

## LED Intelligent Driver (CV)

- Dimming range: 0~100%, LED start at 0.1% possible.
- 0-100% flicker-free, High frequency exemption level.
- Dimming interfaces: DALI-2, Push DIM, 0-10V, 1-10V, 10V PWM, RESISTANCE DIM
- High Efficient driver: PF>0.96, THD<10%
- Over load / Over temp. / Short circuit / Over voltage protection, recover automatically.
- Suitable for internal lights application for I / II / III.
- Up to 50000-hour life time.

**FORTEC**  
UNITED KINGDOM

Osprey House  
1 Osprey Court  
Hinchbrook Business  
Park  
Huntingdon  
PE29 6FN

www.fortec.uk  
info@fortec.uk  
Tel: 01480 411600

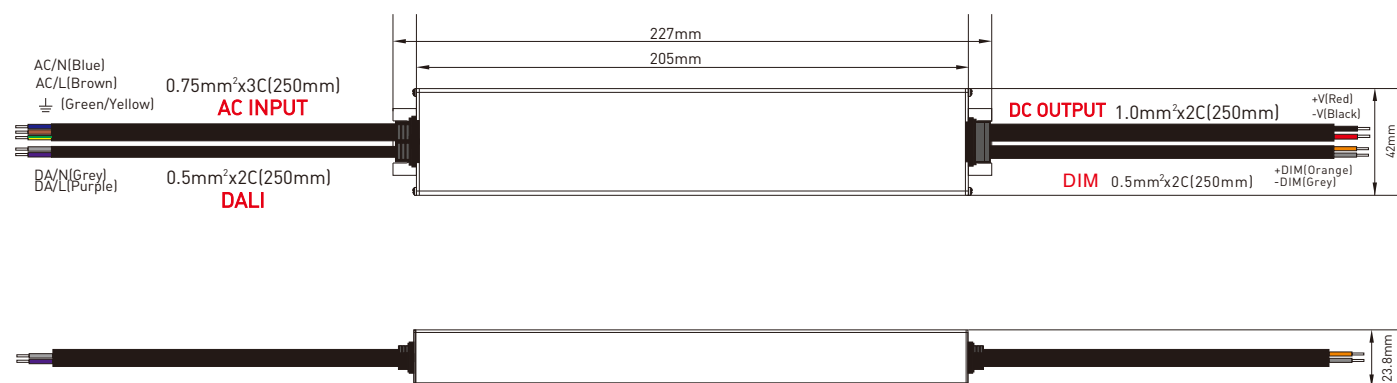


### Specification

Model		YSD-100WUDF-12D	YSD-100WUDF-24D	YSD-100WUDF-36D	YSD-100WUDF-48D
OUTPUT	Output voltage	12VDC	24VDC	36VDC	48VDC
	Output voltage range	12VDC±0.3VDC	24VDC±0.6VDC	36VDC±0.6VDC	48VDC±0.6VDC
	Output current	Max 8.3A	Max 4.2A	Max 2.78A	Max 2.1A
	Output power	Max 100W			
	Output power range	0~100W			
	With or without strobe	No strobe			
	Dimming range	0~100%, dimming depth: Max. 0.1%			
	Ripple & Noise	≤150mV	≤240mV	≤360mV	≤480mV
INPUT	PWM frequency	4~16Khz			
	Dimming interface	DALI-2 / PUSH DIM / 0-10V / 1-10V / 10V PWM / RESISTANCE DIM (0-100K)			
	Input voltage	100-264Vac			
	Frequency	50/60Hz			
	Input current	1.2~0.4A			
	Power factor	PF>0.96/230Vac, at full load			
	THD	≤10% at 230Vac, at full load			
	Efficiency (typ.)	90%	90%	90%	90%
	Inrush current (typ.)	Cold start 50A at 230Vac			
	Control surge capability	L-N:1KV			
ENVIRONMENT	Leakage current	Max. 0.5mA			
	Working temperature	ta: -25°C ~ 50°C tc: 90°C			
	Working humidity	20 ~ 95%RH, non-condensing			
	Storage temp., humidity	-40°C ~ 80°C, 10~95%RH			
PROTECTION	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.			
	Overtemperature	Protection type: Shut down o/p voltage, re--power on to recover			
	Over voltage protection	The no-load voltage is greater than 120%~150% rated output voltage. Shut down the output and It can be automatically restored after the fault is eliminated ,			
SAFETY & EMC	Short circuit protection	Protection type: 1. When the first level short-circuit protection is triggered, the fault will recover automatically after 3 seconds. 2. When the second-level short-circuit protection is triggered, the power needs to be turned on again after the fault is eliminated			
	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			
SAFETY & EMC	Strobe test standard	IEEE 1789			

