

MODEL S8VK-S SWITCHING POWER SUPPLY

EN INSTRUCTION MANUAL DE Bedienungsanleitung FR Manuel d'instructions

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

- Make sure that a specialist with electrical 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 des 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.

• Geben 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 l'utilisation du produit.
- 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

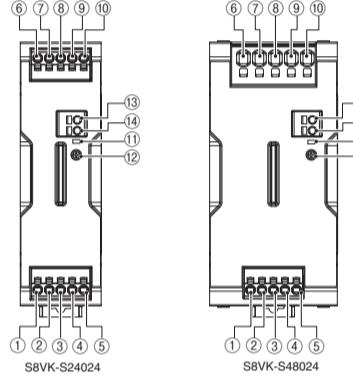
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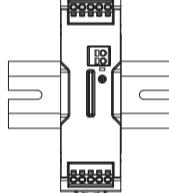
CAUTION : FOR USE IN A CONTROLLED ENVIRONMENT. REFER TO MANUAL FOR ENVIRONMENTAL CONDITIONS.

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

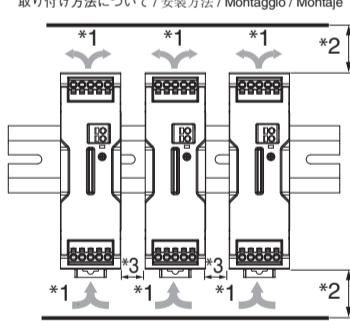
(Fig. 1) Nomenclature / Bezeichnungen / Nomenclature
各部の名称 / 各部位名称 / Nomenclatura / Descripción



(Fig. 2) Standard mounting / Standard Montage / Montage Standard
標準取り付け状態 / Standard installation / Montaggio verticale / Montage Étandard



(Fig. 3) Mounting / Montage
取り付け方法について / Installation method / Montaggio / Montage



EN Precautions for Correct Use

- Mounting
 - For mounting types other than Fig.2, refer to the catalogue.
- Input Voltage Tolerance
 - Mains supply tolerance for AC input: +10 to -15% (85 to 264 VAC)
 - When using an input voltage less than 90 VAC, reduce the load calculated with derating 2.5%/VAC.
- Model:S8VK-S48024
 - Mains supply tolerance for AC input: +10 to -15% (85 to 264 VAC)
 - When using an input voltage less than 100 VAC, reduce the load calculated with derating 1.5%/VAC.
- Model:S8VK-S24024, S8VK-S48024
 - Mains supply tolerance for DC input: ± 0% (90 to 350 VDC), a clearance of 15 mm or more on the left and right sides.
- Output Voltage Adjustment
 - Default Setting: Set at the rated voltage.
 - Adjustment Range: The output voltage can be adjusted to between 21.6 and 28 V with the voltage output adjuster "V ADJ" (⑫) on the front panel.
 - Turning clockwise increases the output voltage, and turning counter-clockwise decreases the output voltage.
- Notes:
 - To ease the cleat of the overvoltage, before turning on the product.
 - Low voltage detection function
 - Output externally by photo-switch when an output voltage drop is detected (OFF when an output drop occurs).
 - The detection voltage is set to about 90% (75% to 90%) of the rated output voltage.
 - Protection against overvoltage
 - The Product is designed to withstand 3,000 VAC for one minute between input terminals ① to ④ together and output terminals ⑥ to ⑩ together.
 - When testing, set the cutoff current for the withstand voltage test device to 20 mA.

The output voltage may increase beyond the allowable voltage range when "V ADJ" (⑫) operation is performed. When adjusting the output voltage, check the output voltage of the Product and be sure that the load is not destroyed.

■ Dielectric Strength Test

The Product is designed to withstand 3,000 VAC for one minute between input terminals ① to ④ together and output terminals ⑥ to ⑩ together.

When testing, set the cutoff current for the withstand voltage test device to 20 mA.

Notes:

- If a test switch is used to apply or cut off 3,000 V suddenly, the resulting impulse voltage may occasionally destroy the Product. Increase/decrease test voltage gradually.
- Be sure to short-circuit all the output terminals of the product to protect the product from damage.

