

#### **IP20 LED Power Supply**



#### **Features**

- . Suitable for leading-edge and trailing-edge triac dimmer
- . EU Standard input voltage (220-240VAC)
- . High PF IP20
- . Suitable for dry environment
- . Protections : Open circuit/Short
- . Adopt plastic case and internal glue potting
- . Built in lightning protection device can meet the requirements of 1KV
- . Compliance to worldwide safety regulations for lighting
- . 3 Years warranty

#### **Description:**

SP36 series is an indoor triac dimmable constant voltage LED power supply. Input voltage range (220-240VAC), working in the temperature range of -20°C~+45°C with natural cooling. This product with high-cost performance and meets the SELV standard of electric shock protection. In order to improve the safety of the product, we add short circuit, overload and open circuit protection. According to new ERP Directive that meets the low standby power consumption standard. This series product are designed for LED Lighting and applied for indoor lighting. Suitable for almost all kinds of applications in indoor places where LED Lighting can be installed. Comply with the world lighting equipment safety specifications, at the same time to ensure the safety of users and lighting system in the installation process.

#### Model

Model	Output Voltage	Output current	Max. output power	Power factor ( Typ. )	Full load efficiency	Dimming range	Input power
SP36-12VFT-1	12V±5%	1.0-3.0A	36W	> 0.9	≥ 85 %	20%-90%	< 45W
SP36-24VFT-1	24V±5%	0.5-1.5A	36W	> 0.9	≥ 85 %	20%-90%	< 45W

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



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### Input

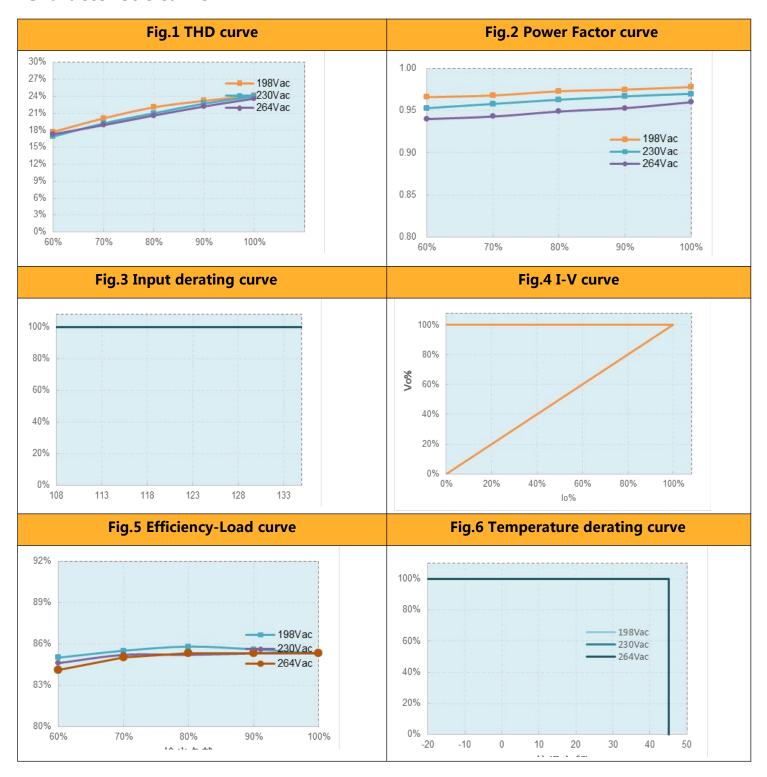
Parameter	Min value	Typical	Max	Note
		value	value	
Rated input voltage	220		240	
Input voltage	198Vac		264Vac	
Input Frequency		50Hz		
Max.Input current			0.25A	230Vac/50Hz , Full Load
Input inrush current			75A	230Vac/60Hz , Cold Start
Leakage current			0.7mA	230Vac/50Hz , Full Load
Stand-by power		0.36W	0.5W	230Vac/50Hz , No Load
consumption				

## Output

Parameter	SP36-12VFT-1	SP36-24VFT-1	Note
Rated output voltage	12.0VDC	24.0VDC	
Rated output current	3.0A 1.5A		
Output current	1.0-3.0A	1.0-3.0A 0.5-1.5A	
Rated output power	36W	36W	
Full load efficiency	≥ 85%	≥ 85%	230Vac
Output voltage tolerance	±5%		
Output voltage ripple	<20%		Full load ( Test under
(PK-PK)			20M bandwidth )
Line regulation	±3%		
Load regulation	±5%		

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#### **Characteristic curve**





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#### **Protection**

Parameter		Conditions	Note
	Over Load	Ta ,0.94-1.06 times of input voltage and 1.2 times of rated output power	Auto-recovery when overload removed
Protection	Short circuit	Hiccup mode	Hiccup mode,auto- recovery when short circuit removed
	Over voltage	Ta, 0.94-1.06 times of input voltage, output voltage is 1.5 times of rated one.	Auto-recovery when overload removed
	Open circuit	Ta,Rated input voltage,Output without load	Hiccup mode

## **Environment Requirement**

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

## 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		



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Safe	ety test	Technical indexes	Note
	Input to Output	3750Vac/5mA	Strengthen insulation,no
Dielectric		Max/60s	breakdown,no flashover
compressive	Primary to ground		Basic insulation,no breakdown,
strength			no flashover
	Secondary to		Functional insulation,no
	ground		breakdown,no flashover
Insulation	Input to Output	≥10MΩ	Test Voltage : 500Vdc
resistance			
Gr	ounding		25A/1min
res	sistance		
Le	akage	≤0.75mA	264Vac
cu	rrent		
	EMI/EMS item	Standards	Basis
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
TC	85℃	
Warranty	3 Years	
Weight	140g	
Dimensions	158mm *45.8mm *18.3mm	LxWxH



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