

15-100W, 5-48V Output DIN Rail Mount Power Supplies



- ◆ Low Cost
- ◆ 5V to 48V Outputs
- ◆ Universal Input
- ◆ Compact Size
- ◆ NEC NFPA70 Class 2⁽²⁾
- ◆ UL508 Listed
- ◆ Class 1, Division 2 (ISA 12.12)⁽³⁾
- ◆ -10 to +71°C Operation
- ◆ Convection Cooled

RoHS

| SPECIFICATIONS | | MODELS | DPP15 | DPP25/30 | DPP50 | DPP100 |
|-------------------------------|-------|----------------|---|-----------------|----------|-----------------------------|
| ITEMS | | | | | | |
| AC Input Voltage range | VAC | | 85 - 264VAC | | | 85 - 132VAC 176 - 264VAC |
| Input Frequency | Hz | | 47 - 63Hz | | | |
| DC Input Voltage range | - | | 90 - 375VDC | | | 210 - 375VDC |
| Inrush Current (115 / 230VAC) | A | <35A | 35 / 45A | 35 / 50A | 35 / 55A | |
| Power Factor | - | | Meets EN61000-3-2 Class A | | | |
| Input Current (230VAC) | A | 0.4 | 0.72 | 1.35 | 2.2 | |
| Leakage Current | mA | | <0.75mA, 265VAC, 63Hz | | | |
| Output Voltage Accuracy | % | | ±1% (24V outputs preset at 24.5V) | | | |
| Line Regulation | % | | < 0.5% | | | |
| Load Regulation | % | | < 0.5% | | | |
| Ripple and Noise | mV | | 50mV | | | |
| Overcurrent Protection (Typ) | - | | >110% (fold forward type) | | | |
| Overvoltage Protection | V | | 120 - 137.5%, Cycle AC line to reset | | | |
| Hold Up Time (115VAC input) | ms | | > 20ms | | | |
| Parallel switch | - | | No | | | Yes |
| LED Indicator | - | | Green LED = On | | | |
| Operating Temperature | - | | -10 to +71°C (Derate linearly 5%/°C from 61 to 71°C) | | | |
| Storage Temperature | - | | -25 to +85°C | | | |
| Operating Humidity | - | | 20 - 90% RH (non condensing) | | | |
| Cooling (1) | - | | Convection | | | |
| Withstand Voltage | - | | Input to Output 3kVAC for 1 min. | | | |
| Shock | - | | Half sine wave, 4G, 22ms, 3 times per face, X, Y, Z | | | |
| Vibration | - | | 10-500Hz (20 min sweep) 0.002G ² /Hz, 1 Grms acceleration X, Y, Z, 1 hour | | | |
| Isolation Resistance | - | | >100M at 25C & 70%RH, Output to Ground 500VDC | | | |
| Safety Agency Approvals | - | | UL60950-1, UL508, NEC Class 2 ⁽²⁾ , EN60950-1, CE Mark, ISA 12.12 ⁽³⁾ | | | |
| Emissions | - | | EN55011, EN55022 class B Radiated & Conducted, EN61000-6-3 | | | |
| Immunity | - | | EN61000-6-2, EN61000-4-2 Level 4, EN61000-4-3, EN61000-4-6 Level 3, EN61000-4-4 Level 4 (I/P) Level 3 (O/P), EN61000-4-5 Level 4, EN61000-4-8, EN61000-4-11 | | | |
| Weight (Typ) | g | 130 | 260 | 390 | | |
| Size (WxHxD) | in | 0.9x2.95x3.81" | 1.77x2.95x3.58" | 2.86x2.95x3.81" | | |
| Case material | - | | Plastic | | | |
| MTBF (MIL-HDBK-217F, GF25) | Hours | 287,000 | >288,000 | 269,000 | 239,000 | |
| Warranty | - | | Two years | | | |

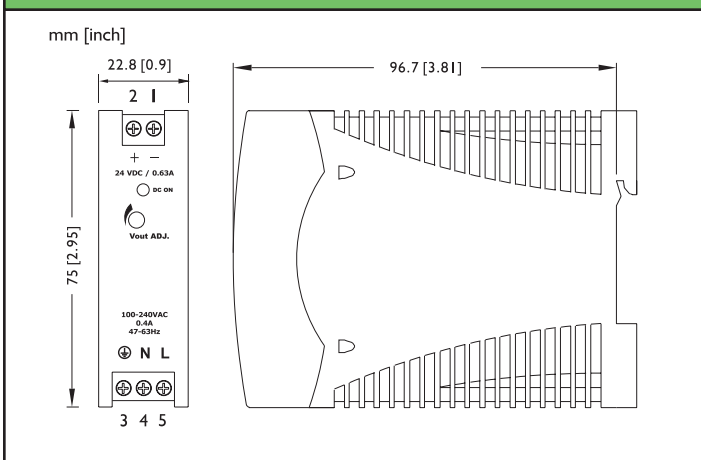
(1) Recommend 1" clearance on all sides.
 (2) See model selector. Evaluated to NEC NFPA70 Class 2 output per UL1310.
 (3) See model selector.

