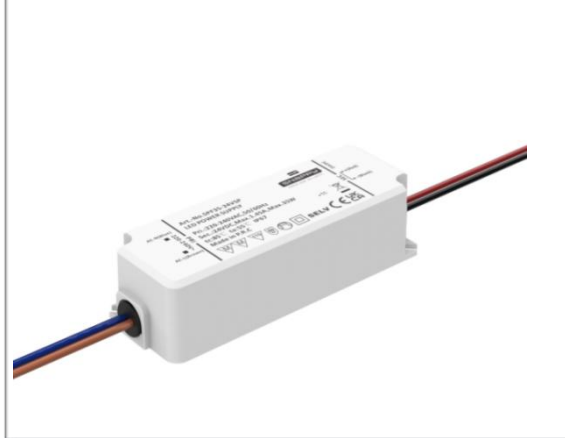


Constant Voltage LED Power Supply

SPF35-12VSP



Product description

The SPF35-12VSP is a constant voltage IP67 LED driver power supply with an input voltage range of 220–240Vac and up to 86% conversion efficiency. It works in the temperature range of -20°C ~ $+50^{\circ}\text{C}$ natural cooling casing, has high power factor, low standby power consumption and all-round protection function. This not only greatly increases the reliability of the product, but also guarantees the product life cycle. This series of products is designed for LED lighting and is designed for indoor lighting. It is suitable for a wide range of applications in almost all indoor locations where LED luminaires can be installed. Comply with the world's lighting equipment safety regulations, while ensuring the safety of the user and the 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

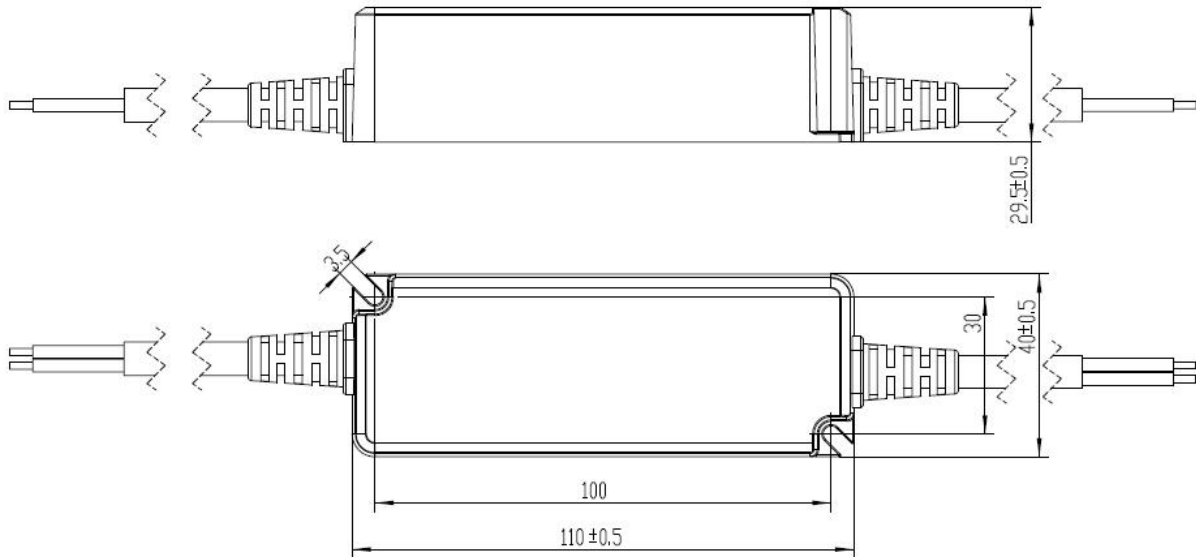
- European input voltage 220–240VAC
- IP67
- Suitable for indoor environment
- Short circuit/over load/open circuit protection
- Plastic case
- Compliance to worldwide safety regulations for lighting
- Warranty: 5 years

