OMRON

型 S8JX-P (300/600W)
开关电源

CHN 使用说明书(1/2)

感谢您购买了S8JX产品。
此说明书内记载了S8JX使用时的功能、性能以及使用方法。
•请由具备电气知识的专业人员来操作S8JX。
•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。
请务必阅读S8JX-P使用说明书(2/2)以及本说明书。

OMRON Corporation

警告标识的含义

⚠	若操作不当的话有可能发生轻中度伤害或设备损坏的危险。

• 警告标识

⚠	
• 可能会引起触电、起火或产品损坏。严禁拆分、改造、修理本产品或触摸产品内部。	
• 可能会引起轻度的烫伤。通电中以及电源刚切断后请不要马上接触电源本体。	
• 可能会引起燃烧。请在规定扭矩(M4:1.13N•m, M5:2.25N•m)下紧固端子螺丝。	
• 可能会引起因触电所导致的轻伤。通电中严禁触摸端子，配线后需关闭端子盖。 通电时，本体内部电压最大为370V。切断电源后30秒内会残留此电压。	
• 可能引起轻度触电，燃烧，机器故障等危险。请不要使金属，导线或安装加工时产生的粉尘进入本产品内。	

CHN 安全注意

(1) 安装/存储环境
1. 请在环境温度为–25～+75℃，相对湿度为25～90%的条件下储藏本产品。
2. 由于安装状态不同出现的散热不良会导致内部元器件性能恶化或损坏。请不要在超出该安装类型的运行温度范围的温度下使用本产品。 Fig.2
3. 可能会引起内部元件破损、恶化。请不要在超过使用温度范围的情况下使用本产品。
4. 请在相对湿度25～85%的场所内使用本产品。
5. 请不要在日光直射的环境下使用本产品。
6. 请不要在液体，异物以及腐蚀性气体可能进入产品内部的场所下使用本产品。
7. 避免冲击和振动。
触电断路器装置可能会产生振动，本产品应置于尽可能远离噪音源的地方以避免冲击或振动。
8. 如果本产品在具有较多电子噪音的环境下工作时，请尽可能把本产品放置在远离噪音源的地方。
9. 如果散热不利，本产品内部元器件性能可能恶化或损坏，所以请不要擅自拧松电源本体上的螺丝。

(2) 设置/配线
1. 请完全接地。确保接地端子处于安全使用状态。
当接地不完全时，可能会引起触电和误动作。
2. 可能发生轻微的起火。请注意不要将输入输出端子误配线。
3. 为防止因负载异常所引起的配线材料的冒烟、起火，请选择额定电流值1.6倍以上的线径。关于线材的选择请参考电线厂家的推荐允许电流和电压降等资料。

型号	端子	推荐使用线径	扭矩
S8JX-P300□□□□	输入(M4)	AWG12 to 20 (横截面积 0.517 to 3.309mm²)	10 in.lb.(1.13N•m)
S8JX-P600□□□□	输出(M5)	AWG 6 to 20 (横截面积 0.517 to 13.30mm²)	20 in.lb.(2.25N•m)

•每个输出端子的额定电流为60A。如果电流超过端子的额定值时，请确保同时使用两个端子。
•请使用60 ℃以上, 或60/75℃的线材。
•请使用导体部分为铜线的线材。(与输入侧连接的裸线长度为7㎜到8㎜。)
4. 紧固端子时，请不要用75N以上的力去按压端子台。
5. 为使散热通畅，通电前请取下加工时覆盖在产品上的薄膜。

(3) 输出电压调整
1. 输出电压调节旋钮(V.ADJ)可能会被损坏。所以请勿施加不必要的外力。
2. 请确保在输出电压调整后，不要超过额定输出功率和额定输出电流。

