

Features

- . IP20
- . Protections: Short circuit / Overload /Over voltage / Over temperature
- . Comply with the world lighting equipment safety standards
- . Lifespan: 30,000hrs



Description:

SL75-48VF is an indoor CV linear LED power supply, rated input voltage AC180-264Vac ,with the high efficiency up to 91.5% , working temperature range of - 20 ° C to + 45 ° C under free air convection. It has a super high PF and ultra-low THD, pass standard EN61000-3-2 and total harmonic distortion, Low standby power consumption, all-round protection function, it not only greatly improves the reliability of products but also ensures the life cycle of products. This series for LED Lighting design, suitable for advertising board, light box, neon lights etc. also applied to indoor cabinet light etc furniture industry. Slim design greatly save the application room for light, screw design convenient for wiring connecting.

Model

Model	Output voltage	Output current	Max. Output power	Output current precision	Total harmonic distortion (Typ.)	Power factor (Typ.)	Efficiency (Typ.)
SL75-48VF	48V	0-1.56A	75W	±5%	12%	0.98	91.5%

Remark: All the parameters are measured at 230VAC input, full load and 25 °C of ambient temperature if they are not specially mentioned



Indoor LED Power Supply

Input

Parameter	Min. value	Typical value	Max. value	Note
Rated input voltage	220 Vac		240Vac	Derating curve is shown in figure
Input voltage	180Vac		264Vac	
Input frequency	47Hz		63Hz	
Max. Input current			0.48A	110Vac,Full Load
Input inrush current			75A	180Vac,Full Load
Power factor	0.9	0.98		230Vac/50Hz, Cold Start
Total harmonic input		12%	12.5%	230Vac,Full Load
Leakage current			0.7mA	230Vac/50Hz,Full Load
Stand-by power consumption		0.4W	0.5W	230Vac/50Hz,No Load

Output

Parameter	SL75-48VF	Note
Output voltage	48V	The max.output power must meet the requirements $P_o=V_o*I_o=75W$
Rated output current		
Output current	0-1.56A	
Rated output power	75W	
Rated output efficiency	91.50%	230Vac
Output voltage precision		
Output voltage ripple (PK-PK)	±1%	Full load (Test under 20M bandwidth)
Output current ripple (PK-PK)	---	Full load (Test under 20M bandwidth) 230Vac
Rise time	100mS	
Startup time	<500mS	230Vac
Line regulation	±1%	full load
Load regulation	±1%	



