

LED Dimming Driver (CV)

- Design for indoor installations
- TRIAC/0-10V/1-10V/10V PWM/RESISTANCE DIM
- Dimming range: 0~100%, LED start at 1% possible.
- 0-100% flicker-free, High frequency exemption level.
- Over load / Over temp. / Short circuit / Over voltage protection, recover automatically.
- Cooling by free air convection
- 100% full load burn-in test
- Suitable for internal lights application for I / II / III.



Flicker-free
IEEE 1789
High frequency exemption level

0-10V
1-10V
DIM

Triac/
Resistance
DIM

PWM
Digital
Dimming

Over-heat
Protection

Short Circuit
Protection

Over Load
Protection

Over voltage
protection



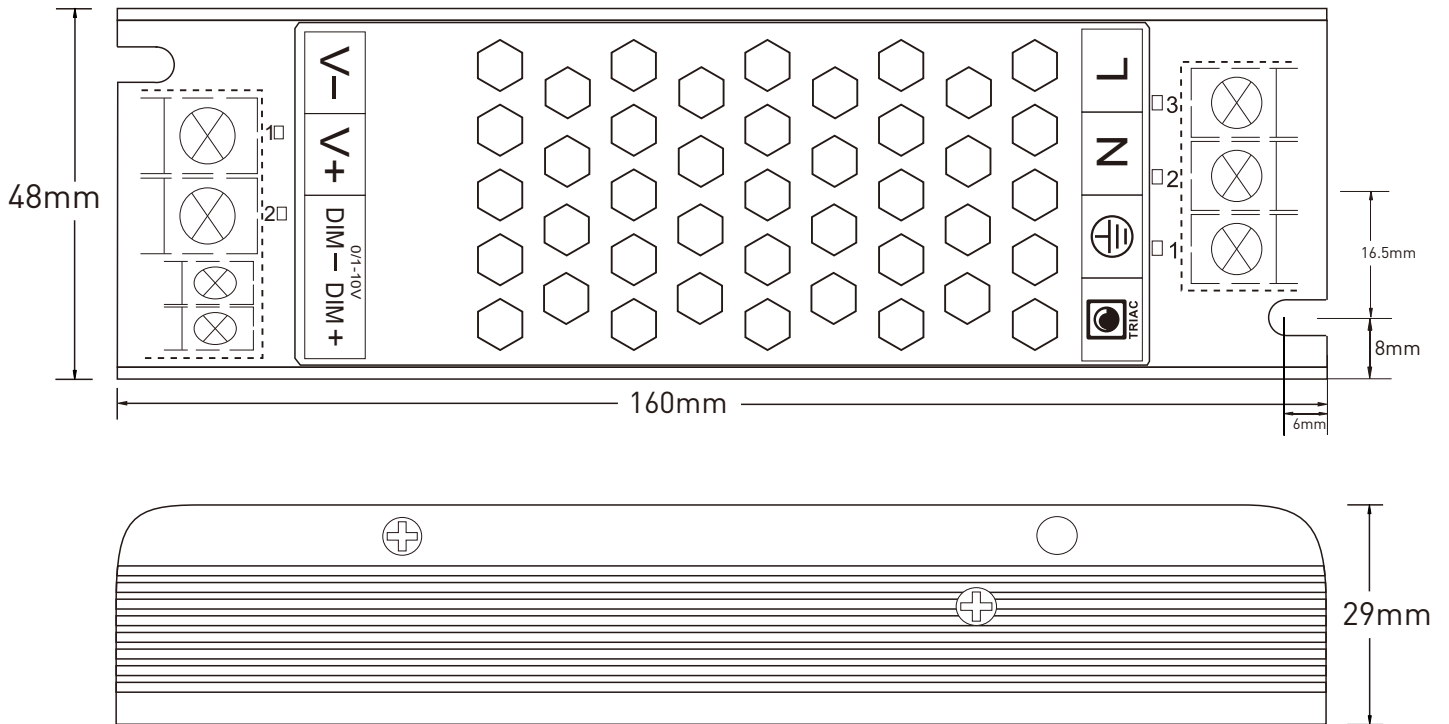
SELV IP20



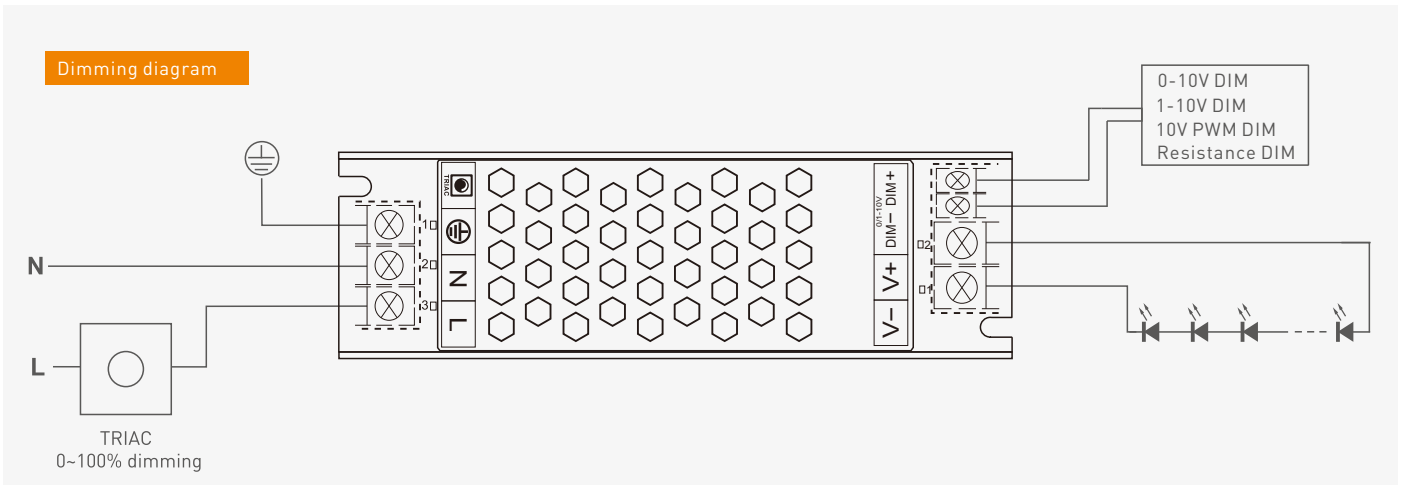
Specification

Model		YSD-100WHCP-12TL	YSD-100WHCP-24TL
OUTPUT	Output voltage	12VDC	24VDC
	Output voltage range	12VDC±0.5VDC	24VDC±0.5VDC
	Output current	Max 8.3A	Max 4.17A
	Output power	Max 100W	
	Output power range	0~100W	
	With or without strobe	No strobe	
	Dimming range	0~100%, dimming depth: Max. 1%	
	Ripple & Noise	≤200mV	≤400mV
INPUT	Dimming interface	TRIAC/0-10V/1-10V/10V PWM/RESISTANCE DIM	
	Input voltage	175-264Vac or 100-130Vac	
	Frequency	50/60Hz	
	Input current	0.88A/230Vac or 1.5A/115Vac	
	Power factor	PF>0.55/230Vac, at full load	
	Efficiency (typ.)	86%	88%
	Inrush current(typ.)	Cold start 55A at 230Vac	
	Control surge capability	L-N:2KV	
	Leakage current	Max. 0.5mA	
ENVIRONMENT	Working temperature	ta: -30°C ~ 50°C tc: 80°C	