CHN 使用时的注意事项

在客户的应用中，欧姆龙不负责产品与任何客户端产品所涉及的规格、规范和标准保持一致性。请务必考虑本产品对于所应用的系统、机器和设备间的适用性。使用时请注意并遵守本产品的禁止事项。
在没有确认整个系统设计时所考虑到的风险，以及没有确认在设备和系统中该欧姆龙产品的额定使用条件和正确安装条件的情况下，禁止将本产品应用于对人身及财产存在严重危险的场合。
详见产品规格书中保证及免责事项内容。

OMRON

MODEL S8JX-P (300/600W)
SWITCHING POWER SUPPLY

EN INSTRUCTION MANUAL (1/2)

Thank you for purchasing the S8JX.
This Instruction Manual describes the functions, performance, and application methods required to use the S8JX.
• Make sure that a specialist with electric knowledge operates the S8JX.
• 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.
Read the S8JX-P Instruction Manual (2/2) together with this manual without fail.

OMRON Corporation

⚠ CAUTION

• CAUTION : FOR USE IN A CONTROLLED ENVIRONMENT.REFER TO MANUAL FOR ENVIRONMENTAL CONDITIONS.
• ATTENTION : POUR UTILISATION EN ATMOSPHÈRE CONTRÔLÉE. CONSULTER LA NOTICE TECHNIQUE.

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 a torque of 10 in. lb. (M4:1.13 N•m, M5:2.25 N•m) so that they do not become loose.	
• 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 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
1. Store the product with ambient temperature –25 to +75°C, and relative humidity 25 to 90%.
2. The internal parts may occasionally deteriorate and be broken due to adverse heat radiation depending on the mounting status. Fig.2
Do not use at a temperature that exceeds the operating temperature range for the mounting type.
3. The internal parts may occasionally be deteriorated or broken. Do not use the product in the condition over the operation ambient temperature range.
4. Use the product where the relative humidity is 25 to 85%.
5. Avoid places where the product is subjected to direct sunlight.
6. Avoid places where the product is subjected to penetration of liquid, foreign substance, or corrosive gas.
7. Avoid places subject to shock or vibration.
A device such as a contact breaker may be a vibration source. Set the Power Supply as far as possible from possible sources of shock or vibration.
8. 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.
9. The internal parts may occasionally deteriorate and be broken due to adverse heat radiation.Do not loosen the screws on the Power Supply.

(2) Arrangement/Wiring
1. Connect the ground completely. A protective earthing terminal stipulated in safety standards is used. Electric shock or malfunction may occur if the ground is not connected completely.
2. The light ignition may possibly be caused. Ensure that input and output terminals are wired correctly.
3. Use the following wiring meterial to prevent smoking or ignition of wiring material caused by abnormal loads.
Over heating or fire can result from inadequately sized wiring materials when problems occur at the load. As a general rule, always select wire sizes suitable for at least 1.6 times the rated current. Refer to the wiring manufacturer's recommended allowable current and voltage drop specifications for information when selecting wiring materials.

Model	Terminal	Recommended Wire Type	Torque
S8JX-P300□□□□	Input (M4)	AWG12 to 20 (Cross section 0.517 to 3.309mm²)	10 in.lb.(1.13N•m)
S8JX-P600□□□□	Output (M5)	AWG6 to 20 (Cross section 0.517 to 13.30mm²)	20 in.lb.(2.25N•m)

• The current rating for the output terminal is 60A per terminal. Make sure to use two terminals together if a current exceeding the terminal rating is used.
• Use min.60°C or 60/75°C wire.
• Use copper conductors only.(The stripping length is 7 to 8 mm for input terminals.)
4. Do not apply more than 75 N force to the terminal block when tightening it.
5. Be sure to remove the sheet covering the product for machining before power-on.

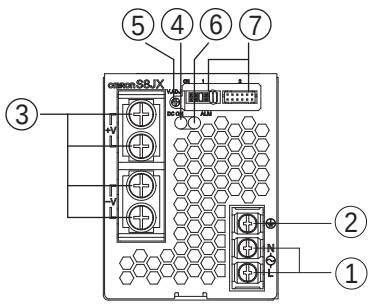
(3) Output Voltage Adjustment
1. The output voltage adjuster (V.ADJ) may possibly be damaged. Do not add unnecessary power.
2. Do not exceed the rated output capacity and current after adjusting the output voltage.

