TPS series

1/2 output ENCLOSED type power supply

- TPS Series
- 1 Output aluminum-case panel installation type
- Equipped with Output voltage adjustable resistance (V.R).
- Output voltage ON pilot lamp (LED lamp)
- Free power supply AC Input (100-240 V a.c.)
- Equipped with Inrush current limiting circuit
- Overcurrent, Overvoltage, Output short circuit, Overheating protection function

Specification

Model	TPS-15S	TPS-30S	TPS-50S	TPS-75S
Appearance				
W × H × D (㎜)	64.1x97.6x32.0	79.0x98.0x37.0	83.0x125.0x38.8	96.0x135.0x40.2
Power output	15 W	30 W	50 W	75 W
Input voltage	Free voltage 100-240 V a.c. (50/60 ㎐)			
Output voltage	5 V, 12 V, 15 V, 24 V d.c.			
Voltage fluctuation range	±5 ~ ±10 % (Varies due to the internal VR)			
Protective circuit	Overcurrent, Overvoltage, Overheating, Output short-circuit protection			
Dielectric strength	• 2,700 V a.c. 1 minute, detection current = 10 ㎃, (input-output) • 1,500 V a.c. 1 minute, detection current = 10 ㎃, (input-FG) • 500 V a.c. 1 minute, detection current = 10 ㎃, (output-FG)			
Insulation resistance	100 ㏁ min, 500V d.c. (Input - Output)			

Model	TPS-100S
Appearance	
W × H × D (㎜)	93.0x199.0x50.0
Power output	100 W
Input voltage	Manual-select input 100 - 120V a.c. 50/60 ㎐ / 200 - 240 V a.c. 50/60 ㎐
Output voltage	5 V, 12 V, 15 V, 24 V d.c.
Voltage fluctuation range	±5 ~ ±10 % (Varies due to the internal VR)
Protective circuit	Overcurrent, Overvoltage, Overheating, Output short-circuit protection
Dielectric strength	• 2,700 V a.c. 1 minute, detection current = 10 ㎃, (input-output) • 1,500 V a.c. 1 minute, detection current = 10 ㎃, (input-FG) • 500 V a.c. 1 minute, detection current = 10 ㎃, (output-FG)
Insulation resistance	100 ㏁ min, 500V d.c. (Input - Output)

Model	TPS-150S	TPS-220S	TPS-350S
Appearance			
W × H × D (㎜)	93.0x209.0x65.0	93.0x209.0x65.0	115.0x230.0x50.0
Power output	150 W	220 W	350 W
Input voltage	Manual-select input 100 - 120 V a.c. 50/60 ㎐ / 00 - 240 V a.c. 50/60 ㎐		
Output voltage	5 V,12 V,15 V,24 V d.c.	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, Overheating, Output short-circuit protection
Dielectric strength	• 2,700 V a.c. 1 minute, detection current = 10 ㎃, (input-output) • 1,500 V a.c. 1 minute, detection current = 10 ㎃, (input-FG) • 500 V a.c. 1 minute, detection current = 10 ㎃, (output-FG)
Insulation resistance	100 ㏁ min, 500V d.c. (Input - Output)

Model	TPS-100S
Appearance	
W × H × D (㎜)	115.0x230.0x50.0
Power output	450 W
Input voltage	Free voltage 100 - 240 V a.c. 50/60 ㎐
Output voltage	12 V, 24 V, 48 V d.c.
Voltage fluctuation range	±5 ~ ±10 % (Varies due to the internal VR)
Protective circuit	Overcurrent, Overvoltage, Overheating, Output short-circuit protection
Dielectric strength	• 2,700 V a.c. 1 minute, detection current = 10 ㎃, (input-output) • 1,500 V a.c. 1 minute, detection current = 10 ㎃, (input-FG) • 500 V a.c. 1 minute, detection current = 10 ㎃, (output-FG)
Insulation resistance	100 ㏁ min, 500V d.c. (Input - Output)

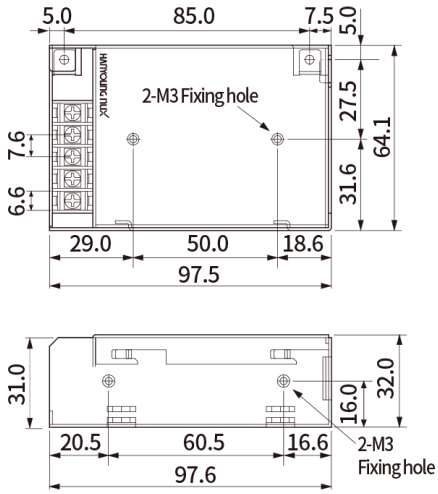
Suffix code

Model	Code			Information
TPS-	☐	☐	☐	TPS Power supply (Enclosed Type)
Power output	15			15W, 30W, 50W, 75W, 100W, 150W, 220W, 350W, 450W
Number of output voltage		S		1 output
Output voltage classification			05	5 V d.c. (220W, 350W, 450W are excluded)
			12	12 V d.c.
			15	15 V d.c. (350W, 450W are excluded)
			24	24 V d.c.
			48	48 V d.c. (15W, 30W, 50W, 75W, 100W, 150W, 220W are excluded)

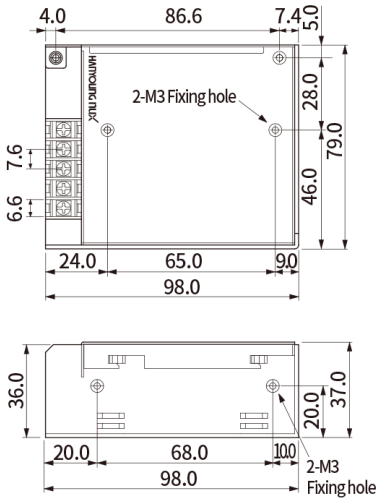
Dimension

[Unit : ㎜]

