

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

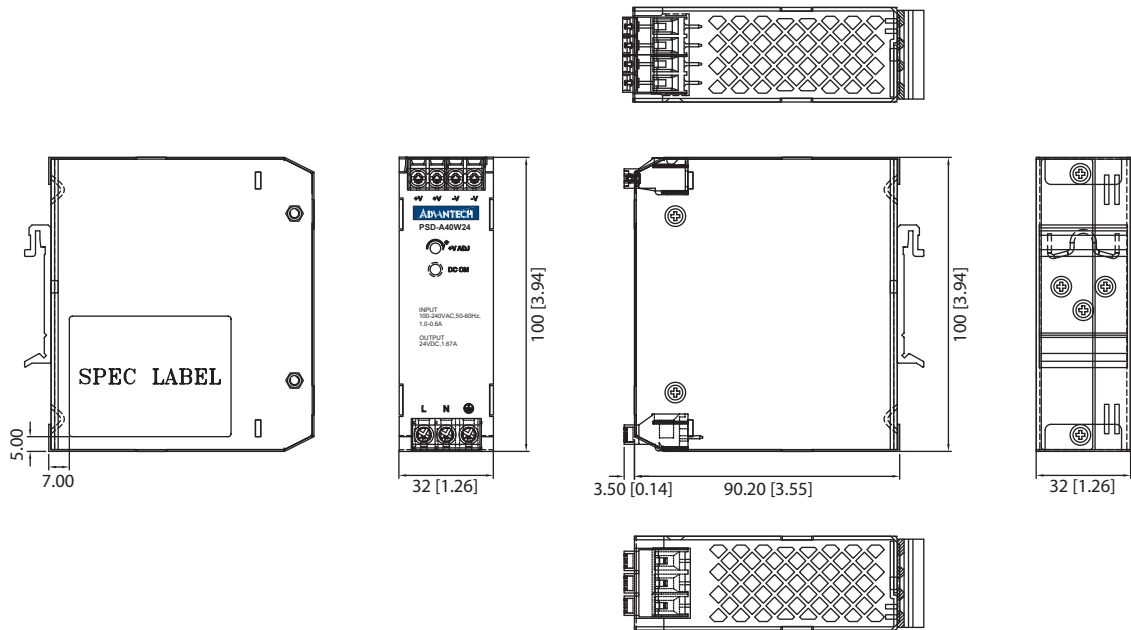
	Model	PSD-A40W12	PSD-A40W24	PSD-A40W48
Output	Output Voltage	12V _{DC}	24V _{DC}	48V _{DC}
	Output Voltage Adjustment Range	12V _{DC} to 14V _{DC}	22V _{DC} to 27V _{DC}	46V _{DC} to 50V _{DC}
	Rated Current	3.34A	1.67A	0.84A
	Peak Current (Max Output Current, 3 seconds)	5.00A	2.50A	1.25A
	Efficiency (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

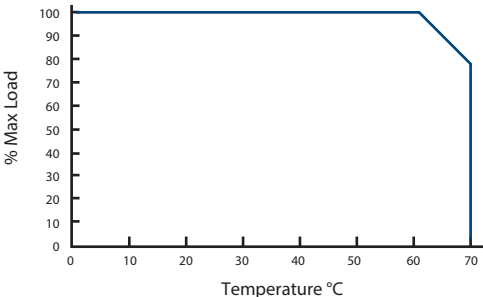
Mechanical	level, criteria A, SEMI F47	Metal Case
	Input Connector	3 Pins (300V/ 20A)
	Output Connector	4 Pins (300V/ 20A)
	Terminal Type	Screw Terminal (Screw Torque: 5.5 lb. per inch)
	Wire	AWG22-16
	Mounting Rail	Standard TS35 DIN-Rail in accordance with EN60715
	Cooling System	Conventional
	Dimensions (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