EN Contact address

OMRON ELECTRONICS LLC

Phone: 1-800-55-OMRON

Fax : 1-847-843-7787

OMRON CANADA INC.

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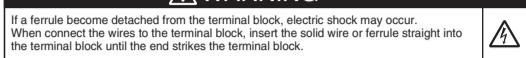
Fax : 1-847-843-7900

EN Safety Precautions

Key to Warning Symbols

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

• Warning Symbols



If a ferrule become 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.



- 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 pieces of metal or conductors or any clippings or cuttings resulting from installation work to enter the Product.

EN Precautions for Safe Use

- 1) Installing/Storage Environment
 - 2. Take adequate measures to ensure proper heat dissipation to increase the long-term reliability of the Product.
 - 3. Do not use the Product in an area with forced natural convection. Mount it so that air convection will occur around it.
 - 4. Direction of air circulation
 - 5. 2 Space above and below the Product: 23 mm min.
 - 6. Horizontal separation 0 mm or more
 - 7. A different derating curve from the one for the standard mounting must be used if the horizontal separation is less than 15 mm.
 - 8. Do not use the Product in areas where liquids, foreign matter, or corrosive gases may enter the interior of the Product.
 - 9. Do not use the Product in vibration or vibration source such as a contact breaker may be a vibration source. Install the Product away from contacts 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.
 - 11. The internal parts may occasionally deteriorate and be broken due to adverse heat radiation. Do not loosen these screws on the power supply unit.
- 2) Arrangement/Wiring
 - 1. Connect the ground wire completely. A protective earthing terminal stipulated in safety standards must be used if the ground wire is not connected completely.
 - 2. Minor fire may possibly occur. Ensure that input and output terminals are wired correctly. 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.
- 3) Recommended Wire Type:

Terminal	Model	Recommend Wire Type (mm²) (AWG)
Input	S8VK-S24024	0.5 to 2.5 20 to 14
Output	S8VK-S48024	0.75 to 2.5 18 to 14
Low-voltage output	S8VK-S24024, S8VK-S48024	3.5 to 6 12 to 10
PE (protective earthing)	S8VK-S24024, S8VK-S48024	0.25 to 2.5 24 to 14
- 4) Stripping length

Terminal	Model	Recommend Wire Type (mm²) (AWG)	Stripping length
Input terminal	S8VK-S24024, S8VK-S48024	0.5 to 1.5mm²/AWG22 to 16	10 mm 8 mm
Output terminal	S8VK-S24024	2 to 2.5mm²/AWG14	12 mm 10 mm
Low-voltage output	S8VK-S24024, S8VK-S48024	3.5 to 6mm²/AWG12 to 10	15 mm 15 mm
PE (protective earth)	S8VK-S24024, S8VK-S48024	0.25 to 2.5mm²/AWG24 to 14	10 mm 10 mm

Note: Use UL-recognized (RC) 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 write anything to the release holes.

6. When you insert a flat-blade screwdriver into a release hole, 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 it is inserted straight in.

8. Do not align 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 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 pre-solder the ends of the wires. Doing so will inhibit proper connection.

12. If there is a possibility that the Unit will be subject to vibration or shock, use Wires with Ferrules or Stranded Wires.

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 (960629-7).

13. 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 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. The 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 application, product or system. Buyer shall take application responsibility 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 PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

EN Nomenclature

①, ⑤ Input terminal (L) (The fuse is located on the (L) side.)

③, ⑩ Input terminal (N)

④ PE (protective earthing) terminal (⑪) (A PE (protective earthing) terminal stipulated in the safety standards is used. Connect fully to ground.)

⑨, ⑭ DC output terminal (+V) (⑬ DC output terminal (-V))

⑩, ⑪ Output indicator (DC ON; green)

⑫ Output voltage adjuster (V ADJ)

⑬, ⑯ Low-voltage detection output terminal

⑭ Note: Use UL-recognized (RC) 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 write anything to the release holes.

6. When you insert a flat-blade screwdriver into a release hole, 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 it is inserted straight in.

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12. If there is a possibility that the Unit will be subject to vibration or shock, use Wires with Ferrules or Stranded Wires.

