

Constant Voltage LED Power Supply

SEA75-48VL



Product description

SEA75-48VL series is an indoor constant voltage power supply. Its input voltage range is 220-240Vac, with the high efficiency up to 90%, fanless design, working in the temperature range of -20 °C to +45 °C under free air convection. It has ultra-high power factor, ultra-low total harmonic distortion, low standby power consumption, with all-round protection functions, which not only greatly improves the reliability of the product, but also ensures the life cycle of product. This series of products is designed for LED lighting used in indoor applications. The product designed completely in accordance with world's lighting equipment safety regulations to ensure the safety of both user and luminaire system during installation.

Standards

EN61347-1:2015
EN 61347-2-13:2014+A1
EN62493:2015
AS/NZS 61347.2.13
EN 61347-2-13:2014 +A1
EN61347-1:2015

Characteristics

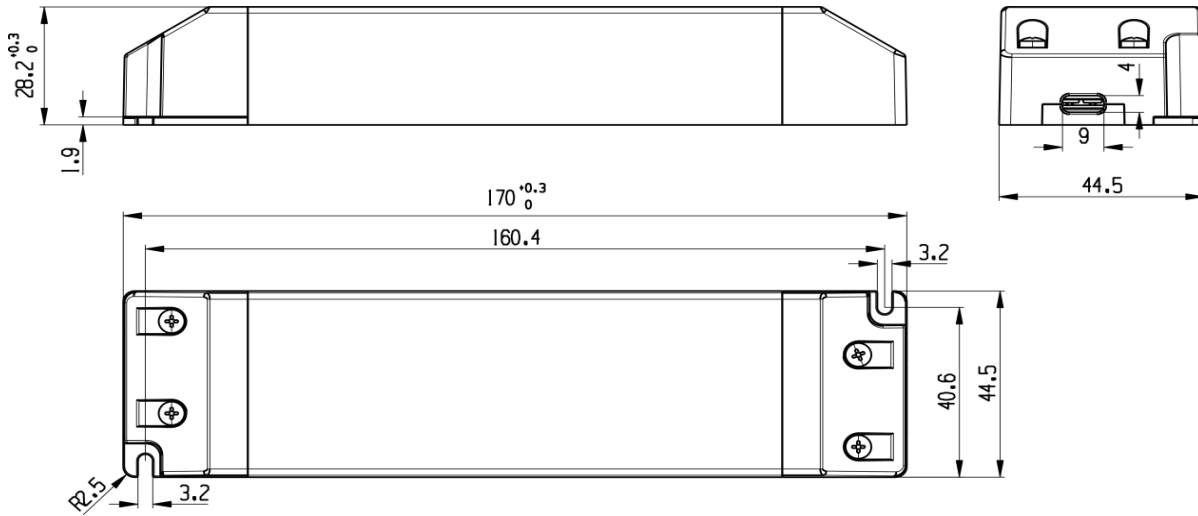
- European AC input / (220-240VAC)
- Waterproof IP20
- Suitable for indoor environment
- Protections: Short circuit / Over voltage / Open circuit
- Fully enclosed plastic housing
- Compliance to worldwide safety regulations for lighting
- Warranty 5 years

Specifications

Model		SEA75-48VL			
Output	turn on time(S)	<0.5			
	output power(W)	75			
	output voltage(V)	48			
	output voltage tolerance	±5%			
	ripple voltage(mV)	±3%			
	Line Regulation	±3%			
	Load Regulation	±3%			
	working current range(A)	0-1.56			
	SVM	≤0.4			
	Pst	≤1			
	dimming type	N/A			
	dimming range	N/A			
	Input	rated DC supply voltage(Vdc)	-		
rated supply voltage(Vac)		220-240			
voltage range(Vac)		198-264			
line frequency(Hz)		50/60			
input current(A)		0.370/230V			
efficiency		90%@full load			
average efficiency 3		≥90%			
no load power consumption(W)		≤0.5W			
power factor		0.95@full load			
Displacement factor		≥0.9			
THD(typ.) THD		10%			
inrush current(Ipk) (Ipk)		34A/225uS			
Leakage current		<0.7mA			
Protection	short circuit protection	hiccup mode, restart automatically after fault correction.			
	over load protection	exceed maximum rated load times 1.1-1.2			
	Over voltage protection	-			
	Over temperature protection	-			
	Surge capacity	L-N: 1KV	M-	N-	O-