Model Selector

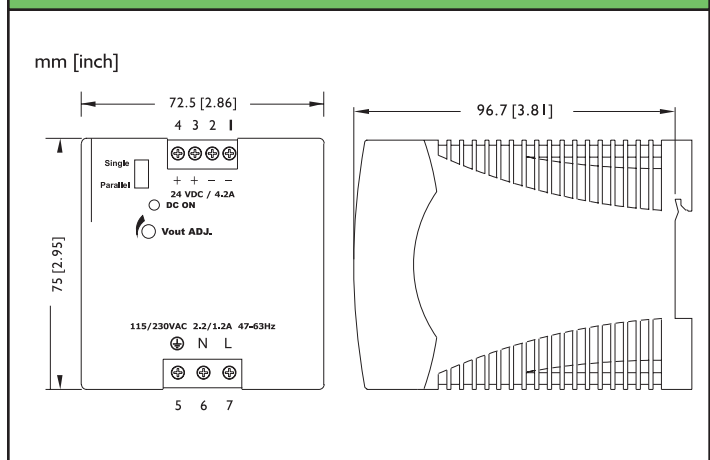
| Model | Voltage (V) | Voltage Adjust (V) | Current (A) | Power (W) | Effic. (typ) % | UL1310 Class 2 | ISA12.12 Class 1 Div 2(4) |
|-----------|-------------|--------------------|-------------|-----------|----------------|----------------|---------------------------|
| DPP25-5 | 5 | 5-6 | 5.0 | 25 | 78 | - | Yes(4) |
| DPP30-12 | 12 | 9.9-12.1 | 2.5 | 30 | 83 | Yes | Yes(4) |
| DPP50-15 | 15 | 11.9-15.1 | 3.4 | 50 | 85 | Yes | Yes(4) |
| DPP15-24 | 24 | 22.5-28.5 | 0.63 | 15 | 81 | Yes | - |
| DPP30-24 | 24 | 22.5-28.5 | 1.3 | 30 | 84 | Yes | Yes(4) |
| DPP50-24 | 24 | 22.5-28.5 | 2.1 | 50 | 86 | Yes | Yes(4) |
| DPP100-24 | 24 | 22.5-28.5 | 4.2 | 100 | 87 | - | - |
| DPP50-48 | 48 | 48-56 | 1.05 | 50 | 87 | Yes | Yes(4) |

(4) Add UL1604 suffix if required, ex. DPP3012UL1604.

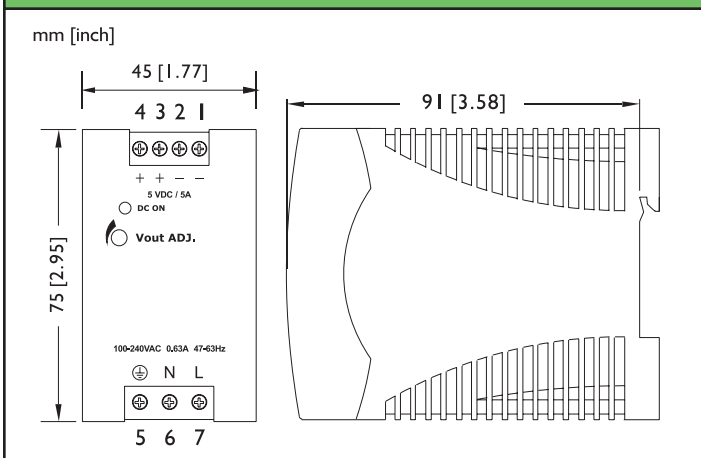
DPP15 Outline



DPP100 Outline



DPP25-DPP50 Outline



Installation:

Snap-on Mounting - snap onto DIN Rail TS35/7.5 or TS35/15. (No tools required)

Cooling - Normal Convection

Clearance - 25mm all sides

Connection - Use copper wire 0.5-2.5mm² (AWG24-12)

Other Lambda DIN Rail Products

| | |
|-------------|--|
| DSP/DPP | 10W to 480W power supplies |
| DLP | 75W to 240W power supplies |
| DLP-PU | Redundancy Module (20A) |
| MC/MZ/MA/MX | 6A to 30A single & three phase EMI Filters |

For Additional Information, please visit us.tdk-lambda.com/lp/products/dpp-series.htm