

Constant Current LED Power Supply

SP3-350ILT SP7-350ILT



Product description

SP3-350ILT and SP7-350ILT are constant current LED power supplies.

These two drivers support leading edge phase cutting and trailing edge phase cutting dimmers. The dimming is smooth and flicker-free. They have good compatibility and can be used with many European brands dimmers. The lifetime is 50,000hrs.



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

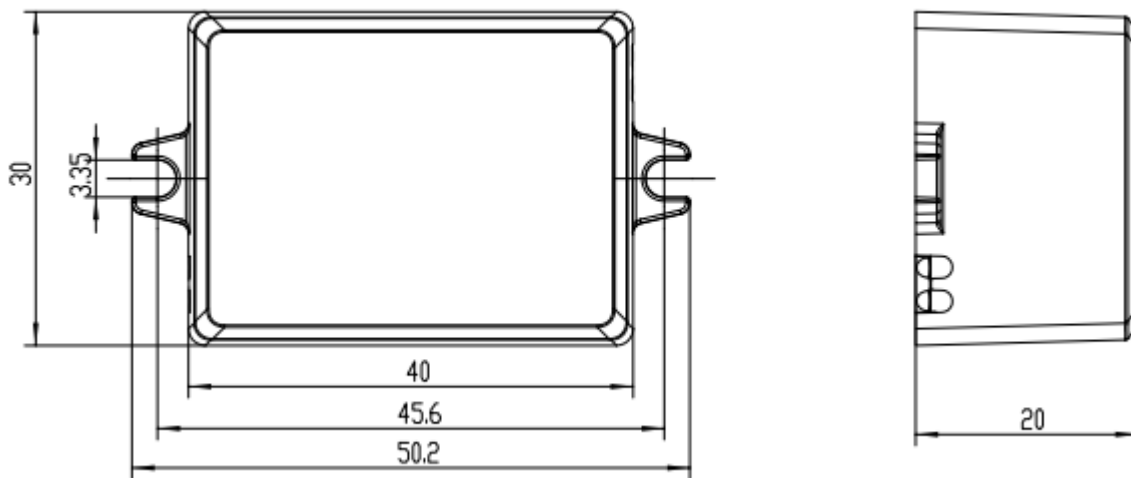
- voltage (198-264VAC)
- Class II design
- Protection type: short circuit/overload/open circuit protection
- Adopt full plastic case
- Comply with world lighting equipment safety regulations
- 5-year warranty
- Suitable for indoor LED lighting related applications
- No-load standby wattage consumption <0.5W

Specifications

Model		SP3-350ILT	SP7-350ILT	
Output	turn on time(S)	<0.5	<0.5	
	output power(W)	3.5	7.7	
	output voltage(V)	2.5-10	10-22	
	output voltage tolerance	N.A	N.A	
	ripple voltage(mV)	N.A	N.A	
	Line Regulation	±5%	±5%	
	Load Regulation	±10%	±10%	
	working current range(A)	0.35	0.35	
	SVM	≤0.4	≤0.4	
	Pst	≤1	≤1	
	dimming type	Triac dimming	Triac dimming	
	dimming range	5-100%	5-100%	
Input	rated DC supply voltage(Vdc)	-	-	
	rated supply voltage(Vac)	220-240	220-240	
	voltage range(Vac)	198-264	198-264	
	line frequency(Hz)	50/60	50/60	
	input current(A)	0.03/230V	0.05/230V	
	efficiency	65%@full load	75%@full load	
	average efficiency 3	≥70%	≥82%	
	no load power consumption(W)	≤0.5W	≤0.5W	
	power factor	0.7@full load	0.8@full load	
	Displacement factor	≥0.7	≥0.8	
	THD(typ.) THD (Type)	-	-	
	inrush current(Ipk) (Ipk)	1.25A/63uS	1.33A/68uS	
Protection	Leakage current	<0.7mA	<0.7mA	
	short circuit protection	hiccup mode, restart automatically after fault correction.	hiccup mode, restart automatically after fault correction.	
	over load protection	exceed maximum rated load times 1.2-1.5	exceed maximum rated load times 1.2-1.5	
	Over voltage protection	-	-	
	Over temperature protection	-	-	
	surge capacity	L-N: 500V	L-N: 500V	
Ambient	Withstand voltage	Input-Output: 3750V/5mA/1min	Input-Output: 3750V/5mA/1min	
	Ta(C)	-20...50	-20...50	
	Tc max.(C)	max.80	max.80	
	Storage Temperature(C)	-40...80	-40...80	

and Life	ambient humidity range	10%...95%RH, Not condensing	10%...95%RH, Not condensing	
	nominal life-time(hrs)	50'000@Ta	50'000@Ta	
Other	dimensions (L×W×H) (mm)	50.2*30*20	50.2*30*20	
	weight(g)	48.7	48.7	
	casing material	Plastic	Plastic	
	housing colour	White	White	
	type of protection	IP20	IP20	
	protection class	class II	class II	
	certificate	CCC CE ENEC	CCC CE ENEC	
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.			
	1			

