

BSD-48V series driver

Data Sheet

2020.05 V1.0

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Features

BSD-48V series driver is a constant dimmable driver with 0/1-10V&Rx&PWM control mode

- Accuracy of output voltage less than 2%
- input voltage , 220-240VAC
- up to 93% power supply efficiency
- Natural air cooling design, no noise
- Built-in PFC function, power factor > 0.95
- Short circuit/ open load/ Over load/ over current protection
- No flicker, ripple wave & noise less than 0.3%@230V full load
- Total harmonic distortion less than 15%
- Warranty for 5 years
- IP20 for indoor LED luminaire
- CE certification



Technical Data

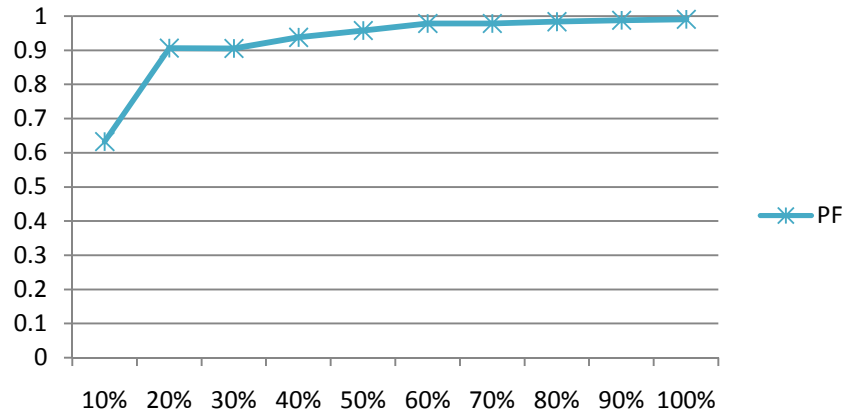
SKU		BSD-V48-065S	BSD-V48-100S	BSD-V48-150S	BSD-V48-200S
Output characteristics	DC voltage	48V	48V	48V	48V
	Voltage accuracy	±2%	±2%	±2%	±2%
	Output current	1.35A	2.05A	3.1A	4.15A
	Power rating	65W	100W	150W	200W
	No load Voltage	1.5W Max			
	Ripple and Noise	500mVp-p			
	Line Regulation	±2%			
	Load Regulation	±2%			
	Turn On Delay Time	<1s@230V			
Input characteristics	Input Frequency	198-264VAC			
	Input Frequency	47-63Hz			
	Power factor (Typ.)	>0.95 (Full load)			
	THD	<15% (Full load)			
	Driver efficiency	87%	88%	92%	93%
	Input Current (Typ.)	0.35A Max	0.52A Max	0.75A Max	0.98A Max
	Inrush Current	60mA Max @230VAC,25°C			
Environment	Ta	-20°C~+50°C			
	Environment humidity	10%~90%			
	Storage temperature	-30°C~+70°C			
	Storage humidity	10%~90%			
	Application	For indoor use			
	IP degree	IP20			
	Size	346*30*23.5mm			372*39*27mm

Technical Data

Protection functions	Open circuit	When the LED disconnection the product is protected such as hiccup or when it is at the highest point of output voltage, the power supply shall be self-recovery when the fault condition is removed.
	Short Circuit	The input power shall decrease when the output rail short, the power supply shall be self-recovery when the fault condition is removed.
Safety compliance	Safety Standard	GB19510.1,GB19510.14;EN61347-1,EN61347-2-13;
	Dielectric Strength	P-S:3750VAC/5mA/60S P-E:1500VAC/5mA/60S
		P-E:500VAC/5mA/60S
	Insulation Resistance	I/P-O/P:>50M Ohms / 500VDC / 25°C / 70% RH.
	Leakage Current	The leakage current shall be less than 0.25mA for Class 2 at maximum input voltage
	EMI	GB17743 , GB17625.1; EN55015, EN61000-3-2, EN61000-3-3.
	EMS	EN 61000-4-2, 3,4,5,6,8,11, EN 61547.
	ESD	Air discharge : ±8KV ; Contact discharge : ±4KV ,Performance Criterion : B
	RF	80-1000MHZ; Severity Level:Level2 , 3V/M ; Performance Criterion : A
	EFT	Level 2 line to line 1.0kv Performance Criterion : B
Surge Immunity	Severity Level : Level2 , DM 1.0kv	
	Severity Level : Level3 , CM 2.0kv	
	Performance Criterion : B	
Reliability	Warranty	5 years
Remark	The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25°C and humidity 50%, AC input 230V and 90% output load.	

