YSD 研硕达

5 in 1 dimming
0-10V
1-10V
10V PWM
TRIAC DIM
Resistance DIM

LED Dimming Driver (CV)

Flicker-free
IEEE 1789
High frequency exemption level

- 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.
- Up to 50000-hour life time.

SELV IP67

0-10V 1-10V DIM | Triac/ Resistance DIM | PWM Digital Dimming | Over-heat Protection | Short Circuit Protection | Over Load Protection | V Over voltage protection

Specification

Model		YSD-150WHBF-12TL	YSD-150WHBF-24TL
OUTPUT	Output voltage	12VDC	24VDC
	Output voltage range	12VDC±0.5VDC	24VDC±0.5VDC
	Output current	Max 12.5A	Max 6.25A
	Output power	Max 150W	
	Output power range	0~150W	
	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	1.3A/230Vac or 2.2A/115Vac	
	Power factor	PF>0.55/230Vac, at full load	
	Efficiency (typ.)	90%	89%
	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.		

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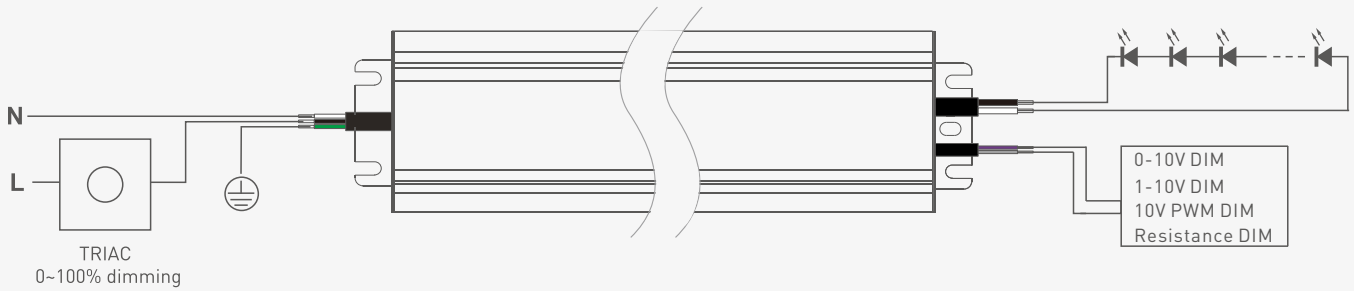
Dimensions
Unit:mm

