

## 120W & 240W DIN Rail Mount Power Supplies

### Features

- ◆ Low Cost
- ◆ 12V, 24V or 48V Outputs
- ◆ Auto-ranging input (no manual switching)
- ◆ Parallel Function Switch
- ◆ -40<sup>(2)</sup> to +71°C Operation

### Key Market Segments & Applications



Industrial



RoHS

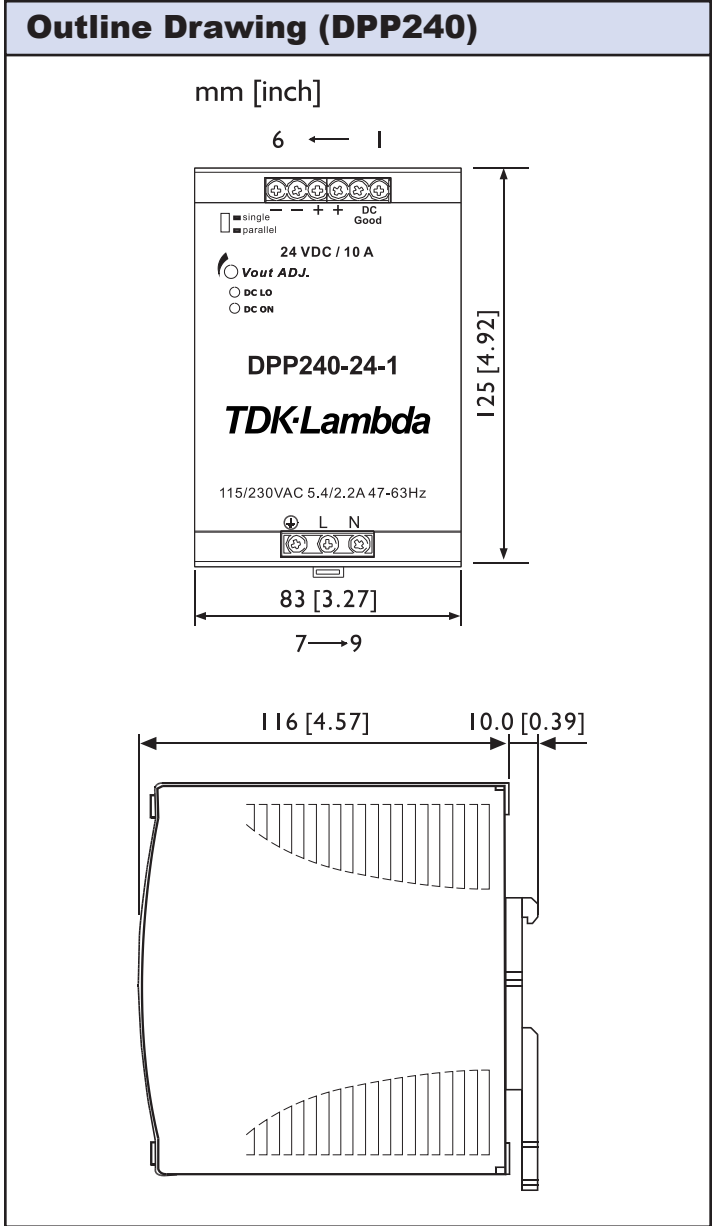
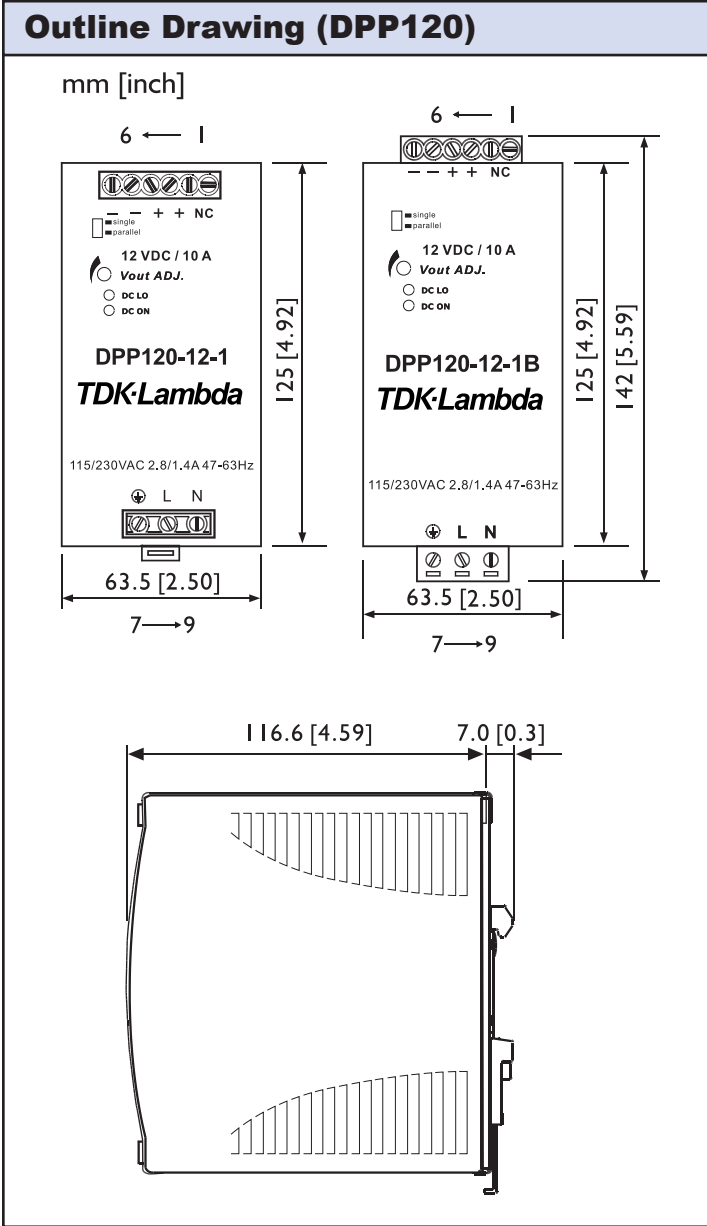
### Specifications

