

Constant Voltage LED Power Supply

SE15-12VF

SE15-24VF



Product description

SE15-12/24VF is the indoor ultra-thin constant-voltage LED driver. It features an input voltage range of 200-240Vac and a maximum conversion efficiency of up to 85%. Adopting a fanless design, it operates within a case temperature range of -20°C to +45°C, relying on natural cooling for heat dissipation.

This driver also boasts an ultra-high power factor, low standby power consumption, and comprehensive protection functions—all of which not only greatly enhance the product's reliability but also extend its service life. Specifically designed for LED lighting applications, this series is tailored for indoor lighting scenarios. It complies with global safety standards for lighting equipment, while ensuring the safety of users and the lighting system throughout the installation process.

Standards

EN61347-1
EN61347-2-13
EN61547
EN55015
EN61000-3-2
EN61000-3-3

Characteristics

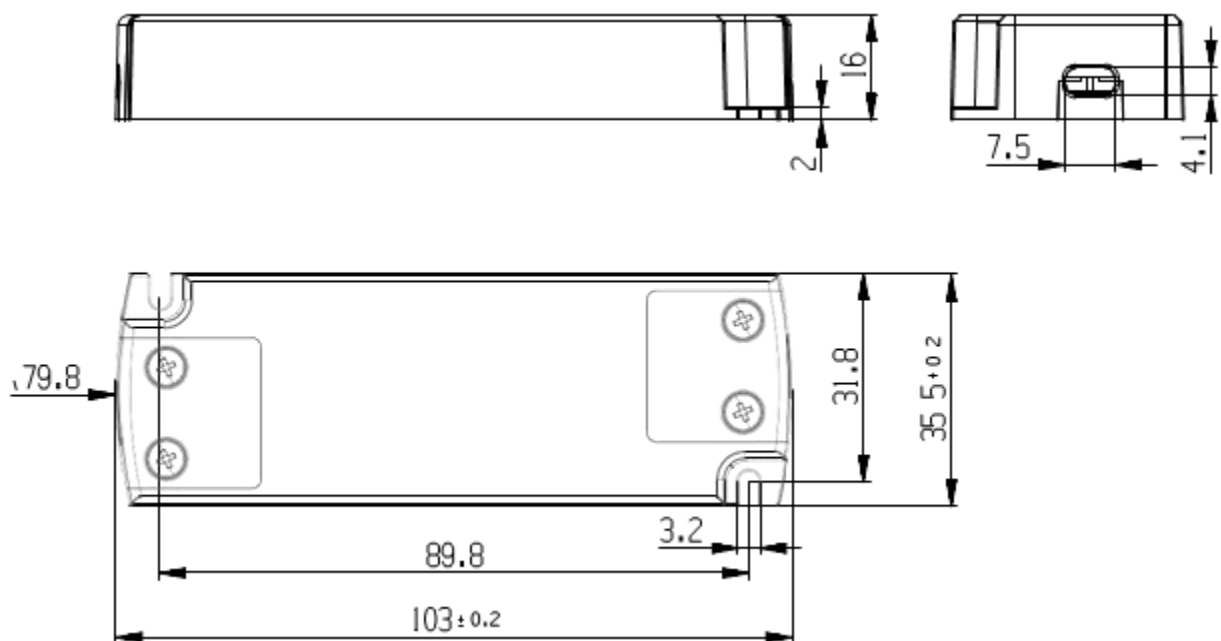
- Input voltage range (180-264VAC)
- IP20
- Suitable for indoor environments
- Protection types: Short circuit, overload, and over voltage
- Complies with European lighting safety regulations
- 5-year warranty

