

# 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 $\equiv$ , 12 VDC $\equiv$ , 24 VDC $\equiv$
- 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 - ① - ②

#### ① Output power

Number: Output power (unit: W)

#### ② Output voltage

Number: Output voltage (unit: VDC $\equiv$ )

### 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
<b>Input condition</b>						
Voltage <sup>(01)</sup>	100 - 240 VAC $\sim$					
Permissible voltage range	85 - 264 VAC $\sim$					
Frequency	50 / 60 Hz					
Efficiency <sup>(02)</sup> (typical)	$\geq 60\%$	$\geq 67\%$	$\geq 74\%$		$\geq 80\%$	
Current consumption <sup>(03)</sup> (typical)	$\leq 1.2$ A	$\leq 1.6$ A	$\leq 1.0$ A	$\leq 1.4$ A	$\leq 0.8$ A	$\leq 1.1$ A
Inrush current	100 VAC $\sim$		$\leq 30$ A		$\leq 20$ A	
protection (typical)	240 VAC $\sim$		$\leq 40$ A		-	
<b>Output characteristics</b>						
Voltage	5 VDC $\equiv$		12 VDC $\equiv$		24 VDC $\equiv$	
Current	6 A	10 A	2.5 A	4.2 A	1.5 A	2.1 A
Voltage adjustment range <sup>(03)</sup>	$\leq \pm 5\%$		$\leq \pm 5\%$		$\leq \pm 5\%$	
Input variation <sup>(04)</sup>	$\leq \pm 0.5\%$		$\leq \pm 0.5\%$		$\leq \pm 0.5\%$	
Load variation <sup>(02)</sup>	$\leq \pm 2\%$		$\leq \pm 1\%$		$\leq \pm 1\%$	
Ripple noise <sup>(02)</sup>	$\leq \pm 1\%$		$\leq \pm 1\%$		$\leq \pm 1\%$	
Start-up time <sup>(02)</sup> (typical)	$\leq 200$ ms		$\leq 150$ ms		$\leq 150$ ms	
Hold time <sup>(02)</sup> (typical)	$\geq 10$ ms		$\geq 10$ ms		$\geq 10$ ms	
<b>Protection</b>						
Over-current protection <sup>(05)</sup>	$\geq 110\%$		$\geq 110\%$		$\geq 110\%$	
Over-voltage protection <sup>(03)</sup>	-		-		-	
Output short-circuit protection	$\leq 5$ ms		$\leq 5$ ms		$\leq 5$ ms	
Approval	CE ENEC		CE ENEC		CE ENEC	
Unit weight	$\approx 350$ g		$\approx 350$ g		$\approx 350$ 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
<b>Input condition</b>						
Voltage <sup>(01)</sup>	100 - 120 / 200 - 240 VAC $\sim$ (permissible voltage: 85 - 264 VAC $\sim$ ) switching type					
Frequency	50 / 60 Hz					
Efficiency <sup>(02)</sup> (typical)	$\geq 70\%$		$\geq 78\%$	$\geq 72\%$	$\geq 78\%$	$\geq 80\%$
Current consumption <sup>(03)</sup> (typical)	$\leq 3.0$ A		$\leq 2.0$ A	$\leq 3.0$ A	$\leq 2.0$ A	$\leq 2.5$ A
Inrush current	100 VAC $\sim$		$\leq 45$ A	$\leq 35$ A	$\leq 45$ A	$\leq 35$ A
protection (typical)	240 VAC $\sim$		$\leq 50$ A	$\leq 40$ A	$\leq 50$ A	$\leq 40$ A
<b>Output characteristics</b>						
Voltage	5 VDC $\equiv$		12 VDC $\equiv$		24 VDC $\equiv$	
Current	15 A	20 A	6.3 A	8.5 A	3.2 A	4.2 A
Voltage adjustment range <sup>(03)</sup>	$\leq \pm 5\%$		$\leq \pm 5\%$		$\leq \pm 5\%$	
Input variation <sup>(04)</sup>	$\leq \pm 0.5\%$		$\leq \pm 0.5\%$		$\leq \pm 0.5\%$	
Load variation <sup>(02)</sup>	$\leq \pm 2\%$		$\leq \pm 1\%$		$\leq \pm 1\%$	
Ripple noise <sup>(02)</sup>	$\leq \pm 1\%$		$\leq \pm 1\%$		$\leq \pm 1\%$	
Start-up time <sup>(02)</sup> (typical)	$\leq 250$ ms		$\leq 250$ ms		$\leq 250$ ms	
Hold time <sup>(02)</sup> (typical)	$\geq 5$ ms		$\geq 10$ ms	$\geq 5$ ms	$\geq 10$ ms	$\geq 10$ ms
<b>Protection</b>						
Over-current protection <sup>(05)</sup>	$\geq 110\%$	$\geq 105\%$	$\geq 110\%$		$\geq 110\%$	
Over-voltage protection <sup>(03)</sup>	6.5 V $\pm 10\%$		16.0 V $\pm 10\%$		30.0 V $\pm 10\%$	
Output short-circuit protection	$\leq 10$ ms		$\leq 5$ ms	$\leq 10$ ms	$\leq 5$ ms	
Approval	CE ENEC		CE ENEC		CE ENEC	
Unit weight	$\approx 400$ g		$\approx 400$ g		$\approx 400$ g	

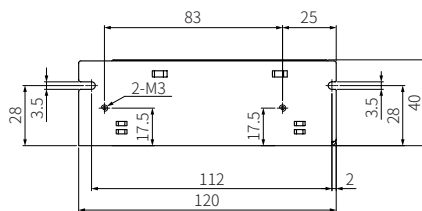
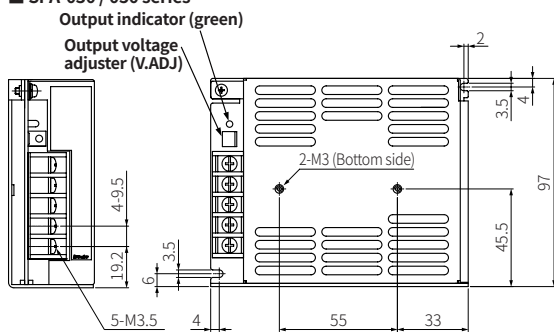
<b>Indicator</b>	Output indicator (green)
<b>Insulation resistance</b>	$\geq 100 \text{ M}\Omega$ (500 VDC= megger, between all inputs and outputs)
<b>Dielectric strength</b>	3,000 VAC~ 50/60 Hz for 1 min (between all inputs and outputs) 1,500 VAC~ 50/60 Hz for 1 min (between all inputs and F.G.)
<b>Vibration</b>	10 to 55 Hz (for 1 min) amplitude at frequency 0.75 mm in each X, Y, Z direction for 2 hours
<b>Shock</b>	300 m/s <sup>2</sup> ( $\approx 30 \text{ G}$ ) in each X, Y, Z direction for 3 times
<b>EMS</b>	EN61000-6-2 conformation
<b>EMI</b>	EN61000-6-4 conformation
<b>Safety standards</b>	EN60950, EN50178
<b>Ambient temperature</b>	-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)
<b>Ambient humidity</b>	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

