# PSD-A40W Series 40 Watts Compact Size DIN-Rail Power Supply



### **Features**

- Extra slim design with 40 watts output
- High power density: 2.27 watts per inch3
- Input range 85 ~ 264 V<sub>AC</sub>/ 110 ~ 375 V<sub>DC</sub>
- Power boost with 150% peak load
- Full protection with auto recovery function
- Full load output up to 60°C
- Adjustable output







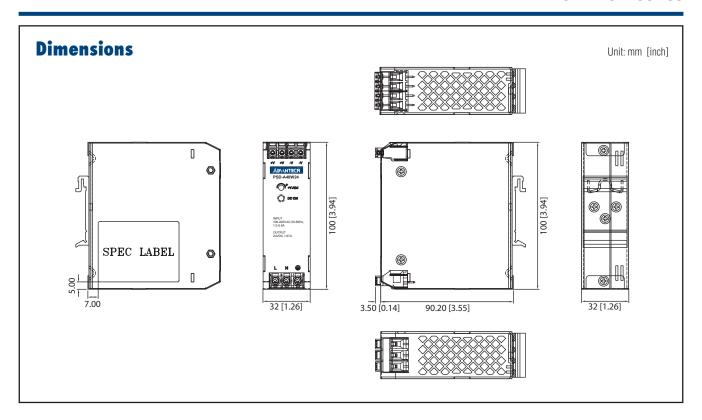






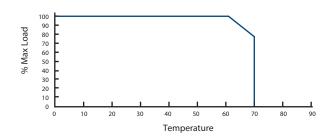


| shermramons              |   |   |  |  |  |
|--------------------------|---|---|--|--|--|
|                          | Model   | PSD-A40W12  | PSD-A40W24                             | PSD-A40W48                             |  |
| Output                   | Output Voltage                                    | 12V <sub>DC</sub>   | 24V <sub>DC</sub>                      | 48V <sub>DC</sub>                      |  |
|                          | Output Voltage Adjustment Range                   | 12V <sub>DC</sub> to 14V <sub>DC</sub>  | 22V <sub>DC</sub> to 27V <sub>DC</sub> | 46V <sub>DC</sub> to 50V <sub>DC</sub> |  |
|                          | Rated Current                                     | 3.34A   | 1.67A                                  | 0.84A                                  |  |
|                          | Peak Current<br>(Max Output Current, 3 seconds)   | 5.00A   | 2.50A                                  | 1.25A                                  |  |
|                          | Efficiency (typical)                              | 88%   | 89%                                    | 89%                                    |  |
|                          | Output Power                                      | 40 Watts  |  |  |  |
|                          | Accuracy (%)                                      | ±1%   |  |  |  |
|                          | Max. Ripple & Noise (mVp-p)                       | 120 mVp-p   |  |  |  |
|                          | Line Regulation                                   | ±1%   |  |  |  |
|                          | Load Regulation                                   | ±1%   |  |  |  |
|                          | Hold-up Time                                      | 115V/60Hz: 16ms Minimum; 230V/50Hz: 20ms. Minimum   |  |  |  |
| Input                    | Input Voltage                                     | 85 ~ 264 V <sub>AC</sub> ; 110 ~ 375 V <sub>DC</sub>  |  |  |  |
|                          | Input Frequency                                   | 47 ~ 63 Hz  |  |  |  |
|                          | Input Current                                     | < 0.93 A @ 115V <sub>AC</sub> , < 0.40 A @ 230V <sub>AC</sub>   |  |  |  |
|                          | Max. Inrush Current                               | 40A @ 230V <sub>AC</sub> , cold start @ 25°C and full load  |  |  |  |
|                          | Leakage Current                                   | <1 mA when power supply is connected to 240V <sub>AC</sub> /60Hz                                      |  |  |  |
| Protection               | OVP (Over Voltage Protection)                     | 16V max   | 35V max                                | 55V max                                |  |
|                          | OCP<br>(Output Peak Current Protection, 3~5 sec.) | 5.00A   | 2.50A                                  | 1.25A                                  |  |
|                          | SCP (Short Circuit Protection)                    | < 0.1 ohm   |  |  |  |
|                          | OTP (Over Temperature Protection)                 | 100 ± 10%   |  |  |  |
| Environment              | Operating Temperature                             | -25 ~ 70°C  |  |  |  |
|                          | Power Derating                                    | Full load to 60°C; output power derated 2.5% per °C   |  |  |  |
|                          | Operating Humidity                                | 95% RH, non-condensing  |  |  |  |
|                          | Storage Temperature                               | -40 ~ 85 °C   |  |  |  |
|                          | Operating Altitude                                | 5,000 m   |  |  |  |
|                          | Shock Test (Non-Operating)                        | IEC60068-2-27, 30G (300m/S²) for a duration of 18ms   |  |  |  |
|                          | Vibration Test (Non-Operating)                    | IEC60068-2-6, 10Hz to 150Hz @ 50m/S <sup>2</sup> (5G peak); 90 min per axis for all X, Y, Z direction |  |  |  |
| Insulation               | Dielectric Strength                               | AC input - DC output/FG: 1500 V <sub>AC</sub> for 1 minute  |  |  |  |
|                          | Insulation Resistance                             | AC input - DC output/FG; DC output - FG: $50M\Omega$ min.   |  |  |  |
| Safety                   | CB/UL/TUV/CCC                                     | IEC60950-1/GB4943.1   |  |  |  |
| Mechnical                | Case Cover / Chassis                              | Metal chassis   |  |  |  |
|                          | Input Connector                                   | 3 Pins (300V/ 20A)  |  |  |  |
|                          | Output Connector                                  | 4 Pins (300V/ 20A)  |  |  |  |
|                          | Terminal Type                                     | Screw terminal (screw torque: 5.5 lb. per inch)   |  |  |  |
|                          | Wire  | AWG22-16  |  |  |  |
|                          | Mounting Rail                                     | Standard TS35 DIN-Rail in accordance with EN60715   |  |  |  |
|                          | Cooling System                                    | Conventional  |  |  |  |
|                          | Dimensions (W x H x D)                            | 32 x 100 x 90.2 mm / 1.26 x 3.94 x 3.54 inch  |  |  |  |
|                          | Weight  | 305±5 g / 0.671 lb.   |  |  |  |
| Reliability and Warranty | MTBF (hours)                                      | 500,000 (base on SR-332) Issue 2  |  |  |  |
|                          | Warranty  | 3 Years   |  |  |  |



## **Derating Curve**

■ PSD-A40W series full load to 60°C, with 2.5% derating per °C



# **Ordering Information**

| Part Number | Description   |
|-------------|---|
| PSD-A40W12  | 12 V <sub>DC</sub> / 40 Watts DIN-Rail Power Supply |
| PSD-A40W24  | 24 V <sub>DC</sub> / 40 Watts DIN-Rail Power Supply |
| PSD-A40W48  | 48 V <sub>DC</sub> / 40 Watts DIN-Rail Power Supply |