

DPS Series 3 Phase 120W AC-DC DIN Rail Power Supplies

- 12 & 24VDC
- 3 phase input 340~575VAC
- UL, cUL, UR, cUR, CE
- High efficiency
- Short circuit protection
- Internal input filter
- 3 Year warranty
- IP20

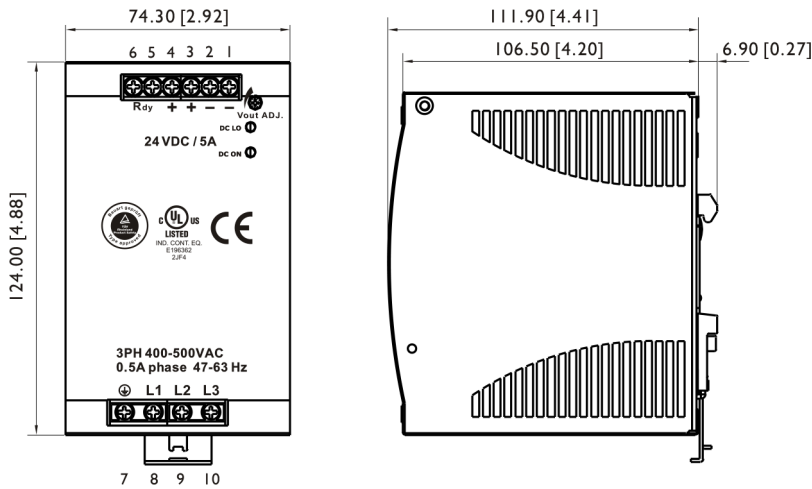


Specification - 120W Output

| Model | DPS-3-120-12DC | DPS-3-120-24DC |
|---|---|----------------|
| Input Voltage | 340 ~ 575VAC | |
| Output Wattage | 120W | |
| Output Voltage | 12VDC | 24VDC |
| Output Current | 10A | 5A |
| Efficiency (min/typ) | 85/87% | 87/89% |
| General Specification | | |
| Approval | cURus | |
| Isolation Voltage | 3000VAC/4242VDC | |
| Isolation Resistance | 100MΩ @ 500VDC | |
| Ambient Temperature | -40 to +71°C | |
| Derating | (61 to 71°C) 2.5%/°C | |
| Storage Temperature | -40 to +85°C | |
| Relative Humidity | 20 to 95% RH | |
| Cooling | Free air convection | |
| Dimensions | L124 x W74.3 x D118.8 mm | |
| Weight | 800g | |
| Case Material | Metal | |
| Input Specifications | | |
| Rated Input Voltage | 400 ~ 500VAC | |
| Input Voltage Range | 340 to 575VAC, 480 to 820VDC | |
| Line Frequency | 47 ~ 63Hz | |
| Inrush Current (400VAC) | typ. 10A, max. 12A | |
| Output Specifications | | |
| Output Voltage Accuracy | +1% | |
| Minimum Load | 0% | |
| Line Regulation | ±1% | |
| Load Regulation | ±1% | |
| Turn On Time | 1000ms after AC applied to input at full resistive load | |
| Voltage Fall Time | 150ms | |
| Voltage Rise Time | 150ms | |
| Hold Up Time (115 / 230VAC) | 20ms | |
| Temperature Coefficient | ±0.03%/°C | |
| Ripple & Noise | 100mV | |
| Voltage Trim Range | 11.4 ~ 14.5VDC | 22.5 ~ 28.5VDC |
| DC ON & LOW Indicator (Green & Red LED) | 10 ~ 11.2VDC | 17.6 ~ 19.4VDC |
| Control & Protection | | |
| Rated Overload Protection | 115 ~ 135% | |
| Over Voltage Protection | 15 ~ 16.5VDC | 30 ~ 33VDC |
| Output Short Circuit | Hiccup Mode | |

DPS Series 3 Phase 120W AC-DC DIN Rail Power Supplies

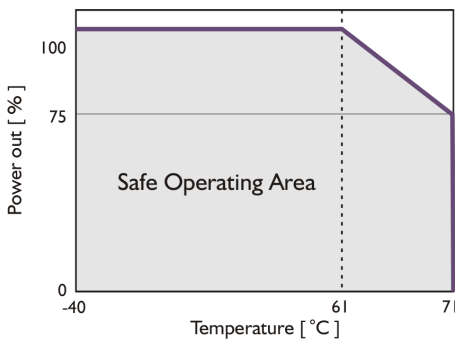
Dimensions (mm)



