

# OMRON

## MODEL S8FS-G SWITCHING POWER SUPPLY

### EN INSTRUCTION MANUAL DE Bedienungsanleitung FR Manuel d'instructions

Thank you for purchasing the S8FS-G.  
This Instruction Manual describes the functions, performance, and application methods required to use the S8FS-G.

- Make sure that a specialist with electric knowledge operates the S8FS-G.
- 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 S8FS-G.

Diese Bedienungsanleitung beschreibt die Funktionen, Leistungen und Anwendungsmethoden, die für den Betrieb des S8FS-G erforderlich sind.

- Vergewissern Sie sich, dass das S8FS-G 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 S8FS-G.

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.

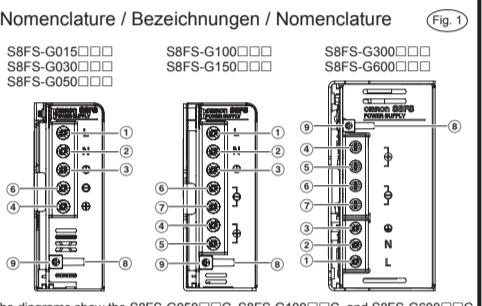
• Veuillez lire attentivement ce manuel d'instructions et vous assurer d'avoir bien compris le fonctionnement de l'appareil avant de l'utiliser.

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

**OMRON Corporation**

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The diagrams show the S8FS-G050□□C, S8FS-G100□□C, and S8FS-G600□□C. Die Diagramme zeigen die Modelle S8FS-G050□□C, S8FS-G100□□C und S8FS-G600□□C.

Les schémas présentent les modèles S8FS-G050□□C, S8FS-G100□□C et S8FS-G600□□C.

### EN Nomenclature

① and ②	AC input terminals (L), (N)	④, ⑤, ⑥ and ⑦	DC output terminals (-V), (+V)
(The fuse is located on the (L) side.)		⑧ Output indicator (DC ON: green)	⑨ Output voltage adjuster
③ Protective earthing terminal (⑨)			
(This is the protective earthing terminal specified in the safety standards. Always ground this terminal.)			

### EN Safety standards

Use the Product in a pollution degree 2 environment.		Precautions Related to EN61558-2-16 and IEC61558-2-16	
1. DC output terminal (④ ⑤ ⑥ ⑦) is electrically isolated from AC input terminal (① ②). (Fig.1)	1. Switch mode power supply (SMPS):		
2. Overvoltage category III (≤ 2,000 mV)	2. Short-circuit-proof safety isolating transformer:		
3. Rated maximum ambient temperature: Ta = 40°C	3. Rated maximum ambient temperature: Ta = 40°C		
4. Climatic class: 3K3	4. Climatic class: 3K3		
The above are according to EN50178 (= VDE 0160).	CSA level 5		
Overvoltage category II:	Surrounding air temperature for UL 508: 40°C		
According to UL60950-1 and EN60950-1.			

### DE Bezeichnungen

① und ②	AC-Eingangsklemmen (L), (N)	④, ⑤, ⑥ und ⑦	DC-Ausgangsklemmen (-V), (+V)
(Die Sicherung befindet sich an der linken Seite (L).)		⑧ Ausgangsanzeige (DC ON: grün)	⑨ Ausgangsspannungsregler
③ Schutzeingangsklemme (⑨)			
(Hierbei handelt es sich um die in den Sicherheitsstandards angegebene Schutzeingangsklemme.)			

### DE Sicherheitsstandards

Verwenden Sie das Produkt in einer Umgebung mit Verschmutzungsgrad 2.		Vorsichtshinweise zu EN61558-2-16 und IEC61558-2-16	
1. Die DC-Ausgangsklemme (④ ⑤ ⑥ ⑦) ist galvanisch von der AC-Eingangsklemme (① ②) getrennt.	1. Schaltnetzteil (SMPS):		
2. Überspannungskategorie III (≤ 2,000 mV)	2. Kurzschlussfester Sicherheitstransformator:		
Überspannungskategorie II (≤ 2,000 mV und ≤ 3,000 mV)	3. Max. Umgebungstemperatur: Ta = 40°C		
3. Dieses Produkt hat die Schutzklasse 1.	CSA Klasse 5		
4. Klimatische Klasse: 3K3	Umgebende Lufttemperatur für UL 508: 40°C		
Die oben genannten Angaben entsprechen EN50178 (= VDE 0160).			
Überspannungskategorie II: Entsprechend UL60950-1 und EN60950-1.			

