

S8AS Switching Power Supply

INSTRUCTION MANUAL

Thank you for purchasing the S8AS-24006 Switching Power Supply (called the S8AS in this Manual).

OMRON Corporation

For detailed operating instructions, refer to the S8AS User's Manual (Cat. No. Z269).

Suitability for Use

OMRON shall not be responsible for conformity with any standards, codes, or regulations that apply to the combination of the products in the customer's application or use of the product.

Key to Warning Symbols

CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.

Warning Symbols

- Minor electric shock, fire, or Product failure may occasionally occur. Do not disassemble, modify, or repair the Product or touch the interior of the Product.

Precautions for Safe Use

- (1) Installation and Storage Environment
1. Store the Product at an ambient temperature of -25°C to 30°C and relative humidity of 25% to 90%.

- (2) Installation and Wiring
1. Minor electric shock during operation may occasionally occur. Always to attach the cover or take other precautions so that the terminals cannot be touched directly.

Table with 5 columns: Terminals, Name, Recommended wire diameter, Wire type, Torque, Wire stripping length.

- (3) Output Voltage Adjustment
1. The output voltage adjuster (V.ADJ.) may possibly become damaged. Do not apply more than the required force.

Precautions for Correct Use

This Instruction Manual describes only the minimum setting operations required when using the S8AS for the first time.

Table with 2 columns: Mounting direction, Status.

- (1) Abnormal Current Tripping
The long-term reliability of the S8AS is guaranteed by its over-current protection function.

Precautions for Correct Use

- Abnormal Current Tripping
The S8AS has an abnormal current tripping function. A branch output will be cut off if its current exceeds a preset value.

- Startup Delay
The S8AS has a startup delay function that prevents cutoffs caused by inrush current at startup.

- Output Voltage Adjustment
Default setting: Set as the rated voltage.

- External Tripping Input
When using the external tripping input, always confirm the application methods described in the S8AS User's Manual.

- Supplementary Information: Conformity to IEC and EN Safety Standards
The S8AS is a Class A product. In a residential, commercial, or light industrial environment, it may cause radio interference.

Part Names and Functions

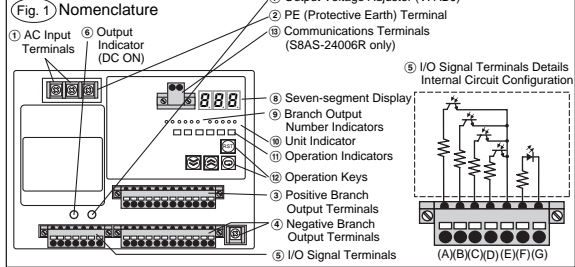
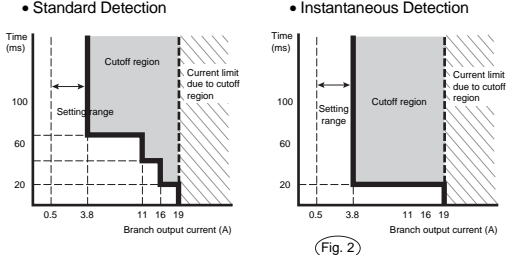


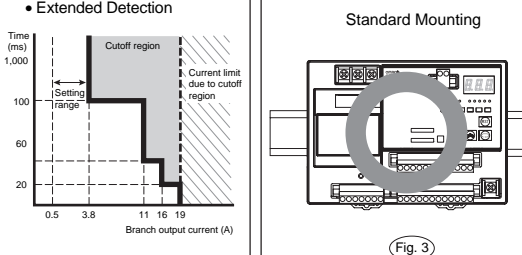
Table with 3 columns: No., Name, Function. Lists components like AC Input Terminals, PE Terminal, Positive Branch Output Terminals, etc.

- Notes:
1. The noise value depends on the wiring method and other factors. Insert a clamp filter (EASR301334) manufactured by SEIWA...

