NO: SD-049 PRODUCT: S8PS Power Supplies DATE: September 2006 TYPE: Discontinuation Notice

# S8PS Power Supplies will be Discontinued March 31, 2008; Use S8VM Models Instead

When Omron discontinues S8PS in March 2008, use S8VM. Note these important differences:

- Overall and Mounting dimensions changed.
- Cooling method has changed:

300W: Natural air-cooling is changed to a forced-air cooling with a built-in fan.

600W: Cooling air blows out from front surface with S8PS while from back surface with S8VM.

■ Terminal for I/O wiring has changed:

50W: Screw size is changed from M4 to M3.5.

100W/150W: Input screw size is changed from M4 to M3.5.

600W: Output screw size is changed from M4 to M5.

Overload protection has changed:

S8PS-600W: Turns OFF when continuous for 5s min. and reset to apply the input voltage again.

S8VM-600W: Inverted L drop type, automatic reset

■ Startup time is shorter:

 $50/100/150W\colon Changed$  from 1000 ms max. to 800 ms max.

300/600W: Changed from 1500 ms max. to 1000 ms max.

#### **Discontinued Parts and Suggested Replacements**

Configuration		Power Ratings	Discontinued model	Recommended replacement
Open-	en- Bottom- 50 W		S8PS-05005	S8VM-05005
frame type	mounting		S8PS-05012	S8VM-05012
	(See note)		S8PS-05024	S8VM-05024
		100 W	S8PS-10024	S8VM-10024
		150 W	S8PS-15024	S8VM-15024
	DIN Rail	50 W	S8PS-05005D	S8VM-05005D
	Mounting		S8PS-05012D	S8VM-05012D
			S8PS-05024D	S8VM-05024D
		100 W	S8PS-10024D	S8VM-10024D
		150 W	S8PS-15024D	S8VM-15024D
Covered	Bottom-	50 W	S8PS-05005C	S8VM-05005C
type	mounting (See note)		S8PS-05012C	S8VM-05012C
			S8PS-05024C	S8VM-05024C
		100 W	S8PS-10024C	S8VM-10024C
		150 W	S8PS-15024C	S8VM-15024C
		300 W	S8PS-30024C	S8VM-30024C
		600 W	S8PS-60024C	S8VM-60024C
	DIN Rail	50 W	S8PS-05005CD	S8VM-05005CD
	Mounting		S8PS-05012CD	S8VM-05012CD
			S8PS-05024CD	S8VM-05024CD
		100 W	S8PS-10024CD	S8VM-10024CD
		150 W	S8PS-15024CD	S8VM-15024CD
		300 W	S8PS-30024CD	S8VM-30024C and S82Y-VM30D
				(Bracket for DIN Rail Mounting)

Note: S8PS: Bottom mounting is possible with the accessory mounting bracket supplied with unit.

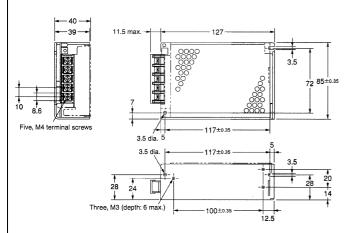
S8VM: A mounting bracket has to be ordered separately for bottom mounting.

#### Model to be discontinued S8PS series

## <50W models>

Bottom-mounting

- S8PS-050□□
- S8PS-050□□C



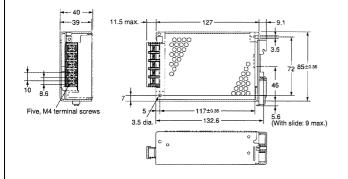
#### (Note)

S8PS: Bottom mounting is possible with the attached accessory mounting bracket.

S8VM: A mounting bracket has to be ordered separately for bottom mounting.

