



# MODEL S8VK-S (30W)

## SWITCHING POWER SUPPLY

### EN INSTRUCTION MANUAL

### DE Bedienungsanleitung

### FR Manuel d'instructions

Thank you for purchasing the S8VK-S.  
The Instruction Manual describes the functions, performance, and application methods required to use the S8VK-S.

• Make sure that a specialist with electric knowledge operates the S8VK-S.

• Read and understand this Instruction Manual, and use the product with enough understanding.

Keep this Instruction Manual close at hand and use it for reference during operation.

Herzlichen Glückwunsch zum Kauf der S8VK-S.

Diese Bedienungsanleitung beschreibt die Funktionen, Leistungen und Anwendungsmethoden, die für den Betrieb des S8VK-S erforderlich sind.

• Vergewissern Sie sich, dass das S8VK-S von Elektro-Fachleuten bedient wird.

• Lesen Sie diese Bedienungsanleitung sorgfältig durch und vergewissern Sie sich vor dem Betrieb, alles verstanden zu haben.

Heben Sie die Bedienungsanleitung griffbereit auf und nutzen Sie sie während des Betriebs als Referenz.

Nous vous remercions d'avoir fait l'acquisition de la S8VK-S.

Ce manuel d'instructions apporte une description des fonctions, des performances et des méthodes d'application nécessaires à son utilisation.

• Assurez-vous qu'un spécialiste ayant une bonne connaissance de l'électricité soit chargé de sa manipulation.

• Veuillez lire attentivement ce manuel d'instructions et vous assurer d'avoir bien compris le fonctionnement de l'appareil avant de l'utiliser.

Gardez ce manuel à portée de main et utilisez-le comme référence pendant son utilisation.

**OMRON Corporation**

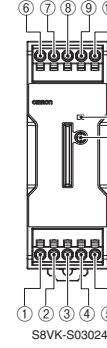
SHIOKOJI HORIKAWA, Shimogyo-Ku, Kyoto, 600-8530 Japan

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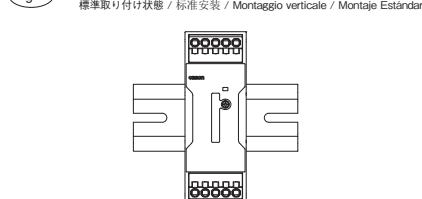
**CAUTION : FOR USE IN A CONTROLLED ENVIRONMENT. REFER TO MANUAL FOR ENVIRONMENTAL CONDITIONS.**

**ATTENTION : POUR UTILISATION EN ATMOSPHÈRE CONTRÔLÉE. CONSULTER LA NOTICE TECHNIQUE.**

(Fig. 1) Nomenclature / Bezeichnungen / Nomenclature  
各部の名称 / 各部位名称 / Nomenclatura / Descripción

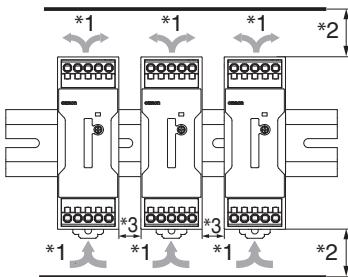


(Fig. 2) Standard mounting / Standard Montage / Montage Standard



(Fig. 3) Mounting / Montage / Montage

取り付け方法について 安装方法 / Montaggio / Montage



### EN Safety Precautions

#### Key to Warning Symbols

<b>⚠ WARNING</b>	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. Additionally, there may be severe property damage.
<b>⚠ CAUTION</b>	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.

#### • Warning Symbols

##### ⚠ WARNING

If a ferrule becomes detached from the terminal block, electric shock may occur. When connect the wires to the terminal block, insert the solid wire or ferrule straight into the terminal block until the end strikes the terminal block.

##### ⚠ CAUTION

- 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.
- Minor burns may occasionally occur. Do not touch the Product while power is being supplied or immediately after power is turned OFF.
- Minor injury due to electric shock may occasionally occur. Do not touch the terminals while power is being supplied. Working voltage can be 370V max. inside. This voltage can be also available 30s after the switch off.
- Minor electric shock, fire, or Product failure may occasionally occur. Do not allow any metal or conductors or any clippings or cuttings resulting from installation work to enter the Product.

