



Installation Precautions



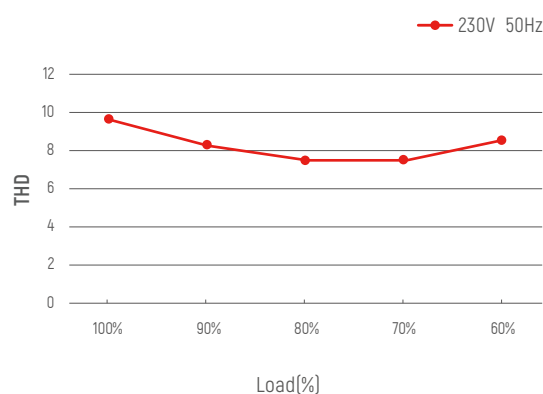
Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

Max. quantity of drivers per miniature circuit breaker

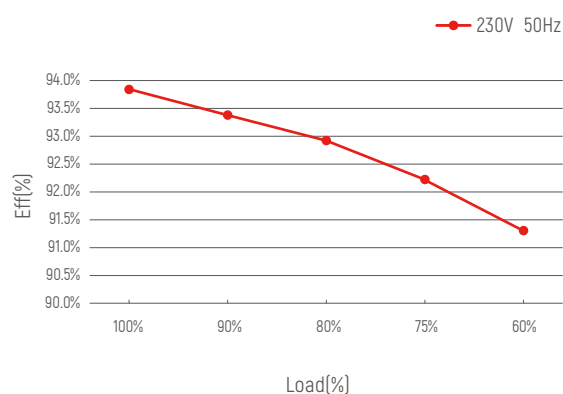
MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	24pcs	C10	40pcs
B13	31pcs	C13	52pcs
B16	39pcs	C16	64pcs
B20	48pcs	C20	80pcs
		D16	64pcs

Specification item	Value	Condition
Inrush current I_{peak}	35A	Input Voltage 230VAC
Inrush current T_{width}	100us	Input Voltage 230VAC, measured ta 50% I_{peak}

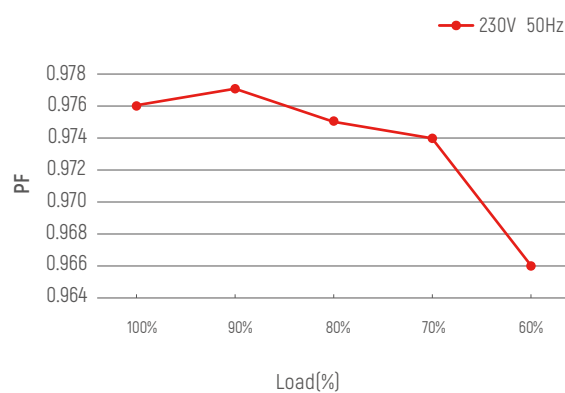
THD vs Load Curve



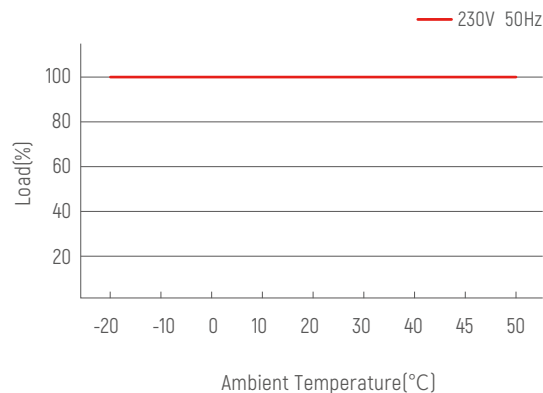
Efficiency vs Load Curve



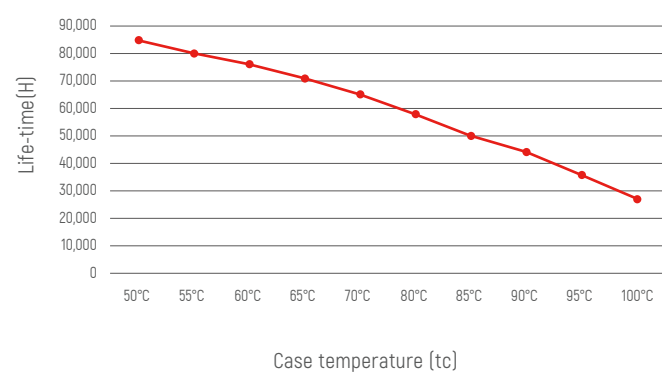
PF vs Load Curve



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 t_c 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 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.