Specifications

Model		SE15-12VF	SE15-24VF
Output	Turn on time(S)	<0.5	
	Output power(W)	15	
	Output voltage(V)	12	24
	Output voltage tolerance	±5%	
	Ripple voltage	≤4%	
	Line Regulation	2%	
	Load Regulation	4%	
	Working current range(A)	0-1.25A	0-0.625A
	SVM	≤0.4	
	Pst	≤1	
	Dimming type	-	
	Dimming range	-	
Input	Rated DC supply voltage(Vdc)	-	
	Rated supply voltage(Vac)	200-240	
	Voltage range(Vac)	180-264	
	Line frequency(Hz)	50/60	
	Input current(A)	0.13	
	Efficiency	83%@full load	85%@full load
	Average efficiency	82.9%	84.9%
	No load power consumption(W)	≤0.5W	
	Power factor	0.8	
	Displacement factor	0.8	
	Total harmonic distortion(typ.)	46%	
	Inrush current(Ipk)	22A/75μS	
	Leakage current	<0.7mA	
Protection	Short circuit protection	hiccup mode ,restart automatically after fault correction.	
	Over load protection	exceed maximum rated load times 1.4 hiccup mode ,restart automatically after fault correction	
	Over voltage protection	hiccup mode ,restart automatically after fault correction	

	Over temperature protection	-
	Surge capacity	L-N: 1KV
	Withstand voltage	Input-Output: 3000V/5mA/1min
Ambient and Life	Ta(°C)	-20...45
	Tc max.(°C)	max.85
	Storage Temperature(°C)	-40...85
	Ambient humidity range	5%...85%RH, Not condensing
	Nominal life-time(hrs)	50'000@Ta 35°C
Other	Dimensions (L×W×H)(mm)	103mm*35.5mm*16mm
	Weight(g)	50
	Casing material	Plastic
	Housing colour	WHITE
	Type of protection	IP20
	Protection class	class II
	Certificate 认证	
Note	1.Tolerance:includes set up tolerance, line regulation and load regulation. 2.Tested at full load,230Vac.Refer to"Power Factor" and "EFFICIENT"curve graphs. 3.Calculate the model's average efficiency for each test voltage by testing at 100%, 75%, 50%, and 25% of rated current and then computing the simple arithmetic average of these four values. 4.All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature. 5.The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.	

Dimensions(mm)



Wiring Diagram



AC	Terminal block for H03VVH2-F 2×0.75mm ²
DC	Terminal block for H03VVH2-F 2×0.75mm ²

