

## Features

- For LED Retail & Outdoor Application
- Wide Input Range for Worldwide use (up to 305Vac)
- Built-in PFC Function: up to PF 0.99
- IP65 Design for Outdoor Installation
- Suitable to Dry, Damp, Wet Location
- High Surge Protection: 4kV(IEC61000-4-5)
- 1-10V Dimming Function
- High Reliability & Long Life 50,000hrs
- Constant Current Design
- Isolation Class II Design, No F.G.
- Type HL LED Driver for use in Class I Division 2 hazardous location luminaires
- All-Round Protections: Short Circuit/ Over Voltage/ Over Temperature
- Safety: Meet IEC61347-2-13, UL8750 & EMI EN55015



**IP65**        **SELV** **TL** **HL** **Class 2**

VG Type: IP65 rated with 1-10V Dimming Function; Type HL Rated  
G Type: IP65 rated and without Dimming Function; Type HL Rated

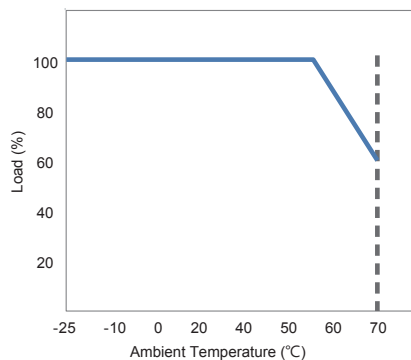
### SPECIFICATIONS

| Model Name   |                               | FSP025OUCS072P  | FSP025OUCS037P | FSP025OUCS024P | FSP025OUCS018P | FSP025OUCS012P |
|--------------|-------------------------------|---|----------------|----------------|----------------|----------------|
| Output       | Rated Power                   | 25W   | 25W            | 25W            | 25W            | 25W            |
|              | Output Voltage                | 44-72V  | 22-37V         | 13-24V         | 8-18V          | 6-12V          |
|              | Rated Current                 | 350mA   | 700mA          | 1050mA         | 1400mA         | 2050mA         |
|              | Output Current Accuracy       | ±5%   | ±5%            | ±5%            | ±5%            | ±5%            |
|              | Line Regulation               | ±0.5%   | ±0.5%          | ±0.5%          | ±0.5%          | ±0.5%          |
|              | Turn On Delay Time,Rise time  | ≤1s max ;≤400ms max   |                |                |                |                |
| Input        | Input Voltage/ Frequency[3]   | 90~305Vac/ 47~63Hz  |                |                |                |                |
|              | Power Factor (typ.)           | PF≥0.99/120Vac, PF≥0.96/230Vac, PF≥0.93/277Vac at full load   |                |                |                |                |
|              | Efficiency (max.)             | 88%   | 88%            | 87%            | 86%            | 84%            |
|              | Total Harmonic Distortion[4]  | THD <20% (Output Loading ≥50% at 120Vac/230Vac, Output Loading ≥75% at 277Vac)  |                |                |                |                |
|              | AC Current (typ.)             | ≤0.3A /120Vac ; ≤0.2A /230Vac ; ≤0.2A /277Vac   |                |                |                |                |
|              | Inrush Current (typ.)         | 5A at 230Vac, 25°C cold start   |                |                |                |                |
| Environment  | Leakage Current               | ≤0.25mA/277Vac  |                |                |                |                |
|              | Operating Temperature         | -25°C ~ +70°C (Please Refer to "Derating Curve")  |                |                |                |                |
|              | Operating Humidity            | 10~90% RH non-condensing  |                |                |                |                |
|              | Storage Temperature, Humidity | -35°C~+85°C, 10~95%RH   |                |                |                |                |
| Protection   | Vibration                     | 0.02g <sup>2</sup> /Hz at 5 Hz sloping to 0.04g <sup>2</sup> /Hz at 20 Hz, and maintaining 0.04g <sup>2</sup> /Hz from 20 Hz to 500 Hz at a constant acceleration of 4.43G for 30 minutes per axis for all three axes |                |                |                |                |
|              | Over Voltage Protection       | <85V  | <50V           | <35V           | <32V           | <15V           |
|              | Short Circuit Protection      | Shut down and latch off, re-power on to recover   |                |                |                |                |
|              | Over Temperature Protection   | Shut down and latch off, re-power on to recover   |                |                |                |                |
| Safety & EMC | Safety Standards              | UL8750, Type HL, LVLE, UL1310 Class 2, CSA-C22.2 No. 250.13, EN61347-1, EN61347-2-13 Approved.  |                |                |                |                |
|              | EMC Standard                  | Compliant with EN55015/CISPR22 CLASS B, Compliant with EN61000-3-2 Class C (≥60% load), EN61000-3-3   |                |                |                |                |
|              | Surge Protection              | Differential Mode: 4KV  |                |                |                |                |
|              | Withstand Voltage (Hipot)     | I/P-CASE 3000Vac, O/P-CASE 3000Vac  |                |                |                |                |
|              | Isolation Resistance          | I/P-CASE ,O/P-CASE: 100M ohm @ 500Vdc/ 25°C   |                |                |                |                |
| Others       | Type TL                       | 76/56°C   | 82/62°C        | 78/56°C        | 79/61°C        | 76/60°C        |
|              | Life Time [5]                 | 50,000 hours at Tcase of ≤ 65°C   |                |                |                |                |
|              | MTBF                          | 500,000 hours, MIL-HDBK-217F(25°C)  |                |                |                |                |
|              | Dimension (LxWxH)             | 78 x 80.3 x 25.4 mm   |                |                |                |                |
| Others       | Net Weight / Packing          | 220g  |                |                |                |                |

