

# Ordering Information

## List of Models

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

### Models with Indication Monitor (Maintenance Forecast Monitor)

Power ratings	Input voltage	Output voltage	Output current	Alarm output * 2	UL Class 2 Output standards	Model number (screw terminal block)	Model number (screwless terminal block)
60 W	100 to 240 VAC (allowable range: 85 to 264 VAC or 80 to 370 VDC * 1)	24 V	2.5 A	—	Yes	S8VS-06024A	S8VS-06024A-F
90 W			3.75 A	Sinking	—	S8VS-09024A	S8VS-09024A-F
				Sinking	Yes	S8VS-09024AS	S8VS-09024AS-F
				Sourcing	—	S8VS-09024AP	S8VS-09024AP-F
				Sourcing	Yes	S8VS-09024APS	S8VS-09024APS-F
120 W			5 A	Sinking	—	S8VS-12024A	S8VS-12024A-F
				Sourcing	—	S8VS-12024AP	S8VS-12024AP-F
180 W			7.5 A	Sinking	—	S8VS-18024A	S8VS-18024A-F
				Sourcing	—	S8VS-18024AP	S8VS-18024AP-F
240 W			10 A	Sinking	—	S8VS-24024A	S8VS-24024A-F
				Sourcing	—	S8VS-24024AP	S8VS-24024AP-F
480 W			100 to 240 VAC	20 A Peak current 30 A (200 VAC)	Sinking/ sourcing	—	S8VS-48024A

\*1. The range for compliance with EC Directives and safety standards (UL, EN, etc.) is 100 to 240 VAC (85 to 264 VAC).

\*2. In the Alarm output column, "sinking" indicates an emitter COM and "sourcing" indicates a collector COM.

### Models with Indication Monitor (Total Run Time Monitor)

Power ratings	Input voltage	Output voltage	Output current	Alarm output * 2	UL Class 2 Output standards	Model number (screw terminal block)	Model number (screwless terminal block)
60 W	100 to 240 VAC (allowable range: 85 to 264 VAC or 80 to 370 VDC) * 1	24 V	2.5 A	—	Yes	S8VS-06024B	S8VS-06024B-F
90 W			3.75 A	—	—	S8VS-09024BE	S8VS-09024BE-F
				—	Yes	S8VS-09024BES	S8VS-09024BES-F
				Sinking	—	S8VS-09024B	S8VS-09024B-F
				Sinking	Yes	S8VS-09024BS	S8VS-09024BS-F
				Sourcing	—	S8VS-09024BP	S8VS-09024BP-F
				Sourcing	Yes	S8VS-09024BPS	S8VS-09024BPS-F
120 W			5 A	—	—	S8VS-12024BE	S8VS-12024BE-F
				Sinking	—	S8VS-12024B	S8VS-12024B-F
				Sourcing	—	S8VS-12024BP	S8VS-12024BP-F
180 W			7.5 A	—	—	S8VS-18024BE	S8VS-18024BE-F
				Sinking	—	S8VS-18024B	S8VS-18024B-F
	Sourcing	—		S8VS-18024BP	S8VS-18024BP-F		
240 W	10 A	—	—	S8VS-24024BE	S8VS-24024BE-F		
		Sinking	—	S8VS-24024B	S8VS-24024B-F		
		Sourcing	—	S8VS-24024BP	S8VS-24024BP-F		
480 W	100 to 240 VAC	20 A Peak current 30 A (200 VAC)	Sinking/ sourcing	—	S8VS-48024B	S8VS-48024B-F	

\*1. The range for compliance with EC Directives and safety standards (UL, EN, etc.) is 100 to 240 VAC (85 to 264 VAC).

\*2. In the Alarm output column, "sinking" indicates an emitter COM and "sourcing" indicates a collector COM.

Note: Refer to pages 24 to 25 for the options that available.

