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

100W-12V/24V Dimming LED Switch Driver (CV)



Flicker-free
IEEE 1789
High frequency exemption level

- 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.

SELV IP20

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

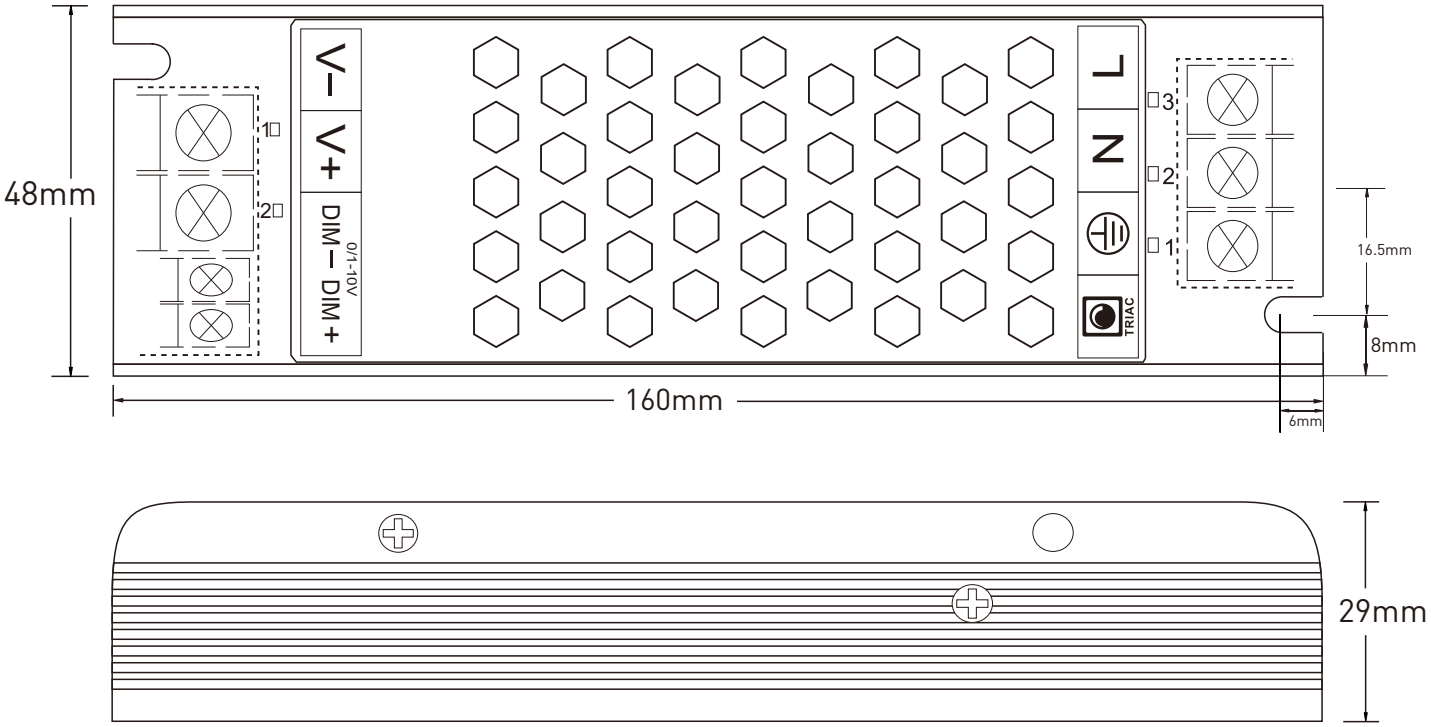
Specification

Model		YSD-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.		

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

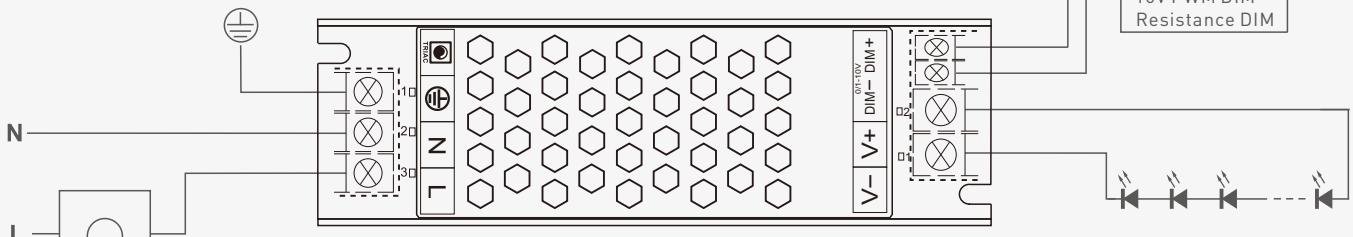
Dimensions

Unit:mm



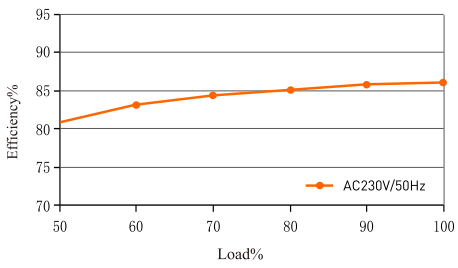
Wiring diagram

Dimming diagram



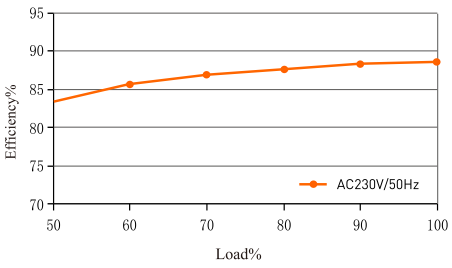
Relationship diagrams

Efficiency vs Load



YSD-100WHCP-12TL

Efficiency vs Load



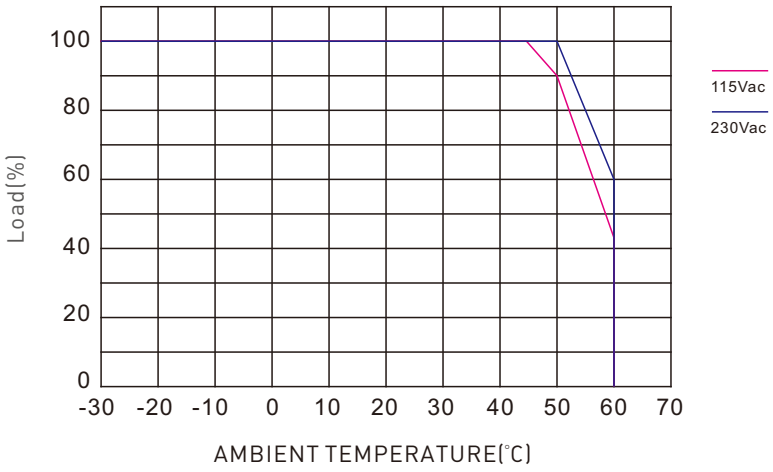
YSD-100WHCP-24TL

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

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 (%)
$f \leq 8Hz$	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)

