





## DPS series





DIN rail installation type Power supply

- DPS Series
- DIN rail installation type
- Automation selection of input voltage due to function of automatic input selection
- Overcurrent, Overvoltage, Loaded with Overprotection function
- Low Output Voltage Regulation
- Various products from 15W to 240W
- The realization of low heat due to high efficiency
- Equipped with output voltage ON pilot lamp
- Equipped with DC OK sign relay output



## Specification

Model	DPS-15S	DPS-30S	DPS-50S	DPS-75S
Appearance				
W×H×D (mm)	25.0x90.0x103.0	40.0x90.0x103.0	40.0x90.0x103.0	56.0x124.0x97.8
Power output	15 W	30 W	50 W	75 W
Input voltage	110 - 240 V a.c. (Free power)			
Output voltage	5 V, 12 V, 15 V, 24 V d.c.			12 V, 24 V, 48 V d.c.
Voltage fluctuation range	±5 ~ 10 % (Varies due to the internal VR)			
Protective circuit	• Overcurrent, • Overvoltage, • overheat, • Output short-circuit protection, • DC OK display function			
Dielectric strength	• 2,700 V a.c. 1 minute, detection current = 10 mA, (input-output) • 1,500 V a.c. 1 minute, detection current = 10 mA, (input-FG) • 500 V a.c. 1 minute, detection current = 10 mA, (output-FG) • 500 V a.c. 1 minute, detection current = 10 mA, (output-DC OK)			
Insulation resistance	50 MΩ or more. (Input-Output, FG), (Output-FG, DC OK)			

Model	DPS-100S	DPS-120S	DPS-180S	DPS-240S
Appearance				
W×H×D (mm)	56.0x124.0x97.8	66.0x124.0x97.8	66.0x124.0x97.8	125.5x124.0x97.8
Power output	100 W	120 W	180 W	240 W (* However, DPS-240S-12 is 216W)
Input voltage	100 - 240 V a.c. 50/60 Hz (Free power)	100 - 120 V a.c. 50/60 Hz/200-240Va.c. 50/60 Hz(Automatic input selection)		
Output voltage	12 V, 24 V, 48 V d.c.		24 V, 48 V d.c.	12 V, 24 V, 48 V d.c.
Voltage fluctuation range	±5 ~ 10 % (Depends on internal VR)			
Protective circuit	• Overcurrent, • Overvoltage, • Overheat, • Output short-circuit protection, • DC OK display, • DC OK output function			
Dielectric strength	• 2,700 V a.c. 1 minute, detection current = 10 mA, (input-output) • 1,500 V a.c. 1 minute, detection current = 10 mA, (input-FG) • 500 V a.c. 1 minute, detection current = 10 mA, (output-FG) • 500 V a.c. 1 minute, detection current = 10 mA, (output-DC OK)			
Insulation resistance	50MΩ or more (input-output, FG), (output-FG, DC OK)			

## Suffix code

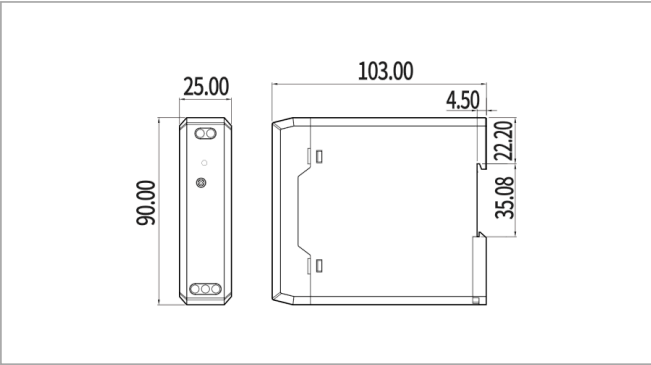
Model	Code			Information
DPS-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DPS Power supply (DIN Rail Type)

Power output	15			15W, 30W, 50W, 75W, 100W, 120W, 180W, 240W
Number of output voltage		S		1 output
Output voltage classification		05		5 V d.c. (DPS-75S, DPS-100S, DPS-120S, DPS-180S, DPS-240S are excluded)
		12		12 V d.c. (DPS-180S are excluded)
		15		15 V d.c. (DPS-75S, DPS-100S, DPS-120S, DPS-180S, DPS-240S are excluded)
		24		24 V d.c.
		48		48 V d.c. (DPS-15S, DPS-30S, DPS-50S are excluded)