Characteristic curve

Fig. 1 Output load-Temperature curve

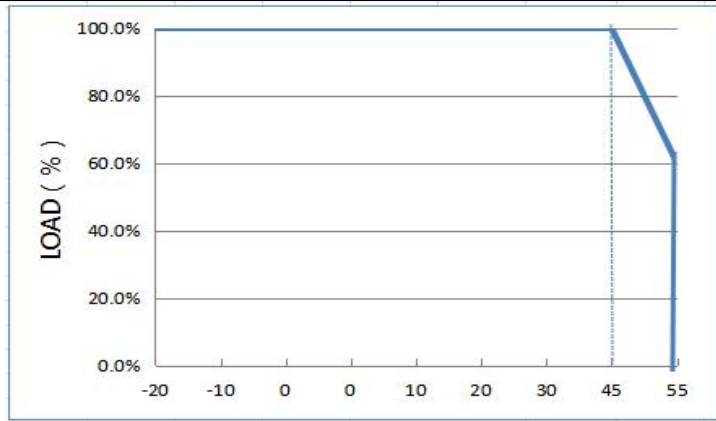


Fig. 2 Static characteristic curve

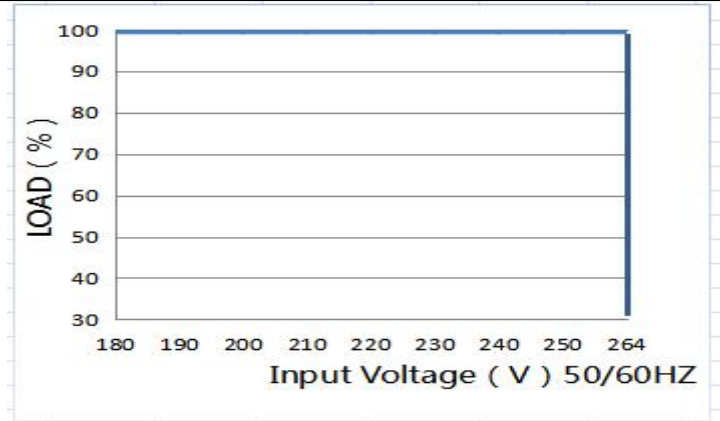


Fig. 3 I-V curve

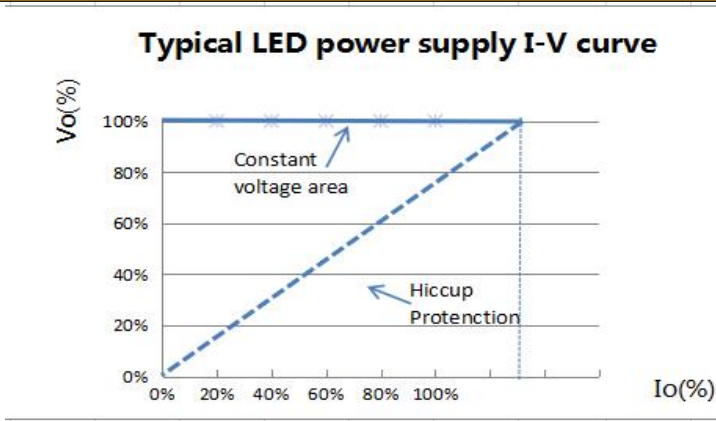


Fig. 4 Power factor characteristic curve

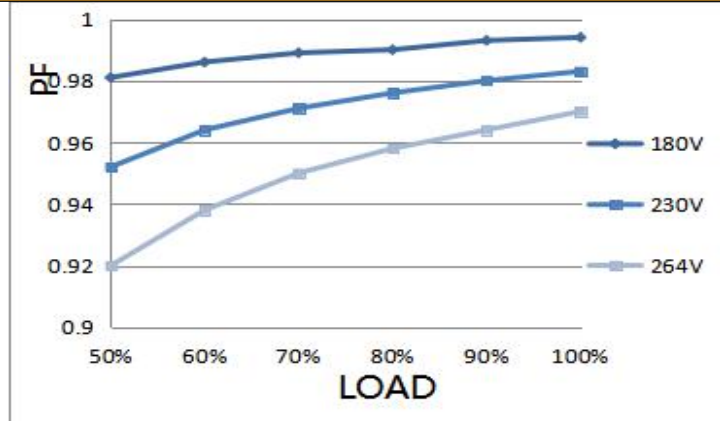


Fig.5 Total harmonic distortion curve (THD)