	Working humidity	20 ~ 95%RH, non-condensing	
	Storage temp., humidity	-40°C ~ 80°C, 10~95%RH	
	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.	
PROTECTION	Overtemperature	Protection type: Shut down o/p voltage, re--power on to recover	
	Over voltage protection	Shut down the output when non-load voltage ≥13V, re-power on to recover after fault condition is removed.	Shut down the output when non-load voltage ≥26V, re-power on to recover after fault condition is removed.
	Over load protection	Shut down the output when current load ≥110%, auto recovers.	
	Short circuit protection	Protection type: 1. When the first-level short-circuit protection is triggered, the fault can be automatically recovered; 2. When the second-level short-circuit protection is triggered, the power needs to be turned on again after the fault is eliminated	
SAFETY & EMC	Withstand voltage	I/P-O/P: 3750Vac	
	Isolation resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH	
	Safety standards	IEC/EN61347-1, IEC/EN61347-2-13	
	EMC emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3	
	EMC immunity	EN61000-4-2,3,4,5,6,8,11 EN61547	
	Strobe test standard	IEEE 1789	
NOTE	1. All parameters not specifically mentioned are measured at 230VAC input, rated load and 25°C ambient temperature. 2. Ripple and noise test method: connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure under 20MHZ bandwidth. 3. Ensure that the power supply is used under the rated parameters and environment.		

