



Features:

- Universal AC input range
- Fully encapsulated with IP67 level
- Protections: short circuit, over load, over voltage, over temperature
- Cooling by free air convection
- Built in active PFC function, PF ≥ 0.92
- Class 2 power supply unit, CLASS II power supply, no FG
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 5 Years warranty

SPECIFICATION

Dimension: 240×43×30mm

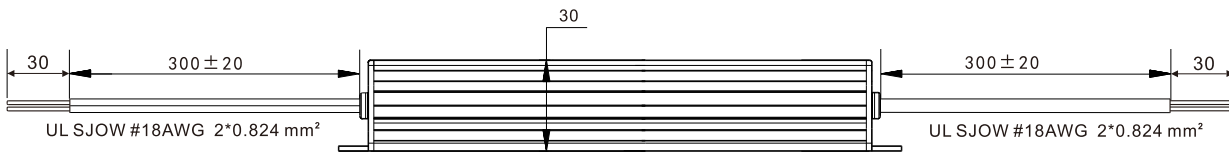
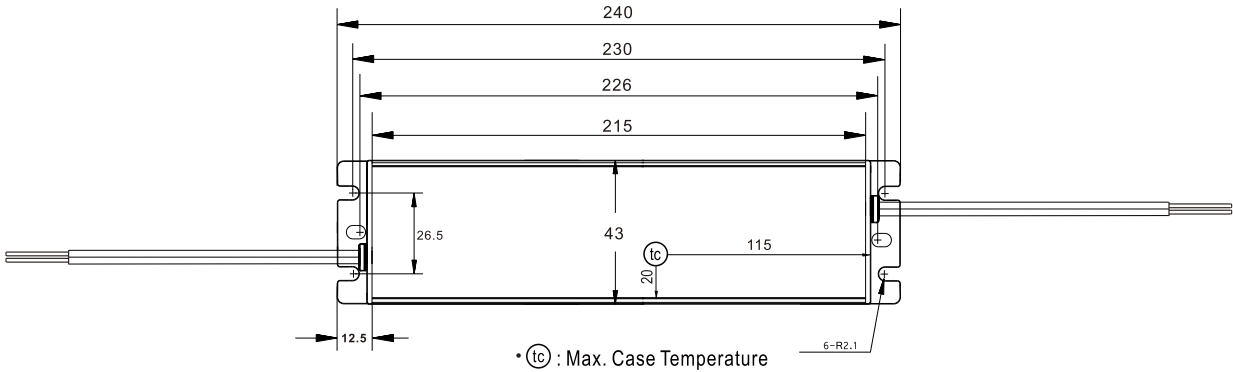


| | Model | HPS-12-100 | HPS-24-100 |
|--------------|---------------------------|--|-------------------------|
| Output | DC voltage | 12V | 24V |
| | Rated current | 8.5A | 4.2A |
| | Current range | 0 ~ 8.5A | 0 ~ 4.2A |
| | Rated power | 102W | 100.8W |
| | Ripple&noise | 150mVp-p | 150mVp-p |
| | Voltage tolerance | ± 3% | |
| | Line regulation | ± 0.5% | |
| | Load regulation | ± 2% | |
| Input | Setup, rise, hold time | 1200ms, 20ms, 24ms/100VAC, 500ms, 20ms, 24ms/240VAC, 400ms, 20ms, 24ms/277VAC at full load | |
| | Voltage range | 100~277VAC | 127~388VDC 47~63Hz |
| | AC current | 1.2A/100VAC | 0.6A/220VAC 0.5A/277VAC |
| | Efficiency | 85% | 87% |
| | Power factor | PF ≥ 0.97/100VAC, PF ≥ 0.95/240VAC, PF ≥ 0.92/277VAC (at full load) | |
| | Total Harmonic Distortion | THD < 20% (100/277VAC input, output load > 50%) | |
| | Inrush current | Cold start 55A/230VAC (twidth = 120 μs measured at 50% I _{peak}) | |
| | Leakage current | < 2mA/240VAC | |
| Protection | Overload | 105~140% rated output power Start overload protection Protection type: Hiccup mode, auto-recovery after fault condition is removed | |
| | Over voltage | 13.5~16V | 27~30V |
| | Over temperature | 95°C ± 10°C (RT2) Protection type: Shut down output voltage, recovers automatically after temperature goes down | |
| Environment | Working temperature | -30°C ~ +60°C (Please refer to "derating curve") | |
| | Working humidity | 20% ~ 90% RH Non-condensing | |
| | Storage temp, humidity | -40°C ~ +80°C; 10% ~ 95% RH | |
| | Temp. coefficient | ± 0.03%/°C (0~50°C) | |
| | Vibration | 10 ~ 500Hz, 5G 12min./1Cycle, Period for 72min, Each axes | |
| Safety & EMC | Safety standards | UL 1020, CAN/CSA-C22.2 No. 107.1-01, UL 8570, CSA C22.2 No. 250.0-08, UL 62368-1 EN 61347-2-13 independent, TUV 61347-1; TUV EN 62368-1; AS 61347.2.13:2018 AS/NZS 61347.1:2016 Inc A1; IP65 certificated, J61347-1, J61347-2-13 | |
| | Withstand voltage | I/P-O/P: 3KVAC I/P-FG: 2KVAC O/P-FG: 0.5KVAC | |
| | Isolation resistance | I/P-O/P: 100M Ohms/500VDC/25°C/70%RH | |
| | EMC emission | Compliance to EN 55015- CLASS B, EN 61000-3-2 Class C (60% load); EN 61000-3-3 | |
| | EMC immunity | Compliance to EN 61000-4-2, 3, 4, 5, 6, 8, 11; EN 61547, EN 55024, light industry level (surge 4KV), criteria A | |
| Others | MTBF | 420K hrs min. MIL-HDBK-217F(25°C) | |
| | Dimension | 240*43*30 mm (L*W*H) | |
| | Packing | 0.66kg/25pcs/16.7kg/0.023m³/0.8CUFT (box dimension: 36x30x21cm) | |

