

60/90/120/180/240/480-W Models

Improved Versions of Standard-type Power Supplies without Indication Monitor (60 to 240 W). EMI Class B Compliant.

- New 90-W models that conform to UL Class 2 standards.
- New models with screwless terminal blocks and without indication monitor (except that 480-W models have an indication monitor).
- Status displayed on 3-digit, 7-segment display.
- Safety standards:
UL508/60950-1,
CSA C22.2 No. 14/60950-1
(15-W, 30-W, 60-W to 240-W models with Indication monitor),
CSA C22.2 No. 107.1/60950-1
(60-W to 240-W standard, 480-W models),
EN 50178 (= VDE0160),
EN 60950-1 (= VDE0805 Teil 1)
- Compact: 150 × 115 × 127.2 mm (W × H × D) (480-W models).



15/30-W Models

Compact, Thin Power Supplies That Mount Just About Anywhere to Contribute to Control Panel Downsizing

- Compact and thin: 22.5 × 85 × 96.5 mm (W × H × D).
- Three mounting directions
(standard, horizontal, facing horizontal).
- Mounting directly to the panel is possible.
- Safety standards:
UL508/60950-1/1604, cUL: CSA C22.2 No. 14/60950-1/213,
EN50178 (= VDE0160), EN60950-1 (= VDE0805 Teil 1).



Features Common to All Models

- Mount to DIN Rail.
- Complies with SEMI F47-0200 (200-VAC input).
- RoHS-compliant.

Model Number Structure

Model Number Legend

Note: Not all combinations are possible. Refer to *List of Models* in *Ordering Information*, below.

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1 2 3 4 5 6

1. Power Ratings

015: 15 W
 030: 30 W
 060: 60 W
 090: 90 W
 120: 120 W
 180: 180 W
 240: 240 W
 480: 480 W

2. Output voltage

05: 5 V
 12: 12 V
 24: 24 V

3. Indication monitor

None: Without indication monitor (standard model)
 A: With indication monitor (maintenance forecast monitor)
 B: With indication monitor (total run time monitor)

4. Alarm output

None: Sinking *
 P: Sourcing

Note: No alarm output possible with 60-W models.

* Both sinking and sourcing outputs are available for 480-W models.

5. UL Class 2 Standards

None: Does not conform. *
 S: Conforms.

* 15-W, 30-W, and 60-W models conform to Class 2 standards.

6. Terminal Block Form

None: Screw terminal block
 F: Screwless terminal block

Ordering Information

List of Models

Note: For details on normal stock models, contact your nearest OMRON representative.

Models without Indication Monitor (Standard Models)

Power ratings	Input voltage	Output voltage	Output current	Model number (screw terminal block)	Model number (screwless terminal block)
15 W	100 to 240 VAC	5 V	2.0 A	S8VS-01505 *1	---
		12 V	1.2 A	S8VS-01512	
		24 V	0.65 A	S8VS-01524	
30 W		5 V	4.0 A	S8VS-03005 *2	
		12 V	2.5 A	S8VS-03012	
		24 V	1.3 A	S8VS-03024	
60 W		24 V	2.5 A	S8VS-06024	S8VS-06024-F
90 W			3.75 A	S8VS-09024	S8VS-09024-F
				S8VS-09024S	S8VS-09024S-F
120 W			5 A	S8VS-12024	S8VS-12024-F
180 W			7.5 A	S8VS-18024	S8VS-18024-F
240 W			10 A	S8VS-24024	S8VS-24024-F
480 W			20 A Peak current 30 A (200 VAC)	S8VS-48024	S8VS-48024-F

*1. The output capacity of the S8VS-01505 is 10 W.

*2. The output capacity of the S8VS-03005 is 20 W.