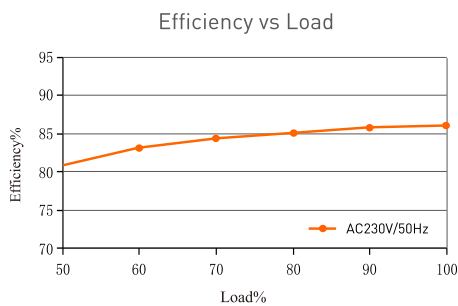
Dimensions
Unit:mm



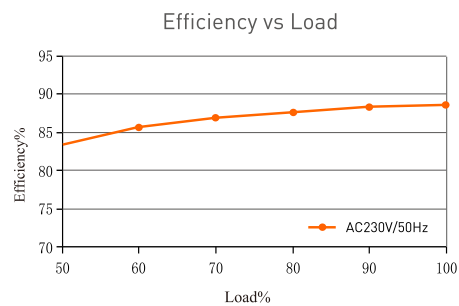
Wiring diagram



Relationship diagrams



YSD-100WHCP-12TL

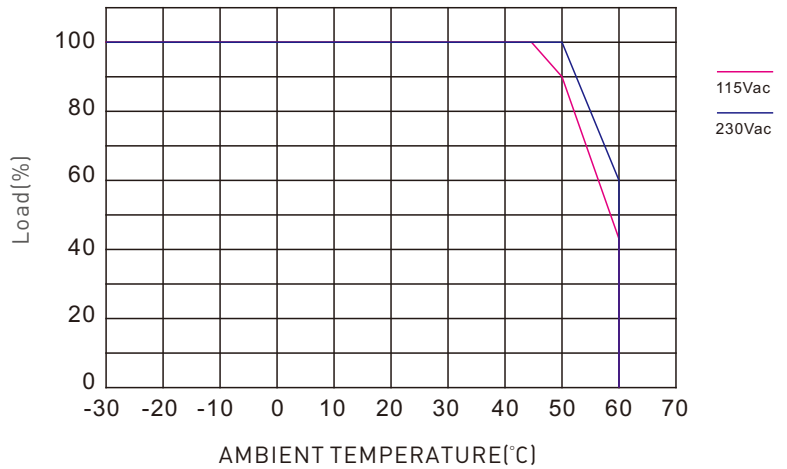


YSD-100WHCP-24TL

Packaging Information

DIMENSION	160x48x29mm(LxWxH)
PACKING	165x53x33mm(LxWxH)
CARTON QUANTITY	80PCS/Carton
CARTON SIZE	360x345x240mm(LxWxH)
WEIGHT	210g±10g/PCS