- Note: 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
 3. Tolerance : includes set up tolerance, line regulation and load regulation.
 4. 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.
 5. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
 6. Derating may be needed under low input voltage. Please check the static characteristics for more details.
 7. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
 8. The LED driver is "Non-IC classified" under AS/NZS 61347.1.
 9. The LED driver is not suitable for residential installation.
 10. The minimum distance from the top and sides of the controlgear to normally flammable building elements should be no less than 5cm.
 11. Relevant information will be supplied if the controlgear is required to be mounted on a specific surface or has additional installation requirements, For example, use in noncombustible enclosed space or to ensure adequate sealing to maintain its IP rating.

Mechanical specification

Unit:mm

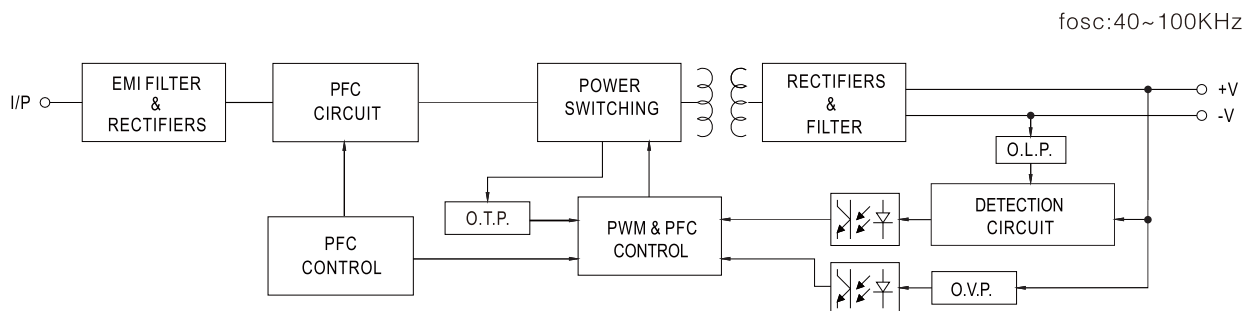


NOTE: The Driver Shell Must Be Grounded When Install

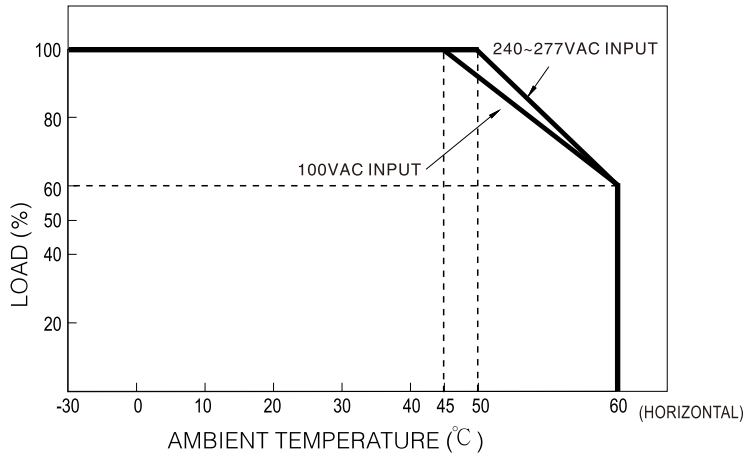
Lead-out wire assignment

| Input(Black two-core) | | Output (Black two-core) | |
|-----------------------|------|-------------------------|--------------|
| Brown | AC/L | Red | DC OUTPUT +V |
| Blue | AC/N | Black | DC OUTPUT -V |

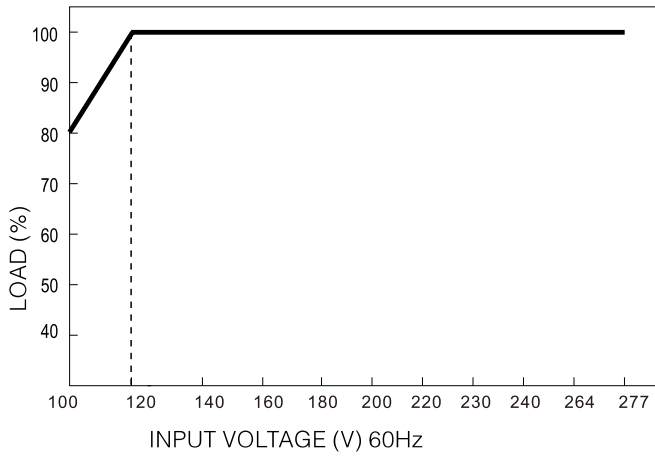
Block diagram



Derating curve



Static characteristic



Power Factor Characteristic