Models with Indication Monitor (Maintenance Forecast Monitor)

Power ratings	Input voltage	Output voltage	Output current	Alarm output	Model number (screw terminal block)	Model number (screwless terminal block)
60 W	100 to 240 VAC	24 V	2.5 A	---	S8VS-06024A	---
90 W			3.75 A	Sinking	S8VS-09024A	
				Sourcing	S8VS-09024AP	
120 W			5 A	Sinking	S8VS-12024A	
				Sourcing	S8VS-12024AP	
180 W			7.5 A	Sinking	S8VS-18024A	
				Sourcing	S8VS-18024AP	
240 W			10 A	Sinking	S8VS-24024A	
				Sourcing	S8VS-24024AP	
480 W			20 A Peak current 30 A (200 VAC)	Sinking/ sourcing	S8VS-48024A	S8VS-48024A-F

Models with Indication Monitor (Total Run Time Monitor)

Power ratings	Input voltage	Output voltage	Output current	Alarm output	Model number (screw terminal block)	Model number (screwless terminal block)
60 W	100 to 240 VAC	24 V	2.5 A	---	S8VS-06024B	---
90 W			3.75 A	Sinking	S8VS-09024B	
				Sourcing	S8VS-09024BP	
120 W			5 A	Sinking	S8VS-12024B	
				Sourcing	S8VS-12024BP	
180 W			7.5 A	Sinking	S8VS-18024B	
				Sourcing	S8VS-18024BP	
240 W			10 A	Sinking	S8VS-24024B	
				Sourcing	S8VS-24024BP	
480 W			20 A Peak current 30 A (200 VAC)	Sinking/ sourcing	S8VS-48024B	S8VS-48024B-F

Note: Refer to pages 27 to 28 for the options that available.

