Switch Mode Power Supply (15/30/60/90/120/180/240/480-W Models)

S8VS-12024

Image

Case model, Input: 100 to 240 VAC, Power rating 120 W, Output: 24 VDC, Terminal blocks (Screw terminal), Harmonic current emissions

Power rating	120 W
Output voltage	24 VDC
Rated input voltage	100 to 240 VAC
Construction	Covered type
Connection	Terminal blocks
Terminal type	Screw terminal

Specifications

As of February 2, 2017

Power rating		120 W
Output voltage		24 VDC
Efficiency		84% typ. (at 100 VAC input) 87% typ. (at 200 VAC input)
Input	**Rated input voltage**	100 to 240 VAC
	Allowable input voltage variable range	85 to 264 VAC 80 to 370 VDC
	Note at DC input	The range for compliance with EC Directives and safety standards (UL, EN, etc.) is 100 to 240 VAC (85 to 264 VAC).
	Frequency	50/60Hz (47 to 63 Hz)
	Rated input curren	1.9 A max., 1.5 A typ. (at 100 VAC input) 1.1 A max., 0.71 A typ. (at 200 VAC input)
	Power factor	0.9 min.
	Leakage current	0.5 mA max. (at 100 VAC input) 1.0 mA max. (at 200 VAC input)
	Inrush current	17.5 A max., 14 A typ. (at 100 VAC input) 35 A max., 28 A typ. (at 200 VAC input)
Output	**Rated output current**	5 A
	Output voltage variable range	-10 to +15% (With V.ADJ)
	Ripple	60 mV max. (at rated input and output)
	Static input variation influence	0.5% max. (at 85 to 264 VAC input, 100% load)
	Static load variation influence	1.5% max. (rated input, 0 to 100% load)

	Ambient temperature variation influence	0.05%/℃ max.
	Start up time	550 ms typ. (at 100 VAC input) 430 ms typ. (at 200 VAC input)
	Hold time	52 ms typ. (at 100 VAC input) 54 ms typ. (at 200 VAC input)
Additional functions	**Overload protection**	Yes, Automatic reset
	Overvoltage protection	Yes, Shut off the input voltage and turn on the input again
	Series operation	Yes (Up to 2 Power Supplies with external diode)
	Output indicator	Yes (color: green)
	Output voltage indication	No
	Output current indication	No
	Peak-hold current indication	No
	Maintenance forecast monitor	output: No
	Total run time monitor	output: No indication: No
	Undervoltage alarm	output: No indication: No
Insulation	**Dielectric strength**	Between all input terminals and PE terminals: 2 kVAC for 1 min, Detection current: 20 mA Between all input terminals and all output terminals/alarm outputs: 3 kVAC for 1 min, Detection current: 20 mA Between all output terminals/alarm outputs and all PE terminals: 1 kVAC for 1 min, Detection current: 30 mA Between all output terminals and all alarm outputs: 500 VAC for 1 min, Detection current: 20 mA
	Insulation resistance	Between all output terminals/alarm outputs and all input terminals/PE terminals: 100 MΩ min., at 500 VDC
Environment	**Vibration resistance**	10 to 55 Hz, 0.375 mm single amplitude in each 3 directions for 2 hours
	Shock resistance	150 m/s**2, in each 6 directions 3 times
	Ambient temperature (Operating)	-10 to 60℃
	Ambient temperature (Storage)	-25 to 65℃
	Ambient humidity (Operating)	25 to 85%
	Ambient humidity (Storage)	25 to 90%
Reliability	**Life expectancy**	10 years (at rated input, a load rate of 50% load, under the temperature of 40 ℃, standard mounting)
Construction	**Construction**	Covered type
	Connection	Terminal blocks
	Terminal type	Screw terminal
	Mounting	DIN track mounting
	Attachment	Terminal block cover
	Weight (Main)	Approx. 550 g

Note

Do not use the 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.

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Demension

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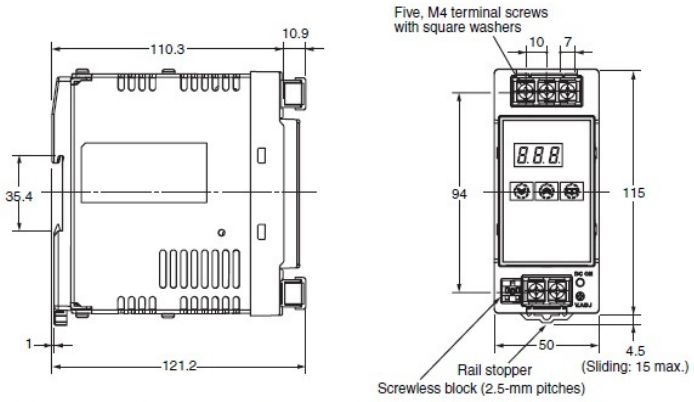

Note: The illustration is the S8VS-12024A model.

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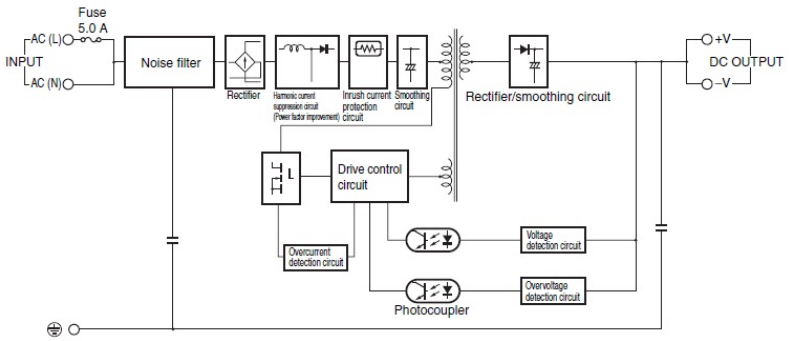
Connection diagram

As of February 2, 2017

Block diagram

S8VS-12024-□ (120 W)



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Derating curve

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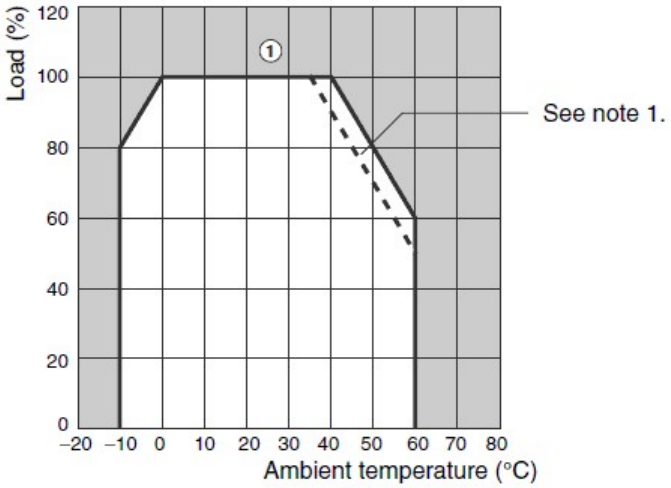
(60-W, 90-W, 120-W, 180-W, 240-W, and 480-W Models)

Derating Curve



Note: 1. Using side mounting bracket for right-side mounting (excluding 240-W models).
2. Internal parts may occasionally deteriorate or be damaged. Do not use the Power Supply in areas outside the derating curve (i.e., the area shown by shading ① in the above graph).
3. If there is a derating problem, use forced air-cooling.
4. When using a 480-W model at an input voltage of 95 VAC or less, derate the load by at least 80%.

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