#### **DIN Rail Mounting**

- S8PS-050□□D
- S8PS-050□□CD

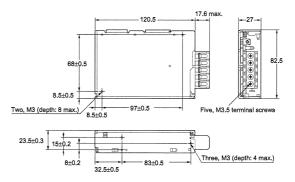


#### Recommended replacement S8VM series

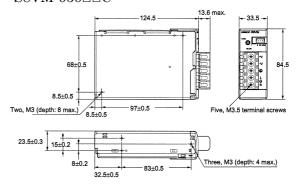
## <50W models>

Bottom-mounting

■ S8VM-050□□

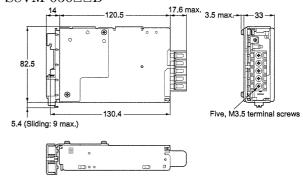


■ S8VM-050□□C

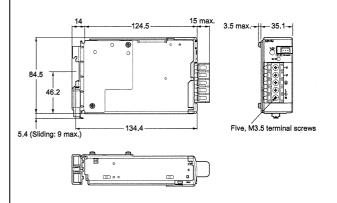


## DIN Rail Mounting

■ S8VM-050□□D



#### ■ S8VM-050□□CD

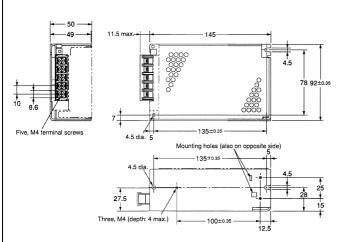


#### Model to be discontinued S8PS series

#### <100W models>

Bottom-mounting

- S8PS-10024
- S8PS-10024C



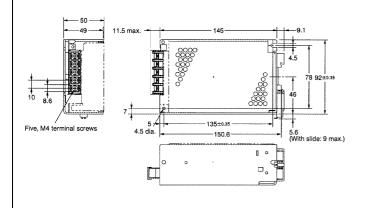
(Note)

S8PS: Bottom mounting is possible with the attached accessory mounting bracket.

S8VM: A mounting bracket has to be ordered separately for bottom mounting.

#### **DIN Rail Mounting**

- S8PS-10024D
- S8PS-10024CD

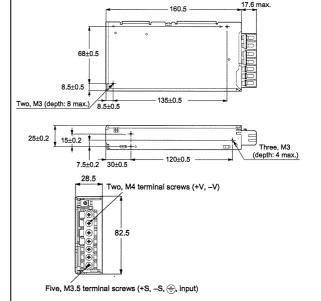


#### Recommended replacement S8VM series

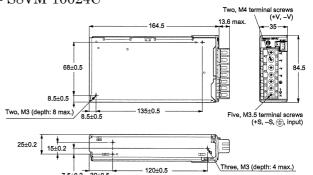
#### <100W models>

Bottom-mounting

■ S8VM-10024

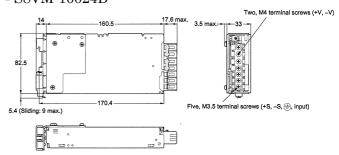


■ S8VM-10024C

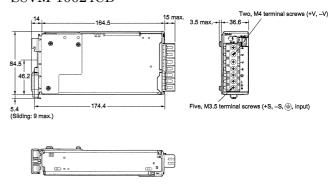


#### DIN Rail Mounting

■ S8VM-10024D



■ S8VM-10024CD

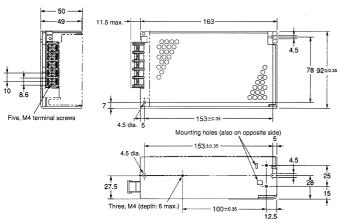


#### Model to be discontinued S8PS series

## <150W models>

Bottom-mounting

- S8PS-15024
- S8PS-15024C



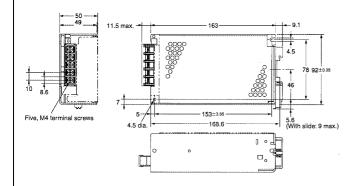
#### (Note)

S8PS: Bottom mounting is possible with the attached accessory mounting bracket.

S8VM: A mounting bracket has to be ordered separately for bottom mounting.