EN Suitability for Use

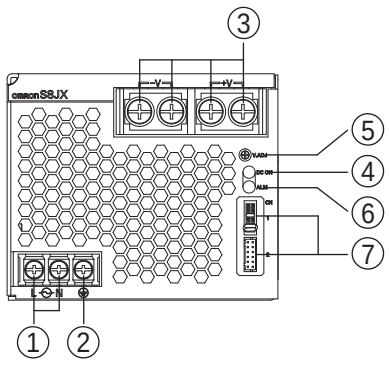
Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer' s application or use of the Product. At Buyer' s request, Omron will provide applicable third party certification documents identifying ratings 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 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.

Fig. 1 各部位名称/Nomenclature

300W: S8JX-P300□□□□



600W: S8JX-P600□□□□



CHN 各部位名称

① AC输入端子(L)，(N)
(保险丝位于(L)侧。)
DC输入时，(L)侧必须为(+)。
注：
DC输入不在安全标准认证范围之内。
② 接地保护端子(⏚)
(使用安全规格所规定的接地保护端子，请确保妥善接地。)
③ DC输出端子(–V)，(+V) Fig.1
④ 输出指示灯(DC ON ： 绿色)
⑤ 输出电压调节旋钮(V.ADJ)
⑥ 报警指示灯(ALM ： 红色)
⑦ 信号输入/输出连接器使用说明书(2/2)

CHN 安全规格

1. DC输出端子(③)与AC输入端子(①) 是相互电气绝缘的。 Fig.1
2. 过电压 category III。
3. 这个设备为防护等级 I。
4. 气候等级： 3K3
按照EN50178 。
过电压category II。
根据UL62368-1 和 EN62368-1。
针对UL508而言，周围温度(Surrounding Air Temperature)是40℃。

EN Nomenclature

① AC input terminal (L), (N)
(The fuse is located on the (L) side.)
For DC input, (L) side must be (+).
Note:
DC input is out of the scope of safety standard certificate.
② Protective earthing terminal (⏚)
(A protective earthing terminal stipulated in safety standards is used. Connect the ground completely.)
③ DC output terminal (–V), (+V) Fig.1
④ Output indicator (DC ON: green)
⑤ Output voltage adjuster (V.ADJ)
⑥ Alarm indicator (ALM: red)
⑦ Signal input/output connector Instruction Manual (2/2)

EN Safety standards

1.DC output terminals (③) are galvanically isolated from the AC input terminals (①). Fig.1
2.Overvoltage category III.
3.This equipment is for protection class I.
4.Climatic class: 3K3
: According to EN50178.
Overvoltage category II.
: According to UL62368-1 and EN62368-1.
Surrounding Air Temperature according to UL508:40 °C

CHN 使用注意

■ 安装
标准安装 Fig.2
侧面安装 Fig.3
标准安装（DIN导轨）
S8JX-P300□□CD/ S8JX-P600□□CD Fig.4
•安装电源时为了能长期高效地使用电源，请注意合理有效地散热。
•采用强制风冷的散热方式。为了能得到足够的风冷效果，请不要堵住通风口（风扇的装配面和反面）。
•当安装机壳上的螺丝时，螺丝在电源内侧突出不允许超过6mm。
安装螺丝的扭矩（推荐值）：1.27 N•m。
•强烈推荐金属板作为安装面板。
背面安装可以使用提供的安装支架。

■ 衰减曲线
衰减曲线请参考S8JX产品目录。

■ 输入电压选择
额定参数：
100到240 VAC（允许范围：85到264 VAC，80到370 VDC）
注：
EU指令和各种安全标准（UL、EN等）的适用范围为100到240 VAC（85到264 VAC）。
仅对于UL508而言，额定参数为100-240 VAC。