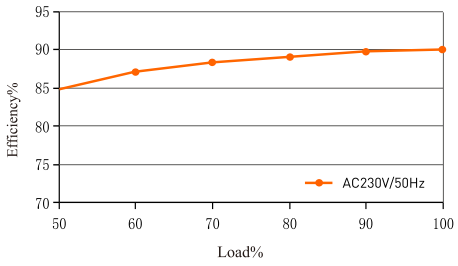
Wiring diagram

Dimming diagram



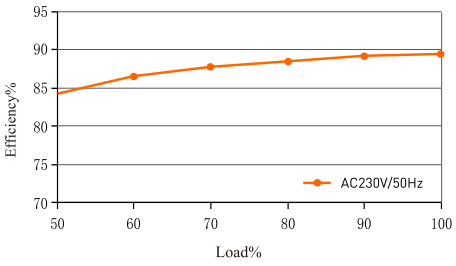
Relationship diagrams

Efficiency vs Load



YSD-150WHBF-12TL

Efficiency vs Load



YSD-150WHBF-24TL

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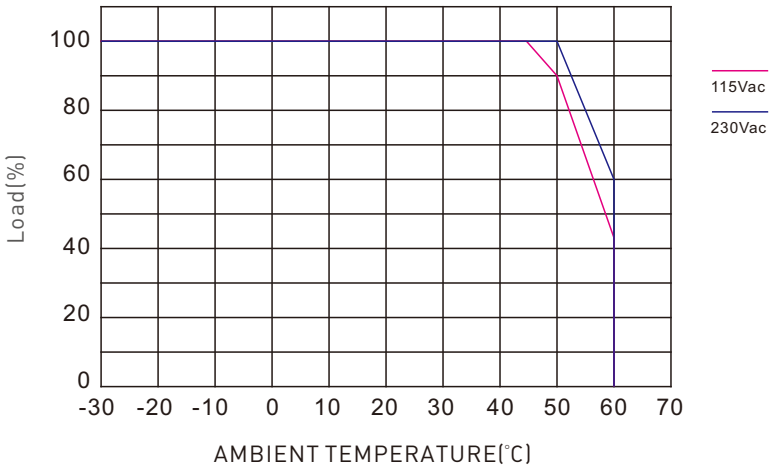
Packaging Information

DIMENSION	238x58x32mm(LxWxH)
PACKING	260x78x45mm(LxWxH)
CARTON QUANTITY	15PCS/Carton
CARTON SIZE	398x268x158mm(LxWxH)
WEIGHT	840g±10g/PCS

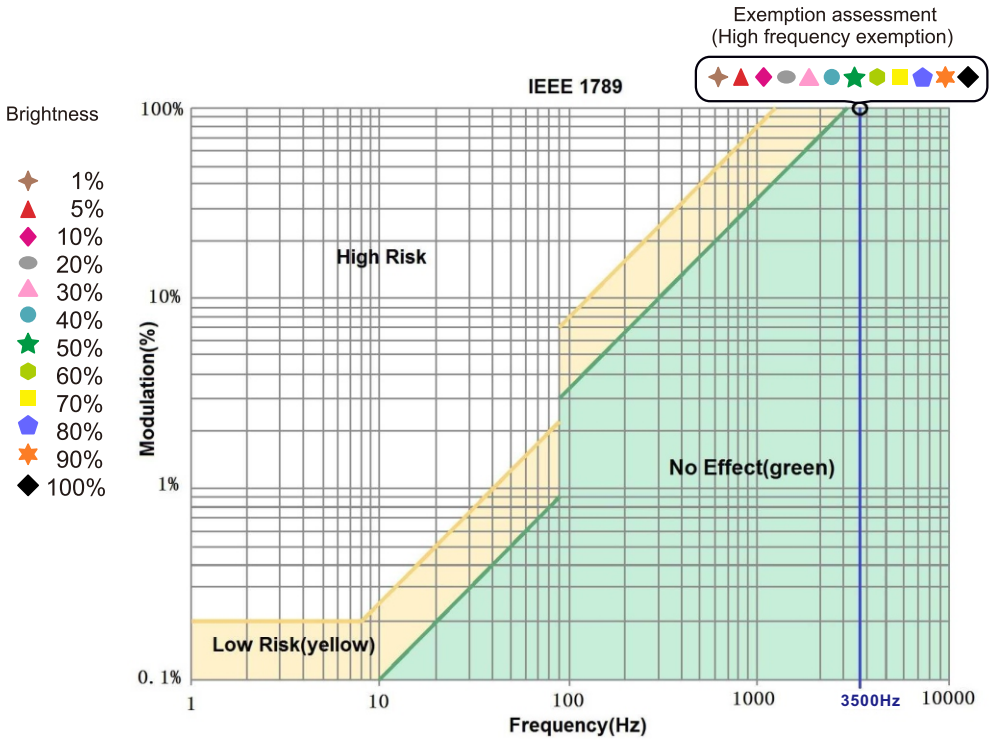
Temperature load curve



Flicker Test Form

IEEE 1789

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



* No further notice if any changes in the manual. Product function depends on the goods. Please feel free to contact your supplier if any question. www.ysdwps.com

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LED 调光电源（恒压型）

- 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.
- 高达50000小时的额定寿命.

