<u>omron</u> Switching Power Supply

S8JT

Compact and Economical Switching Power Supply with Capacity Up to 150 W

- Easily mounted to DIN Track with provided Mounting Bracket.
- Wide AC input range. 35-/50-W models: 100 to 240 VAC on one unit 100-/150-W models: 100 or 200 VAC (selectable)
- High reliability with double AC and DC indicators.
- UL/CSA and EN60950 approved.



Ordering Information

■ S8JT

Configuration	Input voltage	Power ratings	Output voltage	Output current	With Front-mounting Bracket	With DIN Track Mounting Bracket
Covered type with front terminals	100 to 240 VAC	35 W (See note.)	24 V	1.5 A	S8JT-03524D	S8JT-03524DD
		50 W	24 V	2.1 A	S8JT-05024D	S8JT-05024DD
	100 or 200 VAC (selectable)	100 W	24 V	4.5 A	S8JT-10024D	S8JT-10024DD
		150 W (See note.)	24 V	6.5 A	S8JT-15024D	S8JT-15024DD
Covered type with top terminals	100 to 240 VAC	35 W (See note.)	24 V	1.5 A	S8JT-03524E	S8JT-03524ED
		50 W	24 V	2.1 A	S8JT-05024E	S8JT-05024ED
	100 or 200 VAC (selectable)	100 W	24 V	4.5 A	S8JT-10024E	S8JT-10024ED
		150 W (See note.)	24 V	6.5 A	S8JT-15024E	S8JT-15024ED

Note: 35-W and 150-W models will be released in December 2001.

Model Number Legend:



50 W 100: 100 W 150: 150 W

2. Output voltage 24: 24 V

3.Configuration

- D: Covered type with front terminals and Front-mounting Bracket
- DD: Covered type with front terminals and DIN Track Mounting Bracket E:
 - Covered type with top terminals and Front-mounting Bracket
- ED: Covered type with top terminals and DIN Track Mounting Bracket

Specifications

Ratings /Characteristics

Item		100 to 240 VAC (selected automatically)		100 or 200 VAC (selectable)			
		35 W	50 W	100 W	150 W		
Efficiency (typical)		77%		75%	80%		
Input	Voltage	100 to 240 VAC (85 to 285 VAC)					
	Frequency	47 to 440 Hz					
	Current (See note 1.)	0.8 or 0.4 A max.	1.2 or 0.7 A max.	2.0 or 1.2 A max.	3.4 or 1.7 A max.		
	Leakage current (See note 1.)	0.6 or 1.2 mA max.					
	Inrush current (25°C, cold start) (See note 1.)	25 or 50 A max.					
Output (See note 2.)	Voltage adjustment range	±10% (V.ADJ)					
	Ripple (See note 1.)	2% (p–p) max.					
	Input variation influence	0.4% max. (at 85 to 132 VAC input/at 170 to 285 VAC input, 100% load)					
	Load variation influence	0.8% max. (with rated input, 10 to 100% load)					
	Temperature variation influence (See note 1.)	0.05%/°C max.					
	Startup time	500 ms max. (up to 90% of output voltage at rated input and output)					
	Hold time (See note 1.)	20 ms min.					
Additional functions	Overload protection	105% to 180% of rated load current, inverted L drop/intermittent operation type, automatic reset					
	Overvoltage protection (See note 3.)	Yes					

Item		100 to 240 VAC (s	100 to 240 VAC (selected automatically)		100 or 200 VAC (selectable)			
		35 W	50 W	100 W	150 W			
Other	Ambient temperature	Operating: See the dera Storage: -15°C to 65°C	Operating: See the derating curve. (with no condensation or icing) Storage: -15°C to 65°C (with no condensation or icing)					
	Ambient humidity	Operating: 25% to 85%; Storage: 25% to 90%						
	Dielectric strength	2.4 kVAC, 50/60 Hz for 1 min (between all outputs and inputs/GR terminals), detection current 15 mA 2.4 kVAC, 50/60 Hz for 1 min (between all inputs and all outputs), detection current 15 mA 0.5 kVAC, 50/60 Hz for 1 min (between all outputs and GR terminals), detection current 15 mA						
	Insulation resistance	100 M Ω max. (between	100 M Ω max. (between all output and input/GR terminals at 500 VDC)					
	Vibration resistance	10 to 55 Hz, 0.375-mm	10 to 55 Hz, 0.375-mm double amplitude for 2 h each in X, Y, and Z directions					
	Shock resistance	200 m/s², 3 times each in $\pm X, \pm Y,$ and $\pm Z$ directions						
	Output indicator	Yes (green)	Yes (green)					
	Input indicator	Yes (neon lamp)	Yes (neon lamp)					
	Electromagnetic interference	conforms to FCC Class	conforms to FCC Class A					
	Approved standards	UL1950 (3rd Edition), C	UL1950 (3rd Edition), CSA 22.2 No. 60950-00, EN60950: 2000					
	W×H×D (mm)	37.5×97×129	37.5×97×159	37.5×97×199	50×97×199			
	Weight	340 g max.	430 g max.	550 g max.	700 g max.			
	Mounting method	Front-mounting Bracket	Front-mounting Bracket or DIN Track Mounting Bracket					

Note: 1. 100% load for rated input voltage (110 VAC or 220 VAC)

2. The output specification is defined at the power supply output terminals.

3. For resetting, turn OFF the power supply, leave for more than one minute, and then turn ON the power supply.

Derating Curve



Precautions

Mounting

To improve and maintain the reliability of the Power Supply over a long period of time, adequate consideration must be given to heat radiation. The Power Supply is designed to radiate heat by means of natural airflow.

Therefore, mount the Power Supply so that airflow takes place around the Power Supply.

When mounting the Power Supply, mounting it to a metal plate is recommended.

When mounting two or more Power Supplies side-by-side, allow at least 20 mm between them, as shown in the following illustration. Force air-cooling is recommended.



Mounting Methods

The following mounting methods are available. 35-/50-/100-/150-W Models (A) Side mounting (B) Bottom mounting



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

Cat. No. T025-E1-01 In the interest of product improvement, specifications are subject to change without notice.

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