#### **DIN Rail Mounting**

- S8PS-15024D
- S8PS-15024CD

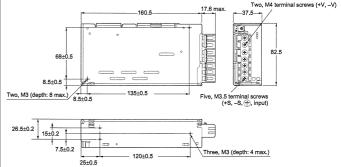


## Recommended replacement S8VM series

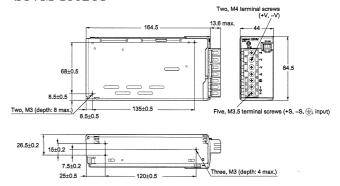
## <150W models>

#### Bottom-mounting

■ S8VM-15024

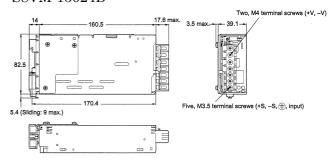


■ S8VM-15024C

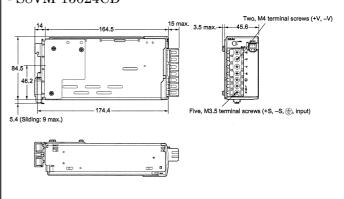


#### **DIN Rail Mounting**

■ S8VM-15024D



■ S8VM-15024CD

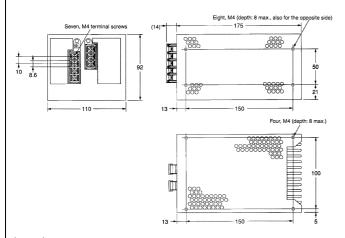


#### Model to be discontinued S8PS series

<300W models>

Bottom-mounting

■ S8PS-30024C



(Note)

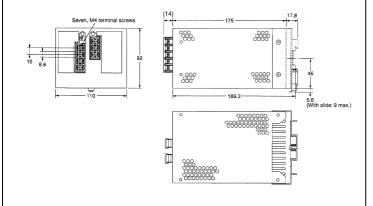
 $S8PS: \ Bottom mounting is possible with the$ 

attached accessory mounting bracket.

S8VM: A mounting bracket has to be ordered separately for bottom mounting.

## DIN Rail Mounting

■ S8PS-30024CD

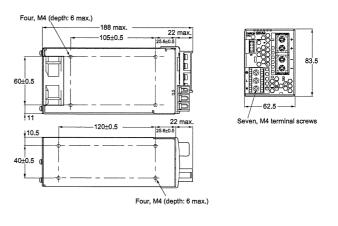


## Recommended replacement S8VM series

<300W models>

Bottom-mounting

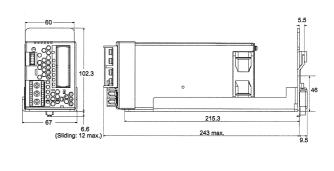
■ S8VM-30024C



DIN Rail Mounting

<Combination of S8VM-30024C +

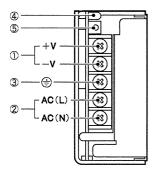
S82Y-VM30D (DIN bracket)>



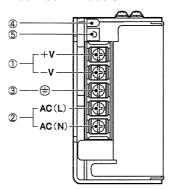
## Model to be discontinued Recommended replacement S8PS series S8VM series <600W models> <600W models> Bottom-mounting Bottom-mounting ■ S8PS-60024C ■ S8VM-60024C Four, M5 terminal screws Four, M4 (depth: 6 max.) -192 max -120±0.5 Three, M4 t -110±0.5 Four, M4 (depth: 6 max.) (Note) S8PS: Bottom mounting is possible with the attached accessory mounting bracket. S8VM: A mounting bracket has to be ordered separately for bottom mounting.

## Model to be discontinued S8PS series

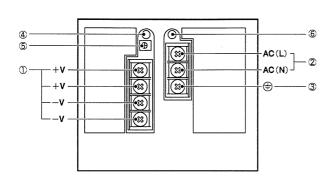
#### 50-W Models

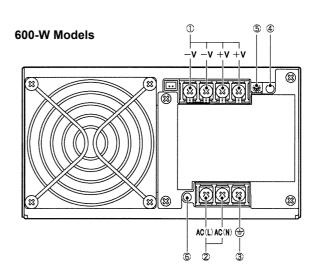


#### 100-/150-W Models



#### 300-W Models





- ① DC Output Terminals: Connect the load lines to these terminals.
- ② Input Terminals: Connect the input lines to these terminals. Note: A fuse is inserted into the AC(L) side
- ③ Ground Terminal (GR): Connect a ground line to this terminal.
- ④ Output Indicator (DC ON): Lights (green) while a Direct Current (DC) output is ON.
- ⑤ Output Voltage Adjuster (V.ADJ): It is possible to increase or decrease the output voltage by -5% to 10%.
- Protection-ON Alarm Indicator: The red indicator will be lit if the overvoltage (for a 300-/600-W model) or overheat protection (for a 600-W model) circuit is triggered.