无频闪
IEEE 1789
高频豁免考核级别

SELV IP67

0-10V 1-10V DIM | 可控硅/电阻 DIM | PWM 数字调光 | 过温保护 | 短路保护 | 过载保护 | V 过压保护

技术参数

型号		YSD-150WHBF-12TL	YSD-150WHBF-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 12.5A	Max 6.25A
	输出功率	Max 150W	
	输出功率范围	0~150W	
	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	1.3A/230Vac or 2.2A/115Vac	
	功率因素	PF>0.55/230Vac, 满载	
	效率(typ.)	90%	89%
	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.		

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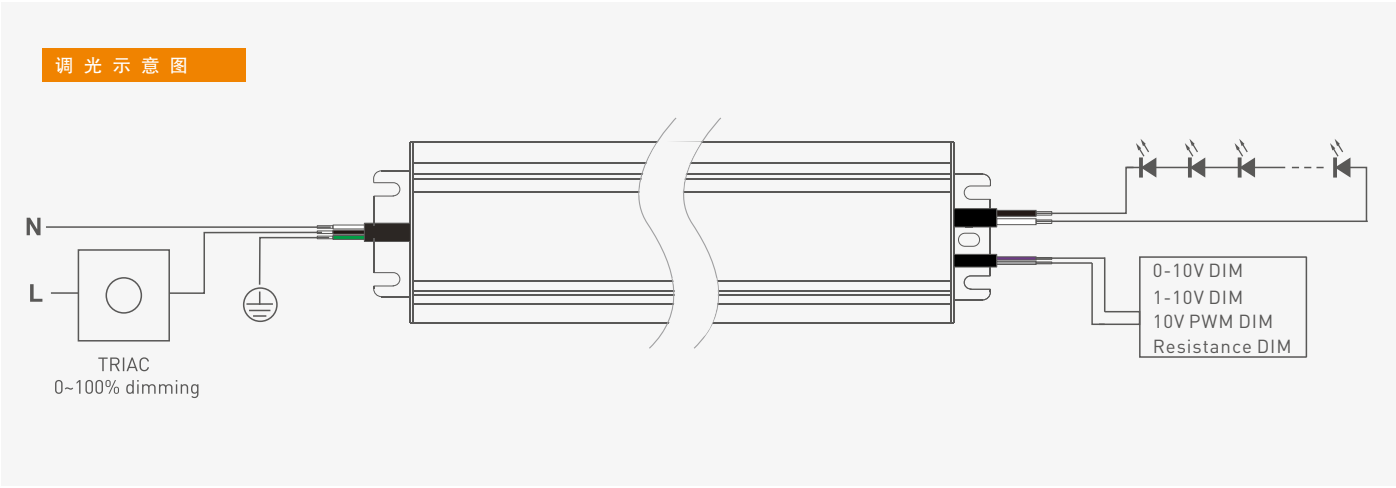
尺寸图