■ 输出电压调整
出厂时：设定输出电压为额定电压。
调整范围：可使用产品正面的"V.ADJ" ⑤进行调整，调整范围从额定电压的–10%到+15%(48 V类型产品上为±10%)。
顺时针旋转时增大输出电压，逆时针旋转时减小输出电压。
注：
1. 请确保在输出电压调整后，不要超过额定输出功率和额定输出电流。
2. 通过"V.ADJ" ⑤的调节，输出电压可能上升到电压可变范围之上。
所以调整输出电压时，请确认电源的输出电压并防止负载遭到破坏。

■ 耐电压实验
额定耐电压：
3000VAC于<所有输入端子 ①>和<所有输出端子③ >之间持续1分钟。
实验时，耐电压测试装置的切断电流设置为20mA。
注：
1. 突然加载3000VAC高压可能产生电压冲击而损坏电源。请缓慢增加/减小实验电压。
2. 实验时，短接所有输出端子以避免端子受损。

■ 绝缘电阻实验
实验采用直流500VDC欧姆表。
注：
实验时，短接所有输出端子以避免端子受损。

■ EN62368-1和EN50178标准对客户的要求：
客户必须在电源S8JX-P600□□□□前的（L）侧添加一个符合标准（IEC60127）的高分断能力熔断器，因为电源内部的保险丝不符合IEC60127的标准。

■ 过载保护
该功能可以自动保护负载和电源免受过电流的损害。如果负载超过额定值的105%，过载保护开始工作。当过载状态解除时，过载保护自动取消。
当过载状态持续5秒以上时，电源输出切断，同时保护回路动作指示灯会亮起。
注：
1. 如果在电源短路或过电流状态下持续运行，电源内部元器件性能可能恶化或损坏。
2. 请不要在过载或输出侧浪涌电流频繁发生的情况下使用该产品。电源内部元器件性能可能恶化或损坏。

■ 过电压保护
该电源能够自动保护自身及负载免受过电压的损害。
如果输出电压超过额定输出电压约120%以上时，过电压保护开始工作，报警指示灯同时亮起。
如果要让电源复位，请先将电源输入切断并放置3分钟以上，然后再重新开启电源。
注：
在重新开启之前，请确保引起过电压的原因已被排除。

■ 过热保护
如果由于环境温度升高或风扇停止而造成电源内部温度异常升高，过热保护电路会启动并停止输出，以保护电源单元。
如要复位，请关闭输入电源，使产品充分冷却，然后重新开启输入电源。

■ 如果没有输出电压
过载、过电压或过热保护功能可能正在运行。或者，内置风扇停止或遥控功能关闭。如果依然没有输出电压，请检查是否存在以下5种可能的原因，并联系欧姆龙代表。
• 检查过载保护状况：
检查负载是否处于过载状态或短路状态。
检查时请移除接在负载上的连线，看上述状态是否已被消除。
• 为了消除过电压保护功能：
关闭输入电源，放置3分钟以上。
然后再将其开启，看上述状态是否已被消除。检查+S引脚或–S引脚是否开路。
检查是否用"V.ADJ" ⑤将输出电压调整为额定值的+20%以上。
• 检查过热保护状况：
关闭输入电源，并保持关闭状态，直至产品充分冷却。然后再将其开启，看上述状态是否已被消除。
• 检查内置风扇电机是否停止：
检查内置风扇电机是否停止。风扇为可消耗产品。
• 检查遥控功能：
检查+RC和–RC引脚是否开路。根据指定进行正确的连接。

■ 符合EU指令
请参考商品目录和本使用说明书来获得符合EMC指令的使用条件。

EN Precautions for Correct Use

■ Mounting
Standard mounting Fig.2
Side mounting Fig.3
Standard mounting (DIN rail)
S8JX-P300□□CD/ S8JX-P600□□CD Fig.4
• Install the Power Supply so that heat is effectively dissipated to improve and maintain the reliability of the Power Supply over a long period of time.
• A forced-air cooling method with a fan is used. Do not cover the air holes (provided at fan mounted side and the opposite side) to have enough air-cooling.
• The screws must not protrude more than 6mm inside the Power Supply when screw holes provided on the chassis are used. Mounting screw tightening torque screw holes (recommended value):1.27 N•m
• Metal plate is strongly recommended as the mounting panel.
• Rear mounting is possible using provided mounting bracket.

