

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_{AC}/ 110 ~ 375 V_{DC}
- Power boost with 150% peak load
- Full protection with auto recovery function
- Full load output up to 60°C
- Adjustable output



Specifications

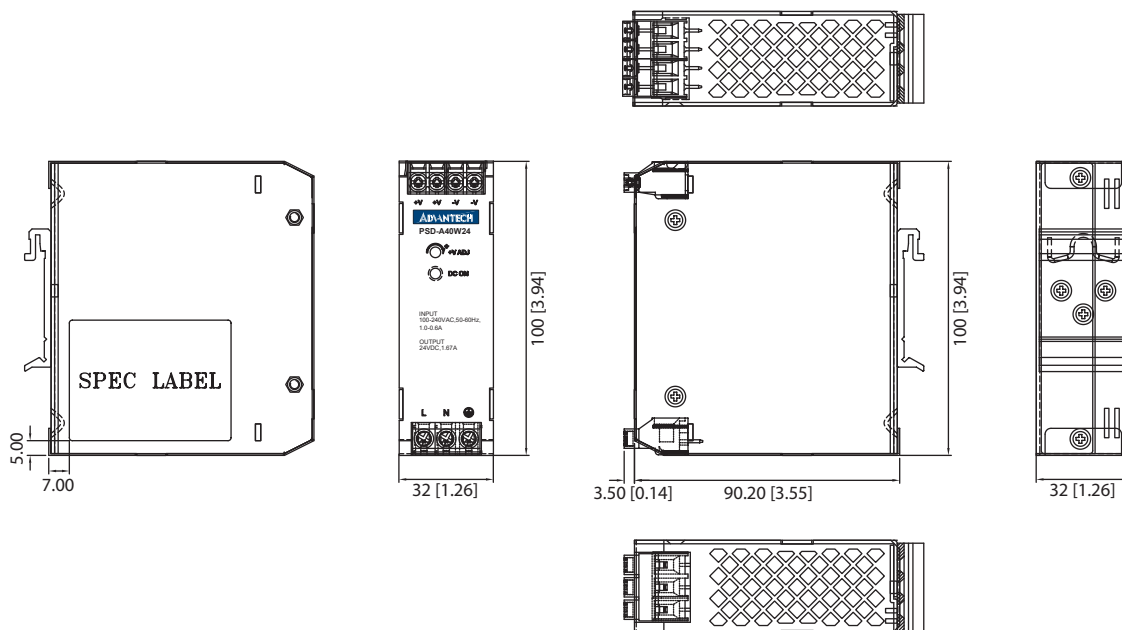
| | Model | PSD-A40W12 | PSD-A40W24 | PSD-A40W48 |
|--------------|---|--|--|--|
| Output | Output Voltage | 12V _{DC} | 24V _{DC} | 48V _{DC} |
| | Output Voltage Adjustment Range | 12V _{DC} to 14V _{DC} | 22V _{DC} to 27V _{DC} | 46V _{DC} to 50V _{DC} |
| | Rated Current | 3.34A | 1.67A | 0.84A |
| | Peak Current (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 _{AC} ; 110 ~ 375 V _{DC} | | |
| | Input Frequency | 47 ~ 63 Hz | | |
| | Input Current | < 0.93 A @ 115V _{AC} ; < 0.40 A @ 230V _{AC} | | |
| | Max. Inrush Current | 40A @ 230V _{AC} , cold start @ 25°C and full load | | |
| | Leakage Current | < 1 mA when power supply is connected to 240V _{AC} /60Hz | | |
| Protection | OVP (Over Voltage Protection) | 16V max | 35V max | 55V max |
| | OCP (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 (Please Refer to Power Derating Curve) | | |
| | Cold Start | -40°C | | |
| | Power Derating | Full load to 60°C; output power derated 2.5% per °C | | |
| | Operating Humidity | 5 to 95% RH, non-condensing | | |
| | Storage Temperature | -40 ~ 85 °C | | |
| | Operating Altitude | 5,000 m | | |
| | Shock Test (Non-Operating) | IEC60068-2-27, 30G (300m/S ²) for a duration of 18ms | | |
| | Vibration Test (Non-Operating) | IEC60068-2-6, 10Hz to 150Hz @ 50m/S ² (5G peak); 90 min per axis for all X, Y, Z direction | | |
| Insulation | Withstand Voltage | I/P-O/P: 3KV _{AC} , I/P-FG: 2KV _{AC} , O/P-FG: 0.5KV _{AC} , O/P-DC OK: 0.5KV _{AC} | | |
| | Insulation Resistance | AC input - DC output/FG, DC output - FG: >100M Ohms / 500V _{DC} | | |
| Safety & EMC | CB/UL/TUV/CCC | IEC60950-1/GB4943.1 | | |
| | EMC Emission | EN55032 (CISPR32), EN61000-3-2, EN61000-3-3, EN55011 | | |
| | EMC Immunity | EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-2, EN61000-6-4, EN61204-3, heavy industry level, criteria A, SEMI F47 | | |

Specifications

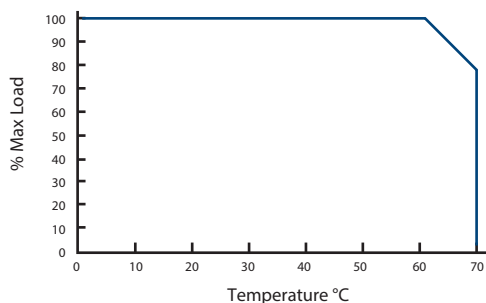
| | | |
|--------------------------|-----------------------------|---|
| Mechanical | level, criteria A, SEMI F47 | Metal Case |
| | Input Connector | 3 Pins (300V/ 20A) |
| | Output Connector | 4 Pins (300V/ 20A) |
| | Terminal Type | Screw Terminal (Screw Torque: 5.5 lb. per inch) |
| | Wire | AWG22-16 |
| | 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 |
| Reliability and Warranty | Weight | 305±5 g / 0.671 lb. |
| | MTBF (hours) | 500,000 (based on SR-332) |
| | Warranty | 3 Years |

Dimensions

Unit: mm [inch]



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 _{DC} / 40 Watts DIN-Rail Power Supply |
| PSD-A40W24 | 24 V _{DC} / 40 Watts DIN-Rail Power Supply |
| PSD-A40W48 | 48 V _{DC} / 40 Watts DIN-Rail Power Supply |

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