Specifications

| Model | | SPF35-12VSP |
|------------------|------------------------------|--|
| Output | turn on time(S) | <0.5 |
| | output power(W) | 35 |
| | output voltage(V) | 12 |
| | output voltage tolerance | ±5% |
| | ripple voltage(mV) | 240 |
| | Line Regulation | 3% |
| | Load Regulation | 3% |
| | working current range(A) | 0-2.9 |
| | 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) | 0.18 |
| | efficiency | 86%@full load |
| | average efficiency 3 | ≥86% |
| | no load power consumption(W) | ≤0.5W |
| | power factor | 0.97@full load |
| | THD(typ.) | 60-100% loaded fractional harmonics |
| | inrush current(Ipk) | 21A/175uS |
| | Leakage current | <0.7mA |
| Protection | short circuit protection | hiccup mode, restart automatically after fault correction. |
| | over load protection | exceed maximum rated load times 1.2 |
| | Over voltage protection | - |
| | Over temperature protection | - |
| | surge capacity | L-N: 1KV |
| | Withstand voltage | Input-Output: 3750V/5mA/1min |
| Ambient and Life | Ta(C) | -20...50 (see fig1) |
| | Tc max.(C) | max.80 |
| | Storage Temperature(C) | -40...80 |
| | ambient humidity range | 10%...95%RH, Not condensing |

| | | |
|--------------|--|-------------|
| | nominal life-time(hrs) | 50'000 |
| Other | dimensions (L×W×H)(mm) | 110*40*29.5 |
| | weight(g) | 228 |
| | casing material | Plastic |
| | housing colour | White |
| | type of protection | IP67 |
| | protection class | class II |
| | certificate | CB CE ENEC |
| Note | <p>1.Tolerance:includes set up tolerance, line regulation and load regulation.</p> <p>2.Tested at full load,230Vac.Refer to"Power Factor" and "EFFICIENT"curve graphs.</p> <p>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.</p> <p>4.All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 of ambient temperature.</p> <p>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



| | |
|----|--|
| AC | SR AWM1015 18AWG*1 UL brown/blue 105°600V L=150mm |
| DC | SR AWM1007 UL 16AWG*1 80°C 300V red/black SNP-023002 |

