

250W-12V/24V Dimming waterproof LED 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

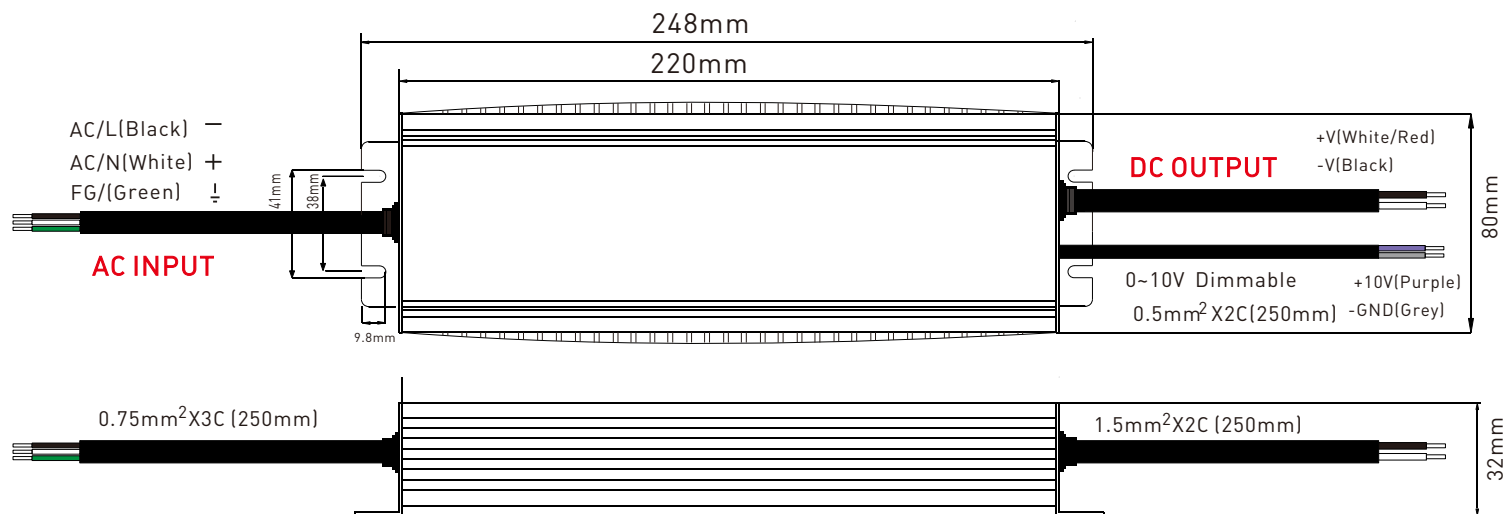


Specification

Model		YSD-250WHBF-12TL	YSD-250WHBF-24TL
OUTPUT	Output voltage	12VDC	24VDC
	Output voltage range	12VDC±0.5VDC	24VDC±0.5VDC
	Output current	Max 21A	Max 10.5A
	Output power	Max 250W	
	Output power range	0~250W	
	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	2.1A/230Vac or 3.7A/115Vac	
	Power factor	PF>0.55/230Vac, at full load	
	Efficiency (typ.)	90%	89%
	Inrush current(typ.)	Cold start 60A at 230Vac	
	Control surge capability	L-N:2KV	
	Leakage current	Max. 0.5mA	
ENVIRONMENT	Working temperature	ta: -30℃ ~ 50℃ tc: 80℃	
	Working humidity	20 ~ 95%RH, non-condensing	
	Storage temp., humidity	-40℃ ~ 80℃, 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℃/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℃ 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.		