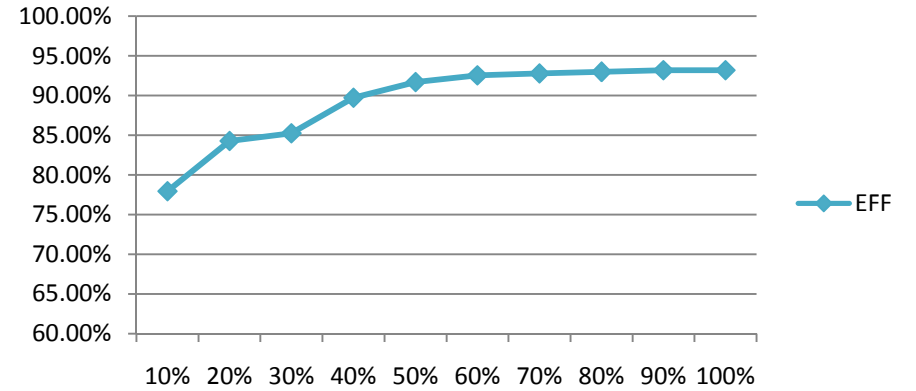
Test Data

PF & load



Power factor curve

efficiency & load



Efficiency curve

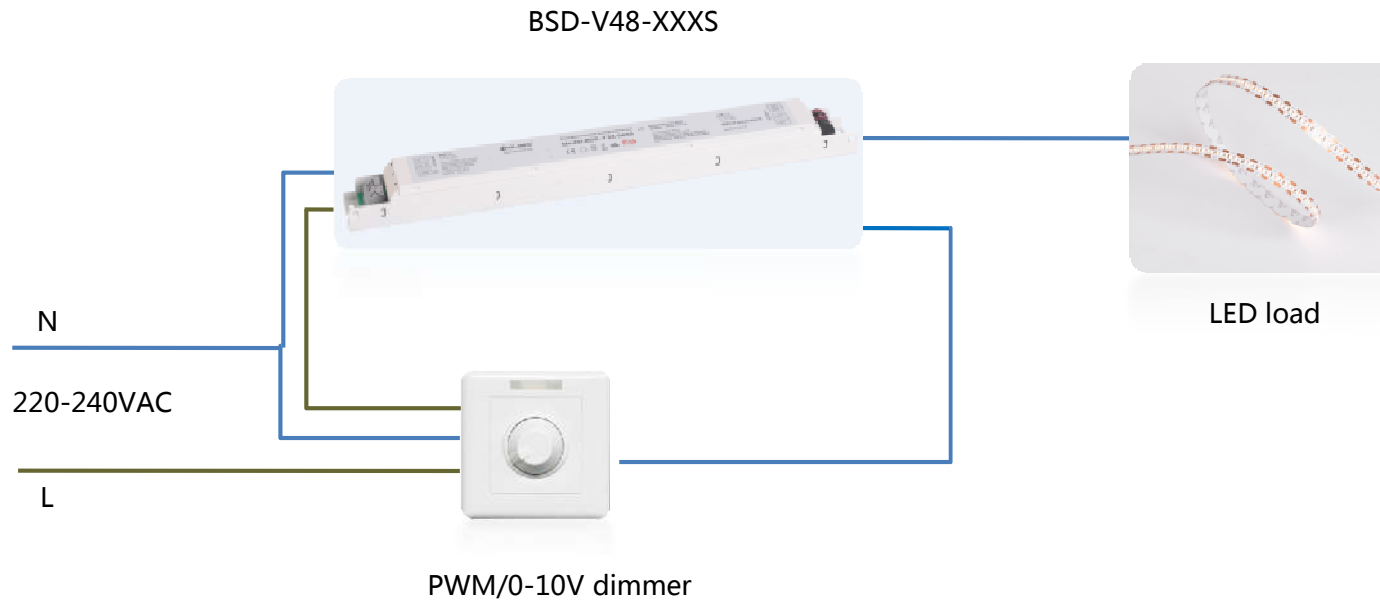
Dimmable feature

Function		0-10V				PWM			RX			
Yes Or No		√				√			√			
0-10V	0	1	2	3	4	5	6	7	8	9	10	open
Ir	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	open
PWM	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	open
Ir	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	98.5%

Note:

1. Ir is the output power percentages.Ir
2. Ir above is typical values.

Instructions

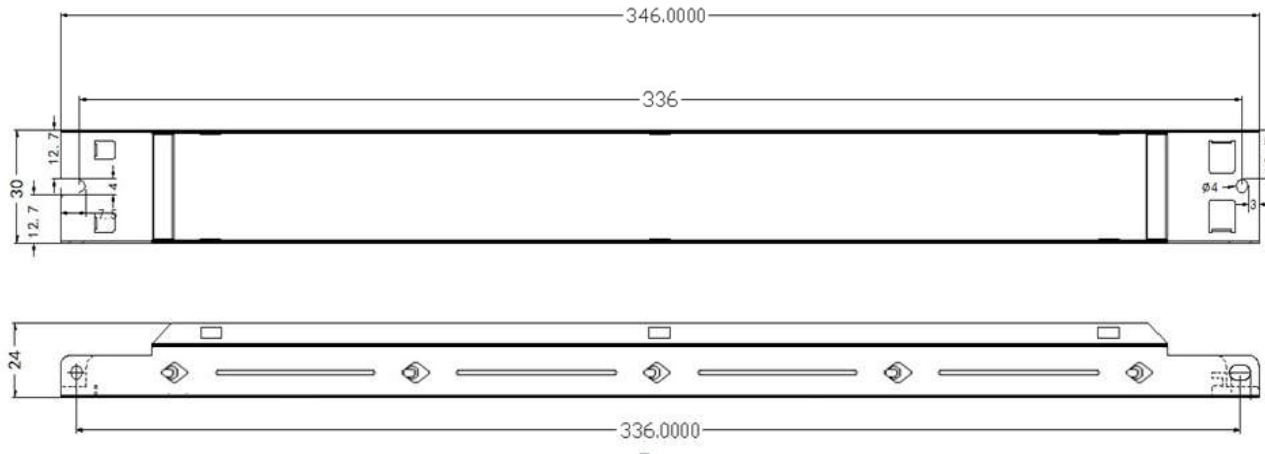


Protection

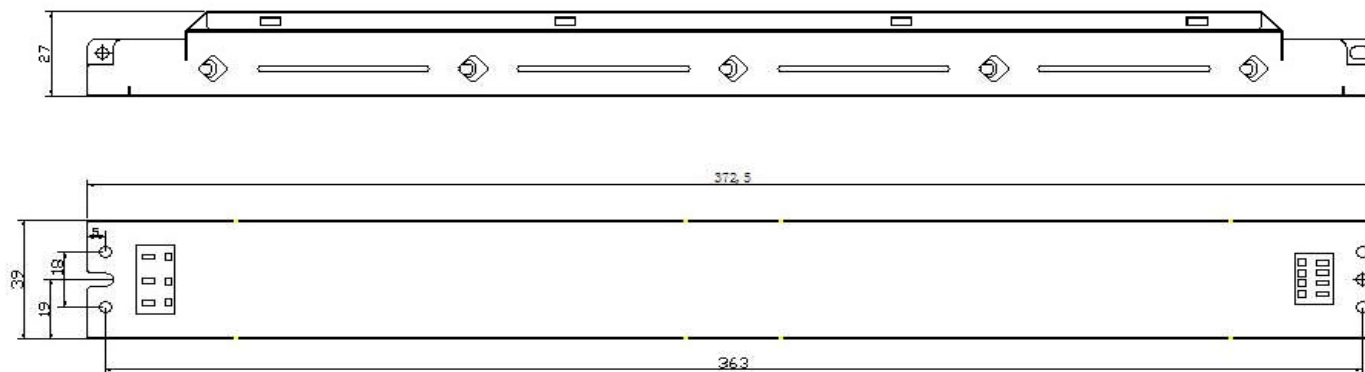
Short circuit/ open load/ Over load/ over current protection