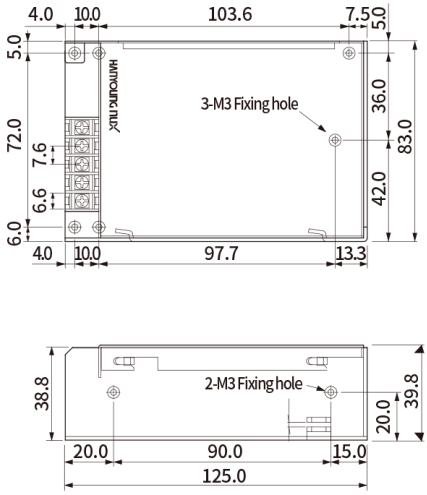
▪ TPS-15S



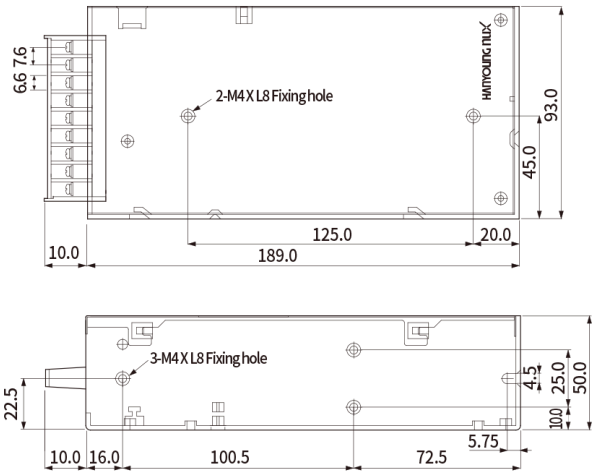
▪ TPS-30S



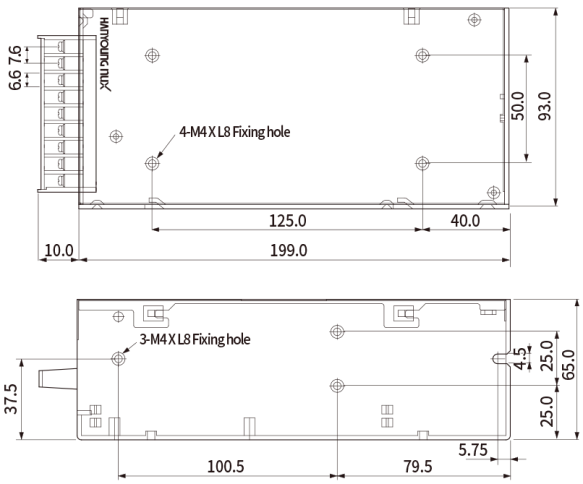
▪ TPS-50S / TPS-75S



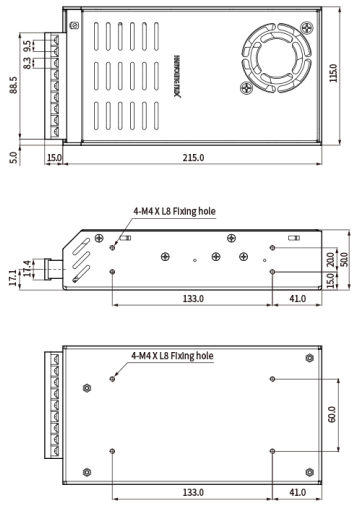
▪ TPS-100S



▪ TPS-150S / 220S



▪ TPS-350S / 450S



Function

▪ Rated input voltage

- The product's input voltage is set at 220 V a.c. 50 - 60 Hz when shipping it out from our company

- Free power supply product works in 100 - 240 V a.c. 50 - 60 Hz even though it does not select input voltage.

Input voltage	Free voltage 100 - 240 V a.c. 50 - 60Hz	Manual-select input 100 - 120 / 200 - 240 V a.c. 50 - 60Hz
TPS series	TPS-15S, TPS-30S, TPS-50S, TPS-75S, TPS-450S	TPS-100S, TPS-150S, TPS-220S, TPS-350S

▪ Instant maximum output power

- The product's instant maximum output voltage can work up to rating's 130 % (220 V a.c. input Standard)

▪ Adjustable Output voltage

- Output voltage can be adjustable by adjustable resistance inside of the product. (more than ±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, activate this protection to stop 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

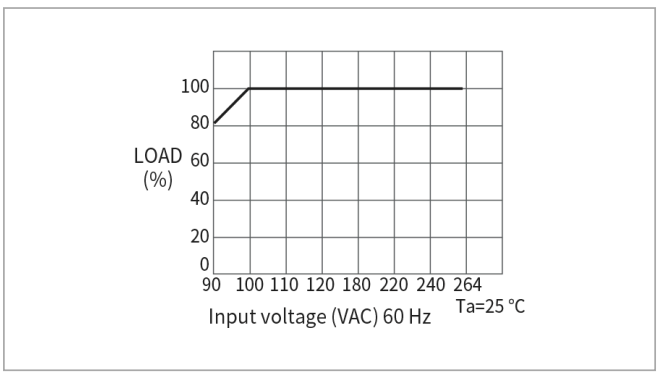
▪ Input terminal

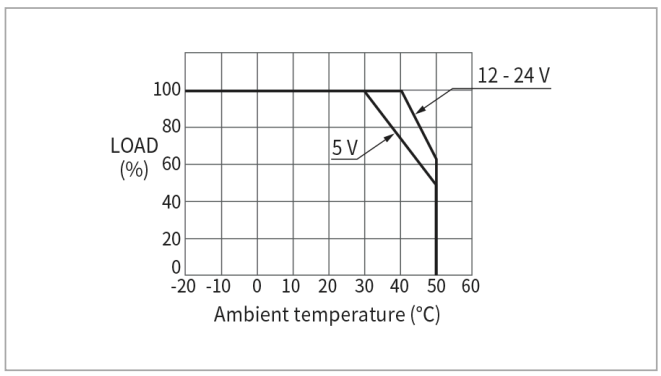
- L(Live)/N(Neutral) : AC input Terminal.
- F.G(Frame Ground) : As an earth terminal, it is used to protect electric shock accident and improve the electromagnetic interference.

▪ Output terminal

- (+) / (-) : It is a DC output terminal. Please pay a careful polarity on connecting
- When output of GND is mutually short circuited, output of terminals would be short circuited each other.
- Please make sure to ask us when you have any question before using the product.
- Please make sure to check about the terminal's existence and connection method because they are different depending on the types of model.

Derating curve





Block diagram