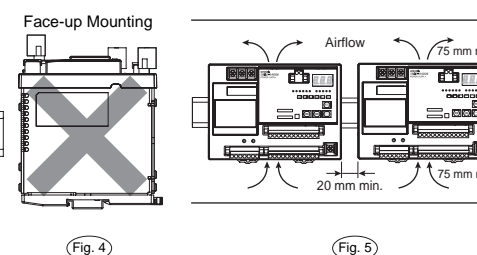
Cutoff Characteristics



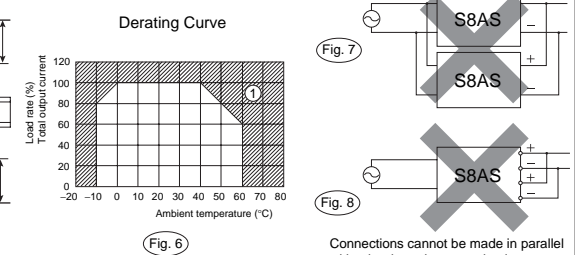
Standard Mounting



Derating Curve and Wiring Diagram

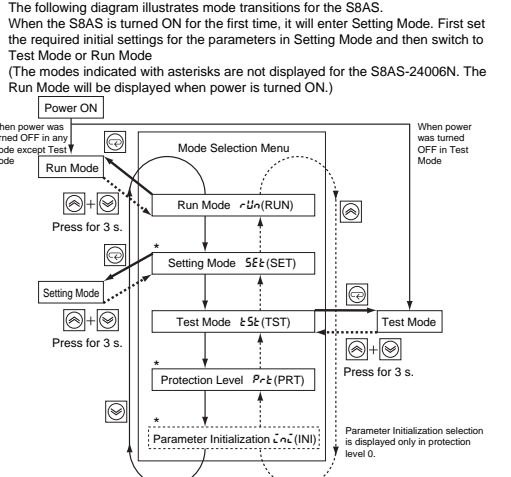


Connections cannot be made in parallel



Operating Procedures and Functions

Initial Settings When First Using the S8AS



Mode Selection Menu

When the required parameters have been set in Setting Mode, Test Mode can be entered from the Mode Selection Menu after pressing the Up + Down Keys for 3 s.

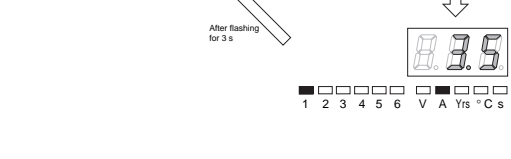
Setting Mode is used to set parameters. Operation starts from this mode when using the S8AS for the first time.

Test Mode enables forcing branch outputs ON and OFF. Connections and cutoffs can be manipulated for all outputs for each branch output.

Protection Level can be used to set restrictions for setting parameters. Three levels, levels 0, 1, and 2, are available.

Parameter Initialization is used to return all parameters to their default settings. The Parameter Initialization is not displayed in the default protection level (level 1).

Setting Parameters
Parameters are set as shown below. After setting all required parameters, go to Test Mode.



Operation in Run Mode

After connecting the required branch outputs in Test Mode, enter Run Mode to confirm that input voltages, output currents, and other values are correct.

The unit indicators (●) indicates that the indicator is lit and (■) indicates that the indicator is flashing.

Input Voltage Display
Displays the output power.

Branch Output 1: Output Current Display
Displays the current of branch outputs. (The example displays the current of branch output 1.)

Branch Output 1: Peak Output Current Display
Displays the peak current of a branch output. (The example displays the peak current of branch output 1.)

Branch Output 2: Output Current Display
Displays the output current of branch outputs 2 to 6 and the peak output current.

Branch Output 3: Total Output Current Display
Displays the total output current of branch outputs 1 to 6.

Branch Output 4: Estimated Years until Replacement Display
Displays the estimated number of years until the replacement time.

Branch Output 5: Internal Temperature Display
Displays the internal temperature.

Setting Mode
Setting Mode is used to set S8AS parameters. The various parameters can be selected as shown below.

1. Abnormal Current Tripping Threshold
The current at which a branch output is cut off. Setting range: 0.5 to 3.8 A.

2. Under-voltage Alarm Value
The detection value for a voltage drop at which an alarm is output. Setting range: 18.0 to 26.4 VDC.

3. Maintenance Forecast Monitor Value
Used to set maintenance forecast monitor function. Setting range: 0.0 to 5.0 years.

4. Over-temperature Output
The temperature at which an alarm is output. Setting range: 25 to 90°C.

Operation in Test Mode

The following operations can be used to force branch outputs to turn ON and OFF. Branch outputs can be turned ON or OFF individually or together.

For the seven-segment display (●) and unit indicators (■), indicates that the display or indicator is lit and (■) indicates that the display or indicator is flashing.

1. Turning ON/OFF Individual Branch Outputs
The following display will appear when Test Mode is entered and the Up and Down Keys can be used to select the branch output. Set the branch output number to be output, confirming the number on the mode indicators, and then turn ON the output.

2. Turn ON/OFF All Branch Outputs
The Up and Down Keys can also be used to select all branch output numbers. The ON or OFF display will appear. Use the Mode Key to execute the operation.

Clearing the Peak Output Current Display
The peak currents displayed for branch outputs in Run Mode can be cleared.

Displaying Alarms
The S8AS displays alarms according to the parameters set in Setting Mode. The alarm number and detected value are alternated on the display for each alarm.

Resetting Alarms
When an alarm is displayed, remove the cause of the alarm and then press the Reset Key. RST will be shown on the 7-segment display. Resetting will be possible.

Branch Output Operation Status Display
The output status of branch outputs is displayed using LED illumination.

Cutoff Performance
The S8AS detects the current of branch outputs as digital values and numeric processing is performed to execute cutoff operations. Refer to (Fig. 2) for the cutoff performance.

Other Functions
The S8AS also provides the following functions. Refer to the S8AS User's Manual (Cat. No. Z269) for details.