■ Derating Curve
For Derating Curve, refer to the S8JX Catalog.

■ Selecting input Voltage
Rating:
100 to 240 VAC (allowable range: 85 to 264 VAC, 80 to 370 VDC)
Note:
The applicable range of EU directives and various safety standards (UL, EN, others) is 100 to 240 VAC (85 to 264 VAC).
For UL508 only, the rating is 100-240 VAC.

■ Output Voltage Adjustment
Default Setting: Set at the rated voltage.
Adjustable Range: Adjustable from –10% to +15% (±10% on the 48 V type) of the rated voltage using "V.ADJ "⑤ on the front of the unit.
Turning clockwise increases the output voltage, and turning counterclockwise decreases the output voltage.
Notes:
1.Do not exceed the rated output capacity and current after adjusting the output voltage.
2.The output voltage may increase beyond the allowable voltage range when the operation is performed for "V.ADJ"⑤ . When adjusting the output voltage, check the output voltage of the power supply and be sure that the load is not destroyed.

■ Dielectric Strength Test
Rated dielectric strength:
3000VAC between <input terminals① together > and <output terminals③together> for 1 minute. When testing, set the cutoff current for the withstand voltage test device to 20mA.
Notes:
1.Sudden switching of 3000VAC may possibly cause a voltage surge, damaging the power supply. Increase/decrease test voltage gradually.
2.When performing the test, be sure to short-circuit all the output terminals to protect them from damage.

■ Insulation Resistance Test
When testing the insulation resistance of the power supply, use a DC ohmmeter at 500VDC.
Note:
When performing the test, be sure to short-circuit all the output terminals to protect them from damage.

■ EN 62368-1 and EN 50178 Requirement to the customer:
Customers must insert an approved (IEC 60127) high-breaking-capacity fuse in front of the power supply S8JX-P600□□□□ on the (L) side, as the fuse in this power supply does not comply with IEC 60127.

■ Overload Protection
The load and the power supply are automatically protected from overcurrent damage by this function.
Overload protection is activated if the output current rises above 105% of the rated current. When the output current returns within the rated range, overload protection is automatically cleared.
Notes:
1. If operation is continued when the Power Supply has been short-circuited or in an overcurrent status, internal parts in the Power Supply may occasionally deteriorate or be damaged.
2.The internal parts may possibly be deteriorated or damaged. Do not use the product for applications where the load causes frequent inrush current and overload.

■ Overvoltage Protection
This power supply automatically protects itself and the load from overvoltage.
Overvoltage protection is activated if the output voltage rises above approx. 120% of the rated output voltage. The alarm indicator lights simultaneously.
To reset the power supply, leave the power supply off for more than 3 minutes and then turn it on again.
Note:
Be sure to clear the cause of the overvoltage, before turning on the power supply.

■ Overheat Protection
If the temperature inside the power supply rises abnormally due to the ambient temperature rising or the fan stopping, the overheat protection circuit activates and stops output to protect the power supply unit.
To reset, turn off the input power, allow the unit to cool sufficiently, and then turn on the input power again.

