

LM60-1H24V-A

Product overview

The circuit of this product is simple, stable and reliable. Long aluminum structure, ordinary constant voltage simple terminal input and output. Simple installation, can be used in commercial, home, engineering and other projects.

Product Features

- Aluminium Casing
- Ultra-low start up temp. [-20℃]
- Ultra-light and easy to install
- High efficiency up to 85%
- High reliability
- Small size, light weight



Application



LED Strip Light



RoHS

SELV



Short Circuit Protection



Over Load Protection



Overcurrent Protection

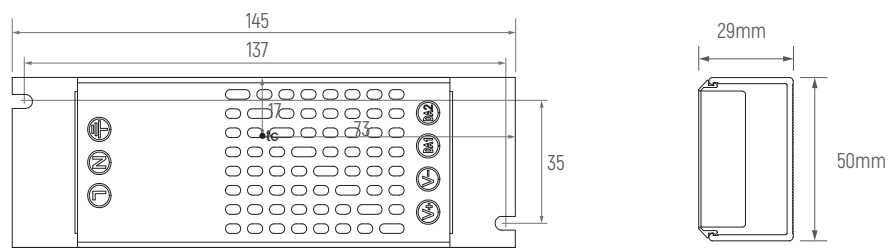


Temperature Protection

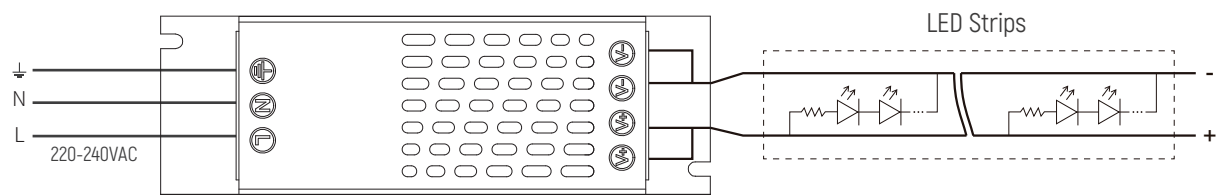
Technical Parameters

Model	LM60-1H24V-A	
Input	Efficiency	≥85%@230VAC
	Frequency Range(Hz)	50/60Hz
	Voltage	220-240VAC
	PF	≥0.4@230VAC
	Current	0.7Amax@230Vac
	Inrush current	Cold start,60A@230VAC 400us
	No load power	≤0.5W
	Turn on delay Time	≤ 0.75 s, at230Vac (When the light begins to shine)
Output	Power	60W±5%
	Output Voltage	24VDC±5%
	Current	0~2.5A
	Frequency	65K
	Channel	1
	Load Regulation	±5%
	line Regulation	±1%
	No load output voltage	24.5VDC max
Protection	Over load	Reduce voltage protection to troubleshoot normal output
	Short circuit	Short circuit No output, troubleshooting output normal
	Over Current	Reduce voltage protection to troubleshoot normal output
	Over temperature	Reduce voltage protection to troubleshoot normal output
Safety& EMC	Surge	L-N 1000VAC, LN- Ground cable 2000VAC
	Withstand Voltage	I/P-O/P: 1500Vac/1min/<5mA; I/P-PE:1500Vac/1min/<5mA; O/P-PE:500Vac/1min/<5mA
	Safety standards	IEC/EN62384, IEC/EN61347-1, IEC/EN61347-2-13, GB19510.1, GB19510.14
	Insulation Resisance	5MΩ
Others	Storage Temp., Humidity	-40℃~85℃, 20-90%RH
	Working temp.	ta:-20~40℃
	Tc	85℃ @230Vac
	IP	IP20
	Lifetime	30,000h@tc:65℃
	Warranty	3 year
	Switch cycle	15,000 times
	Packing size	Net weight:180g±5%/PCS; 50PCS/Carton; 9.5kg±5%/Carton; Carton Size: 330*294*200mm(L*W*H)
	Dimension	145*50*29mm(L*W*H)

Dimension(mm)