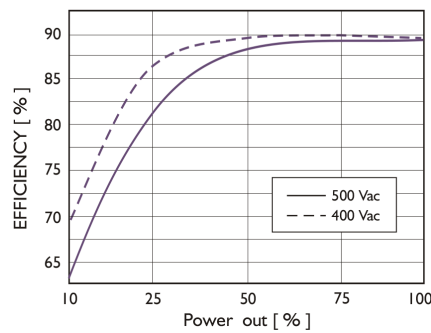
Pin Connections

| Key | Description |
|----------|---|
| 1, 2 | V - Negative output terminal |
| 3, 4 | V+ Positive output terminal |
| 5 | RDY Normal open relay contact for DC ON level control |
| 6 | (Never connect except 24V model) |
| 7 | Ground this terminal to minimise high-frequency emissions |
| 8 | L1 Input terminals |
| 9 | L2 Input terminals |
| 10 | L3 Input terminals |
| DC ON | Operation indicator LED |
| DC LO | DC LOW voltage indicator LED |
| Vout ADJ | Trimmer-potentiometer for Vout adjustment |

Derating



Typ. Efficiency Curve

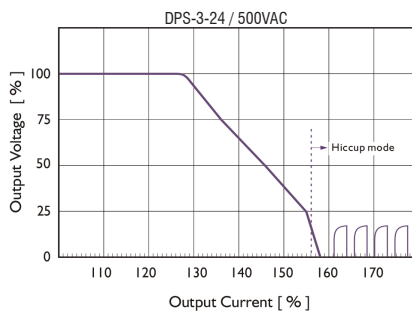
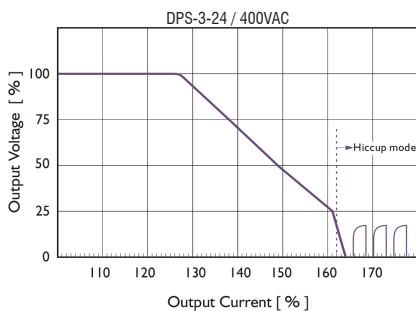


Installation

Ventilation / Cooling
 Normal convection
 All sides 25mm free space
 For cooling recommended

Connector Size Range
 AWG24-10 (0.2 ~ 4mm²) flexible / solid cable,
 - Input connector can withstand torque at maximum 9 pound-inches
 - Output connector can withstand torque at maximum 5.5 pound-inches
 8 m/m striping cable end recommends
 Use copper conductors only, 60 / 75°C

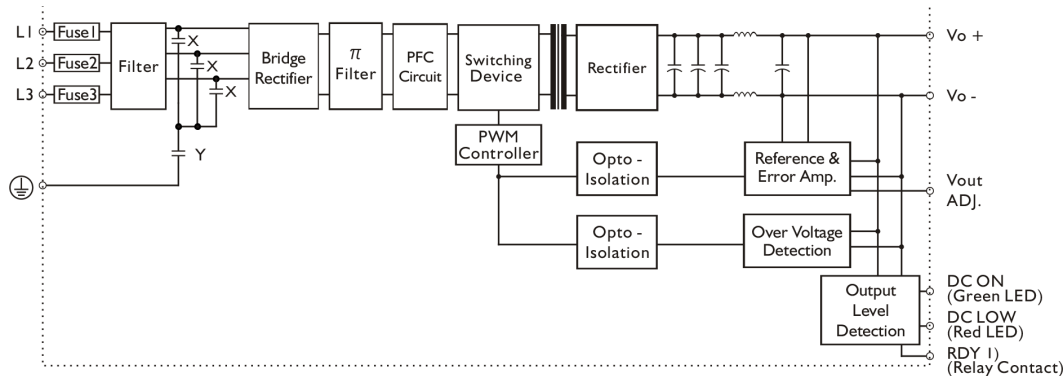
Typ. Current Limited Curve



Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

Circuit Schematic



Note: 1) For 24V Model Only