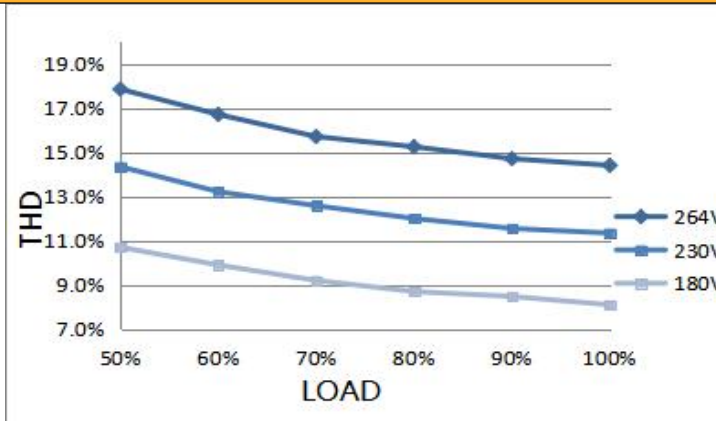
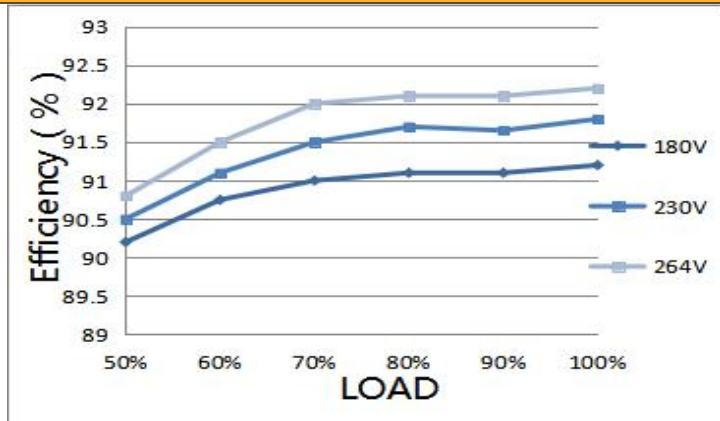


Fig.6 Efficiency-Load curve





Indoor LED Power Supply

Protection

Parameter		Conditions	Note
Protection	Over load	1.8times rated load	Overloading restores automatically
	Short circuit	Short circuit power \leq 3W	Hiccup mode, auto-recovery after short circuit removal
	Over voltage	1.5 times of rated output voltage	Turn off the input voltage and recover after restart
	Over temperature	---	----

Environment Requirement

Parameter	Min.	Typ.	Max.	Note
Working temp.	-20°C	25°C	+45°C	See Fig.1
Storage temp.	-40°C	25°C	+85°C	
Working humidity	10%RH		90%RH	
Storagehumidity	5%RH		95%RH	
IP grade		IP20	IP20	
Cooling mode	Natural cooling			

Remark: All the parameters are measured at 25 °C of ambient temperature if they are not specially mentioned