#### Recommended replacement S8VM series

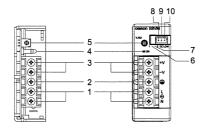
#### 50-W Models

**Open-frame Models** 

#### **Covered Models**

\$8VM-050@@/\$8VM-050@@D

S8VM-050000000/S8VM-05024A00/P00



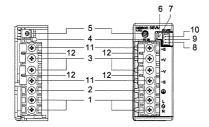
#### 100-W Models

**Open-frame Models** 

#### **Covered Models**

\$8VM-100@@/\$8VM-100@@D \$8VM-

S8VM-10000C0/S8VM-10024A0/P0

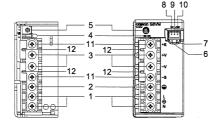


#### 150-W Models

**Open-frame Models** 

**Covered Models** 

\$8VM-150\( \subseteq \) \( \supseteq \) \( \supseteq \) \( \subseteq \) \( \supseteq \) \( \supseteq \) \( \supseteq \) \( \su



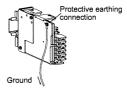
		,
No.	Name	Function
1	AC input terminals (L), (N)	Connect the input lines to these terminals. (See note 1.)
2	PE terminal: Protective earthing terminal (S8VM-\_\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Connect the ground line to this terminal. (See note 2.)
3	DC output terminals (-V), (+V)	Connect the load lines to these terminals.
4	Output indicator (DC ON: Green)	Lights (green) while a direct current (DC) output is ON.
5	Output voltage adjuster (V. ADJ)	Use to adjust the voltage.
6	Undervoltage alarm indicator 1 (DC LOW1: Yellow) (See note 3.)	Lights only when a momentary drop in output voltage is detected. This status is maintained.
7	Undervoltage alarm indicator 2 (DC LOW2: Red) (See note 3.)	Lights only when the output voltage drops to approximately 20 V or lower.
8	Undervoltage alarm output terminal 1: (DC LOW1) (See note 4.)	Outputs only when a momentary drop in output voltage is detected. This status is maintained. (The transistor turns OFF when a voltage drop occurs.)
9	Undervoltage alarm output terminal 2: (DC LOW2) (See note 4.)	Outputs only when the output voltage drops to approximately 20 V or lower. (The transistor turns OFF when a voltage drop occurs.)
10	Common terminal for undervoltage alarm output (See note 4.)	Common terminal (See note 6.) for terminals 8 and 9
11	Remote sensing terminals (See note 5.)	Correct the voltage drop in the load lines.
12	Short bars (See note 5.)	

Note: 1. The fuse is located on the (L) side. It is NOT user-replaceable.

2. If mounting is performed using a DIN Rail, the protective earthing connection is the panel mounting hole shown in the figure below

figure below. (A protective earthing connection stipulated in safety standards is used. Connect the ground completely (S8VM-DDD only)).

Ground terminal: M3 (Depth: 8 mm max.)/Ground wire: AWG 18

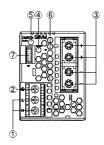


- 3. S8VM-□□□24A□/P□ only
- 4. S8VM-05024A□/P□, S8VM-10024A□/P□, S8VM-15024A□/P□ only. Housing and terminals of the connector for undervoltage detection output are also provided. For details, refer to Undervoltage Alarm Output Connector Harness Manufacture Method on page 33 under Safety Precautions.
- 5. When not using the remote sensing function, leave the short bar in the same state as when shipped.
- 6. A□ models: Common terminal (emitter)
  P□ models: Common terminal (collector)