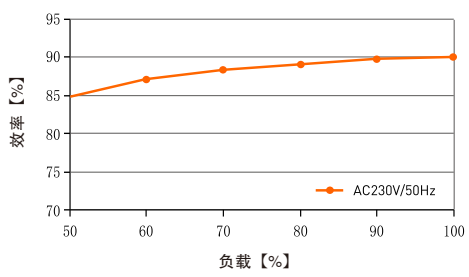
单位:mm

连接应用图



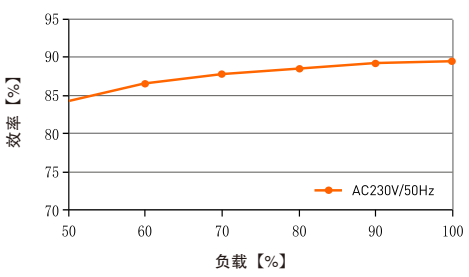
关系图表

效率与负载关系图表



YSD-150WHBF-12TL

效率与负载关系图表



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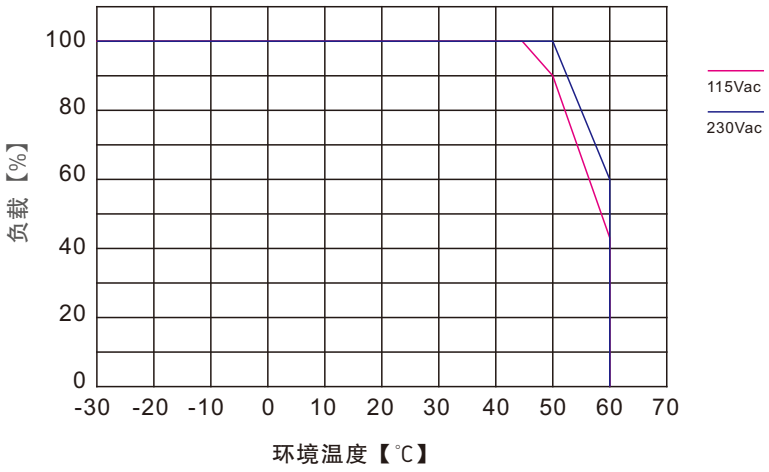
包装信息

产品尺寸	238x58x32mm(LxWxH)
包装尺寸	260x78x45mm(LxWxH)
装箱数量	15PCS/Carton
外箱尺寸	398x268x158mm(LxWxH)
产品重量	840g±10g/PCS

温度负载曲线



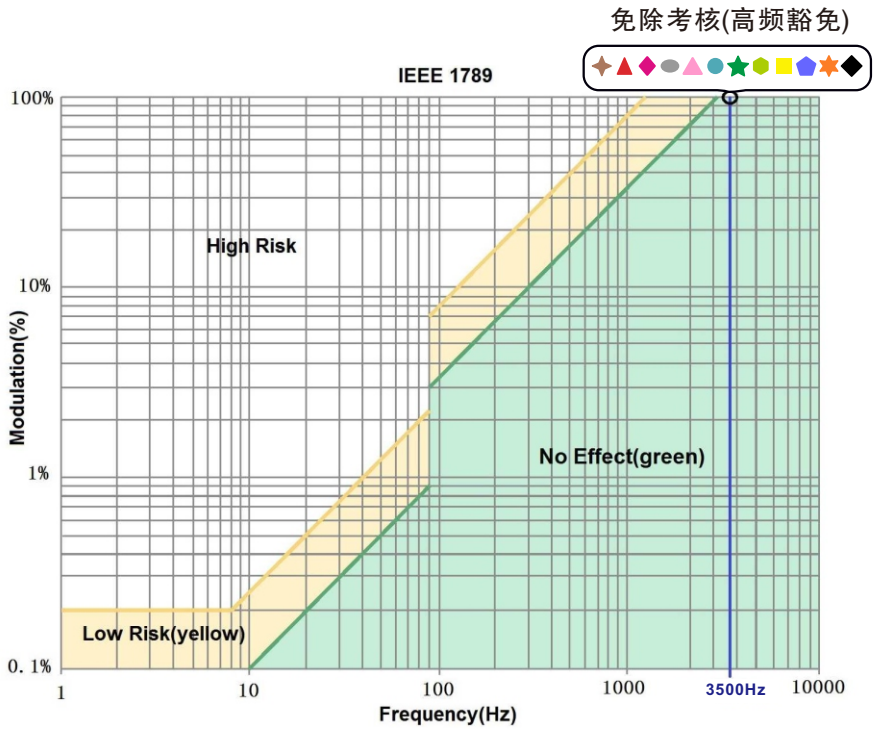
频闪测试表

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 ≤ 8Hz	0.2
8Hz < *f* ≤ 90Hz	0.025 × *f*
90Hz < *f* ≤ 1250Hz	0.08 × *f*
f > 1250Hz	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 ≤ 10Hz	0.1
10Hz < *f* ≤ 90Hz	0.01 × *f*
90Hz < *f* ≤ 3125Hz	(0.08/2.5) × *f*
f > 3125Hz	免除考核(高频豁免)

亮度

1%
5%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%



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