Panel Mount SMPS

SPA Series

CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Major Features

- Stable power supply with minimal noise and ripple
- Built-in overcurrent protection circuit, output short-circuit protection circuit, overheat protection circuit, and overvoltage protection circuits (overvoltage protection: SPA-075/100 only)
- EN 60950 (Safety of information technology equipment) compliant
- EN 50178 (Electronic equipment for use in power installations) compliant
- EN 61000-6-2 (EMC: Immunity for industrial environments) compliant
- EN 61000-6-4 (EMC: Emission standard for industrial environments) compliant
- Output voltage: 5 VDC⎓, 12 VDC⎓, 24 VDC⎓
- Output power: 30 W, 50 W, 75 W, 100 W

Ordering Information

This is only for reference.
For selecting the specific model, follow the Autonics web site.

SPA	-	❶	-	❷

❶ Output power
Number: Output power (unit: W)

❷ Output voltage
Number: Output voltage (unit: VDC⎓)

Product Components

- Product
- Instruction manual

Specifications

Output range		**30 to 50 W**					
Model		**SPA-030-05**	**SPA-050-05**	**SPA-030-12**	**SPA-050-12**	**SPA-030-24**	**SPA-050-24**
Output power		30 W	50 W	30 W	50 W	30 W	50 W
Input condition							
Voltage [01]		100 - 240 VAC～					
Permissible voltage range		85 - 264 VAC～					
Frequency		50 / 60 Hz					
Efficiency [02] (typical)		≥ 60%	≥ 67%	≥ 74%		≥ 80%	
Current consumption [02] (typical)		≤ 1.2 A	≤ 1.6 A	≤ 1.0 A	≤ 1.4 A	≤ 0.8 A	≤ 1.1 A
Inrush current protection (typical)	100 VAC～	≤ 30 A		≤ 20 A		≤ 20 A	
	240 VAC～	≤ 40 A		-		-	
Output characteristics							
Voltage		5 VDC⎓		12 VDC⎓		24 VDC⎓	
Current		6 A	10 A	2.5 A	4.2 A	1.5 A	2.1 A
Voltage adjustment range [03]		≤ ±5%		≤ ±5%		≤ ±5%	
Input variation [04]		≤ ±0.5%		≤ ±0.5%		≤ ±0.5%	
Load variation [02]		≤ ±2%		≤ ±1%		≤ ±1%	
Ripple noise [02]		≤ ±1%		≤ ±1%		≤ ±1%	
Start-up time [02] (typical)		≤ 200 ms		≤ 150 ms		≤ 150 ms	
Hold time [02] (typical)		≥ 10 ms		≥ 10 ms		≥ 10 ms	
Protection							
Over-current protection [05]		≥ 110%		≥ 110%		≥ 110%	
Over-voltage protection [03]		-		-		-	
Output short-circuit protection		≤ 5 ms		≤ 5 ms		≤ 5 ms	
Approval		CE EAC		CE EAC		CE EAC	
Unit weight		≈ 350 g		≈ 350 g		≈ 350 g	

Output range		**75 to 100 W**					
Model		**SPA-075-05**	**SPA-100-05**	**SPA-075-12**	**SPA-100-12**	**SPA-075-24**	**SPA-100-24**
Output power		75 W	100 W	75 W	100 W	75 W	100 W
Input condition							
Voltage [01]		100 - 120 / 200 - 240 VAC～ (permissible voltage: 85 - 264 VAC～) switching type					
Frequency		50 / 60 Hz					
Efficiency [02] (typical)		≥ 70%		≥ 78%	≥ 72%	≥ 78%	≥ 80%
Current consumption [02] (typical)		≤ 3.0 A		≤ 2.0 A	≤ 3.0 A	≤ 2.0 A	≤ 2.5 A
Inrush current protection (typical)	100 VAC～	≤ 45 A		≤ 35 A	≤ 45 A	≤ 35 A	
	240 VAC～	≤ 50 A		≤ 40 A	≤ 50 A	≤ 40 A	
Output characteristics							
Voltage		5 VDC⎓		12 VDC⎓		24 VDC⎓	
Current		15 A	20 A	6.3 A	8.5 A	3.2 A	4.2 A
Voltage adjustment range [03]		≤ ±5%		≤ ±5%		≤ ±5%	
Input variation [04]		≤ ±0.5%		≤ ±0.5%		≤ ±0.5%	
Load variation [02]		≤ ±2%		≤ ±1%		≤ ±1%	
Ripple noise [02]		≤ ±1%		≤ ±1%		≤ ±1%	
Start-up time [02] (typical)		≤ 250 ms		≤ 250 ms		≤ 250 ms	
Hold time [02] (typical)		≥ 5 ms		≥ 10 ms	≥ 5 ms	≥ 10 ms	
Protection							
Over-current protection [05]		≥ 110%	≥ 105%	≥ 110%		≥ 110%	
Over-voltage protection [03]		6.5 V ±10%		16.0 V ±10%		30.0 V ±10%	
Output short-circuit protection		≤ 10 ms		≤ 5 ms	≤ 10 ms	≤ 5 ms	
Approval		CE EAC		CE EAC		CE EAC	
Unit weight		≈ 400 g		≈ 400 g		≈ 400 g	