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 (960629-7).

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- 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 Safety standards

Input and Output

Model: S8VK-S24024	Input: 100-240 VAC 50/60Hz 3.1 A max.90-350 VDC 3.4 A max. output: 24 VDC 10A (240 V)
Model: S8VK-S48024	Input: 100-240 VAC 50/60Hz 5.9 A max.90-350 VDC 6.6 A max. output: 24 VDC 20A (240 V)
Model: S8VK-S24024, S8VK-S48024	Input: 100-240 VAC 50/60Hz 5.9 A max.90-350 VDC 6.6 A max. output: 24 VDC 20A (480 V)

Tolerance: ±5-264 VAC, ±5-264 VDC, ±5-264 VDC

Load derating: 100 VAC with 100% load and 85 VAC with 85% load. When the load is lower than 100% load, derate the load by 1.0% for every 1% decrease in load.

Notes: The UL60958-2-16/IEC60958-2-16/CISPR22-1 safety standards are applicable for the following input frequency ranges:

• The UL60958-2-16/IEC60958-2-16 and CSA22.2 No.62368-1 safety standards are applicable for the following input frequency ranges:

• The IEC60958-2-16/IEC60958-2-16 and CSA22.2 No.62368-1 safety standards are applicable for the following input frequency ranges:

• The IEC60958-2-16/IEC60958-2-16 and CSA22.2 No.62368-1 safety standards are applicable for the following input frequency ranges:

• The IEC60958-2-16/IEC60958-2-16 and CSA22.2 No.62368-1 safety standards are applicable for the following input frequency ranges:

• The

形 S8VK-S スイッチングパワーサプライ

JPN 取扱説明書
CHN 使用说明书
IT MANUALE DIISTRUZIONI
ES MANUAL DE INSTRUCCIONES

この度は、S8VK-Sをお買い上げいただきまして、ごとにあります。この取扱説明書では、S8VK-Sを使用する上での必要な機能、性能、使用方法などの情報を記載しております。

S8VK-Sをご使用して以下のことを守ってください。

• S8VK-Sは電気の危険を有する機器であります。必ずご使用ください。

• この取扱説明書によくお読みになり、十分に理解のうえ、正しくご使用ください。

この取扱説明書はいつもでも参考できるよう大切に保管してください。

感謝御 購买了 S8VK-S の产品。

此说明书内記載した S8VK-S 使用時の功能、性能及使用方法。

检验员：01

• 请确保具备电气知识的人员操作 S8VK-S。

• 请充分阅读并理解本使用说明书的内容之后，再正确使用本产品。

请妥善保管本使用说明书以便作参考。

Grazie per aver acquistato l'S8VK-S. Nel presente Manuale di istruzioni vengono descritte le funzioni, le prestazioni e i metodi applicativi necessari per l'uso di S8VK-S.

• L'S8VK-S deve essere maneggiato da personale esperto con conoscenze in campo elettrico.

• Leggere a fondo il presente Manuale di istruzioni e verificare di aver compreso il funzionamento del prodotto prima dell'uso.

Tenere il presente Manuale di istruzioni a portata di mano e utilizzarlo come riferimento durante il funzionamento del prodotto.

Gracias por comprar el S8VK-S. Este manual de instrucciones describe el funcionamiento, el rendimiento y los métodos de aplicación necesarios para utilizar el S8VK-S.

• Asegúrese que la persona que utiliza el S8VK-S sea un especialista que tiene los conocimientos de electricidad necesarios.

• Lea este manual de instrucciones y asegúrese de entender el funcionamiento del aparato antes de utilizarlo.

Conservate este manual de instrucciones a mano y consultelo mientras utilice el producto.