### FR Nomenclature

① et ②	Bornes d'entrée c.a. (L), (N)	④, ⑤, ⑥ et ⑦	Bornes de sortie c.c. (-V), (+V)
(Le fusible est situé sur le côté (L).)		⑧ Voyant de sortie (DC ON: vert)	
③ borne de mise à la terre (⑨)	(Il s'agit de la borne de mise à la terre définie dans les normes de sécurité.)	⑨ Potentiomètre de réglage de la tension de sortie	

### FR Normes de sécurité

Utilisez ce produit dans un environnement soumis à une pollution de classe 2.		Précautions conformément aux normes EN61558-2-16 et CEI61558-2-16	
1. Les bornes de sortie c.c. (④ ⑤ ⑥ ⑦) sont isolées électriquement des bornes d'entrée c.a. (① ②). (Fig.1)	1. Alimentation en mode commutation (SMPS):		
2. Classe de surtension II (≤ 2,000 mV)	2. Transformateur d'isolement de sécurité protégé contre les courts-circuits :		
Classe de surtension II (≤ 2,000 mV et < 3,000 mV)	3. Température ambiante nominale max.: Ta = 40°C		
3. Cet appareil est conforme à la classe de protection 1.	CSA niveau 5		
4. Climatic class: 3K3	Température de l'air environnant pour UL 508: 40°C		
Conformément à la norme EN50178 (= VDE 0160).	Température de l'air environnant pour UL 508: 40°C		
Classe de surtension II : Conformément aux normes UL60950-1 et EN60950-1.			

### EN 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	

### 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 fires may occasionally occur. Tighten terminal screws to the specified torque (M3.5 screws: 6.65 to 10.00 lb-in (0.74 to 1.13 N·m), M4 screws: 9.56 to 11.68 lb-in (1.08 to 1.32 N·m)).
- Minor injury due to electric shock may occasionally occur. Do not touch the terminals while power is being supplied. Always close the terminal cover after wiring. Working voltage can be 370 V max. inside. This voltage can also be 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) Installation and Storage Environment
  1. Store the Product at a temperature of -25 to 75°C and a humidity of 90% or less.
  2. Take adequate measures to ensure proper heat dissipation to increase the long-term reliability of the Product.
- The S8FS-G015□□□ to S8FS-G100□□□ are cooled by natural convection. Mount them so that air convection will occur around them.
- The S8FS-G300□□□ and S8FS-G600□□□ are cooled by forced airflow. Do not allow the ventilation hole (provided at one mounted side and the opposite side) to be blocked. The effectiveness of cooling would be reduced.
- The internal parts may occasionally deteriorate or be damaged. Do not use the Product beyond the derating curve range.
- Refer to the Product catalog for the derating curve for each mounting direction.
- Use the Product at a humidity of 90% or less.
- Avoid places where the Product is subjected to direct sunlight.
- Avoid places where the Product is subjected to penetration of liquid, foreign substances or corrosive gases.
- Avoid places subject to shock or vibration.
- A device such as a contact breaker may be vibration sensitive. Set the Power Supply as far as possible from possible sources of shock or vibration.
- If the Power Supply is used in an area with excessive electronic noise, be sure to separate the Power Supply as far as possible from the noise sources.
- The internal parts may occasionally deteriorate and be broken due to adverse heat radiation. Do not loosen the screws on the Power Supply.

- 2) Installation and Wiring
  1. Connect the ground completely. A protective earth terminal is stipulated in safety standards. Use a protective earth terminal.
  2. The light ignition may possibly be caused. Ensure that input and output terminals are wired correctly.
  3. Use the following wiring material to prevent smoking or ignition of wiring material caused by abnormal loads.

Terminal	Model	Recommended wire type	Torque
Input	S8FS-G015□□□	AWG12 to 22	
	S8FS-G030□□□ bis S8FS-G100□□□	AWG12 to 20	
	S8FS-G300□□□	AWG12 to 16	
	S8FS-G600□□□	AWG12 to 16	
Output	S8FS-G015□□□ bis S8FS-G100□□□	AWG12 to 22	6.65 to 10.00 lb-in (0.74 to 1.13 N·m)
	S8FS-G030□□□ bis S8FS-G100□□□	AWG12 to 20	6.65 to 10.00 lb-in (0.74 to 1.13 N·m)
	S8FS-G600□□□	AWG12 to 16	6.65 to 10.00 lb-in (0.74 to 1.13 N·m)
Protective earth terminal	S8FS-G015□□□ to S8FS-G600□□□	AWG12 to 14	6.65 to 10.00 lb-in (0.74 to 1.13 N·m)

- Note:  
1. The current rating per terminal of the output terminals is shown below. If the current exceeds the rating on a terminal, always use two terminals simultaneously.  
• S8FS-G015□□□ to 20 A  
• S8FS-G600□□□ to 30 A

2. After completing the wiring, create the following clearance and creepage distance between the terminal wires and case:  
Between any two wires connected to the L, N and FG (④ ⑤ ⑥ ⑦) terminals and between wires connected to L, N terminals and the metal case: 6.4mm min.

Between any two wires connected to the +V, -V and FG (④ ⑤ ⑥ ⑦) terminals and between wires connected to +V, -V terminals and the metal case: 3.2mm min.

4. Do not apply more than 150 N force to the terminal block when tightening it to avoid the terminal block damaged.

5. Be sure to remove the sheet covering the product for machining before power-on.

6. Do not exceed the rated output capacity and current after adjusting the output voltage.

7. Refer to the other Instructions Manual (3114994-5) for details on the optional models (S8FS-G050□□□, S8FS-G100□□□, and S8FS-G600□□□-W).