Electrical curves

Fig. 1 Output load-Temperature curve

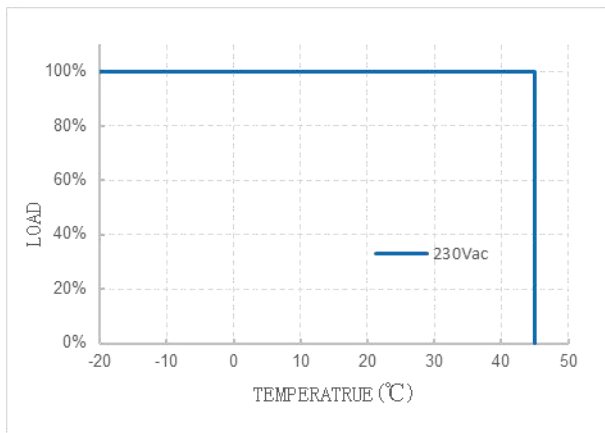


Fig. 2 Static characteristic curve

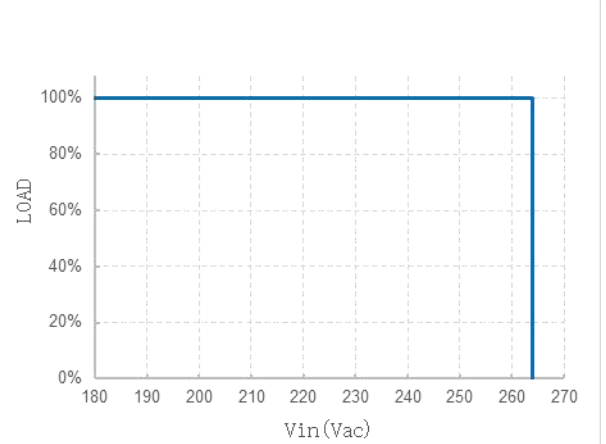


Fig. 3 I-V curve

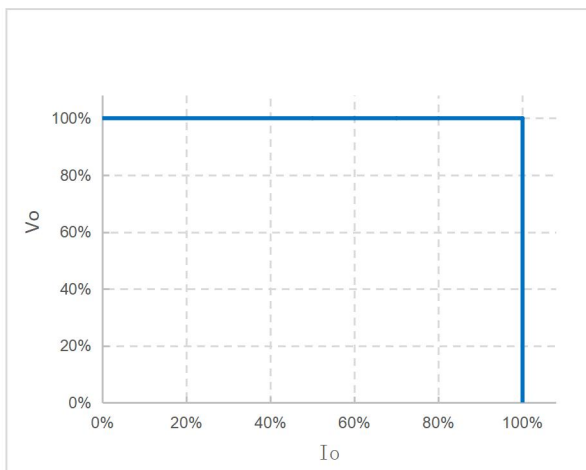


Fig. 4 Power factor characteristic curve

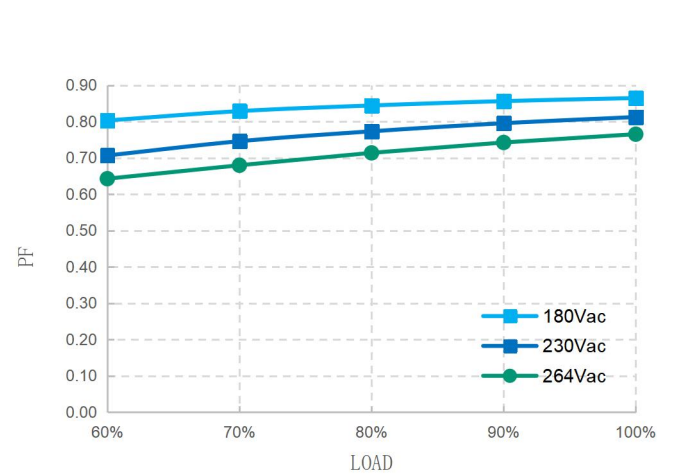


Fig.5 Total harmonic distortion curve (THD)

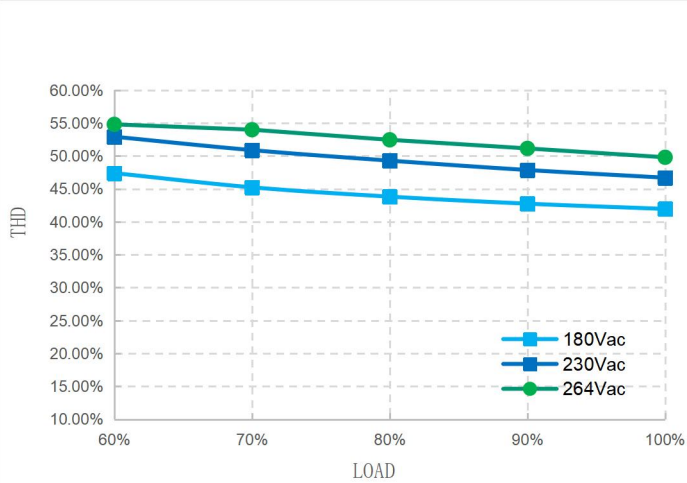
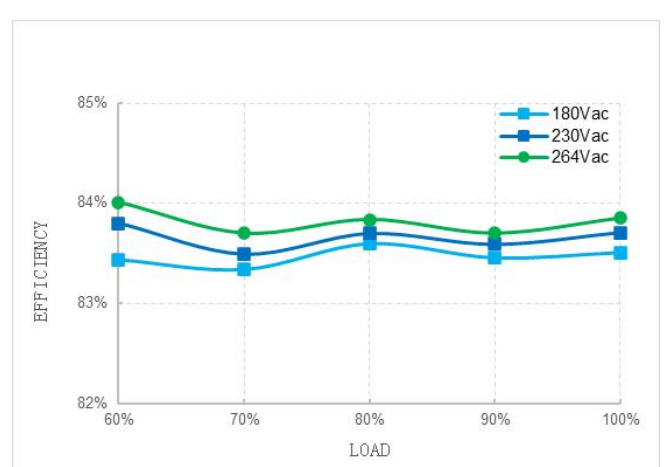


Fig.6 Efficiency-Load curve



MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SE15-12/24VF	30	40	49	61	38	50	61	76

Package

Model	Carton quantity(pcs)	Carton dimension(mm)	G.W./CTN(kg)
SE15-12/24VF			

Revision history

Date	Rev.	Remark
2025.10.11	A3	Datasheet updated version