オムロン株式会社

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(Fig.1)、(Fig.2)、(Fig.3)の説明図は、反対面に記載しています。

説明図 (Fig.1)、(Fig.2) と (Fig.3) 显示在背面。

Sul retro appaiono le illustrazioni esplicative (Fig.1)、(Fig.2) e (Fig.3)。

En el reverso aparecen las ilustraciones explicativas (Fig.1)、(Fig.2) y (Fig.3)。

JPN 各部の名称

①、② 入力端子 (L) ヒューズは (L) 側に挿入されています。
③、④ 入力端子 (N)
⑤ PE (保護接地) 端子 (◎)
⑥、⑦ 直流出力端子 (+V)
⑧、⑨、⑩ 直流出力端子 (-V)

(Fig.1)

⑪、⑫ 出力端子 (DC ON: 青)
⑬、⑭ 出力端子 (DC ON: 緑)
⑮、⑯、⑰ 直流电压調整端子 (V ADJ)
⑲ PE (保護接地) 端子。完全接続。

(Fig.2)

①、② 入力端子 (L) ヒューズは (L) 側に挿入されています。
③、④ 入力端子 (N)
⑤ PE (保護接地) 端子 (◎)
⑥、⑦ 直流出力端子 (+V)
⑧、⑨、⑩ 直流出力端子 (-V)

(Fig.3)

⑪、⑫ 出力端子 (DC ON: 青)
⑬、⑭ 出力端子 (DC ON: 緑)
⑮、⑯、⑰ 直流电压調整端子 (V ADJ)
⑲ PE (保護接地) 端子。完全接続。

(Fig.1)

①、② 入力端子 (L) ヒューズは (L) 側に挿入されています。
③、④ 入力端子 (N)
⑤ PE (保護接地) 端子 (◎)
⑥、⑦ 直流出力端子 (+V)
⑧、⑨、⑩ 直流出力端子 (-V)

(Fig.2)

⑪、⑫ 出力端子 (DC ON: 青)
⑬、⑭ 出力端子 (DC ON: 緑)
⑮、⑯、⑰ 直流电压調整端子 (V ADJ)
⑲ PE (保護接地) 端子。完全接続。

(Fig.3)

CHN 各部位名称

①、② 輸入端子 (L) (保護端子 (L))
③、④ 入力端子 (N)
⑤ PE (保護接地) 端子 (◎)
(使用了安全标准中规定的PE (保护接地) 端子。完全接地。)

(Fig.1)

⑥、⑦ DC 输出端子 (+V)
⑧、⑨、⑩ DC 输出端子 (-V)

⑪、⑫、⑬、⑭、⑮、⑯、⑰、⑲、⑲ 直流电压调整端子 (V ADJ)
⑲ PE (保護接地) 端子

(Fig.2)

①、② 輸入端子 (L) (保護端子 (L))
③、④ 入力端子 (N)
⑤ PE (保護接地) 端子 (◎)
(使用了安全标准中规定的PE (保护接地) 端子。完全接地。)

(Fig.3)

⑥、⑦ DC 输出端子 (+V)
⑧、⑨、⑩ DC 输出端子 (-V)

⑪、⑫、⑬、⑭、⑮、⑯、⑰、⑲、⑲ 直流电压调整端子 (V ADJ)
⑲ PE (保護接地) 端子

(Fig.1)

①、② 輸入端子 (L) (保護端子 (L))
③、④ 入力端子 (N)
⑤ PE (保護接地) 端子 (◎)
(使用了安全标准中规定的PE (保护接地) 端子。完全接地。)

(Fig.2)

⑥、⑦ DC 输出端子 (+V)
⑧、⑨、⑩ DC 输出端子 (-V)

⑪、⑫、⑬、⑭、⑮、⑯、⑰、⑲、⑲ 直流电压調整端子 (V ADJ)
⑲ PE (保護接地) 端子

(Fig.3)

CHN 安全標準

①、② 輸入端子 (L) (保護端子 (L))
③、④ 入力端子 (N)
⑤ PE (保護接地) 端子 (◎)
(使用了安全标准中规定的PE (保护接地) 端子。完全接地。)

(Fig.1)

⑥、⑦ DC 输出端子 (+V)
⑧、⑨、⑩ DC 输出端子 (-V)

⑪、⑫、⑬、⑭、⑮、⑯、⑰、⑲、⑲ 直流电压調整端子 (V ADJ)
⑲ PE (保護接地) 端子

(Fig.2)

⑥、⑦ DC 输出端子 (+V)
⑧、⑨、⑩ DC 输出端子 (-V)

⑪、⑫、⑬、⑭、⑮、⑯、⑰、⑲、⑲ 直流电压調整端子 (V ADJ)
⑲ PE (保護接地) 端子

(Fig.3)

IT Standard di sicurezza

①、② Terminali di ingresso (L) (il fusibile si trova sul lato (L))
③、④ Terminali di ingresso (N)
⑤ Terminali di terra (PE) (◎)
(Vedere le norme sulla terminali di protezione (PE) specificato negli standard di sicurezza. Eseguire tutti i collegamenti della messa a terra.)