Wiring

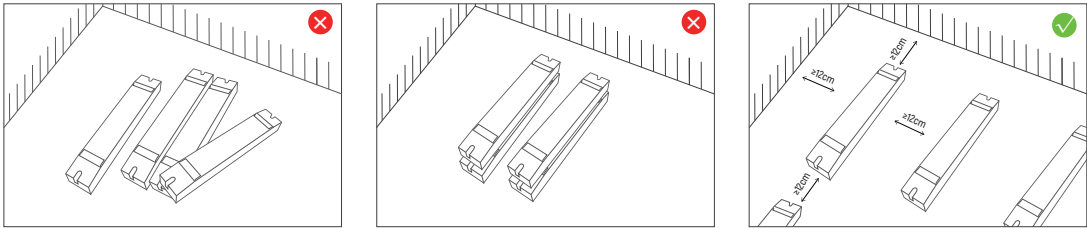


Max. quantity of drivers per miniature circuit breaker

Specification item	Value	Condition
Inrush current Ipeak	60A	Input Voltage 230VAC
Inrush current Twidth	400us	Input Voltage 230VAC, measured at 50% Ipeak

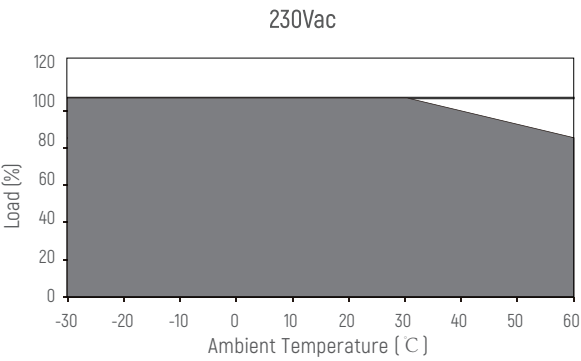
MCB	Input Voltage 230V Drivers	MCB	Input Voltage 230V Drivers
B10	3pcs	C10	5pcs
B13	4pcs	C13	7pcs
B16	5pcs	C16	8pcs
B20	6pcs	C20	10pcs
		D16	17pcs

Installation Precautions

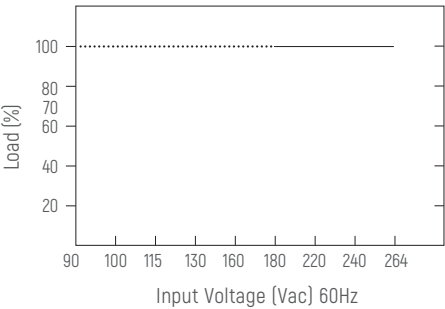


Please do not stack the products. The distance between two products should be>12cm so as not to affect heat dissipation and the lifespan of the products.

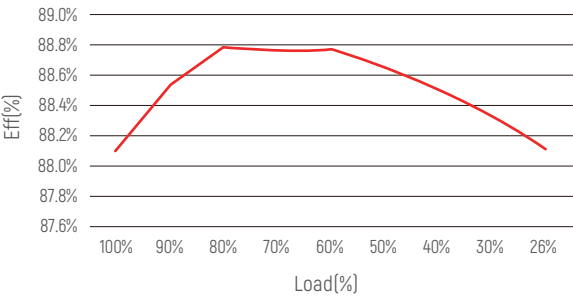
Derating Curve



Static characteristic Curve



Eff vs load Curve



Cautions

This product must be installed and adjusted by a qualified professional.		
1	Confirmation of installation conditions	· Waterproof and Protection: This product is non waterproof, need to avoid sun and rain.In case of outdoor use, please ensure it is mounted in a water proof enclosure. · Heat dissipation requirements: Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
2	Power check	· Before use, please make sure LED power supply output voltage, current is used to meet the product requirements.
3	Safe wiring	· Due to safety concerns, PVC or rubber cord of 0.75- 1.5mm² is recommended for input and output terminal(s)(excluding signal terminals). Flat power cord is not suitable.Ensure all wire. · 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	· Connections and polarities are correct before applying power to avoid any damages to the LED lights.
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 : 3 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.