Dimensions(mm)



Wiring Diagram



AC	18AWG 7726 0.75mm FEP/FEP Brown 180mm 18AWG 7726 0.75mm FEP/FEP Blue 180mm
DC	AWM1015 20AWG*1 UL red (21/0.18) AWM1015 20AWG*1 UL black (21/0.18)

Electrical curves

SP3-350ILT

Fig. 1 Output load-Temperature curve

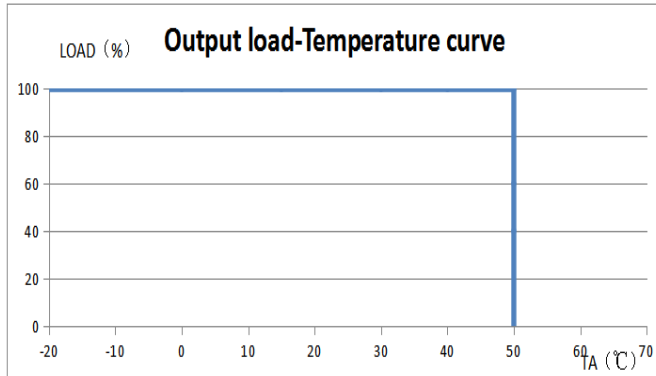


Fig. 2 Static characteristic curve

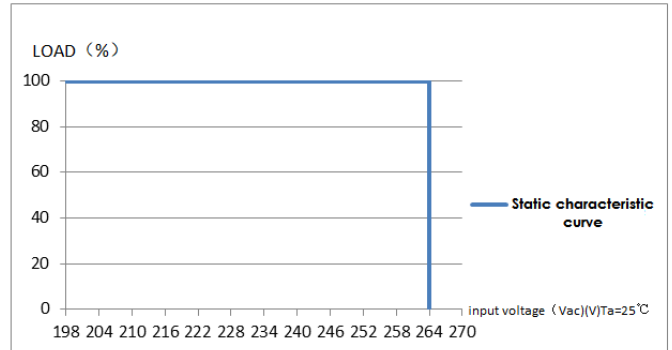


Fig. 3 I-V curve

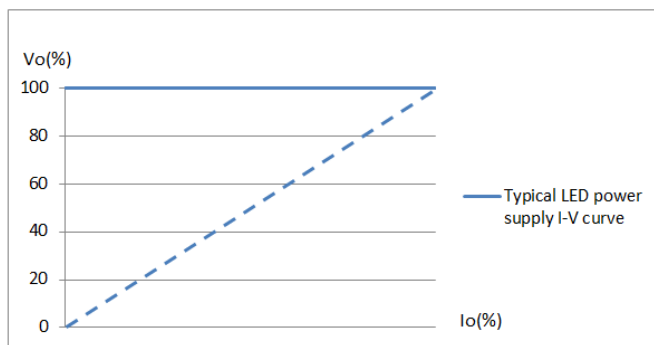


Fig. 4 Power factor characteristic curve

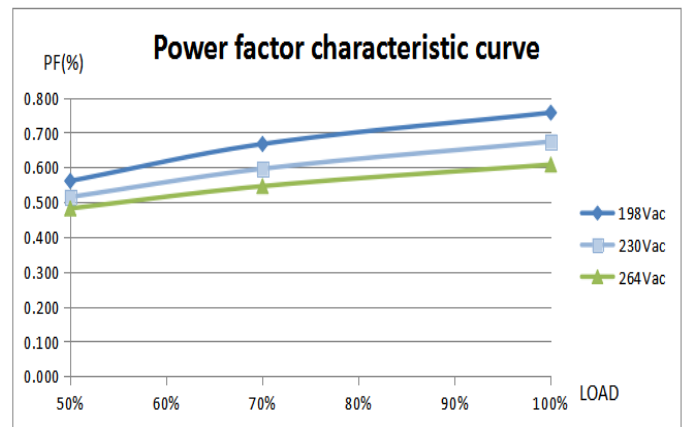


Fig.5 Total harmonic distortion curve (THD)