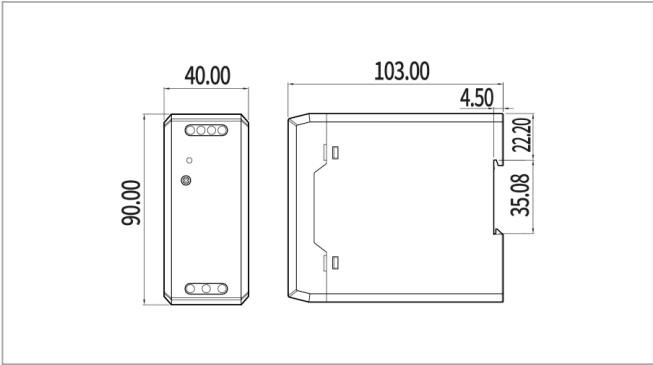
**Dimension**

[Unit : mm]

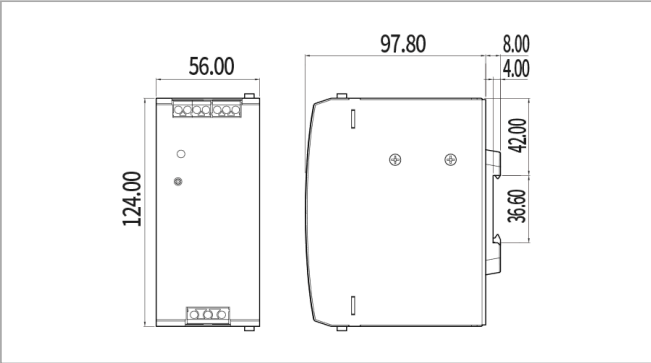
■ DPS-15S



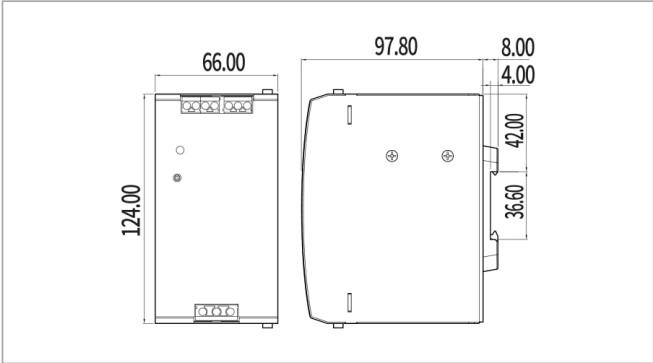
■ DPS-30S / DPS-50S



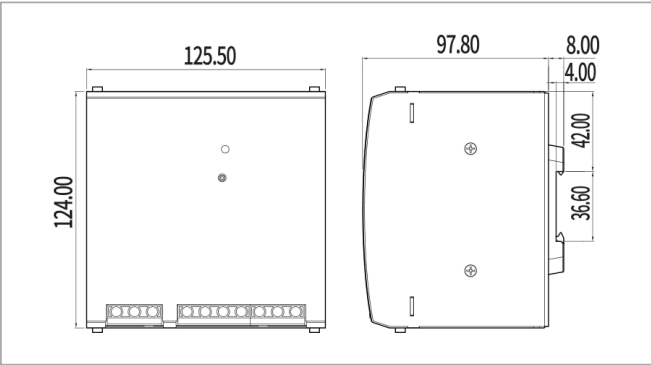
■ DPS-75S / DPS-100S



■ DPS-120S / DPS-180S



■ DPS-240S



## Function

### Rated input voltage

Input voltage	Frequency	Model
100 - 240 V a.c. (Free voltage)	50 - 60Hz	DPS-15S, DPS-30S, DPS-50S, DPS-75S, DPS-100S
100 - 120 / 200 - 240 V a.c. (Auto-select input)	50 - 60Hz	DPS-120S, DPS-180S, DPS-240S

- Auto-select input?
- Automatically input voltage selected regardless of input voltage 100 - 120 V a.c. or 200 - 240 V a.c.(Dual use)

### Adjustable Output voltage

- Output voltage can be adjustable by adjustable resistance inside of the product. (more than  $\pm 5$  % of rated output voltage)

### Limited Inrush Current

- This product has inrush current limit circuit but it should be considered carefully when selection of the external switch or fuse.