		Power ratings		60 W			90 W		
Item		Type	Standard	Maintenance forecast monitor	Total run time monitor	Standard	Maintenance forecast monitor	Total run time monitor	
Efficiency (typical)			78% min.			80% min.			
Input	Voltage *1		100 to 240 VAC (85 to 264 VAC)						
	Frequency *1		50/60 Hz (47 to 450 Hz)						
	Current	100-V input	1.7 A max.			2.3 A max.			
		200-V input	1.0 A max.			1.4 A max.			
	Power factor		---						
	Harmonic current emissions		Conforms to EN61000-3-2						
	Leakage current	100-V input	0.5 mA max.						
		200-V input	1.0 mA max.						
Output	Inrush current *2	100-V input	25 A max. (for a cold start at 25°C)						
		200-V input	50 A max. (for a cold start at 25°C)						
	Voltage adjustment range *3		-10% to 15% (with V. ADJ)			The voltage cannot be adjusted for the S8VS-09024S-□.			
	Ripple		2.0% (p-p) max. (at rated input/output voltage)						
	Input variation influence		0.5% max. (at 85- to 264-VAC input, 100% load)						
	Load variation influence (rated input voltage)		1.5% max. (with rated input, 0 to 100% load)						
	Temperature variation influence		0.05%/°C max.						
	Startup time *2		1,000 ms max. (at rated input/output voltage)						
Hold time *2		20 ms min. (at rated input/output voltage)							
Additional functions	Overload protection *2		105% to 160% of rated load current, voltage drop, intermittent, automatic reset						
	Overvoltage protection *2, *4		Yes						
	Output voltage indication *5		No	Yes (selectable) *6		No	Yes (selectable) *6		
	Output current indication *5		No	Yes (selectable) *7		No	Yes (selectable) *7		
	Peak-hold current indication *5		No	Yes (selectable) *8		No	Yes (selectable) *8		
	Maintenance forecast monitor indication *5		No	Yes (selectable)	No	No	Yes (selectable)	No	
	Maintenance forecast monitor output		No					Yes (transistor output), 30 VDC max., 50 mA max. *9	No
	Total run time monitor indication *5		No			Yes (selectable)	No	Yes (selectable)	
	Total run time monitor output *5		No					Yes (transistor output), 30 VDC max., 50 mA max. *9	
	Undervoltage alarm indication *5		No	Yes (selectable)		No	Yes (selectable)		
	Undervoltage alarm output terminals		No					Yes (transistor output), 30 VDC max., 50 mA max. *9	
	Parallel operation		No						
Series operation		Yes for up to 2 Power Supplies (with external diode)							
Other	Operating ambient temperature		Refer to the derating curve in <i>Engineering Data (60-W, 90-W, 120-W, 180-W, 240-W, and 480-W Models)</i> . (with no icing or condensation)						
	Storage temperature		-25 to 65°C						
	Operating ambient humidity		25% to 85% (Storage humidity: 25% to 90%)						
	Dielectric strength		3.0 kVAC for 1 min. (between all inputs and outputs/ alarm outputs; detection current: 20 mA) 2.0 kVAC for 1 min. (between all inputs and PE terminals; detection current: 20 mA) 1.0 kVAC for 1 min. (between all outputs/ alarm outputs and PE terminals; detection current for standard models: 30 mA, detection current for models with indication monitor: 20 mA) 500 VAC for 1 min. (between all outputs and alarm outputs; detection current: 20 mA)						
	Insulation resistance		100 MΩ min. (between all outputs/ alarm outputs and all inputs/ PE terminals) at 500 VDC						
	Vibration resistance		10 to 55 Hz, 0.375-mm single amplitude for 2 h each in X, Y, and Z directions 10 to 150 Hz, 0.35-mm single amplitude (5 G max.) for 80 min each in X, Y, and Z directions						
	Shock resistance		150 m/s², 3 times each in ±X, ±Y, and ±Z directions						
	Output indicator		Yes (color: green)						
	EMI	Conducted Emissions	Models with indication monitor: Conforms to EN61204-3 EN55011 Class A and based on FCC Class A, Conforms to EN61204-3 EN55011 Class B *11 Standard models: Conforms to EN61204-3 EN55011 Group 1 Class B and based on FCC Class A						
		Radiated Emissions	Models with indication monitor: Conforms to EN61204-3 EN55011 Class A, Conforms to EN61204-3 EN55011 Class B *11 Standard models: Conforms to EN61204-3 EN55011 Group 1 Class B						
	EMS		Conforms to EN61204-3 high severity levels						
	Approved standards		UL for standard models: UL508 (Listing; Class 2: Per UL1310), UL60950-1 UL for models with indication monitor: UL508 (Listing; Class 2: Per UL1310), UL60950-1 cUL for standard models: CSA C22.2 No.107.1 (Class 2: Per CSA C22.2 No. 223) cUL for models with indication monitor: CSA C22.2 No. 14 (Class 2) cUR: CSA No.60950-1 EN/VDE: EN50178 (= VDE0160), EN60950-1 (SELV) (= VDE0805 Teil 1) According to VDE 0106/P100, IP20 (except terminal block) KOSHA S Mark *10				UL for standard models: UL508 (Listing), UL60950-1 UL for standard models S8VS-09024S-□ only: UL508 (Listing, Class 2: Per UL1310), UL60950-1 UL for models with indication monitor: UL508 (Listing), UL60950-1 cUL for standard models: CSA C22.2 No.107.1 (Class 2: Per CSA C22.2 No. 223) cUL for standard models S8VS-09024S-□ only: CSA C22.2 No.107.1 (Class 2: Per CSA C22.2 No. 223) cUL for models with indication monitor: CSA C22.2 No. 14 cUR: CSA No.60950-1 EN/VDE: EN50178 (= VDE0160), EN60950-1 (SELV) (= VDE0805 Teil 1) According to VDE 0106/P100, IP20 (except terminal block) KOSHA S Mark *10		
	SEMI		F47-0200 (200-VAC input)						
	Weight		330 g max.				490 g max.		

- *1. Do not use an inverter output for the Power Supply. Inverters with an output frequency of 50/60 Hz are available, but the rise in the internal temperature of the Power Supply may result in ignition or burning.
- *2. Refer to *Engineering Data (60-W, 90-W, 120-W, 180-W, 240-W, and 480-W Models)* on page 22 for details.
- *3. If the output voltage adjuster (V. ADJ) is turned, the voltage will increase by more than +15% of the voltage adjustment range (by more than +10% for 240-W models with indication monitor).
- *4. When adjusting the output voltage, confirm the actual output voltage from the Power Supply and be sure that the load is not damaged.
- *5. To reset the protection, turn OFF the input power for three minutes or longer and then turn it back ON.
- *6. Displayed on 7-segment LED. (character height: 8 mm)
- *7. Resolution of output voltage indication: 0.1 V; Precision of output voltage indication: ±2% (percentage of output voltage value, ±1 digit)
- *8. Resolution of output current indication: 0.1 A; Precision of output current indication: ±5% F.S. ±1 digit max. (specified by rated output voltage)
- *9. Resolution of peak-hold current indication: 0.1 A; Precision of peak-hold current indication: ±5% F.S. ±1 digit max. (specified by rated output voltage); Signal width required for peak-hold current: 20 ms
- *10. A Type and B Type: Sinking, AP Type and BP Type: Sourcing
- *11. To ensure the emission rating, a ferrite ring core should be used in all cabling (TDK HF60T, HF70RH or equivalent model).
- *12. To ensure the emission rating, a ferrite ring core should be used in all cabling (SEIWA E04SR301334 or equivalent model).

