

# PSD-A120W Series

## 120 Watts Compact Size DIN-Rail Power Supply



### Features

- Extra compact design with 120 watts output
- High power density: 3.72 watts per inch<sup>3</sup>
- 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



### Specifications

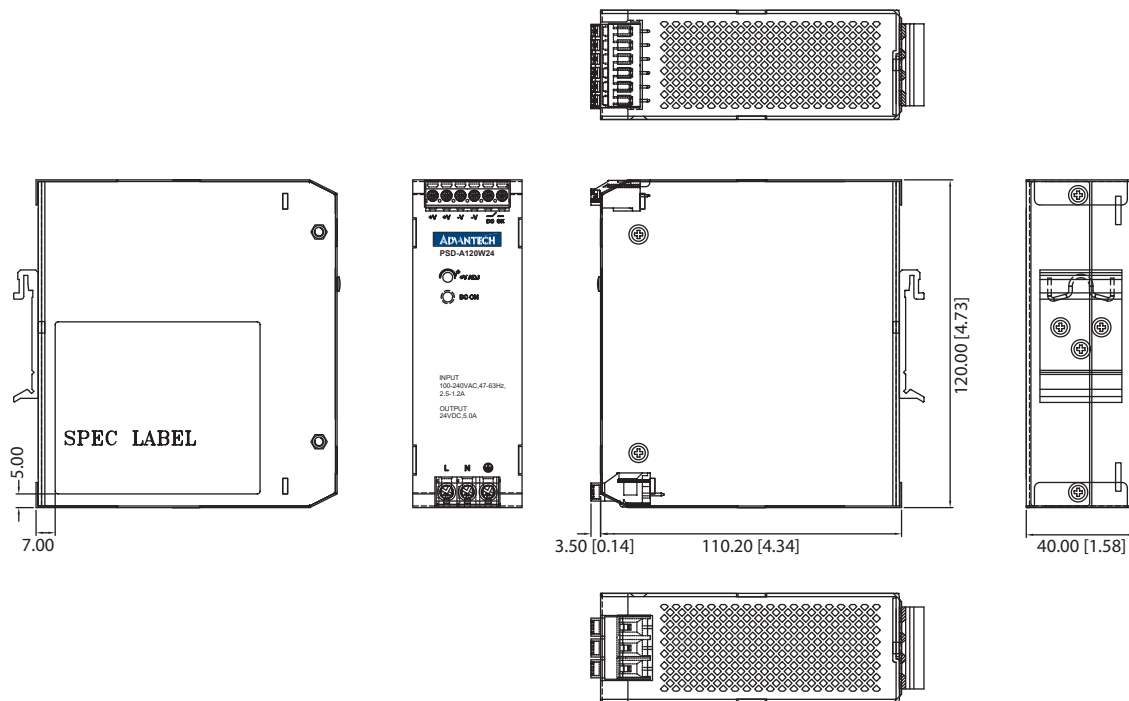
	Model	PSD-A120W12	PSD-A120W24	PSD-A120W48
<b>Output</b>	Output Voltage	12V <sub>DC</sub>	24V <sub>DC</sub>	48V <sub>DC</sub>
	Output Voltage Adjustment Range	12V <sub>DC</sub> to 14V <sub>DC</sub>	24V <sub>DC</sub> to 28V <sub>DC</sub>	48V <sub>DC</sub> to 55V <sub>DC</sub>
	Rated Current	10.0A	5.0A	2.5A
	Peak Current (Max Output Current, 3 seconds)	15.00A	7.50A	3.75A
	Efficiency (typ.)	89%	90%	91%
	Output Power	120 Watts		
	Accuracy (%)	±1%		
	Max. Ripple & Noise (mVp-p)	120 mVp-p		
	Line Regulation	±0.5%		
	Load Regulation	±1%		
	Start-up Delay	<2.5sec typ. @ 115V <sub>AC</sub> & 230V <sub>AC</sub>		
	Rise Time	60 ms ( Max)		
	Hold-up Time	115V/60Hz: 30ms. Typical; 230V/50Hz: 40ms. Typical		
	DC OK Relay Contact	60V <sub>DC</sub> /0.3A, 30V <sub>DC</sub> /1A, 30V <sub>AC</sub> /0.5A resistive load Relay Turn On/Off Point@ 60% Standard Output Voltage		
<b>Input</b>	Input Voltage	85 - 264 V <sub>AC</sub> ; 110 - 375 V <sub>DC</sub> Under 90V <sub>AC</sub> ; 125V <sub>DC</sub> (Please Refer to Power Derating Curve)		
	Input Frequency	47 ~ 63 Hz		
	Input Current	< 1.40 A @ 115V <sub>AC</sub> ; < 0.70 A @ 230V <sub>AC</sub>		
	Max.Inrush Current	60A at 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		
<b>Protection</b>	OVP ( Over Voltage Protection)	14-17V	28-35V	56-65V
	OCP (Output Peak Current Protection, 3-5 sec)	15.0A	7.5A	3.75A
	SCP ( Short Circuit Protection)	< 0.1 ohm		
	OTP (Over Temperature Protection)	100 ± 10%		
<b>Environment</b>	Operating Temperature	-25 ~ 70°C (Please Refer to Power Derating Curve)		
	Cold Start	-40°C		
	Power Derating	-25 ~ 70°C ; > 60°C Power derating 2.5% per °C		
	Operating Humidity	5 ~ 95% RH, non-condensing		
	Storage Temperature	-40 ~ 85 °C		
	Shock Test (Non-Operating)	IEC60068-2-27, 30G (300m/S <sup>2</sup> ) for a duration of 18ms		
<b>Insulation</b>	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		
	Withstand Voltage	I/P-O/P:3KV <sub>AC</sub> , I/P-FG:2KV <sub>AC</sub> , O/P-FG:0.5KV <sub>AC</sub> , O/P-DC OK:0.5KV <sub>AC</sub>		
<b>Safety &amp; EMC</b>	Insulation Resistance	AC input - DC output/FG, DC output - FG: >100M Ohms / 500V <sub>DC</sub>		
	CB/UL/FCC/CE	IEC 60950 UL/CB		
	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		