■ If There Is No Output Voltage
The overload, overvoltage, or overheat protection functions may be operating. Alternatively, the built-in fan may be stopped or the remote control function may be OFF. Check the following five possible causes and contact your OMRON representative if there is still no output voltage.
• Check the Overload Protection Status:
Check whether the load is in overload status or is shorted.
Remove wires to load when checking.
• Attempt to Clear the Overvoltage Protection Function:
Turn input power OFF and leave it OFF for at least 3 minutes.
Then turn it ON again to see if this clears the condition. Check if the +S pin or –S pin is opened.
Check if the output voltage is adjusted to more than +20% of the ratedvalue with "V.ADJ" ⑤ .
• Check the Overheat Protected Status:
Turn OFF the input power and leave it OFF until the product cools sufficiently. Turn it ON again to see if this clears the condition.
• Check if the Built-in Fan Motor Has Stopped:
Check if the built-in fan motor has stopped. The fan is a consumable product.
• Check the Remote Control Function:
Check if the +RC and –RC pins are open. Make the correct connections as specified.

■ Conformance to EU Directives
Refer to the catalogue and this instruction manual for details on the operating condition for EMC-compliance.

Fig. 2 标准安装/Standard mounting

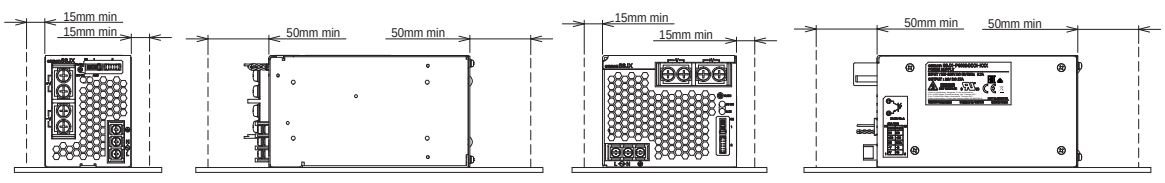


Fig. 3 侧面安装 / Side mounting

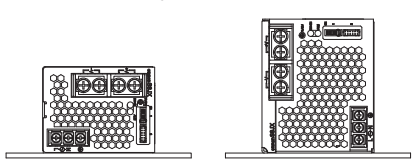
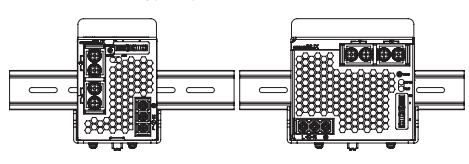


Fig. 4 标准安装（DIN 导轨） /Standard mounting (DIN rail)



在DIN 导轨上进行安装时，请使用铁制DIN 导轨
/When mounting on DIN rails, use iron DIN rails.

CHN 制造商 / CHN 技术咨询

欧姆龙（上海）有限公司
地址：中国(上海)自由贸易实验区金吉路789号
电话：（86）21-5050-9988

欧姆龙自动化（中国）有限公司
地址：中国上海市浦东新区银城中路200号中银大厦2211室
电话：（86）21-6023-0333

技术咨询热线：400-820-4535
网址：http://www.fa.omron.com.cn

2194719-3F (Side-B)

OMRON

MODEL S8JX-P(300/600W)
SWITCHING POWER SUPPLY

CHN 使用说明书 (2/2)

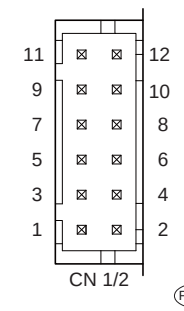
EN INSTRUCTION MANUAL (2/2)

请务必阅读S8JX-P使用说明书(1/2)以及本说明书。

Read the S8JX-P Instruction Manual (1/2) together with this manual without fail.