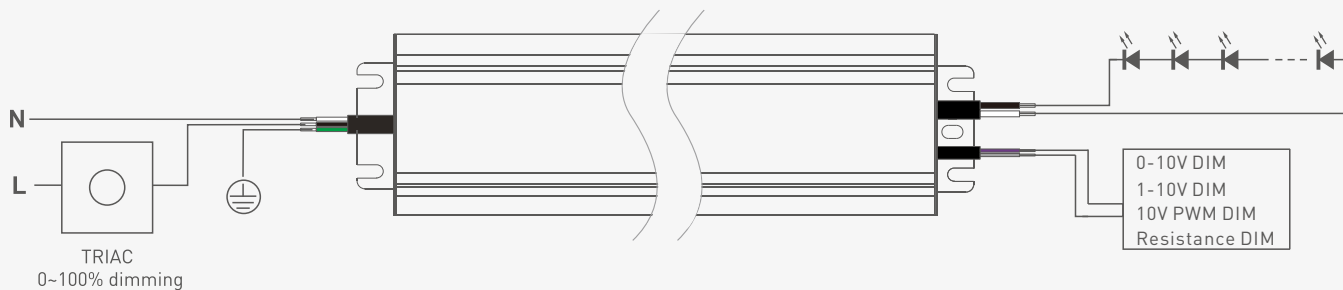
Dimensions

Unit:mm

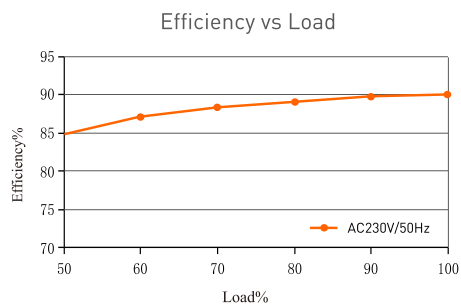


Wiring diagram

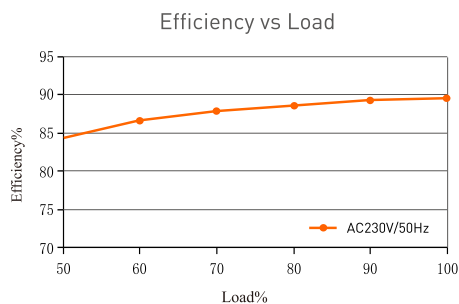
Dimming diagram



Relationship diagrams



YSD-250WHBF-12TL

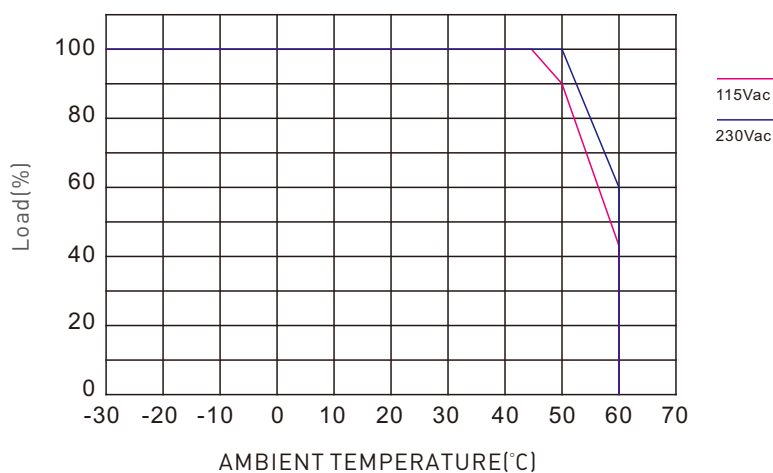


YSD-250WHBF-24TL

Packaging Information

DIMENSION	248x80x32mm(LxWxH)
PACKING	260x95x45mm(LxWxH)
CARTON QUANTITY	15PCS/Carton
CARTON SIZE	495x275x155mm(LxWxH)
WEIGHT	1110g±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% (brown diamond)
- 5% (red triangle)
- 10% (pink diamond)
- 20% (grey circle)
- 30% (pink triangle)
- 40% (teal circle)
- 50% (green star)
- 60% (yellow star)
- 70% (yellow square)
- 80% (blue pentagon)
- 90% (orange star)
- 100% (black diamond)

Exemption assessment
(High frequency exemption)


IEEE 1789