Indoor LED Power Supply

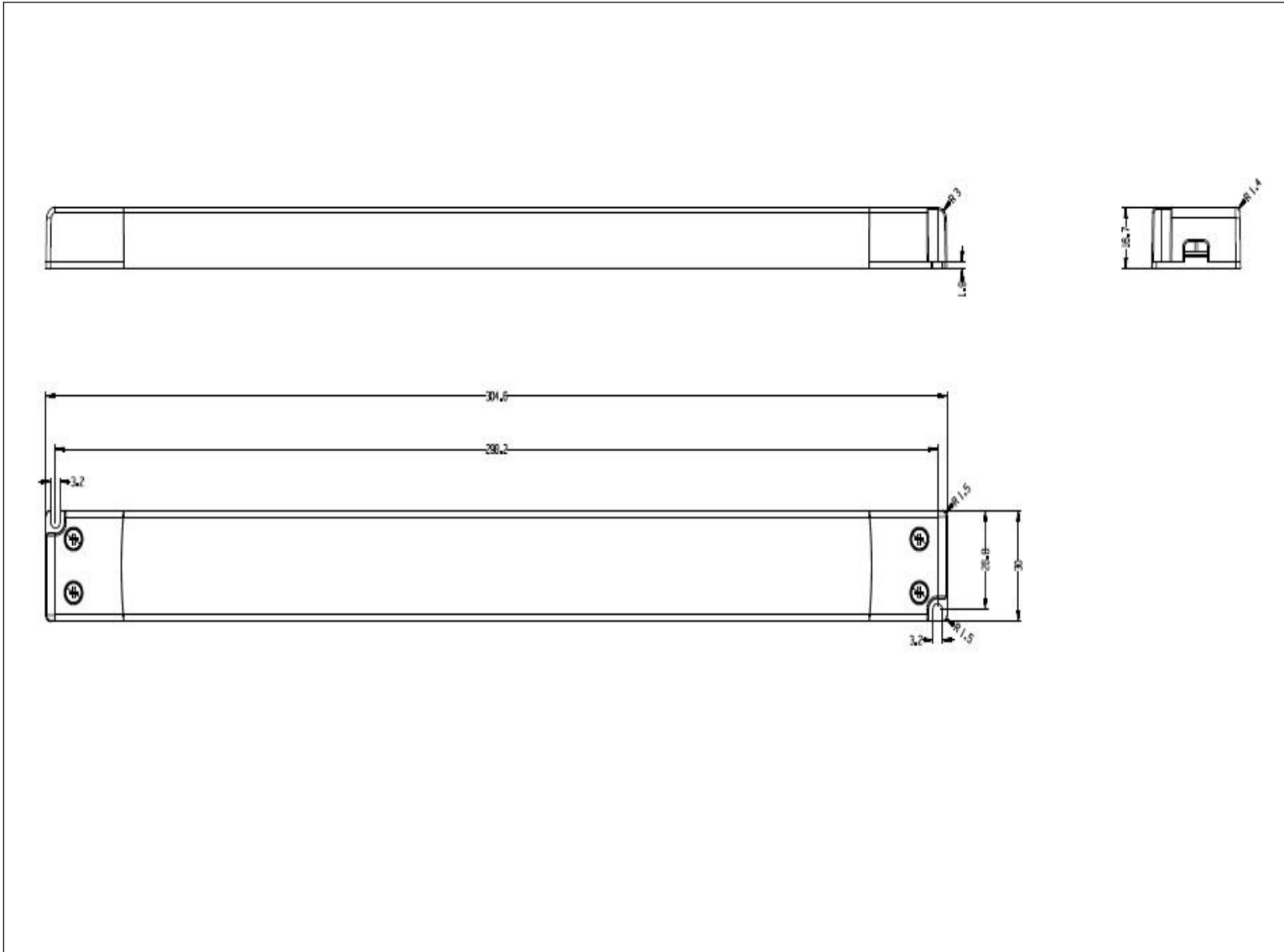
Safety&EMC standard

Certificate		Safety standards	Certification	Note
UL/CUL		---		
TUV		EN61347-1:2015 EN 61347-2-13:2014+A1 EN62493:2015		
SAA		AS/NZS 61347.2.13		
CCC		---		
CE		EN 61347-2-13:2014 +A1 EN61347-1:2015		
Safety test		Qualification	Note	
Dielectric compressive strength	Input to output	3200Vac/5mA Max/60s	Strengthen insulation,no breakdown,no arc	
	Primary to ground	1600Vac/5mA Max/60s ---	Basic insulation,no breakdown, no arc	
	Secondary to ground	1000Vac/5mA Max/60s ---	Functional insulation,no breakdown,no arc	
Insulation resistance	Input to output	≥10MΩ	Test voltage : 500Vdc	
Grounding resistance		≤0.1Ω---	25A/1min	
Leakage current		≤0.75mA	277Vac	
EMI/EMS item		Standard/Level	Data	
Conduction CE		EN55015		
Radiation RE		EN55015		
Harmonics		EN IEC 61000-3-2	Class C	

Others

Parameters	Condition	note
Lifetime	30,000 hours	230Vac,full load, TC. 75°C
MTBF	200,000 hours	230Vac,full load, environment temperature (MIL-HDBK-217F)
TC	85°C	
Warranty	3 years	Case temperature : 75°C---
Weight	g	
Dimensions	305mm×30mm×16.7mm	L x Wx H

Characteristic curve



Remark :

AC input cable	Terminal block,H03VVH2-F 2×0.75mm ²
DC output cable	Terminal block,H03VVH2-F 2×0.75mm ²