信号I/O连接器 / Signal I/O connector

正面图 / Front view



No.	配置 / Configuration
1	+V
2	+S
3	–V
4	–S
5	CB
6	CBG
7	+RC
8	–RC
9	NC
10	NC
11	ALMC
12	ALME

Fig.11

并行操作 / Parallel Operation

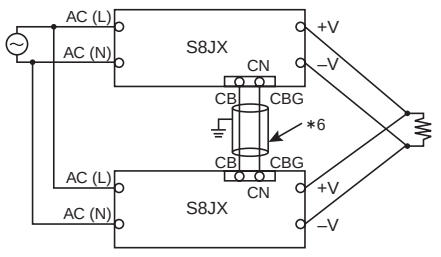


Fig.12

遥控感应功能 / Remote sensing function

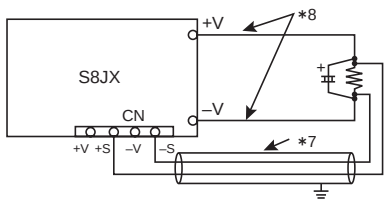


Fig.13

遥控功能 / Remote Control Function

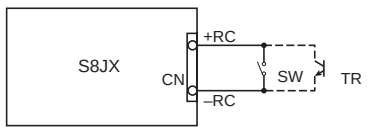
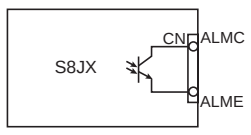


Fig.14

报警输出功能 / Alarm output function



Vce max : DC30V
Ic max :50mA

Fig.15

绝缘外圈上的卷边条件 /
Crimping condition at wire insulation barrel

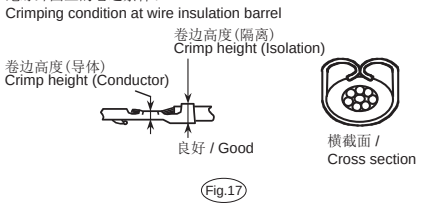
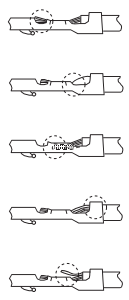


Fig.17

错误卷边示例 / Examples of improper crimping



导线导体突出过长 /
Wire conductor protruding length is too long

导线外圈咬入导线绝缘 /
Wire barrel is biting into the wire insulation

导线导体突出过短 /
Wire conductor protruding length is too short

导线绝缘卷边不充分 /
Wire insulation is not crimped sufficiently

导线导体未卷边 /
Wire conductors is not crimped

Fig.18

插口 /
Insertion

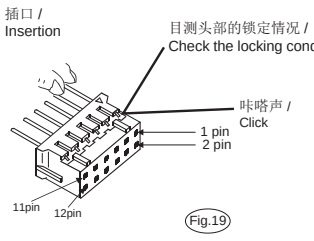


Fig.19

CHN 各部位名称(CN)

1: DC输出监视器引脚(+V)
2: 遥控感应引脚(+S)
3: DC输出监视器引脚(–V)
4: 遥控感应引脚(–S)
5: 电流平衡引脚(CB)
6: 用于电流平衡的信号接地引脚(CBG)
7: 遥控引脚(+RC)
8: 遥控引脚(–RC)
9: 无连接
10: 无连接
11: 报警输出引脚(ALMC)(集电器)
12: 报警输出引脚(ALME)(发射器)

信号I/O连接器：作为标准附件提供。
短路：(1 – 2)、(3 – 4)和(7 – 8)，出厂时安装至CN。

注：
请不要将负载连接至DC输出监视器引脚(+V或–V)。

EN Nomenclature (CN)

1: DC output monitor pin (+V)
2: Remote sensing pin (+S)
3: DC output monitor pin (–V)
4: Remote sensing pin (–S)
5: Current balance pin (CB)
6: Signal ground pin for Current balance (CBG)
7: Remote control pin (+RC)
8: Remote control pin (–RC)
9: No connect
10: No connect
11: Alarm output pin (ALMC) (collector)
12: Alarm output pin (ALME) (emitter)

Signal I/O connector: Provided as a standard accessory.
Shorted: (1 – 2), (3 – 4), and (7 – 8)
Mounted to CN at shipment.

Note:
Do not connect a load to the DC output monitor pins (+V or –V).