CE EAC

Indicator	Output indicator (green)
Insulation resistance	≥ 100 MΩ (500 VDC⎓ megger, between all inputs and outputs)
Dielectric strength	3,000 VAC~ 50/60 Hz for 1 min (between all inputs and outputs) 1,500 VAC~ 50/60 Hz for 1 min (between all inputs and F.G.)
Vibration	10 to 55 Hz (for 1 min) amplitude at frequency 0.75 mm in each X, Y, Z direction for 2 hours
Shock	300 m/s^2 (≈ 30 G) in each X, Y, Z direction for 3 times
EMS	EN61000-6-2 conformation
EMI	EN61000-6-4 conformation
Safety standards	EN60950, EN50178
Ambient temperature	-10 to 50 °C (SPA-050-05, SPA-030-12, SPA-050-12: -10 to 40 °C), storage: -25 to 65 °C (no freezing or condensation)
Ambient humidity	25 to 85%RH, storage: 25 to 90%RH (no freezing or condensation)

01) Since there is no separate input over-voltage protection for the voltage over the rated input voltage range, Supplying over-voltage may result in product damage.

02) It is in the rated input voltage 100 VAC~ with 100% load.

03) Use the output voltage adjusting volume within the voltage variable range. If the voltage exceeds the output voltage range, overvoltage protection function is activated and the output is cut off.

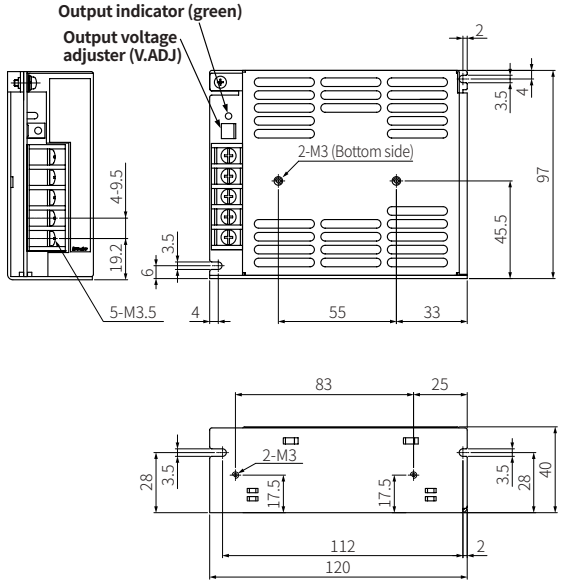
04) Rate input voltage
- SPA-030 / 050 series: 100 - 240 VAC~ (85 - 264 VAC~) with 100% of load
- SPA-075 / 100 series: 100 - 120 / 200 - 240 (85 - 132 / 170 - 264 VAC~) with 100% of load
- SPA-100-05 model: 100 - 120 / 200 - 240 VAC~ (100 - 132 / 190 - 264 VAC~) with 100% of load

05) It is for rate input voltage 100 VAC~.

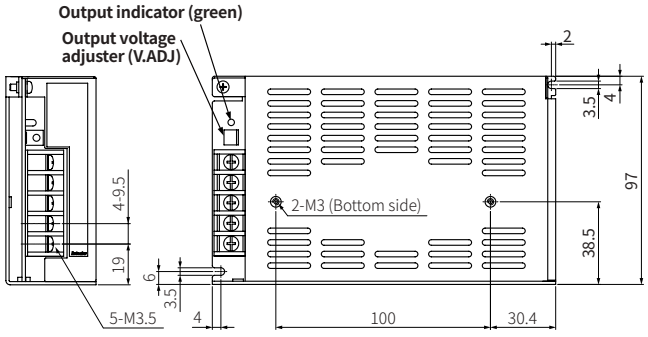
Dimensions

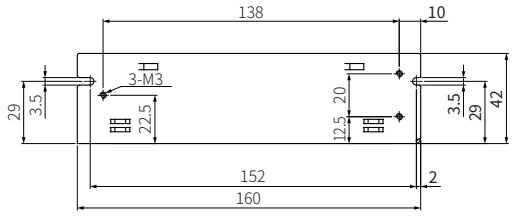
• Unit: mm, refer to the Autonics website for the details of the product.

■ **SPA-030 / 050 series**



■ **SPA-075 / 100 series**





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