SCS40-1HMC

概述

SCS40-1HMC是一款40W恒流LED驱动器, 输出电流可通过拨码调节

外壳两侧端盖拆卸, 独立式和内置式可切换。

产品特点

- 单通道恒流输出
- 短路、过载、过压、过温保护, V0级阻燃外壳
- 效率高达 93%
- 端盖壳拆卸设计, 便于安装狭窄空间内
- 空载功耗≤0.5W
- 寿命50,000小时, 5年质保
- 防护等级IP20, 适用于室内 II 类灯具



应用



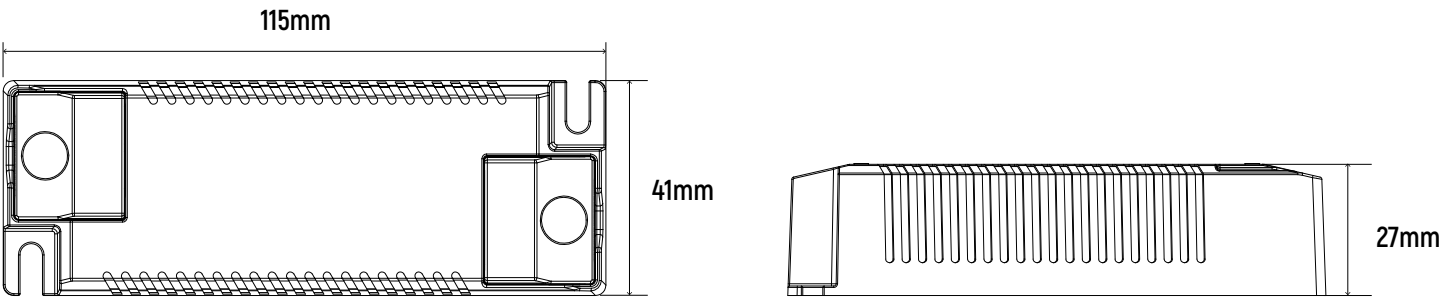
筒灯

技术参数

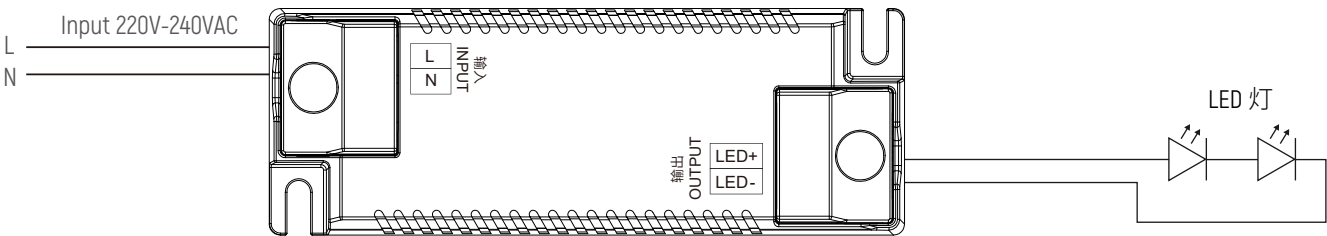
产品型号	SCS40-1HMC			
输入	输入电压	220VAC-240VAC		
	频率范围	50/60Hz		
	输入电流	0.25Amax@230VAC		
	功率因数	0.97@230VAC, 满载		
	效率	>93%@230VAC, 满载		
	谐波THD	<10%@230VAC, 满载		
	待机功耗	/		
	空载功耗	<0.5W		
	浪涌电流	冷启动, 35A@230VAC 100us		
输出	输出电流/电压/功率	900mA/25-42VDC/37.8W	950mA/25-42VDC/39.9W	1000mA/25-42VDC/42W
	输出功率范围	22.5W-42W		
	输出电流精度	±5%		
	线性调整率	±3%		
	负载调整率	±3% @满载		
	Pst LM	≤1		
	SVM	≤0.4		
	启动延时	0.5s, @230Vac[当灯光开始亮起]		
保护	短路保护	无输出,排除故障输出正常		
	过压保护	无输出,排除故障输出正常		
	过载保护	无输出,排除故障输出正常		
	过温保护	无输出, 去除故障后重新上电可恢复		
安规与电磁兼容	雷击浪涌	L-N:1KV		
	耐压标准	I/P-O/P: 3750VAC/1min/5mA		
	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	BIS [印度] IS15885
		CE [欧盟]	EN55015, EN61000-3-2, EN61000-3-3, EN61547	KC [韩国] K00032 KN61000-3-2 KN61000-3-3
		RCM [澳洲]	EN55015, EN61000-3-2, EN61000-3-3, EN61547	UKCA [英国] BS EN61347-1, BS EN61347-2-13, BS EN62384
	EMC抗扰度	EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547		
环境	工作温度	-30°C-55°C		
	储存温度	-40°C-85°C		
	储存湿度	20-90%RH [无凝露]		

其他	RoHS	遵守 2015/863/EU
	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	115*41*27mm[长*宽*高]
	包装尺寸(重量)	净重: 88g±5%/PCS; 100PCS/Carton; 9.5kg±5%/箱; 外箱尺寸: 475*220*165mm[长*宽*高]
	噪音	安静环境下, 30-50cm以外无噪音
	符合认证	CB, CE, CCC, BIS, KC, RCM, UKCA
	输入线材	0.75...1.5mm ² (线材外径: Max:7mm, Min:3mm)
	输出线材	0.5...1.5mm ² (线材外径: Max:7mm, Min:2mm)
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。	