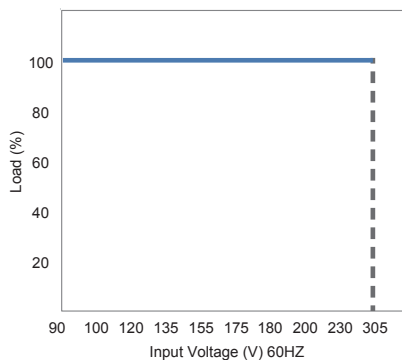
#### Notes:

1. All data NOT specially mentioned are measured at 230Vac/ 50Hz input, full load and 25°C of ambient temperature.
2. The ripple current must be measured under the condition of AC coupling & 20MHz bandwidth. (Rated input and rated output)
3. Derating may be needed under low input voltages. Please check the static characteristics for more details.
4. Measured at rated output voltage.
5. Measured at 230Vac/50Hz input, rated load.
6. 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.

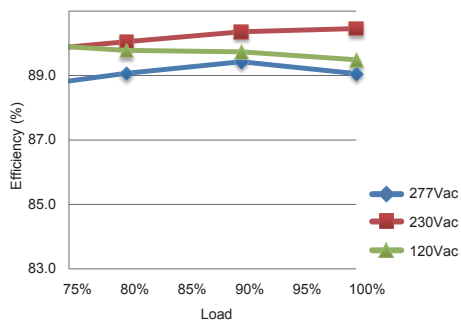
## Derating Curve



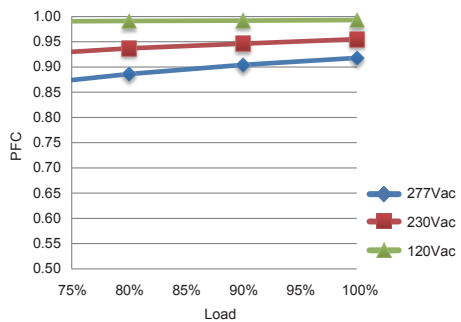
## Static Curve



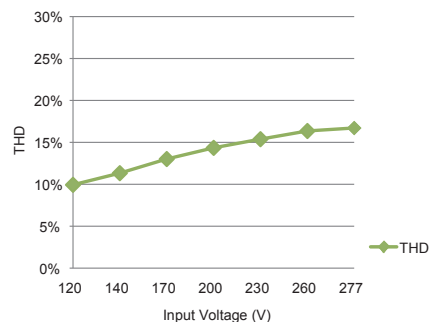
## Efficiency



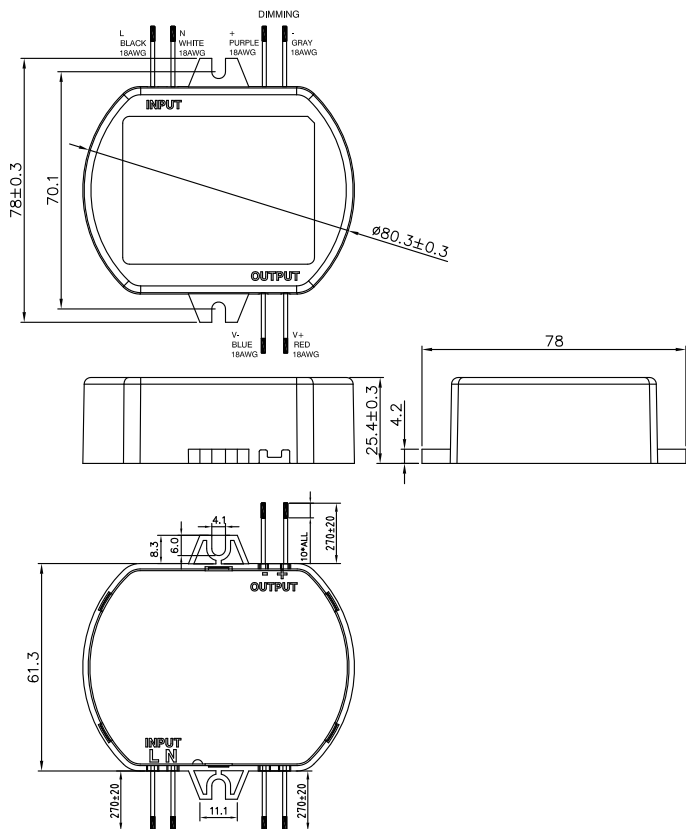
## PFC vs Loading



## THD vs Input Voltage



## VG Type:



## G Type:

