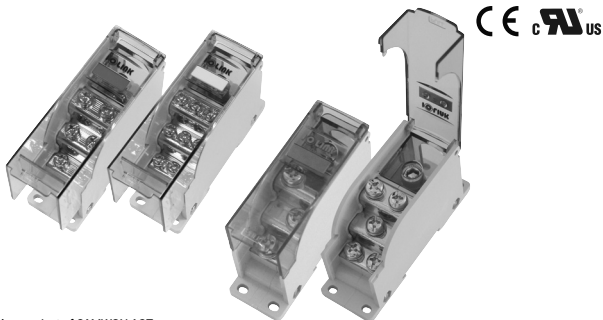


SPS Series Wiring-type Screw-type Power Distribution Block

User's Guide



Thank you for purchasing product of SAMWON ACT.
Please check model of product that you purchase first, and read this manual prior to use it.

● Caution for safety

- Warning** Case that results in serious damage in human body or equipment, and fire if user handles this equipment wrongly
- Caution** Case that results in slight damage in human body or equipment, and fire if user handles this equipment wrongly

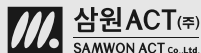
Warning

1. Do not allow foreign substances such as dust or wire sheath to enter the connection terminals. It may cause damage, fever, and ignition of the main body.
2. When installing or wiring, please cut off the external power supply or circuit breaker first. It may cause electric shock or short circuit accidents.

Caution

1. Use within the specified temperature range. (-25°C ~ +55°C)
Damage to the outer case may occur.
2. Use within the specified rated voltage and rated current range.
This may result in fire or damage.
3. When wiring, please tighten it with the specified torque using the appropriate tool.
If it is outside of this range torque, it may cause malfunction due to breakage or looseness of tightening surface terminal.

● The above specifications are subject to change without notice.
● Please contact HQ or branch office where you purchased product for A/S of this product or technique.



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TEL : 051)320-7777 FAX : 051)312-2233
■ SEOUL Office | 14353, M Cluster-707, 17, Deogan-ro
104beon-gil, Gwangmyeong-si, Gyeonggi-do
TEL : 02)837-2230 FAX : 02)837-2226

NO.202211-0M-KOR-SPS-UL

● Model configuration

SPS 25 - M6 / 6 * M4 - S

Division	Series
SPS	Wiring-type screw-type power distribution block

Division	Pitch
25	25mm
30	30mm
35	35mm
45	45mm

Division	Primary-side terminal screw specification
M6	M6 X 10 * 1ea
M8	M8 X 15 * 1ea

Division	Window option
No indication	Normal
S	Safety window

Division	Secondary-side terminal screw specification
6 * M4	M4 * 6ea
9 * M4	M4 * 9ea
12 * M4	M4 * 12ea
3 * M5	M5 * 3ea
6 * M5	M5 * 6ea
9 * M5	M5 * 9ea
3 * M6	M6 * 3ea
5 * M6	M6 * 5ea

● Model selection

Model	Rated capacity	Pitch	Rating (IEC wires)		Terminal screw		Dimensions (W * Dmm)	Mounting method
			Primary	Secondary ^(Note)	Primary	Secondary		
SPS25-M6/6 * M4	UL : 600V 100A	25mm	25mm ² [100A]	1.5 - 4mm ²	M6 * 1ea	M4 * 6ea	25 * 95	Screw fastening/ DIN Rail (Channel)
SPS25-M6/6 * M4-S	CE : 600V 75A					M5 * 3ea	25 * 109	
SPS25-M6/3 * M5							25 * 95	
SPS25-M6/3 * M5-S			25 * 109					
SPS30-M6/6 * M5	UL : 600V 125A	30mm	35mm ² [125A]	4 - 16mm ²	M6 * 1ea	M5 * 6ea	30 * 95	
SPS30-M6/6 * M5-S	CE : 600V 100A					M6 * 3ea	30 * 109	
SPS30-M6/3 * M6							30 * 95	
SPS30-M6/3 * M6-S			6 - 16mm ²		M6 * 3ea	30 * 109		
SPS35-M8/9 * M4	UL : 600V 150A	35mm	50mm ² [150A]	2.5 - 4mm ²	M8 * 1ea	M4 * 9ea	35 * 102	
SPS35-M8/9 * M4-S	CE : 600V 150A					M5 * 6ea	35 * 116	
SPS35-M8/6 * M5							35 * 102	
SPS35-M8/6 * M5-S			4 - 16mm ²		M6 * 5ea	35 * 116		
SPS35-M8/5 * M6			6 - 16mm ²			35 * 102		
SPS35-M8/5 * M6-S						35 * 116		
SPS45-M8/12 * M4	UL : 600V 200A	45mm	90mm ² [200A]	2.5 - 4mm ²	M8 * 1ea	M4 * 12ea	45 * 102	
SPS45-M8/12 * M4-S	CE : 600V 175A					M5 * 9ea	45 * 116	
SPS45-M8/9 * M5							45 * 102	
SPS45-M8/9 * M5-S			4 - 16mm ²			45 * 116		

(Note) The twin wiring is possible when the outer diameter of the cable is less than Ø6.5.