| Model                          |     | DPP120-xx-1   | DPP240-xx-1         |
|--------------------------------|-----|---|---------------------|
| AC Input Voltage range         | VAC | 93 - 132 / 186 - 264VAC, single phase. Auto select  |                     |
| Input Frequency                | Hz  | 47 - 63Hz   |                     |
| DC Input Voltage range         | VDC | 210 - 370VDC*   |                     |
| Inrush Current (115 / 230VAC)  | A   | 24 / 48A  | 30 / 60A            |
| Power Factor                   | -   | Meets EN61000-3-2   |                     |
| Input Current (115 / 230VAC)   | A   | 2.8 / 1.4A  | 5.4 / 2.2A          |
| Leakage Current                | mA  | 3.5mA   |                     |
| Output Voltage Accuracy        | %   | -0, +1% of Nominal  |                     |
| Line Regulation                | %   | ±0.5%   |                     |
| Load Regulation                | %   | ±1% (±5% when set in parallel mode)   |                     |
| Ripple and Noise (20MHz BW)    | mV  | 50mV  | 100mV               |
| Overcurrent Protection (Typ)   | -   | 110 - 145%  |                     |
| Overvoltage Protection         | V   | See model selector  |                     |
| Overtemperature Protection     | -   | -   |                     |
| Hold Up Time (230VAC input)    | ms  | > 30ms  |                     |
| Parallel operation             | -   | Set in parallel (droop) mode - maximum of 3 units   |                     |
| LED Indicators                 | -   | Green LED = On, Red LED = DC Output Low   |                     |
| DC Good Relay (24V model only) | -   | 0.3A rated normally open relay contacts, closes when output is above 17.6 - 19.4V                         |                     |
| Operating Temperature          | °C  | -40 <sup>(2)</sup> to +71°C (Derate linearly 2.5%/°C from 61 to 71°C)                                     |                     |
| Storage Temperature            | °C  | -40 to +85°C  |                     |
| Operating Humidity             | -   | 20 - 95% RH (non condensing)  |                     |
| Cooling (1)                    | -   | Convection  |                     |
| Withstand Voltage              | -   | Input to Output 3kVAC for 1 min.  |                     |
| Isolation Resistance           | -   | >100M at 25C & 70%RH, Output to Ground 500VDC   |                     |
| Vibration (Operating)          | -   | IEC 60068-2-6 (Mounting by rail: Random wave, 10-500 Hz, 2G, ea. along X, Y, Z axes 10 min/cycle, 60 min) |                     |
| Shock (Operating)              | -   | IEC 60068-2-27 (Half sine wave, 4G, 22ms, 3 axes, 6 Faces, 3 times for each face)                         |                     |
| Safety Agency Approvals        | -   | UL508 Listed, IEC/UL/CSA/EN62368-1, 60950-1, CE Mark  |                     |
| Conducted & Radiated EMI       | -   | EN55022 class B   | EN55022 class A     |
| Immunity                       | -   | IEC 61000-4-2, -3, 4, -5, -6, -8, -11   |                     |
| Weight (Typ)                   | g   | 920   | 1000                |
| Size (LxWxH)                   | mm  | 116.6 x 63.5 x 125mm  | 116 x 83 x 125mm    |
| Size (LxWxH) (1)               | in  | 4.59 x 2.5 x 4.92"  | 4.57 x 3.27 x 4.92" |
| Case material                  | -   | Metal   |                     |
| Warranty                       | yrs | Three years   |                     |

(1) Recommend 1" clearance on all sides

(2) DPP120 -35°C

\*Safety certified for AC input only



### Model Selector

| Model       | Voltage | Adjust. Range | Output Curr. | Over-voltage | Eff. |
|-------------|---------|---------------|--------------|--------------|------|
| DPP120-12-1 | 12V     | 11.4 - 14.5V  | 10A          | 15 - 17.4V   | 84%  |
| DPP120-24-1 | 24V     | 22.5 - 28.5V  | 5A           | 30 - 34.8V   | 86%  |
| DPP120-48-1 | 48V     | 45 - 55V      | 2.5A         | 60 - 69.6V   | 87%  |
| DPP240-24-1 | 24V     | 22.5 - 28.5V  | 10A          | 30 - 34.8V   | 89%  |
| DPP240-48-1 | 48V     | 47 - 56V      | 5A           | 60 - 69.6V   | 90%  |

### Terminal Assignments

| # | Function       |
|---|----------------|
| 1 | DC Good relay  |
| 2 | DC Good relay  |
| 3 | +V             |
| 4 | +V             |
| 5 | -V             |
| 6 | -V             |
| 7 | Chassis ground |
| 8 | L              |
| 9 | N              |

### Other DIN Rail Products

|        |                             |
|--------|-----------------------------|
| DPP    | 15W to 100W                 |
| DPP480 | 480W single and three phase |
| DSP    | 10W to 100W low profile     |
| DLP    | 75W to 240W single phase    |

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

### Options

| Suffix | Description                            |
|--------|--|
| Blank  | Non detachable connectors              |
| B      | Detachable input and output connectors |

For Additional Information, please visit  
<https://product.tdk.com/info/en/products/power/index.html>