## Recommended replacement S8VM series

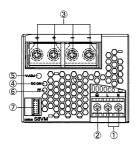
## 300-W Models

S8VM-300□□C



## 600-W Models

S8VM-600□□C



No.	Name	Function	
1	AC input terminal (L), (N)	Connect the input lines to these terminals. (See note 1.)	
2	PE terminal: Protective earthing terminal (S8VM-300□□C/S8VM-600□□C) FG terminal: Frame ground terminal (S8VM-15224C)	Connect the ground line to this terminal. (See note 2.)	
3	DC output terminals (-V), (+V)	Connect the load lines to these terminals.	
4	Output indicator (DC ON: Green)	Lights (green) while a direct current (DC) output is ON.	
5	Output voltage adjuster (V.ADJ)	Use to adjust the voltage.	
6	Power failure alarm indicator (PF: Red)	Lights when the output voltage decreases, the fan stops, and the system is on stand-by using the remote control function.	
7	Signal I/O connector (See note 3.)  2	1: DC output monitor pin (+V) 2: Remote sensing pin (+S) 3: DC output monitor pin (-V) 4: Remote sensing pin (-S) 5: Current balance pin (CB) 6: Signal ground pin for current balance (CBG) 7: Remote control pin (+RC) 8: Remote control pin (-RC) 9: No connect 10: No connect 11: Power failure alarm output pin (PF-C) (collector) 12: Power failure alarm output pin (PF-E) (emitter)	

Note: 1. The fuse is located on the (L) side. It is NOT user-replaceable

- Protective earthing connection is the panel mounting hole of the metal case. (A protective earthing connection stipulated in safety standards is used. Connect the ground completely).
  - Ground terminal: M4 (Depth: 6 mm max.)/Ground wire: AWG 18
- The enclosed standard connector for signal I/O is mounted to CN when S8VM is shipped. The enclosed signal I/O connector shorts between 1 and 2, between 3 and 4, and between 7 and 8.
  - Do not connect a load to the output voltage monitor terminals (+V, -V).

## Characteristics

	Model to be discontinued	Recommended replacement	
	S8PS series	S8VM series	
Supply Voltage	All models in common: Free input 100 to 240VAC (85 to 264VAC)	All models in common: Free input 100 to 240VAC (85 to 264VAC)	
Inrush current	All models in common: 25A TYP at 100VAC 50A TYP at 200VAC Note: 25°C, cold start	50/100/150W models 17.5A TYP at 100VAC 35A TYP at 200VAC 300/600W models 20A TYP at 100VAC 40A TYP at 200VAC Note: 25°C, cold start	
Startup time	50/100/150W models 1000ms max. 300/600W models 1500ms max.	50/100/150W models 800ms max. 300/600W models 1000ms max.	
Hold time	20ms min.	20ms typ (15ms min.)	
Overload protection	50/100/150/300W models 105% (300W: 101% min.) of rated load current, voltage drop, intermittent, automatic reset 600W models 105% min. of rated load current, inverted L drop type (Turns OFF when continuous for 5s min.)	50/100/150W models 105% of rated load current, inverted L drop type, automatic reset 300W models 105% (24V: 120% min.) of rated load current, inverted L drop type, automatic reset 600W models 105% (24V: 115% min.) of rated load current, inverted L drop type, automatic reset All capacities in common 5V: intermittent	
Parallel operation	50/100/150W models No 300/600W models Yes, up to 2 units	50/100/150W models No 300/600W models Yes, up to 2 units (It is necessary to connect CB pin and CBG pin.)	
Cooling method  50/100/150/300W models  Natural air-cooling 600W models  Forced-air cooling with a built-in fan (Cooling air blows out from anterior surface)		50/100/150W models Natural air-cooling 300/600W models Forced-air cooling with a built-in fan (Cooling air blows out from anterior surface)	

## Accessories

Model to be discontinued S8PS series	Recommended replacement S8VM series		
<accessories></accessories>	<order separately=""></order>		
Bottom-mounting bracket:	Bottom mounting bracket:	S82Y-VM10B (for 50W)	
Included to Bottom-mounting type		S82Y-VM20B (for 100/150W)	
Replacement fan: S82Y-JFAN (for 600W)		S82Y-VM30B (for 300W)	
		S82Y-VM60B (for 600W)	
	Horizontal bottom mounting bracket:		
		S82Y-VM30S (for 300W)	
		S82Y-VM60S (for 600W)	
	Front mounting bracket:	S82Y-VM10F	
	_	(for 50/100/150W)	
		S82Y-VM30F (for 300W)	
		S82Y-VM60F (for 600W)	
	DIN Rail mounting bracket:	S82Y-VM30D (for 300W)	
		S82Y-VM60D (for 600W)	
	Replacement fan:	S82Y-VM30FAN (for 300W)	
	_	S82Y-VM60FAN (for 600W)	

When S8PS is mounted with a bottom-mounting bracket attached, please also use a bottom-mounting bracket (Ordered separately) for S8VM.