# Specifications

Item	Power ratings		60 W			90 W			
	Type		Standard	Maintenance forecast monitor	Total run time monitor	Standard	Maintenance forecast monitor	Total run time monitor	
Efficiency	With 100-VAC input		84% typical	83% typical		83% typical	83% typical		
	With 200-VAC input		83% typical	85% typical		84% typical	85% typical		
Input	Voltage * 1		100 to 240 VAC (allowable range: 85 to 264 VAC or 80 to 370 VDC * 11)						
	Frequency * 1		50/60 Hz (47 to 450 Hz)						
	Current	With 100-VAC input		1.7 A max., 1.3 A typical			2.3 A max., 1.9 A typical		2.3 A max., 1.9 A typical
		With 200-VAC input		1.0 A max., 0.68 A typical			1.4 A max., 1.0 A typical		1.4 A max., 1.2 A typical
	Power factor		---						
	Harmonic current regulation		Conforms to EN61000-3-2						
	Leakage current	With 100-VAC input		0.5 mA max.					
		With 200-VAC input		1.0 mA max.					
Inrush current * 2	With 100-VAC input		17.5 A max., 14 A typical						
	With 200-VAC input		35 A max., 28 A typical						
Output	Voltage adjustment range * 3		-10% to 15% (with V. ADJ) (The voltage cannot be adjusted for the S8VS-09024@@@S-@.)						
	Ripple noise voltage (at rated I/O)		70 mV max.	90 mV max.		250 mV max.	150 mV max.		
	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 (at rated I/O) * 2	With 100-VAC input		620 ms typical		460 ms typical		460 ms typical	660 ms typical
		With 200-VAC input		400 ms typical		290 ms typical		300 ms typical	420 ms typical
	Output hold time (at rated I/O) * 2	With 100-VAC input		34 ms typical		33 ms typical		28 ms typical	28 ms typical
		With 200-VAC input		158 ms typical		154 ms typical		132 ms typical	136 ms typical
	Additional functions	Overload protection * 2		105% to 160% of rated load current (101% to 110% of rated load current for the S8VS-09024@@@S-@), inverted L 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 . (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)					
	Insulation resistance		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						
	Shock resistance		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/s <sup>2</sup> , 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 * 11			UL: UL 508 (Listing; Class 2 Output: Per UL1310), UL UR: UL 60950-1 (Recognition), cUL: CSA C22.2 No.107.1 (Class 2 Output: Per CSA C22.2 No. 223), cUR: CSA C22.2 No.60950-1, EN/VDE: EN 50178 (= VDE 0160), EN 60950-1 (= VDE 0805 Teil 1) KOSHA S Mark * 10			UL: UL 508 (Listing) UL Listed (S8VS-09024@@@S-@ only): UL 508 (Listing, Class 2 Output: Per UL1310), UL UR: UL 60950-1 (Recognition), cUL: CSA C22.2 No.107.1, cUL (S8VS-09024-@@@S-@ only): CSA C22.2 No.107.1 (Class 2 Output: Per CSA C22.2 No. 223), cUR: CSA C22.2 No.60950-1, EN/VDE: EN 50178 (= VDE 0160), EN 60950-1 (= VDE 0805 Teil 1) KOSHA S Mark * 10			
SEMI * 11		F47-0706 (With 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. For a cold start at 25°C. Refer to *Engineering Data* on page 18 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). When adjusting the output voltage, confirm the actual output voltage from the Power Supply and be sure that the load is not damaged.  
\*4. To reset the protection, turn OFF the input power for three minutes or longer and then turn it back ON.  
\*5. Displayed on 7-segment LED. (character height: 8 mm)  
\*6. Resolution of output voltage indication: 0.1 V. Precision of output voltage indication: ±2% (percentage of output voltage value, ±1 digit)  
\*7. Resolution of output current indication: 0.1 A; Precision of output current indication: ±5% F.S. ±1 digit max. (specified by rated output voltage)  
\*8. 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  
\*9. A Type and B Type: Sinking, AP Type and BP Type: Sourcing, BE Type: No alarm output.  
\*10. S8VS-06024A, S8VS-09024A/AP, S8VS-12024A/AP, S8VS-18024A/AP, and S8VS-24024A/AP only  
\*11. The range for compliance with EC Directives and safety standards (UL, EN, etc.) is 100 to 240 VAC (85 to 264 VAC).