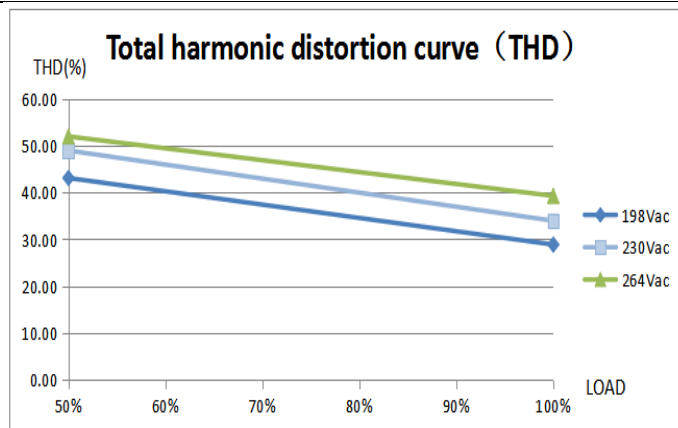


Fig.6 Efficiency-Load curve

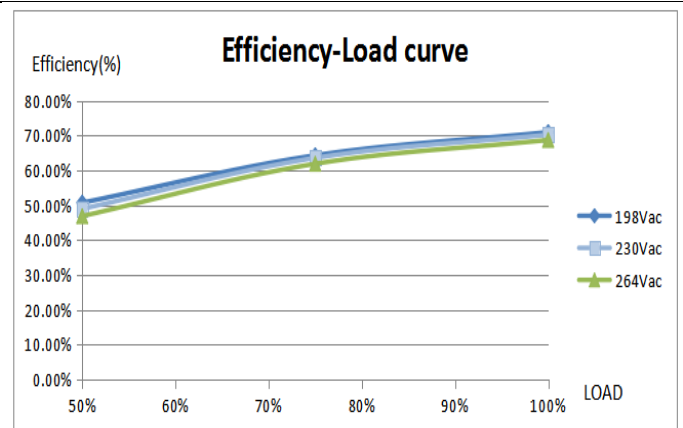


Fig. 1 Output load-Temperature curve

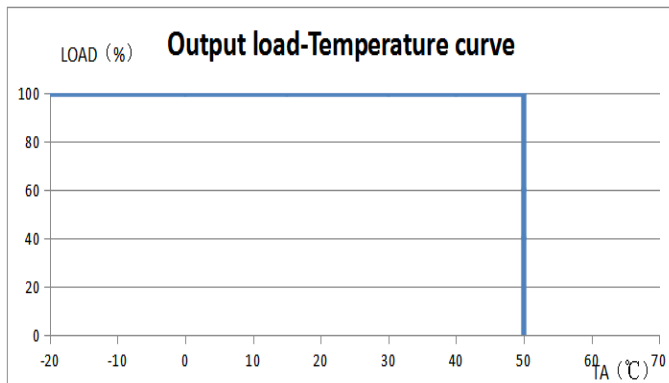


Fig. 2 Static characteristic curve

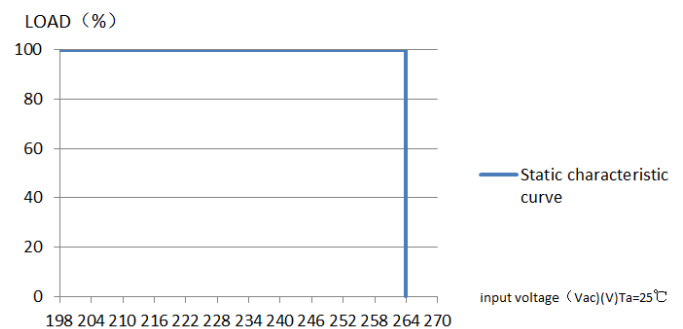


Fig. 3 I-V curve

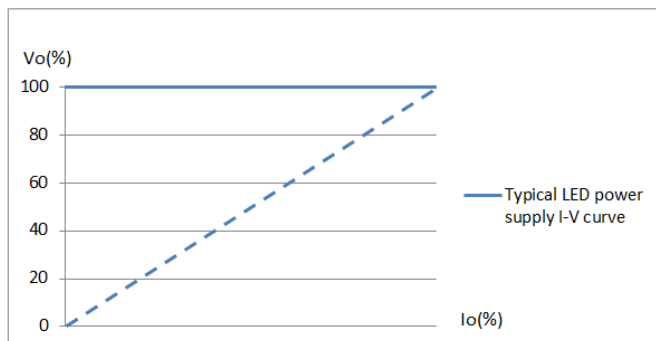


Fig. 4 Power factor characteristic curve

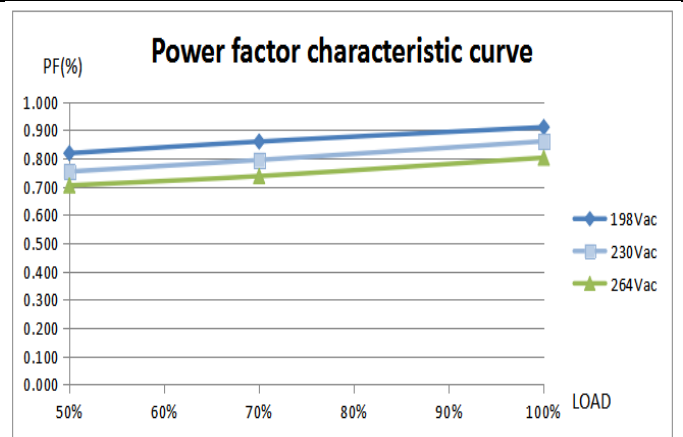


Fig.5 Total harmonic distortion curve (THD)

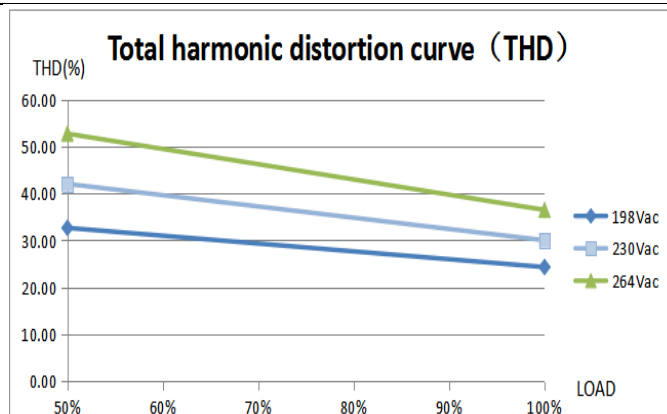
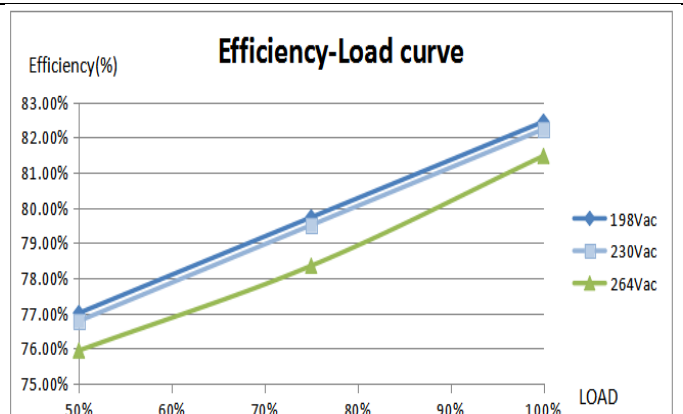


Fig.6 Efficiency-Load curve



MCBS

MCBS Model	B10	B13	B16	B20	C10	C13	C16	C20
SP3-350ILT	370	481	592	740	370	481	592	740
SP7-350ILT	229	297	366	458	229	297	366	458

Compatibility dimmer charts

Dimmer
WI-FI Dimmer module Art. No.QS-WIFI-D02-TRIAC-2C(230VAC / 50Hz)
MIBOXER AC Triac RF + Push dimmer Model TRI-C1(230VAC / 50Hz)
DalcNet DAC230-1CH-DALI(230VAC / 50Hz)
MOES Smartdimmer module Model: MS-105(230VAC / 50Hz)
FINDER 15.91.8.230.0000(230VAC / 50Hz)
Ns, Cod. TRA-0231 Sunrichermod. SR-2303SAC-HP(230VAC / 50Hz)
Vadsbo VD600(230VAC / 50Hz)
Jung 1731DD(230VAC / 50Hz)
Merten MEG5134-0000(230VAC / 50Hz)
Busch und jager6523 0-102(230VAC / 50Hz)
GIRA 245000(230VAC / 50Hz)
Varilight JSP401 (230VAC / 50Hz)
Berker 2873(230VAC / 50Hz)
SG LEDDim 200(230VAC / 50Hz)

Revision history

Date	Rev.	Remark
2023.9.26	A0	
2024.1.16	A1	Data updated