Temperature load curve



Flicker Test Form

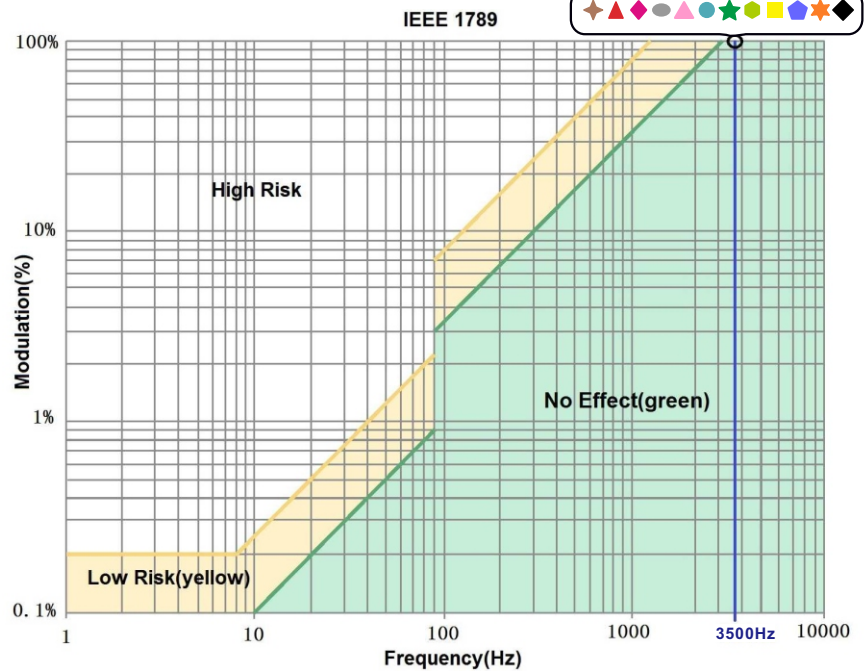
IEEE 1789

Limit of Modulation in low risk area	
Waveform frequency of Optical output	limit (%)
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	Exemption assessment
Limit of Modulation in no effect area	
Waveform frequency of Optical output	limit (%)
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$[0.08/2.5] \times f$
$f > 3125\text{Hz}$	Exemption assessment (High frequency exemption)

Brightness

- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- 80%
- ★ 90%
- ◆ 100%

Exemption assessment
(High frequency exemption)



LED 调光电源 (恒压型)

- 室内安装设计
- 可控硅/0-10V/1-10V/10V PWM/电阻 DIM
- 调光范围: 0~100%, LED 从 1% 开始调光.
- 0-100% 全程无频闪, 高频豁免考核级别.
- 过载、过温、短路、过压保护
- 自然风冷
- 100% 满负荷老化测试.
- 适合室内 I / II / III 类灯具使用.