Product size

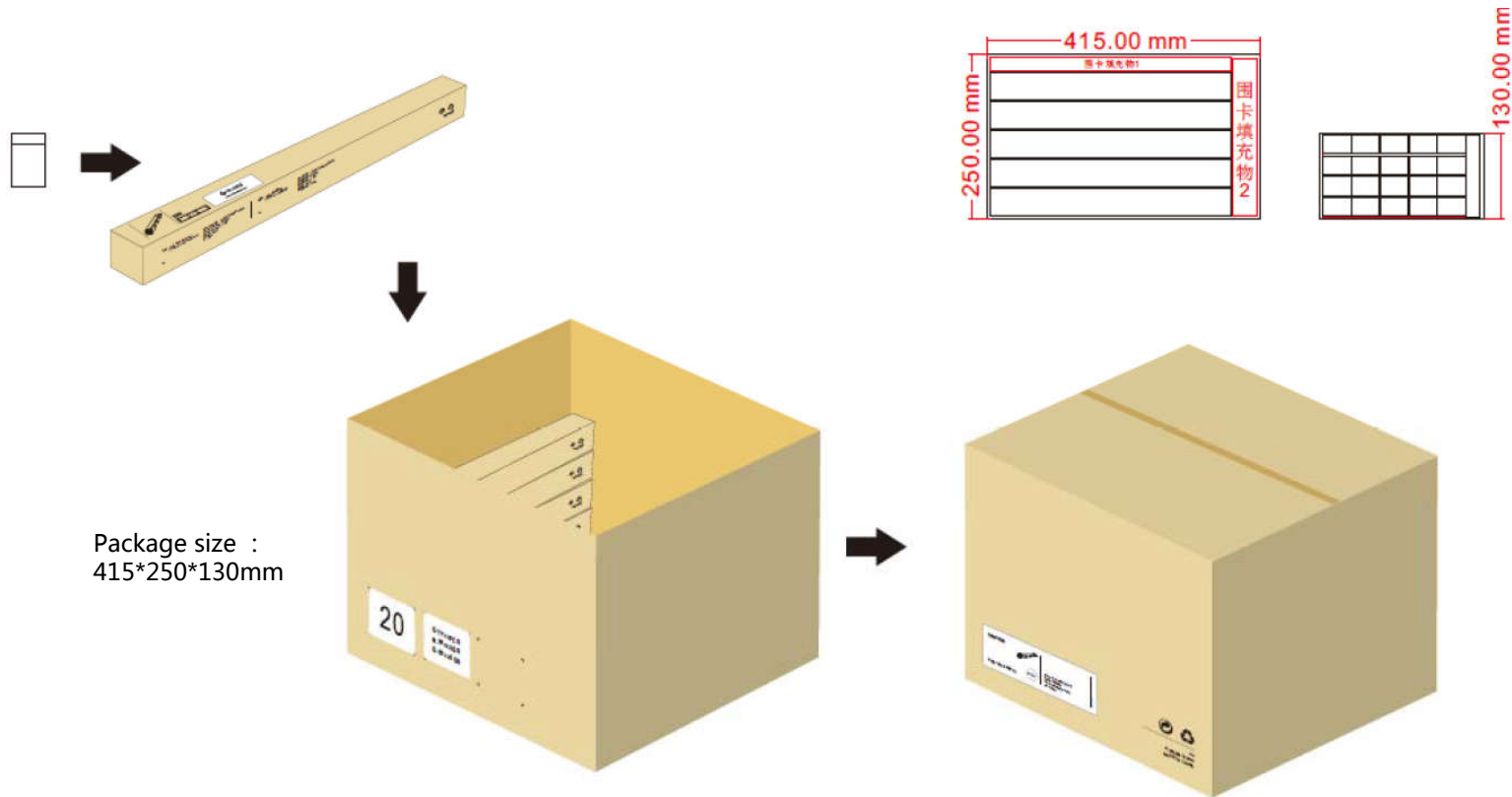
BSD-V48-065S/ BSD-V48-100S (size : 346*30*23.5mm)



BSD-V48-150S/ BSD-V48-200S (size : 372*39*27mm)



Package



SKU	Product size(mm)	Product quantity (PCS)	Product net weight (KG)	Net weight per box (KG)	Gross weight (KG)	Package size (mm)
BSD-V48-065W	346*30*23.5	20	0.28	5.6	7.2	415*250*130
BSD-V48-100W	346*30*23.5	20	0.3	6	7.6	415*250*130
BSD-V48-150W	372*39*27	20	0.4	8	10	415*250*130
BSD-V48-200W	372*39*27	20	0.42	8.4	10.5	415*250*130

Precautions

- Please select the driver that matches the specified load. The output voltage of this product is 48VDC.
- To prolong the driver life span, please keep 5% load left(It' s recommended to use only 95% of the electricity)
- Do not use any acid or alkaline adhesive to fix the product.
- Risk of electric! It must be installed by a recognized electrician,and make sure to cut off the power before installation
- Please contact us for more information about test reports,raliability etc.

VIEW OF US

Become an innovative lighting enterprise with a global influence

VALUE OF BRAND

Customer-centric

Striver-oriented

Simplicity is on account of trust

Embrace change for continuous improvement



website



WeChat

CHARACTER OF PRODUCT

Concise, Trendy, Innovative

CONSIDERATION OF DESIGN

Simplification, User friendly, Consumerism