LM60-1H24V-A

产品概述

本产品电路简单、稳定、可靠。长条形铝材结构，普通恒压简单端子输入输出
安装简单,可以在商业、家居、工程等项目上使用。

产品特点

- 铝外壳
- 超低温启动(-20℃)
- 易安装
- 高效率85%
- 高可靠性
- 体积小，重量轻



应用



LED灯带



RoHS

SELV



短路保护



过载保护



过流保护

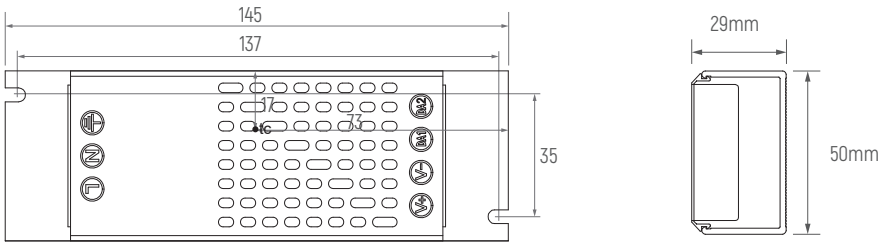


过温保护

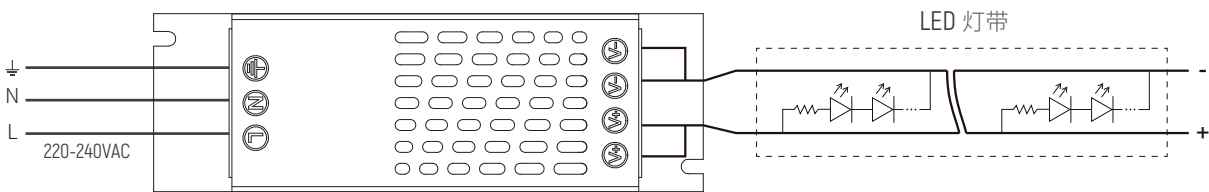
技术参数

型号	LM60-1H24V-A	
输入	效率	≥85%@230VAC
	频率	50/60Hz
	电压	220-240VAC
	功率因素	≥0.4@230VAC
	电流	0.7Amax@230Vac
	浪涌电流	冷启动,60A@230VAC 400us
	空载功耗	≤0.5W
	启动延时	≤ 0.75 s, at230Vac (当灯光亮起)
输出	功率	60W±5%
	电压	24VDC±5%
	输出电流范围	0~2.5A
	输出频率	65K
	通道	1
	负载调整率	±5%
	线性调整率	±1%
	空载电压	24.5VDC max
保护	过负载	降低电压保护，排除故障输出正常
	短路	短路无输出，排除故障输出正常
	过流	降低电压保护，排除故障输出正常
	过温	降低电压保护，排除故障输出正常
安规 电磁兼容	雷击浪涌	L-N 1000VAC，LN-地线2000VAC
	耐压	I/P-O/P: 1500Vac/1min/<5mA; I/P-PE:1500Vac/1min/<5mA; O/P-PE:500Vac/1min/<5mA
	安全标准	IEC/EN62384, IEC/EN61347-1, IEC/EN61347-2-13, GB19510.1, GB19510.14
	绝缘阻抗	5MΩ
其它	储存温度、湿度	-40℃~85℃, 20-90%RH
	工作温度	ta:-20~40℃
	tc 温度点	85℃ @230Vac
	防水等级	IP20
	寿命	30,000小时@tc:65℃
	质保	3年
	开关周期	15,000次
	包装尺寸(重量)	净重: 180g±5%/PCS; 50PCS/Cartron; 9.5kg±5%/箱; 外箱尺寸: 330*294*200mm[长*宽*高]
	尺寸	145*50*29mm[长*宽*高]

尺寸(mm)