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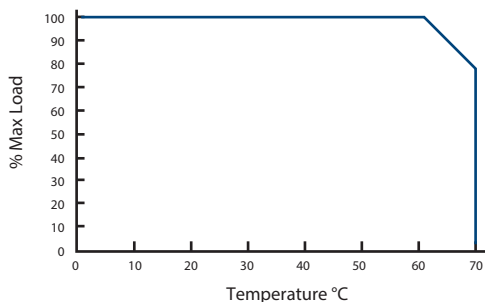
<b>Mechanical</b>	Case Cover / Chassis	Metal Case
	Input Connector	3 Pins (300V/ 20A)
	Output Connector	4 Pins (300V/ 20A)
	Terminal Type	Screw Terminal (Screw Torque: 5.5 Lb per Inch)
	Wire	AWG22-16
	Mounting Rail	Standard TS35 Din Rail in accordance with EN60715
	Cooling System	Conventional
	Dimensions (W x H x D)	40 x 120 x 110 mm / 1.57 x 4.72 x 4.33 inch
<b>Reliability and Warranty</b>	Weight	496±5 g / 1.09 lb.
	MTBF (hours)	500,000 min. (Base on SR-332)
	Warranty	3 Years

## Dimensions

Unit: mm [inch]



## Derating Curve



Derating at 55°C with input 100V<sub>AC</sub>

## Ordering Information

Part Number	Description
PSD-A120W12	12 V <sub>DC</sub> / 120 Watts DIN-Rail Power Supply
PSD-A120W24	24 V <sub>DC</sub> / 120 Watts DIN-Rail Power Supply
PSD-A120W48	48 V <sub>DC</sub> / 120 Watts DIN-Rail Power Supply