

SPS Series Wiring-type Screw-type Power Distribution Block

User's Guide

2-tiered



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

- 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.
- 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

- Use within the specified temperature range. (-25°C ~ +55°C)
Damage to the outer case may occur.
- Use within the specified rated voltage and rated current range.
This may result in fire or damage.
- 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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NO.202208-0M-ENG-SPS2-UL

● Model configuration

SPS		25	-	M6	/	M6+2*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							
M6+2*M4	M6 * 1ea / M4 * 2ea							
M8+3*M4	M8 * 1ea / M4 * 3ea							
M8+4*M4	M8 * 1ea / M4 * 4ea							

● Model selection

Model	Rated capacity	Pitch	Rating (IEC wires)		Terminal screw		Dimensions (W * Dmm)	Mounting method
			Primary	Secondary	Primary	Secondary		
SPS25-M6/M6+2*M4	UL: 600[V] 100[A] CE: 600[V] 75[A]	25mm	25mm ² [100A]	Upper: 1.5 ~ 4mm ² Bottom: 25mm ²	M6 * 1ea	Upper: M4 * 2ea Bottom: M6 * 1ea	25 * 95	Screw fastening/ DIN Rail (Channel)
SPS25-M6/M6+2*M4-S							25 * 109	
SPS30-M6/M6+2*M4	UL: 600[V] 125[A] CE: 600[V] 100[A]	30mm	35mm ² [125A]	Upper: 1.5 ~ 4mm ² Bottom: 6 ~ 35mm ²	M6 * 1ea	Upper: M4 * 2ea Bottom: M6 * 1ea	30 * 95	
SPS30-M6/M6+2*M4-S							30 * 109	
SPS35-M8/M8+3*M4	UL: 600[V] 150[A] CE: 600[V] 150[A]	35mm	50mm ² [150A]	Upper: 1.5 ~ 4mm ² Bottom: 10 ~ 50mm ²	M8 * 1ea	Upper: M4 * 3ea Bottom: M8 * 1ea	35 * 102	
SPS35-M8/M8+3*M4-S							35 * 116	
SPS45-M8/M8+4*M4	UL: 600[V] 200[A] CE: 600[V] 175[A]	45mm	90mm ² [200A]	Upper: 1.5 ~ 4mm ² Bottom: 10 ~ 90mm ²	M8 * 1ea	Upper: M4 * 4ea Bottom: M8 * 1ea	45 * 102	
SPS45-M8/M8+4*M4-S							45 * 116	

● Applicable crimp terminal specifications

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
M8	22.0	8.0	11.0	9.0



● Rated current by wire cross-sectional area (IEC standard)

Cross-sectional area mm ²	1	1.5	2.5	4	6	10	16	25	35	50	70	90
AWG/kcmil	17	16	14	12	10	8	6	4	2	0	00	000
Rated current[A]	13.5	17.5	24	32	41	57	76	101	125	150	192	232

● 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

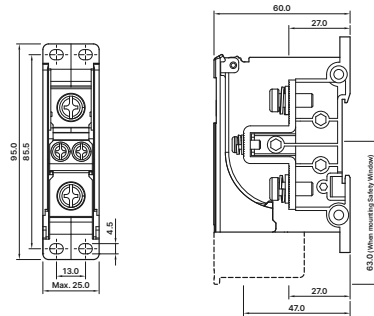
● Suitable rating

Screw	Tightening torque	Suitable wire
M4	1.4 N·m	AWG 16 ~ 10
M5	2.2 N·m	AWG 12 ~ 6
M6	4 N·m	AWG 10 ~ 4
M8	8 N·m	AWG 8 ~ 1

• Dimension

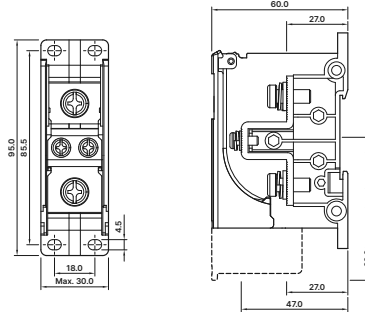
• SPS25-M6/M6+2*M4-□

Model	Terminal screw		Tightening torque		Dimensions (W*Dmm)	Mounting screw
	Primary	Secondary	Primary	Secondary		
SPS25-M6/M6+2*M4	M6*1ea	Upper : M4*2ea	4 N·m	Upper : 1.4 N·m	25*95	M4
SPS25-M6/M6+2*M4-S		Bottom : M6*1ea		Bottom : 4 N·m		



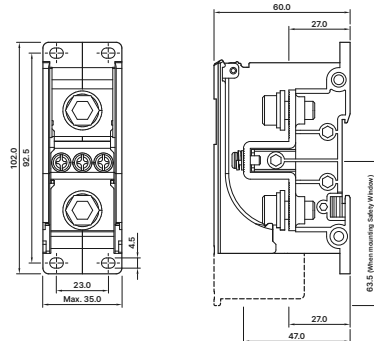
• SPS30-M6/M6+2*M4-□

Model	Terminal screw		Tightening torque		Dimensions (W*Dmm)	Mounting screw
	Primary	Secondary	Primary	Secondary		
SPS30-M6/M6+2*M4	M6*1ea	Upper : M4*2ea	4 N·m	Upper : 1.4 N·m	30*95	M4
SPS30-M6/M6+2*M4-S		Bottom : M6*1ea		Bottom : 4 N·m		



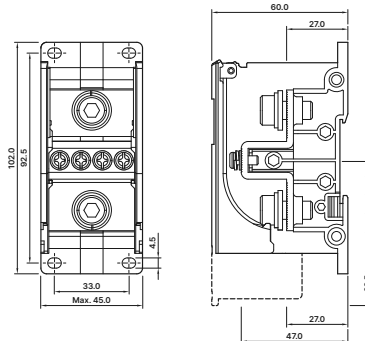
• SPS35-M8/M8+3*M4-□

Model	Terminal screw		Tightening torque		Dimensions (W*Dmm)	Mounting screw
	Primary	Secondary	Primary	Secondary		
SPS35-M8/M8+3*M4	M8*1ea	Upper : M4*3ea	8 N·m	Upper : 1.4 N·m	35*102	M4
SPS35-M8/M8+3*M4-S		Bottom : M8*1ea		Bottom : 8 N·m		

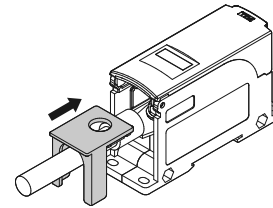


• SPS45-M8/M8+4*M4-□

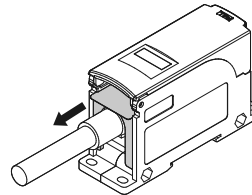
Model	Terminal screw		Tightening torque		Dimensions (W*Dmm)	Mounting screw
	Primary	Secondary	Primary	Secondary		
SPS45-M8/M8+4*M4	M8*1ea	Upper : M4*4ea	8 N·m	Upper : 1.4 N·m	45*102	M4
SPS45-M8/M8+4*M4-S		Bottom : M8*1ea		Bottom : 8 N·m		



• How to use protection cover of primary-side

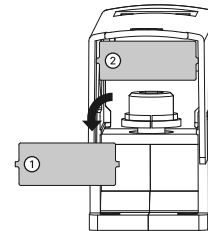


[Installation]
After wiring, insert the terminal cover into the primary side of the main body in the direction of an arrow.



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

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



※ When wiring only one step, remove protection cover ① before use.

※ When wiring a 2 step cable, remove all ① and ② before use.