接线图

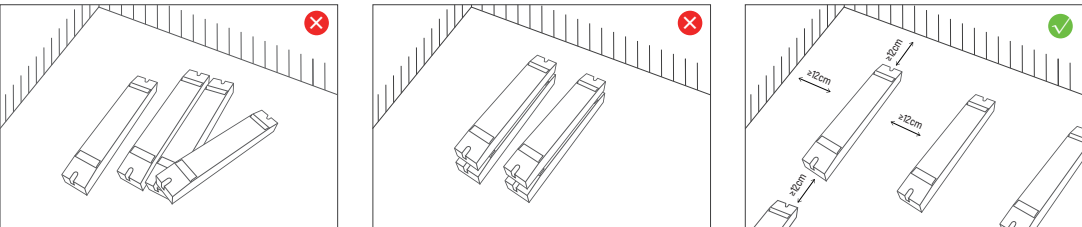


断路器带载说明

规范项	值	备注
浪涌电流 I_{peak}	60A	输入电压230VAC
浪涌电流 T_{width}	400us	输入电压230VAC, 在50% I_{peak} 下测试

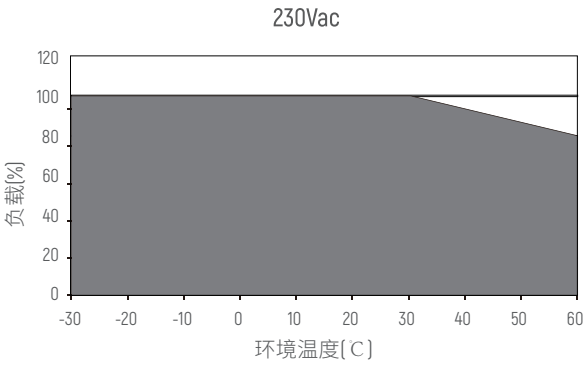
MCB	输入电压230V 驱动器数量	MCB	输入电压230V 驱动器数量
B10	3pcs	C10	5pcs
B13	4pcs	C13	7pcs
B16	5pcs	C16	8pcs
B20	6pcs	C20	10pcs
		D16	17pcs

安装规范要求

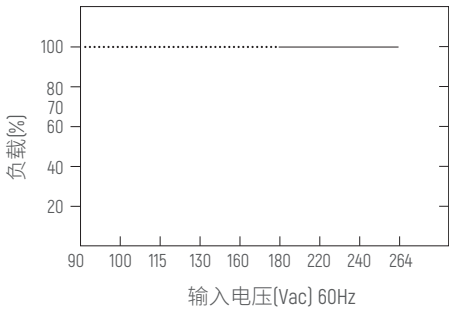


请勿将产品堆叠摆放，产品与产品间隔距离应≥12cm，避免影响产品散热和使用寿命。

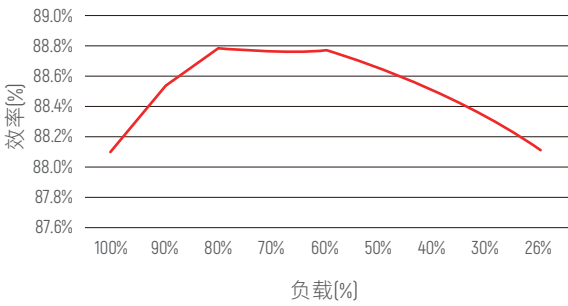
降额曲线



静态特性曲线



效率曲线



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: 本产品不能防水, 需避免日晒雨淋, 如安装在户外, 请用防水箱。 ·散热要求: 良好的散热条件会延长产品的使用寿命, 请把产品安装在通风良好的环境。
2	电源检查	·使用前, 请检查使用的LED电源输出电压电流, 是否符合产品要求。
3	安全接线	·出于安全考虑, 推荐输入和输出(信号端除外)用0.75-1.5mm² PVC或橡胶线缆, 并确保接线牢固, 以免电线过热或接触不良触发事故。扁平电源线不适用。 ·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, 应确保所有接线正确, 以避免因接线错误而导致灯具损坏。
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 **3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，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。