	Withstand voltage	Input-Output: 3750V/5mA/1min			
Ambient and Life	Ta(C)	-20...45			
	Tc max.(C)	max.90			
	Storage Temperature(C)	-40...80			
	ambient humidity range	10%...95%RH, Not condensing			
	nominal life-time(hrs)	50'000@Ta			
Other	dimensions (L×W×H)(mm)	170*44.5*28.2			
	weight(g)	222			
	casing material	Plastic			
	housing colour	White			
	type of protection	IP20			
	protection class	class II			
	certificate	TUV CE			
Note	<p>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.</p>				

Dimensions(mm)



Wiring Diagram



Note:

AC	CA 350-04-500-03P-14-200 *green
DC	CA 350-04-500-02P-13-200 *blue

Electrical curves

SEA75-48VL

Fig. 1 Output load-Temperature curve

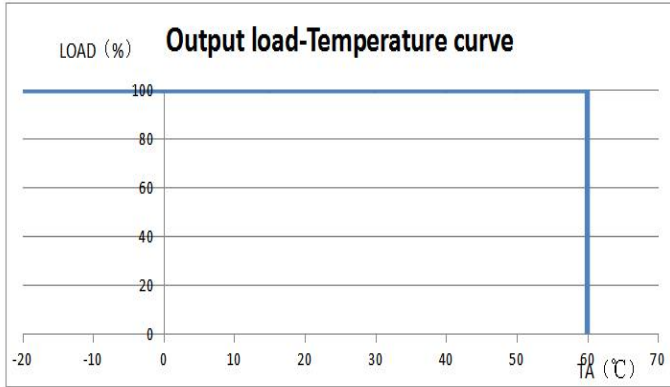


Fig. 2 Static characteristic curve

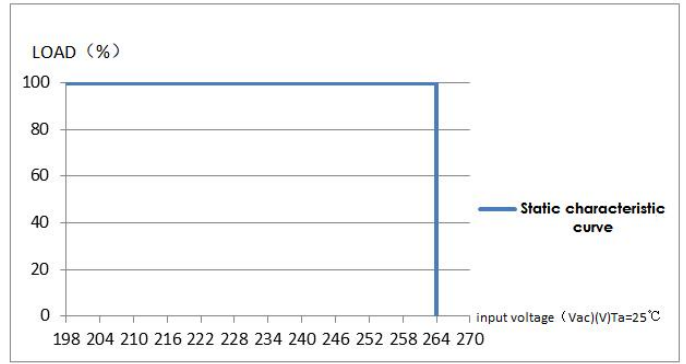


Fig. 3 I-V curve

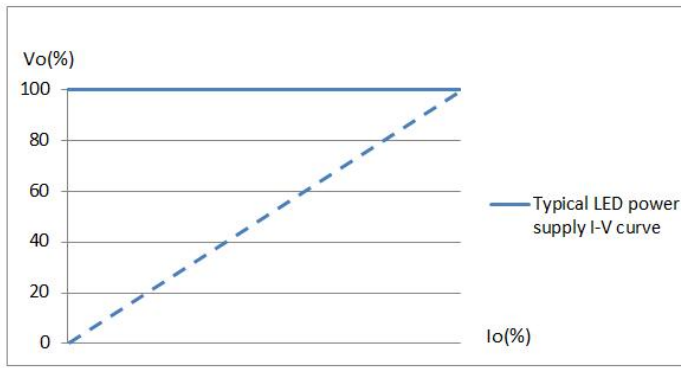


Fig. 4 Power factor characteristic curve

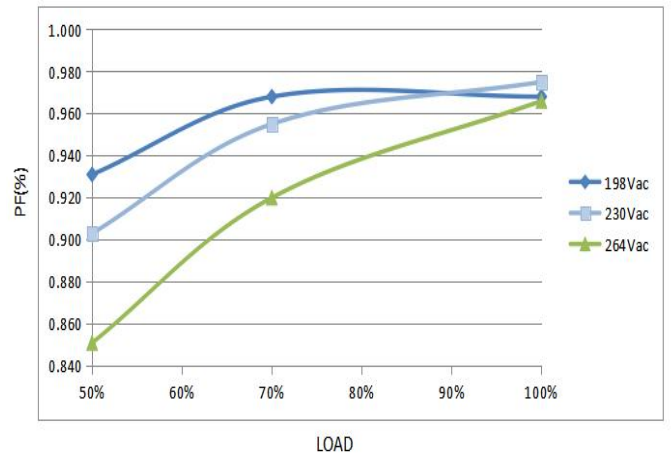


Fig.5 Total harmonic distortion curve (THD)

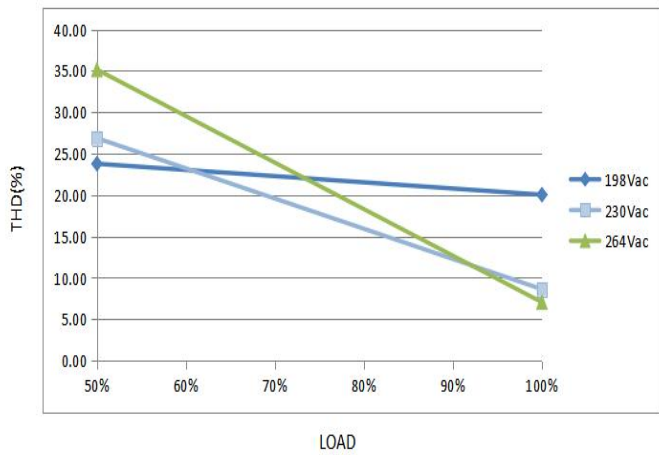
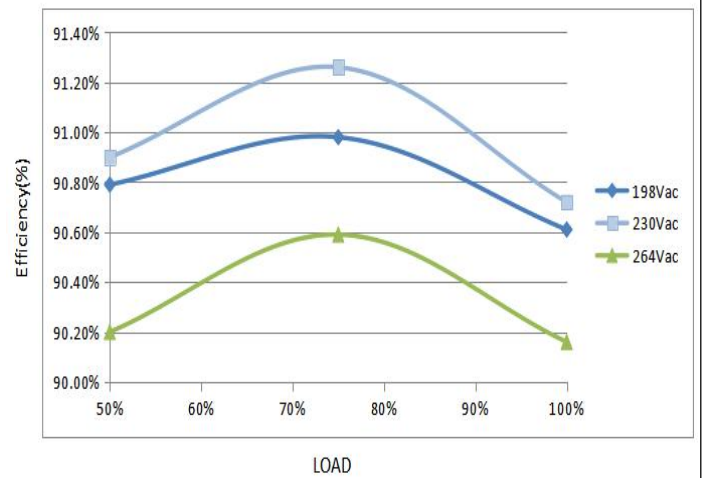


Fig.6 Efficiency-Load curve



MCBS

Model \ MCBS	B10	B13	B16	B20	C10	C13	C16	C20
SEA75-48VL	11	14	18	22	19	25	31	38

Package

Model	Carton quantity(pcs)	Carton dimension(cm)	G.W./CTN(kg)
SEA75-48VL			

Revision history

Date	Rev.	Remark
2023.3	A0	Initial release.