● Applicable crimp terminal (Secondary-side)

	Model	A(MAX)	B(MIN)	C(MAX)	D(MIN)
	M4	9.1	4.0	4.5	6.2
	M5	12.0	5.0	5.8	6.5
	M6	12.5	6.0	6.4	6.5

● Rated current

by wire cross-sectional area (IEC Standard)

Cross-sectional area mm ²	Rated current [A]										
	1	1.5	2.5	4	6	10	16	25	35	50	70
AWG/kcmil	17	16	14	12	10	8	6	4	2	0	00
Rated current [A]	13.5	17.5	24	32	41	57	76	101	125	150	192

● Material/Specification

Case	Modified PPO
Protective cover	Polycarbonate
Pin header	Brass / Nickel-Plated
Ambient temperature	-25°C ~ +55°C (No condensation)
Temperature rise	The temperature rise of the conductive bracket is 45 °C or less
Withstand voltage	2,500V 1min
Impulse dielectric strength	6,000V

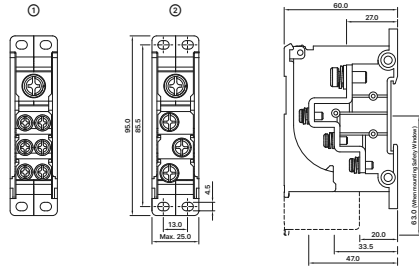
● SPS Series appropriate tool

Model	Primary-side	Secondary-side
SPS25-M6/□ * □	⊕ PH2	⊕ PH2
SPS30-M6/□ * □		
SPS35-M8/□ * □	⊕ PH2	
SPS45-M8/□ * □		

• Dimension

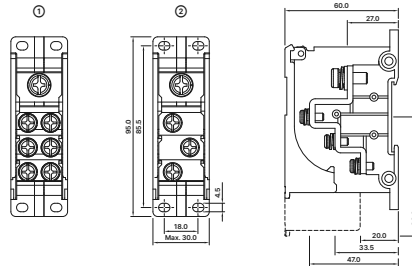
• SPS25-M6/□ * □

Model	Terminal screw		Tightening torque		Dimensions (W×Dmm)	Appearance diagram	Mounting screw
	Primary	Secondary	Primary	Secondary			
SPS25-M6/6 * M4	M6 * 1ea	M4 * 6ea	4 N·m	1.4 N·m	25 * 95	⊙	M4
SPS25-M6/6 * M4-S				25 * 109			
SPS25-M6/3 * M5		M5 * 3ea	2.2 N·m	25 * 95			
SPS25-M6/3 * M5-S			25 * 109				

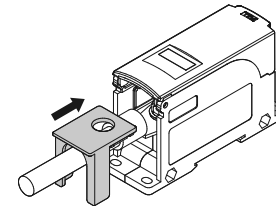


• SPS30-M6/□ * □

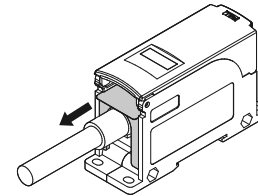
Model	Terminal screw		Tightening torque		Dimensions (W×Dmm)	Appearance diagram	Mounting screw
	Primary	Secondary	Primary	Secondary			
SPS30-M6/6 * M5	M6 * 1ea	M5 * 6ea	4 N·m	2.2 N·m	30 * 95	⊙	M4
SPS30-M6/6 * M5-S				30 * 109			
SPS30-M6/3 * M6		M6 * 3ea	4 N·m	30 * 95			
SPS30-M6/3 * M6-S			30 * 109				



• How to use protection cover of primary-side



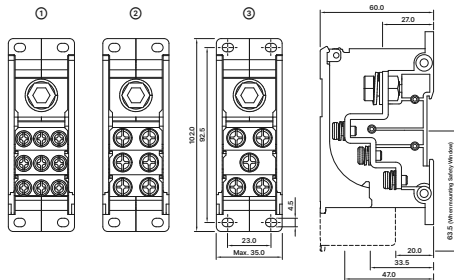
[Installation]
After wiring, insert the terminal cover into the primary side of the main body in the direction of an arrow.



[Removal]
Pull the terminal cover in the direction of an arrow and remove it from main body.

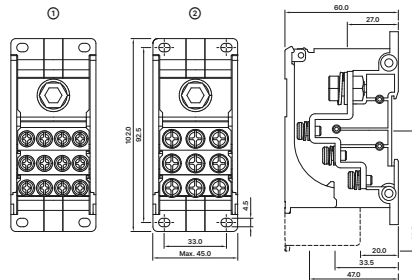
• SPS35-M8/□ * □

Model	Terminal screw		Tightening torque		Dimensions (W×Dmm)	Appearance diagram	Mounting screw
	Primary	Secondary	Primary	Secondary			
SPS35-M8/9 * M4	M8 * 1ea	M4 * 9ea	8 N·m	1.4 N·m	35 * 102	⊙	M4
SPS35-M8/9 * M4-S				35 * 116			
SPS35-M8/6 * M5		M5 * 6ea	2.2 N·m	35 * 102			
SPS35-M8/6 * M5-S			35 * 116				
SPS35-M8/5 * M6	M6 * 5ea	4 N·m	35 * 102				
SPS35-M8/5 * M6-S		35 * 116					

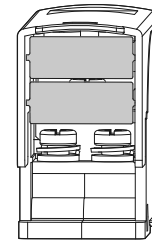


• SPS45-M8/□ * □

Model	Terminal screw		Tightening torque		Dimensions (W×Dmm)	Appearance diagram	Mounting screw
	Primary	Secondary	Primary	Secondary			
SPS45-M8/12 * M4	M8 * 1ea	M4 * 12ea	8 N·m	1.4 N·m	45 * 102	⊙	M4
SPS45-M8/12 * M4-S				45 * 116			
SPS45-M8/9 * M5		M5 * 9ea	2.2 N·m	45 * 102			
SPS45-M8/9 * M5-S			45 * 116				



• How to use protection cover of secondary-side (Safety Window)



* When wiring only one step, use without removing the protective cover.

* When wiring a 2 step cable, use after removing ⊙. When wiring all cables up to 3 step, remove all ⊙ and ⊙ before use.