# 形 S8FS-G スイッチング パワーサプライ

JPN 取扱説明書

CHN 使用説明書

IT MANUALE DIISTRUZIONI

ES MANUAL DE INSTRUCCIONES

このたびは、S8FS-Gをお買い上げいただきまして、まことにありがとうございます。この取扱説明書では、S8FS-Gを使用する上に必要な機能、性能、使用方法などの情報を記載しております。

S8FS-Gをご使用に際して以下のことを守ってください。

• S8FS-Gの取扱説明書をよくお読みになり、十分にご理解のうえ、正しくご使用ください。

この取扱説明書はいつも参考できるよう大切に保管してください。

感謝御言葉をS8FS-Gの产品へ。

此説明書内に記載されたS8FS-G使用時の功能、性能及使用方法。

• 请由具备相关知识的人员来操作S8FS-G。

• 请充分阅读并理解本使用说明书的内容之后，**检验合格**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'S8FS-G. Nel presente Manuale di istruzioni vengono descritte le funzioni, le prestazioni e i metodi applicativi necessari per l'uso di S8FS-G.

• L'S8FS-G deve essere manovrato 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 S8FS-G. Este manual de instrucciones describe el funcionamiento, el rendimiento y los métodos de aplicación necesarios para utilizar el S8FS-G.

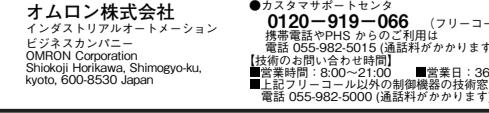
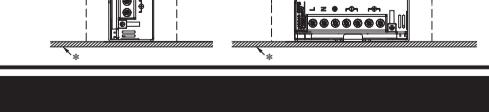
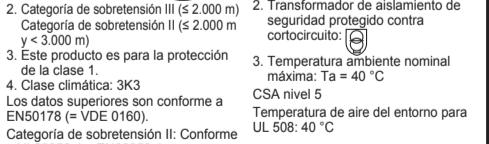
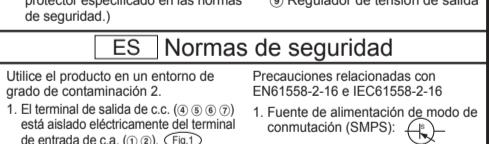
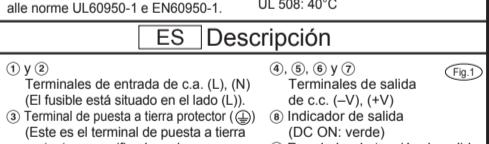
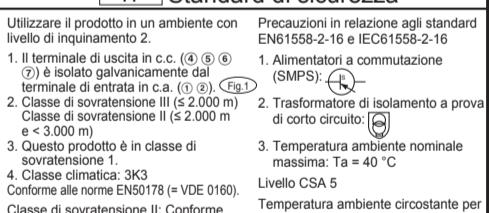
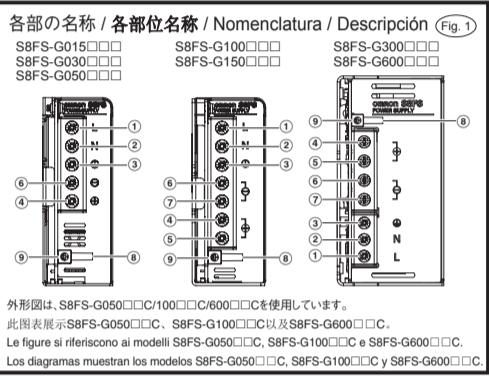
• Asegúrese que la persona que utiliza el S8FS-G sea un especialista que tiene los conocimientos de electricidad necesarios.

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

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

## オムロン株式会社

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## JPN 警告表示の意味

<b>△ 注意</b>	正しい取り扱いをしなければ、この危険のために、時に軽傷・中程度の傷害を被ったり、あるいは物的損害を受ける恐れがあります。
<b>・警告表示</b>	
<b>△ 注意</b>	・絶度の感電、発火、機器の故障等に起る恐れがあります。分解、改造、修理たり、内部に触らないでください。
	・軽度の火傷が起こる恐れがあります。通電中や電源を切った直後は製品本体に触らないでください。
	・発火が起こる恐れがあります。器具には規定トルク(M3.5: 6.55~10.00lb-in(0.74~1.13Nm)、M4: 9.56~11.68lb-in(1.08~1.32Nm))で締めてください。
	・感電により軽度の傷害が起こる恐れがあります。通電中は端子に触れないでください。また、器具後、必ず端子カバーを取付けてください。断電時、本体内部には最大370Vの電圧が発生します。電源OFF後も30秒間の電圧が残ります。
	・絶度の感電、発火、機器の故障が起こる恐れがあります。製品の中に金属、導線または、取りつけ加工中の切片などが入らないようにしてください。

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