Electrical curves 曲线

SPF35-12VSP

Fig. 1 Output load-Temperature curve

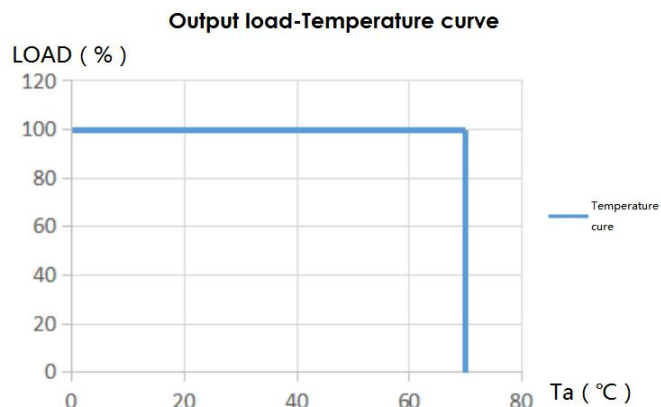


Fig. 2 Static characteristic curve

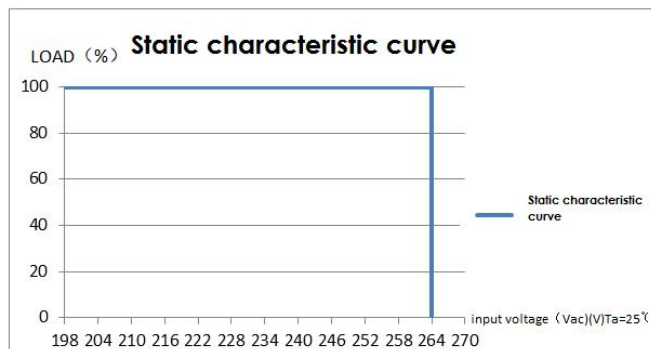


Fig. 3 I-V curve

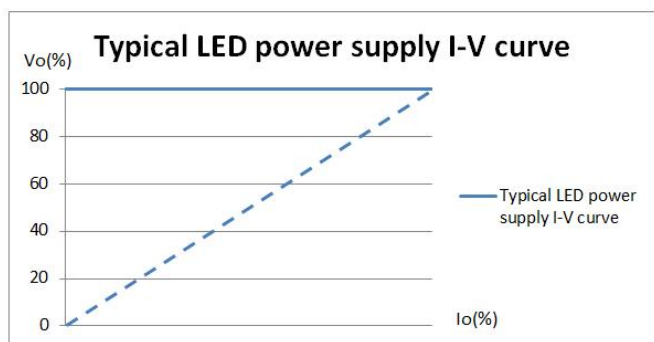


Fig. 4 Power factor characteristic curve

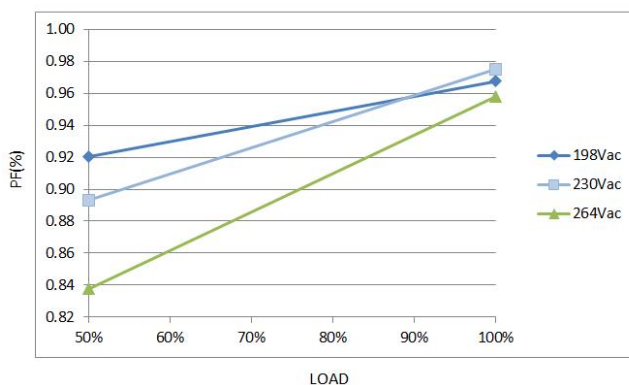


Fig.5 Total harmonic distortion curve (THD)

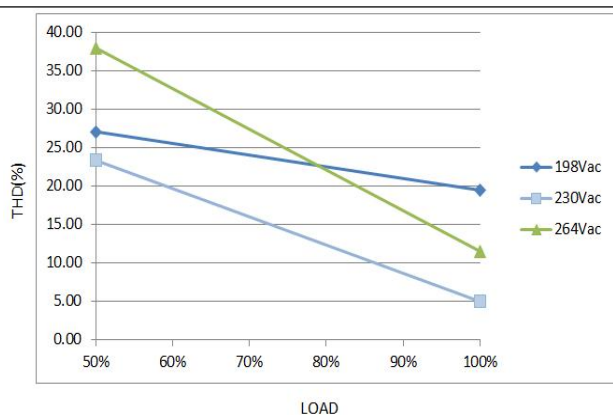
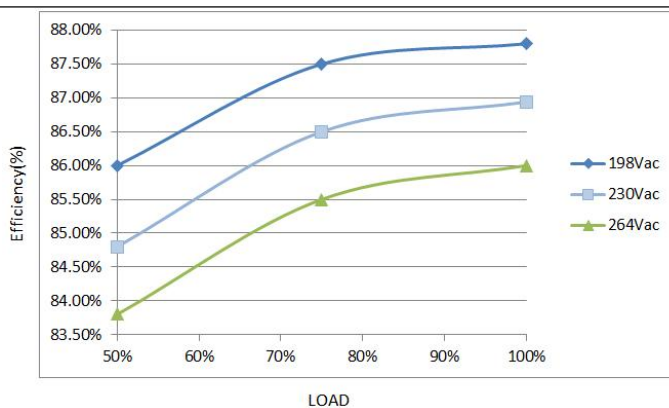


Fig.6 Efficiency-Load curve



| Model \ MCBS | | | | | | | | |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|
| | B10 | B13 | B16 | B20 | C10 | C13 | C16 | C20 |
| SPF35-12VSP | 10 | 13 | 17 | 21 | 17 | 23 | 29 | 36 |
| | | | | | | | | |

Package

| Model | Carton quantity(pcs) | Carton dimension(mm) | G.W./CTN(kg) |
|-------------|----------------------|----------------------|--------------|
| SPF35-12VSP | | | |
| | | | |

Revision history

| Date | Rev. | Remark |
|--------|------|------------------|
| 2023.3 | A1 | Initial release. |
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