无频闪

IEEE 1789
高频豁免考核级别















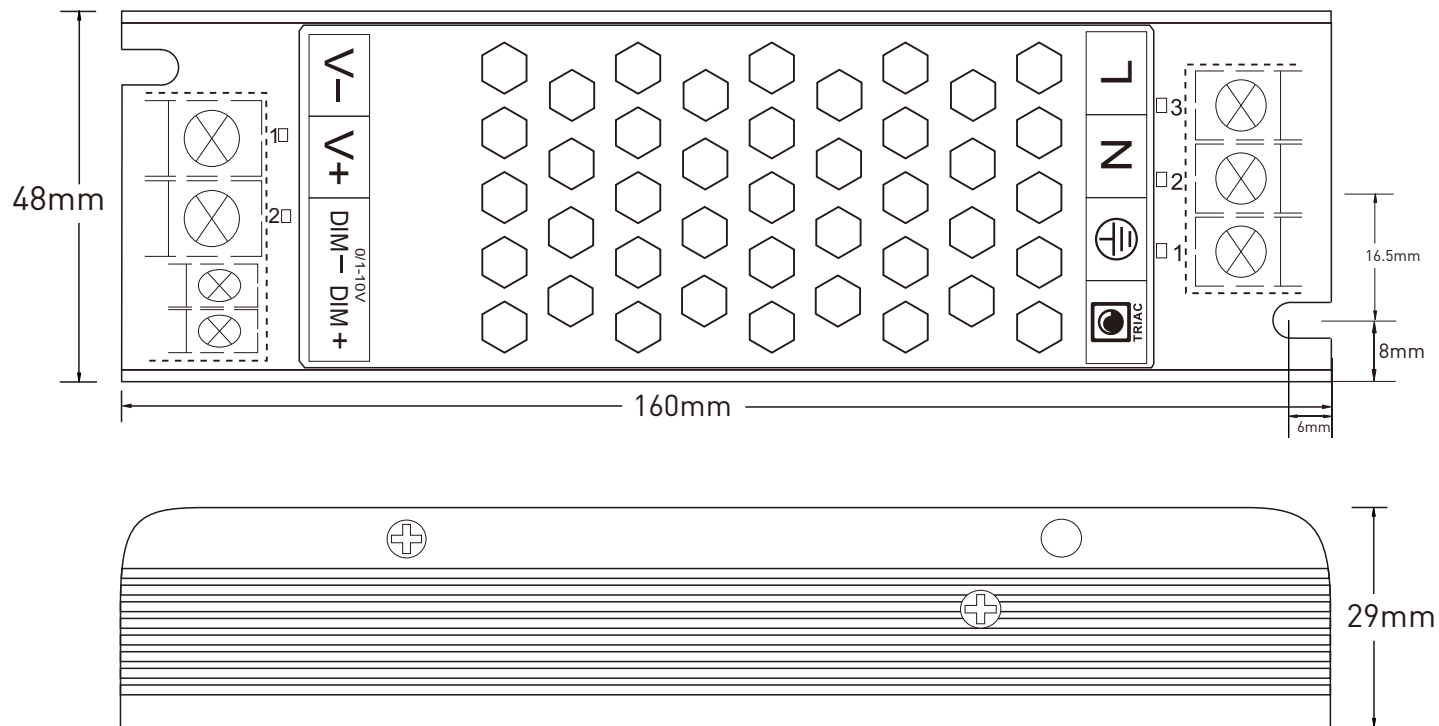



技术参数

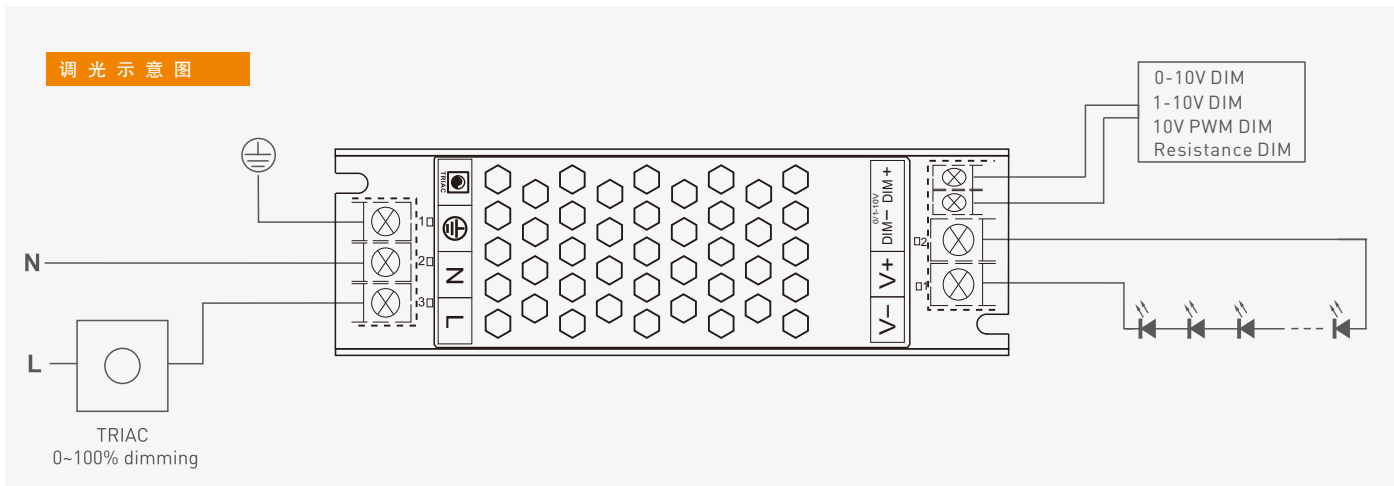
型号	YSD-100WHCP-12TL	YSD-100WHCP-24TL	
输出	输出电压	12VDC	24VDC
	输出电压范围	12VDC±0.5VDC	24VDC±0.5VDC
	输出电流	Max 8.3A	Max 4.17A
	输出功率	Max 100W	
	输出功率范围	0~100W	
	是否频闪	无频闪	
	调光范围	0~100%, 调光深度: 1%	
	纹波和噪音	≤200mV	≤400mV
输入	调光接口	TRIAC/0-10V/1-10V/10V PWM/电阻 DIM	
	输入电压	175-264Vac or 100-130Vac	
	频率范围	50/60Hz	
	输入电流	0.88A/230Vac or 1.5A/115Vac	
	功率因素	PF>0.55/230Vac, 满载	
	效率[typ.]	86%	88%
	浪涌电流[typ.]	冷启动55A at 230Vac	
	抗浪涌	L-N:2KV	
	漏电流	Max. 0.5mA	
环境	工作温度	ta: -30°C ~ 50°C tc: 80°C	
	工作湿度	20 ~ 95%RH, 无冷凝	
	储存温度 湿度	-40°C ~ 80°C, 10~95%RH	
	耐振动	10~500Hz, 2G 12分钟/周期, X, Y, Z轴各72分钟.	
保护	过温保护	保护类型:关闭输出电压,重新通电恢复	
	过压保护	空载电压≥13V,关闭输出,异常排除后上电恢复	空载电压≥26V, 关闭输出,异常排除后上电恢复
	过载保护	负载电流 ≥110%,关闭输出,可自动恢复	
	短路保护	保护类型:1.触发第一级短路保护时,故障消除后可自动回复; 2.触发第二级短路保护时,故障消除后需重新通电恢复.	
安规和电磁规格	耐压	输入对输出:3750Vac	
	绝缘阻抗	输入对输出:100MΩ/500VDC/25°C/70%RH	
	安全规范	IEC/EN61347-1, IEC/EN61347-2-13	
	电磁兼容发射	EN55015, EN61000-3-2 Class C, IEC61000-3-3	
	电磁兼容抗扰度	EN61000-4-2,3,4,5,6,8,11 EN61547	
	频闪测试标准	IEEE 1789	
备注	1. 所有未特别提及的参数均在230VAC输入, 额定负载和25°C环境温度下测量. 2. 纹波和噪声测试方法:在终端并联0.1uF和47uF的电容,并在20MHZ带宽下进行测量. 3. 保证电源在额定的参数和环境下使用.		