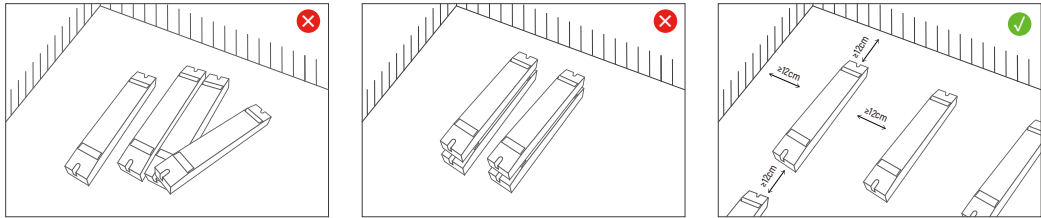
尺寸(mm)



接线图



安装规范要求



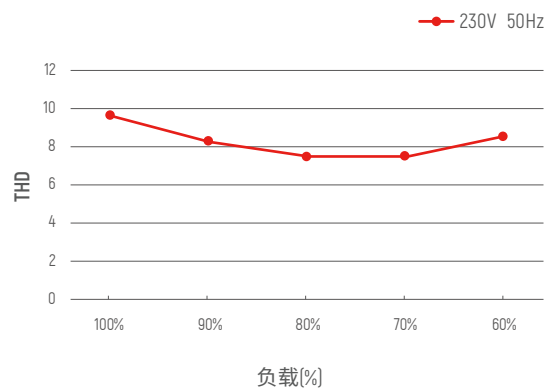
请勿将产品堆叠摆放, 产品与产品间隔距离应≥12cm, 避免影响产品散热和使用寿命。

断路器带载说明

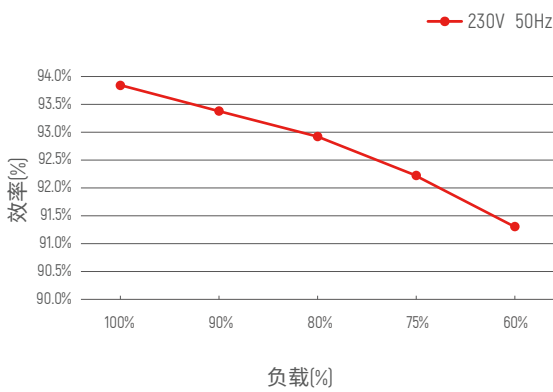
MCB	输入电压230V 驱动器数量	MCB	输入电压230V 驱动器数量
B10	24pcs	C10	40pcs
B13	31pcs	C13	52pcs
B16	39pcs	C16	64pcs
B20	48pcs	C20	80pcs
		D16	64pcs

规范项	值	备注
浪涌电流 I _{peak}	35A	输入电压230VAC
浪涌电流 T _{width}	100us	输入电压230VAC, 在50%I _{peak} 下测试

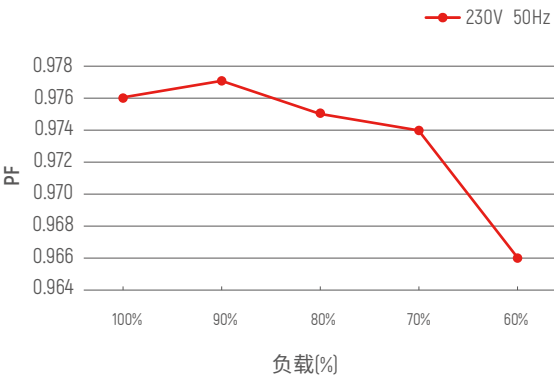
THD vs 负载曲线



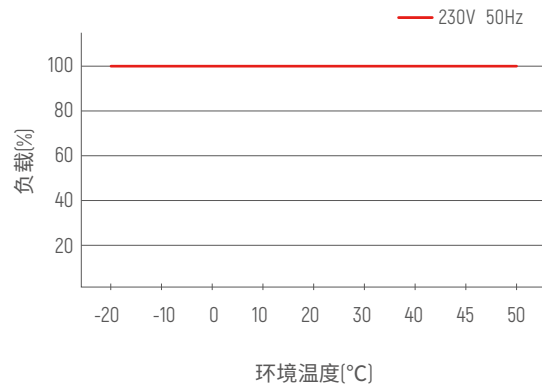
效率 vs 负载曲线



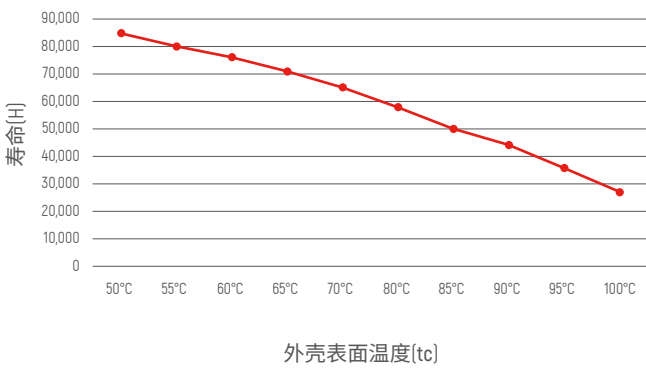
PF vs 负载曲线



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 mm² 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 responsibility, 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。