### Short-Circuit Protection

- When the output terminals shorted, the output is blocked. After eliminating the reason of short, voltage is output automatically.

### Over-Voltage Protection

- When the output voltage is reached at 115 to 140 % of the rated voltage. Blocking the current flow to protect the outside of the connected equipment and system.

### Over-Current Protection

- When the output current exceeds the rated capacity, it is activated and stops output.
- After eliminating the reason of over-current, the output voltage is restored automatically.


### Over-Temperature Protection

- When PWM controller junction temperature reaches to 135 ~ 140 °C, this protection automatically stops switching to prevent components damage due to overheating.

### Ripple Noise

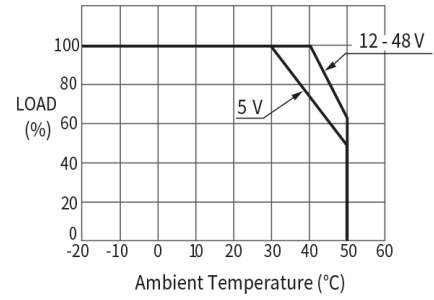
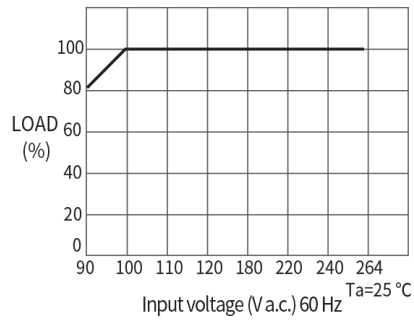
- Wiring should be shortened to reduce induction noise. Please use after reducing ripples noise sufficiently.

## Product's wiring

Name of Terminal		Description
Input Terminal	AC(L)	AC Input Terminal
	AC(N)	
		Protective Earth Terminal
Output terminal	+V OUT	DC Output Terminal
	-V OUT	
	COM	Relay Output Terminal (250 V a.c., 1A, 30 V d.c., 1A) ON : more than 85 % of the rated output voltage lights on OFF : Less than 85 % of the rated output voltage turns off
	NC	
	NO	

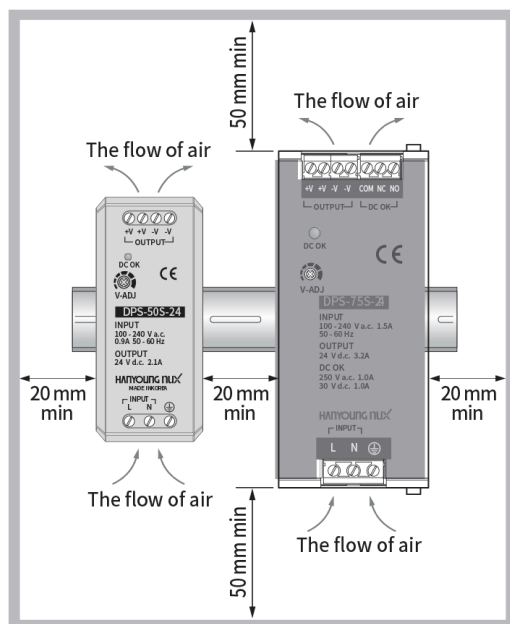
- Please check carefully how to connect depending on model. (different connection depending on models)

## Derating curve



## Installation instructions and precautions

- Do not force the product after installation. (Max 20 N)
- Please strip wire cover 6 ~ 7 mm when wiring.



## + standard of wire

Model	Multiple wire	Single wire
DPS-15S	AWG 22 ~ 12 (0.33 ~ 3.3 mm <sup>2</sup> )	AWG 22 ~ 12 (0.33 ~ 3.3 mm <sup>2</sup> )
DPS-30S		
DPS-50S		
DPS-75S	AWG 30 ~ 12 (0.05 ~ 3.3 mm <sup>2</sup> )	AWG 30 ~ 12 (0.05 ~ 3.3 mm <sup>2</sup> )
DPS-100S		
DPS-120S		
DPS-180S		
DPS-240S	AWG 24 ~ 10 (0.2 ~ 5.26 mm <sup>2</sup> )	AWG 24 ~ 10 (0.2 ~ 5.26 mm <sup>2</sup> )

\* In order to improve long-term reliability, the product should be install vertically and make more enough space as 50 mm vertically and 20 mm horizontally. Airfan is recommended to flow air circulation.