尺寸图

单位: mm

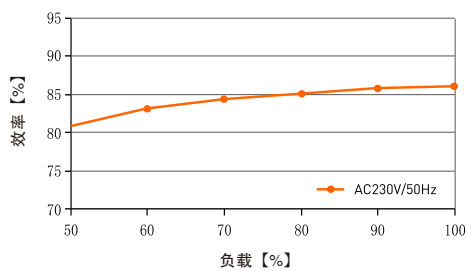


连接应用图



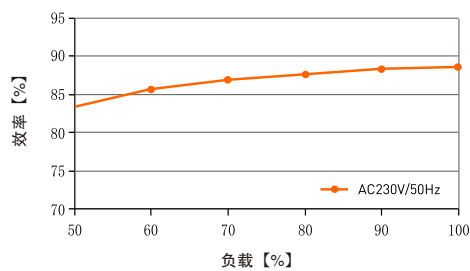
关系图表

效率与负载关系图表



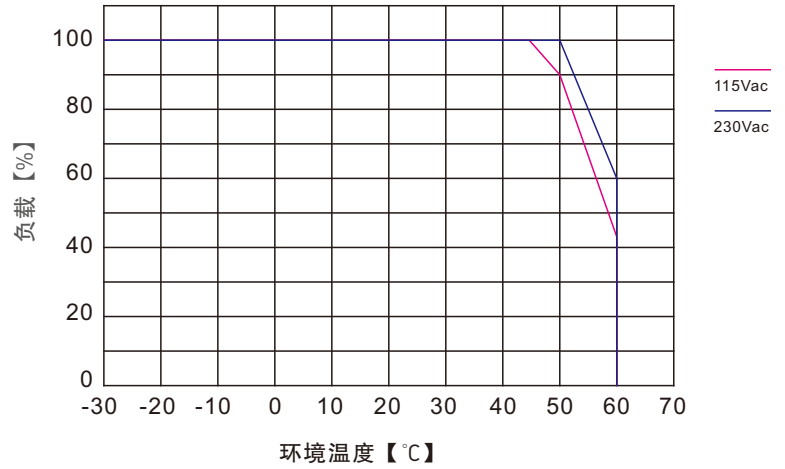
YSD-100WHCP-12TL

效率与负载关系图表



YSD-100WHCP-24TL

温度负载曲线



包装信息

产品尺寸	160x48x29mm(LxWxH)
包装尺寸	165x53x33mm(LxWxH)
装箱数量	80PCS/Carton
外箱尺寸	360x345x240mm(LxWxH)
产品重量	210g±10g/PCS

频闪测试表

IEEE 1789	
低风险区域(Low Risk)的波动深度(Modulation)限值	
光输出波形频率 f	限值[%]
$f \leq 8\text{Hz}$	0.2
$8\text{Hz} < f \leq 90\text{Hz}$	$0.025 \times f$
$90\text{Hz} < f \leq 1250\text{Hz}$	$0.08 \times f$
$f > 1250\text{Hz}$	免除考核
无风险区域(No Effect)的波动深度(Modulation)限值	
光输出波形频率 f	限值[%]
$f \leq 10\text{Hz}$	0.1
$10\text{Hz} < f \leq 90\text{Hz}$	$0.01 \times f$
$90\text{Hz} < f \leq 3125\text{Hz}$	$[0.08/2.5] \times f$
$f > 3125\text{Hz}$	免除考核(高频豁免)

亮度

- ◆ 1%
- ▲ 5%
- ◆ 10%
- 20%
- ▲ 30%
- 40%
- ★ 50%
- 60%
- 70%
- ★ 80%
- ★ 90%
- ◆ 100%