Safety Standards

- According to EN 50178 (i.e., VDE 0160)
• Overvoltage Category III
• Device Protection Class 1

According to IEC 60950
• Use in an enclosure that maintains a Pollution Degree 2 environment.
• WARNING: Risk of fire or electric shock.

According to IEC 60950-1
• Overvoltage Category II

According to IEC 60950-1
• Use in an enclosure that maintains a Pollution Degree 2 environment.

According to IEC 60950-1
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• Use in an enclosure that maintains a Pollution Degree 2 environment.

Contact address

Table with 4 columns: Region, Company Name, Address, Phone/Fax/Website.

形 S8AS スイッチングパワーサプライ

JPN 取扱説明書

このたびは、スイッチングパワーサプライ形 S8AS-24006□(以下、本紙では形 S8AS といいます)をお買い上げいただきまして、誠にありがとうございます。この取扱説明書では、形 S8AS を使用する上で必要な機能、性能、使用方法などの情報を記載しております。ご使用に際して以下のことを守ってください。

オムロン株式会社

使用方法の詳細については「スイッチングパワーサプライ形 S8AS ユーザーズマニュアル(カタログ番号:SGTC-702)」をご覧ください。ユーザーズマニュアルはオムロンの下記の Web ページから無料でダウンロードすることができます。(http://www.fa.omron.co.jp/)

ご使用に際してのご承諾事項

- 下記用途に使用される場合、当社営業担当までご相談のうえ仕様などによりご確認いただくとともに、定格・性能に対し余裕を持った使い方、万一故障があっても危険を最小にする安全対策などの安全対策を講じてください。

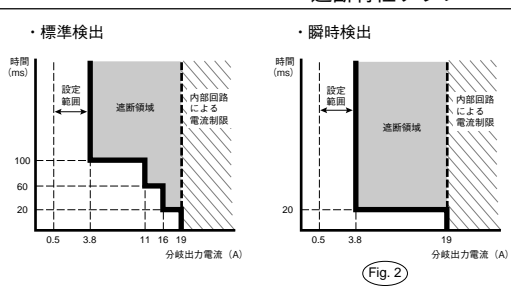
警告表示の意味

正しい取扱いをしなければ、この危険のために、時に軽傷・程度の傷害を負ったり、あるいは物的損害を受ける恐れがあります。

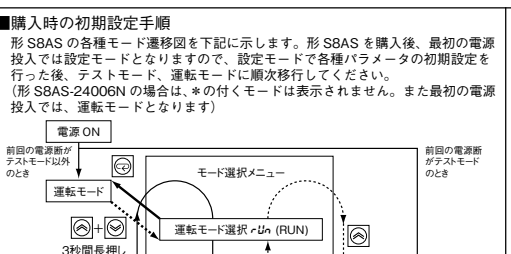
警告表示

Table with 2 columns: 警告表示 (Warning symbols) and 説明 (Description of symbols).

遮断特性グラフ



ディレーティング、配線図



操作方法と機能

Operational instructions including initial settings, mode operation, parameter settings, and test mode operation. Includes diagrams of the display and control buttons.

安全上の要点

- (1) 設置・保管環境について: 周囲温度 25~90% で保管してください。...

- (2) 設置・配線について: 操作時に軽微な感電が起る恐れがあります。...

使用上の注意

- この取扱説明書は購入時の初期設定に必要な最低限の設定値のみを記載しています。...

異常電圧遮断機能

- 1. 形 S8AS 本体は異常電圧遮断機能を持っており、DC28.8V 以上の電圧が印加されると、すべての分岐出力が遮断されます。...

- 2. 入力電圧の低下を検出する機能: 入力電圧が AC100 ~ 120V の範囲では、入力電圧が低下すると、不足電圧検出出力 (L) が ON になります。...

動作モード

- 1. 電源 ON: 電源スイッチを押すと、電源が ON になります。...

各部の名称と働き

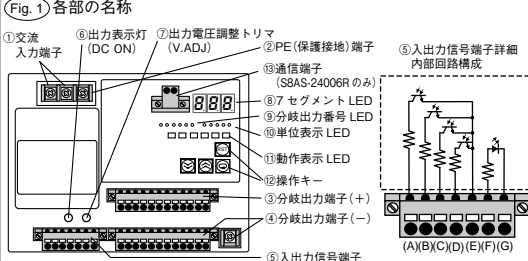


Table listing components and their functions, such as input terminals, protection ground, output terminals, and LEDs.

- \*1. 配線の方法などにより、RIS 値は変化します。...

各種警告のリセット(復帰)方法

Instructions for resetting warnings, including diagrams of the display and button presses.

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安全規格

- 以下 EN50178 (=VDE0160) に従います。...

お問い合わせ先

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〒426-8601 静岡県浜松市東区綱島1-1-1 ゲートシティ大崎ウエストタワー14F (〒411-0032)