

## 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.

**S8VS-**            **-** 

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-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				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	

#### 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				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	

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

# Specifications

## Ratings/Characteristics

Item	Power ratings		15 W	30 W	
	Type		Standard	Standard	
Efficiency (typical)	5-V models		72% min.	70% min.	
	12-V models		74% min.	76% min.	
	24-V models		77% 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		0.45 A max.	0.9 A max.
		200-V input		0.25 A max.	0.6 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.	
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)		
Output	Voltage adjustment range *3		-10% to 15% (with V.ADJ)		
	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)		2.0% max. (5 V), 1.5% max. (12 V, 24 V), (with rated input, 0 to 100% load)		
	Temperature variation influence		0.05%/°C max.		
	Startup time *2		100 ms max. (at rated input/output voltage)	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, automatic reset	105% to 160% of rated load current, voltage drop, intermittent operation, automatic reset	
	Overvoltage protection *2		Yes (a zener diode clamp) *4	Yes *5	
	Output voltage indication		No		
	Output current indication		No		
	Peak-hold current indication		No		
	Maintenance forecast monitor indication		No		
	Maintenance forecast monitor output		No		
	Total run time monitor indication		No		
	Total run time monitor output		No		
	Undervoltage alarm indication		Yes (color: red)		
	Undervoltage alarm output		No		
	Parallel operation		No		
Series operation		Models with 24-V output: Possible for up to 2 Power Supplies (with external diode) Models with 5- or 12-V output: Not possible			
Other	Operating ambient temperature		Refer to the derating curve in <i>Engineering Data (15-W, 30-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; 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 and PE terminals; detection current: 20 mA)	
	Insulation resistance		100 MΩ min. (between all 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		
	Shock resistance		150 m/s <sup>2</sup> , 3 times each in ±X, ±Y, and ±Z directions		
	Output indicator		Yes (color: green)		
	EMI	Conducted Emissions		Conforms to EN61204-3 EN55011 Class B and based on FCC Class A	
		Radiated Emissions		Conforms to EN61204-3 EN55011 Class B	
	EMS		Conforms to EN61204-3 high severity levels		
Approved standards		UL: UL508 (Listing; Class 2: Per UL1310), UL60950-1, UL1604 (Class I/Division2) cUL: CSA C22.2 No.14 (Class 2), No.60950-1, No.213 (Class I/Division2) EN/VDE: EN50178 (=VDE0160), EN60950-1 (SELV) (=VDE0805 Teil 1) According to VDE0106/P100, IP20 (except terminal block)			
SEMI		F47-0200 (200-VAC input)			
Weight		160 g max.	180 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 (15-W, 30-W Models)* on page 12 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. When adjusting the output voltage, confirm the actual output voltage from the Power Supply and be sure that the load is not damaged.

\*4. The overvoltage protection of the S8VS-015□□ uses a zener diode clamp. If the internal feedback circuit is destroyed by any chance, the load may be destroyed by the clamped output voltage (approx. 140% to 190% of the rated output voltage).

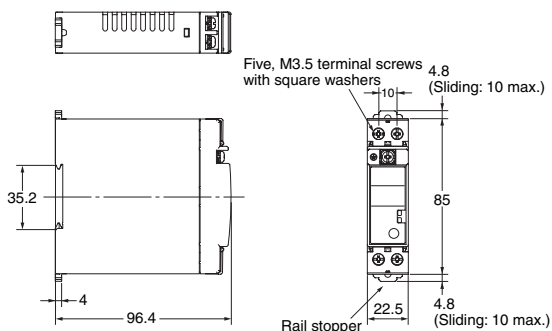
\*5. To reset the protection, turn OFF the input power for three minutes or longer and then turn it back ON.

## Dimensions

### Power Supplies with Screw Terminal Blocks

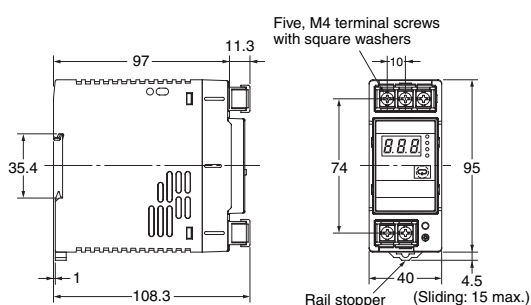
Note: All units are in millimeters unless otherwise indicated.

S8VS-015□□ (15 W)  
S8VS-030□□ (30 W)



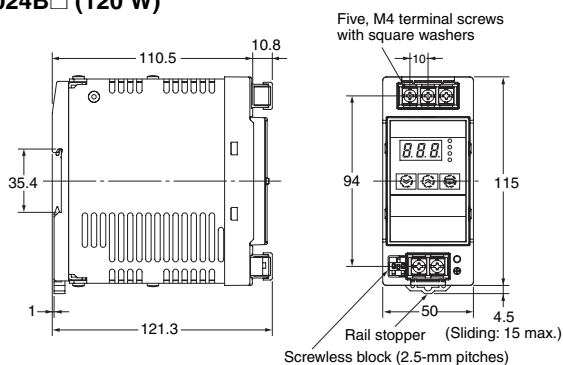
Note: The illustration is the S8VS-03024 model.

S8VS-06024 (60 W)  
S8VS-06024A (60 W)  
S8VS-06024B (60 W)



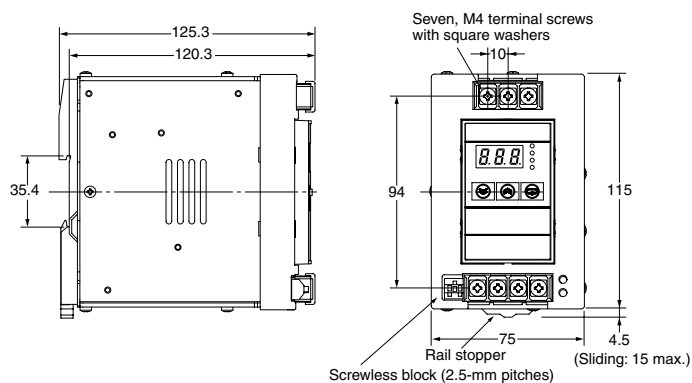
Note: The illustration is the S8VS-06024A model.

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.