### EN Precautions for Safe Use

1. Store the Product at a temperature of -40 to 85°C and a humidity of 95% or less.
2. Take adequate measures to ensure proper heat dissipation to increase the long-term reliability of the Product.
- The Product is cooled by natural convection. Mount it so that air convection will occur around it.
  - ① Direction of air circulation:  $> 25 \text{ mm}$
  - ② Horizontal separation:  $0 \text{ mm}$  or more
3. A different derating curve from the one for the standard mounting must be used if the horizontal separation is less than 15 mm.
4. The internal parts may occasionally deteriorate or be damaged. Do not use the Product in areas outside the derating curves.
5. Refer to the product catalogue for the derating curve for each mounting direction.
6. Use the Product at a humidity of 95% or less.
7. Do not use the Product in locations where liquids, foreign matter, or corrosive gases may enter the interior of the Product.
8. Avoid places subject to shock or vibration. A device such as a contact breaker may be a vibration source. Install the Product away from contactors and other parts and devices that are sources of vibration. For application on a ship, always attach an End Plate (PPF-M) to each end to hold the Product in place.
10. If the Product is used in an area with excessive electronic noise or surge, be sure to separate the Product as far as possible from the noise and source.
- (2) Arrangement/Wiring
  - 1. Connect the ground completely. A protective earthing terminal stipulated in safety standards must be connected to ground.
  - 2. Minor fire may possibly occur. Ensure that input and output terminals are wired correctly.
  - 3. Use the following material to the wire to be applied to the product for preventing from the occurrence of the smoking or ignition caused by the abnormal load.

#### Recommend Wire Type:

Terminal	Recommend Wire Type	(mm <sup>2</sup> )	(AWG)
Input	0.34 to 2.5	22 to 14	
Output	0.5 to 2.5	20 to 14	
PE (protective earthing)	2 to 2.5	14	

#### Stripping length

Recommend Wire Type	Ferrules used	Ferrules not used
0.34 to 1.5mm <sup>2</sup> /AWG22 to 16	10 mm	8 mm
2 to 2.5mm <sup>2</sup> /AWG14	12 mm	10 mm

Note: Use UL-recognized (R/C) ferrules.

4. When you insert wires or insert a flat-blade screwdriver into a release hole, do not press down on the terminal block with a force of 40 N or greater.
5. Do not turn anyone to the release holes.
6. When you insert a flat-blade screwdriver into a release hole, do not tilt or twist the screwdriver. The terminal block may be damaged.
7. Insert a flat-blade screwdriver into the release holes at an angle. The terminal block may be damaged if you insert the screwdriver straight in.
8. Do not allow the flat-blade screwdriver to fall out while it is inserted into a release hole.
9. Do not bend a wire past its natural bending radius or pull on it with excessive force. Doing so may cause the wire to break.
10. Do not insert more than one wire into each terminal insertion hole.
11. Do not use the ends of the wires. Doing so will inhibit proper connection.
- Note:** For information on connecting wires to and removing wires from push-in terminal blocks, refer to the following document: *Connection Method of Push-In Plus Terminals (9606429-7)*.
12. Be sure to remove the sheet covering the product for machining before power-on.
- (3) Output Voltage Adjustment
  - 1. The output voltage adjuster (V. ADJ) may possibly be damaged if it is turned with unnecessary force. Do not turn the adjuster with excessive force.
  - 2. After completing output voltage adjustment, be sure that the output power or output current does not exceed the rated output power or rated output current.
  - (4) See product catalogue for details.

### EN Suitability for Use

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's intended application. Buyer is liable for any damages resulting from such use in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCTS IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

### EN Nomenclature

- ①, ② Input terminal (L)
- ③, ④ Output terminal (N)
- ⑤ PE (protective earthing) terminal (G)
- ⑥, ⑦ DC output terminal (+V)
- ⑧, ⑨, ⑩ DC output terminal (-V)
- ⑪ Output indicator (DC ON: green)
- ⑫ Output voltage adjuster (V. ADJ)

(Fig.1) Note: Use the following material to the wire to be applied to the product for preventing from the occurrence of the smoking or ignition caused by the abnormal load.

Matters related to UL61558-2-16/IEC61558-1-16

1. Switch mode power supply (SMPS):

2. Short-circuit-proof isolating transformer:

3. Rated maximum ambient temperature: Ta = 40°C

Ambient temperature / Surrounding Air Temperature: Max. 55°C at 80% load, 40°C at 100% load (Ta=40°C)

Use in pollution degree 2 environment.

Installation spacing: Spacing between the Product: 25 mm. Horizontal separation 0 mm or more.

\*1: DC output terminals (⑥ to ⑨) are galvanically isolated from the input terminals (① to ⑤).

\*2: Overvoltage category III (≥ 2000V).

This equipment is for protection class I.

3. Climatic class: 3K3

4. Overvoltage category II.

2. This product is intended to be used in connection with information technology equipment. According to UL62368-1.

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