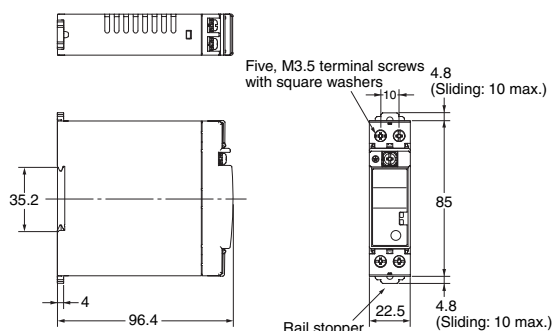
Dimensions

Power Supplies with Screw Terminal Blocks

Note: All units are in millimeters unless otherwise indicated.

S8VS-015□□ (15 W)

S8VS-030□□ (30 W)

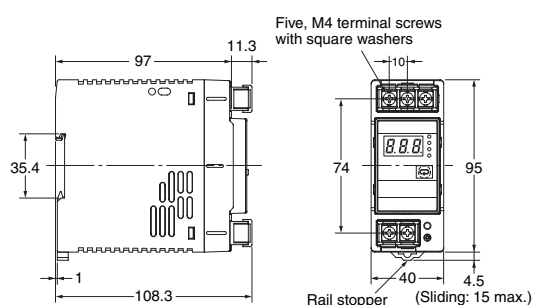


Note: The illustration is the S8VS-03024 model.

S8VS-06024 (60 W)

S8VS-06024A (60 W)

S8VS-06024B (60 W)



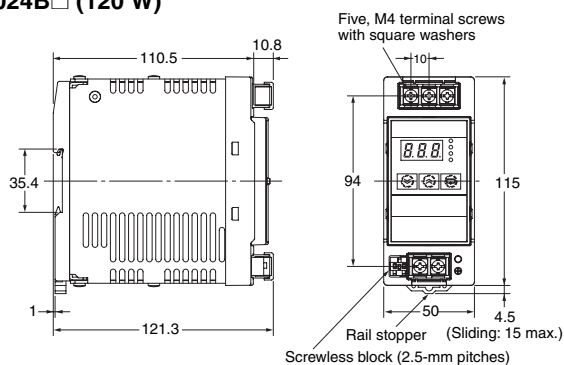
Note: The illustration is the S8VS-06024A model.

S8VS-09024 (90 W)/**S8VS-12024** (120 W)

S8VS-09024A□ (90 W)/**S8VS-12024A**□ (120 W)

S8VS-09024B□ (90 W)/**S8VS-12024B**□ (120 W)

S8VS-09024S (90 W)

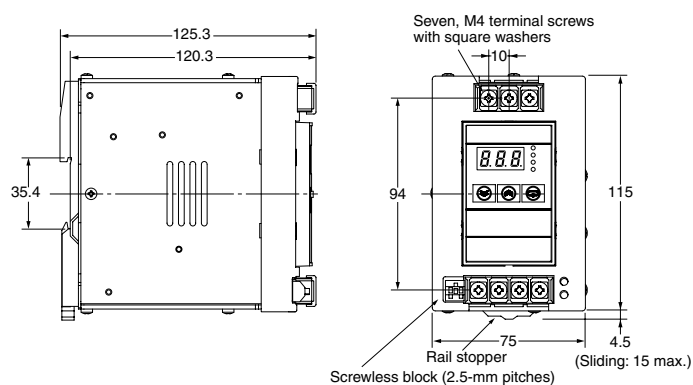


Note: The illustration is the S8VS-12024A model.

S8VS-18024 (180 W)

S8VS-18024A□ (180 W)

S8VS-18024B□ (180 W)



Note: The illustration is the S8VS-18024A model.