## OmROn

## Switching Power Supply

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

E Easily mounted to DIN Track with provided Mounting Bracket.

- Wide AC input range.
$35-/ 50-\mathrm{W}$ 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 |
|  | $100 \text { or } 200 \mathrm{VAC}$(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 |
|  | $\begin{aligned} & 100 \text { or } 200 \text { VAC } \\ & \text { (selectable) } \end{aligned}$ | 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:

S8JT-


1. Power ratings 035: 35 W 050: 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 ${ }^{\circ} \mathrm{C}$, cold start) (See note 1.) | 25 or 50 A max. |  |  |  |
| Output (See note 2.) | Voltage adjustment range | $\pm 10 \%$ (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\%/ ${ }^{\circ} \mathrm{C}$ max. |  |  |  |
|  | Startup time | $500 \mathrm{~ms} \mathrm{max}$. (up to $90 \%$ of output voltage at rated input and output) |  |  |  |
|  | Hold time (See note 1.) | $20 \mathrm{~ms} \mathrm{min}$. |  |  |  |
| 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 (selected automatically) |  | 100 or 200 VAC (selectable) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 35 W | 50 W | 100 W | 150 W |
| Other | Ambient temperature | Operating: See the derating curve. (with no condensation or icing) Storage: $-15^{\circ} \mathrm{C}$ to $65^{\circ} \mathrm{C}$ (with no condensation or icing) |  |  |  |
|  | Ambient humidity | Operating: $25 \%$ to $85 \%$; Storage: $25 \%$ to $90 \%$ |  |  |  |
|  | Dielectric strength | $2.4 \mathrm{kVAC}, 50 / 60 \mathrm{~Hz}$ for 1 min (between all outputs and inputs/GR terminals), detection current 15 mA $2.4 \mathrm{kVAC}, 50 / 60 \mathrm{~Hz}$ for 1 min (between all inputs and all outputs), detection current 15 mA <br> $0.5 \mathrm{kVAC}, 50 / 60 \mathrm{~Hz}$ for 1 min (between all outputs and GR terminals), detection current 15 mA |  |  |  |
|  | Insulation resistance | $100 \mathrm{M} \Omega$ max. (between all output and input/GR terminals at 500 VDC ) |  |  |  |
|  | Vibration resistance | 10 to $55 \mathrm{~Hz}, 0.375-\mathrm{mm}$ double amplitude for 2 h each in $\mathrm{X}, \mathrm{Y}$, and Z directions |  |  |  |
|  | Shock resistance | $200 \mathrm{~m} / \mathrm{s}^{2}, 3$ times each in $\pm \mathrm{X}, \pm \mathrm{Y}$, and $\pm \mathrm{Z}$ directions |  |  |  |
|  | Output indicator | Yes (green) |  |  |  |
|  | Input indicator | Yes (neon lamp) |  |  |  |
|  | Electromagnetic interference | conforms to FCC Class A |  |  |  |
|  | Approved standards | UL1950 (3rd Edition), CSA 22.2 No. 60950-00, EN60950: 2000 |  |  |  |
|  | $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ (mm) | $37.5 \times 97 \times 129$ | $37.5 \times 97 \times 159$ | 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 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


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

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