(Fig.1)

⑥、⑦ Terminali di uscita c.c. (V)
⑧、⑨、⑩ Terminali di uscita c.c. (-V)

⑪ Indicatore di uscita (DC ON: verde)

⑫ Regolatore della tensione di uscita (V ADJ)

⑬ Terminali di uscita di rilevamento di bassa tensione

(Fig.2)

⑥、⑦ Terminali di uscita c.c. (V)
⑧、⑨、⑩ Terminali di uscita c.c. (-V)

⑪ Indicatore di uscita (DC ON: verde)

⑫ Potenziometro di tensione di salita (V ADJ)

⑬ Terminali di uscita di deteczione di bassa tensione

(Fig.3)

ES Descripción

①、② Terminal de entrada (L). (El fusible está situado en el lado (L)).

③、④ Terminal de entrada (N).

⑤ Terminal PE (puesta a tierra de protección) (◎)

(Vedere las normas de seguridad establecidas en los términos de protección (PE) especificados en los estándares correspondientes).

⑥、⑦ Terminal de salida c.c. (+V)

⑧、⑨、⑩ Terminal de salida c.c. (-V)

⑪ Indicador de salida (DC ON: verde)

⑫ Potenciómetro de tensión de salida (V ADJ)

⑬ Terminal de salida de detección de baja tensión

(Fig.1)

⑥、⑦ Terminal de salida c.c. (V)

⑧、⑨、⑩ Terminal de salida c.c. (-V)

⑪ Indicador de salida (DC ON: verde)

⑫ Potenciómetro de tensión de salida (V ADJ)

⑬ Terminal de salida de detección de baja tensión

(Fig.2)

⑥、⑦ Terminal de salida c.c. (V)

⑧、⑨、⑩ Terminal de salida c.c. (-V)

⑪ Indicador de salida (DC ON: verde)

⑫ Potenciómetro de tensión de salida (V ADJ)

⑬ Terminal de salida de detección de baja tensión

(Fig.3)

ES Normas de seguridad

1. Los terminales de salida de c.c. (+V) están aislados galvanicamente del terminal de entrada de c.c. (L).

2. Categoría de sobrevoltaje III (0-2000V).

3. Clase de protección II (0-2000V).

4. Esta es una fuente de alimentación de tipo I.

5. Clase de protección II (0-2000V).

6. Clase de protección II (0-2000V).

7. Clase de protección II (0-2000V).

8. Clase de protección II (0-2000V).

9. Clase de protección II (0-2000V).

10. Clase de protección II (0-2000V).

11. Clase de protección II (0-2000V).

12. Clase de protección II (0-2000V).

13. Clase de protección II (0-2000V).

14. Clase de protección II (0-2000V).

15. Clase de protección II (0-2000V).

16. Clase de protección II (0-2000V).

17. Clase de protección II (0-2000V).

18. Clase de protección II (0-2000V).

19. Clase de protección II (0-2000V).

20. Clase de protección II (0-2000V).

21. Clase de protección II (0-2000V).

22. Clase de protección II (0-2000V).

23. Clase de protección II (0-2000V).

24. Clase de protección II (0-2000V).

25. Clase de protección II (0-2000V).

26. Clase de protección II (0-2000V).

27. Clase de protección II (0-2000V).

28. Clase de protección II (0-2000V).

29. Clase de protección II (0-2000V).

30. Clase de protección II (0-2000V).

31. Clase de protección II (0-2000V).

32. Clase de protección II (0-2000V).

33. Clase de protección II (0-2000V).

34. Clase de protección II (0-2000V).

35. Clase de protección II (0-2000V).