## Dimensions

Unit: mm

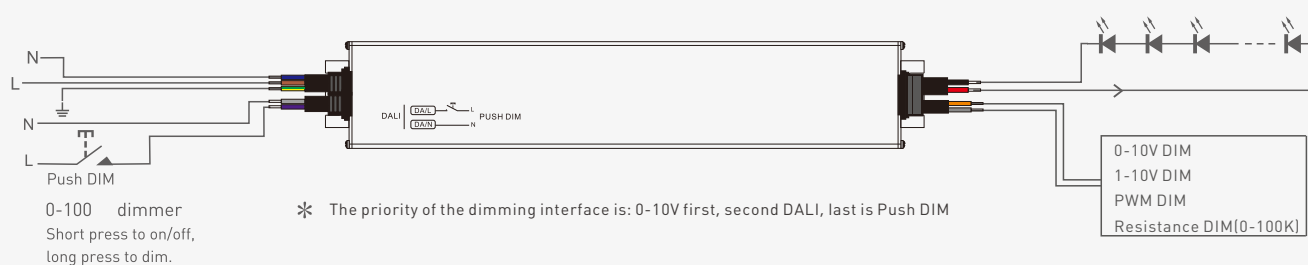


## Wiring diagram

### DALI Connection Mode



### PUSH DIM Connection Mode



## Push DIM



Reset switch

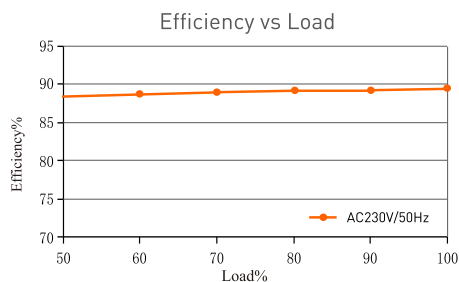
On/off control: Short press.

Stepless dimming: Long press.

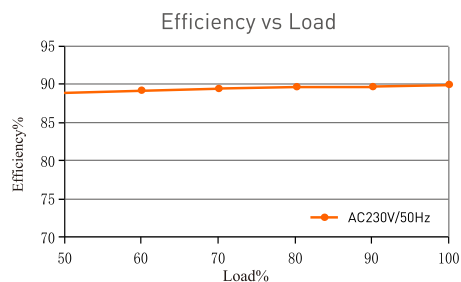
With every other long press, the brightness level goes to the opposite direction.

Dimming memory: Go to the brightness level adjusted previously when lights are turned on.

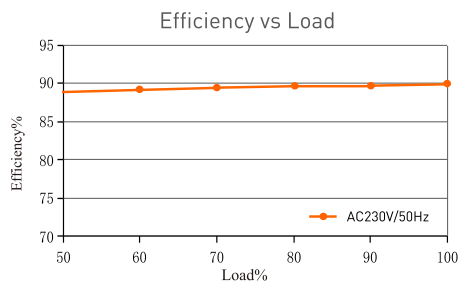
## Relationship diagrams



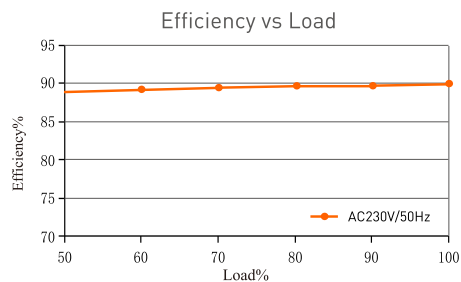
YSD-100WUDF-12D



YSD-100WUDF-24D



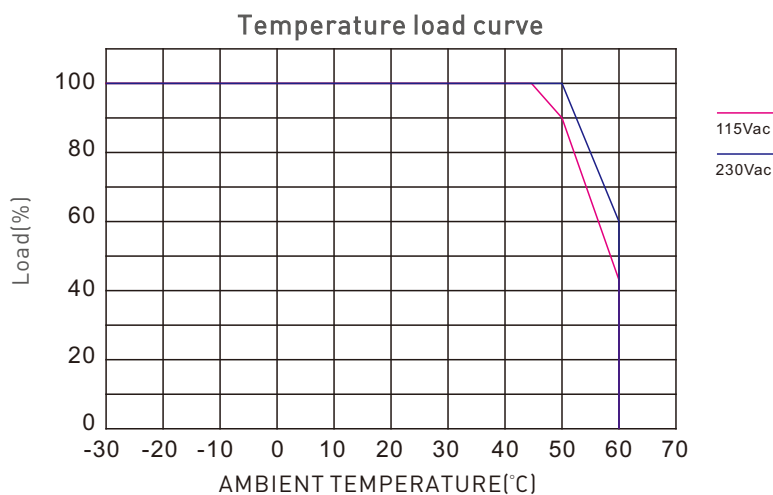
YSD-100WUDF-36D



YSD-100WUDF-48D

## Packaging Information

DIMENSION	227x42x23.8mm(LxWxH)
PACKING	285x67x33mm(LxWxH)
CARTON QUANTITY	25PCS
CARTON SIZE	360x293x180mm(LxWxH)
WEIGHT	465g±10gPCS



## 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)