CHN 使用注意

■ 并行操作 Fig.12
连接了CB引脚(CN上的引脚5)和CBG引脚(CN上的引脚6)时，电流平衡功能会工作并可以进行并行操作。
最多可以连接5个单元。
注：
1.使用2芯屏蔽电缆作为连接线(＊6)。
2.将各个电源的输出电压调整为相同的值，相差在1%或100 mV之内，以较小者为准。并行操作期间，负载电流可能会过度流向任一电源并损坏内部元件。
3.并行操作用于增加静电电容。负载突然波动时，输出电压可能会下降。
4.并行操作期间，要升高输出电压的波形可能需要几步。
5.拆下标配的连接器，并另外准备一个连接器。
6.连接了N单元时，与一个单元的xN电流相同的突流会流入。
请检查外部保险丝或断路器的特性，作出合适的选择，使突流不会导致保险丝熔断或断路器启动。

■ 遥控感应功能 Fig.13
该功能用于补偿负载线路上的电压下降。将+S引脚(CN上的引脚2)连接至正极负载端子上，将–S引脚(CN上的引脚4)连接至负极负载端子上，以启动遥控感应。
不使用遥控感应功能时，请使用标准的连接器。将连接+ S和+V引脚(CN上的引脚1)和– S和– V引脚(CN上的引脚3)。
注：
1.使用2芯屏蔽电缆作为连接线(＊7)。
2.由于负载线路(＊8)上较高的压降可能会启动过电压保护功能，请使用尽量粗的接线。
3.总线路压降(+侧线路和–侧线路)必须小于0.3 V。
4.如果感应线路过长，则需要在负载端子之间安置电解电容。请注意，视连接的负载而定，波纹电流可能会导致电解电容产生热量。因此，电解电容的波纹电流限额必须高于输出波纹电流。
5.如果+S或–S引脚开路，则输出的稳定性和精确性将下降。
请务必连接+S或–S引脚。
6.拆下标配的连接器，并另外准备一个连接器。
7.确保遥控感应引脚(+S, –S)没有开路。

■ 遥控功能 Fig.14
在通过+RC引脚(CN上的引脚7)和–RC引脚(CN上的引脚8)施加输入电压时，该功能会使用外部信号来开启和关闭输出。
将一个开关或晶体管连接至+RC和–RC引脚，以使用遥控功能。
不使用该功能时，会使用标准连接器来使+RC和–RC引脚短路。

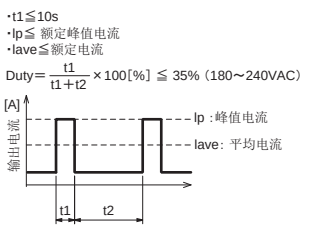
–RC的+RC电平	输出	内置风扇电机
短路或L (0到0.8V)	开启	旋转
开路或H (2.4到12V)	关闭	停止

最大输入电压：最大12V。
允许的最大反向电压：最大–1V。反向电流：3.5mA
注：
1.使用2芯屏蔽电缆或双绞线电缆作为连接线。
2.遥控电路与电源的输入和输出电路分离。
3.拆下标配的连接器，并另外准备一个连接器。
4.如果对遥控引脚施加了反向电压，则不能开启/关闭输出电压。接线时请小心。

■ 报警输出功能 Fig.15
启动了过载、过电压或过热保护时，输入电压下降导致输出电压下降时，内置风扇电机停止时以及遥控待机期间，电源故障报警指示灯会呈红色亮起，以显示输出电压出错。还会通过晶体管从外部输出报警信号。
晶体管输出：最大30 VDC，最大50 mA。开启时的剩余电压：最大2 V，关闭时的泄漏电流：最大0.1 mA。
报警检测电压：约为输出电压设定的80%
如果检测到报警(没有电源至CN上的引脚11和12)和LED指示灯亮起(⑥：红色)时，晶体管输出会关闭。
注：
1.该功能会监控电源输出端子上的电压。如要检测实际电压，请测量负载侧的电压。
2.拆下标配的连接器，并另外准备一个连接器。

■ 峰值输出电流 Fig.16
(S8JX-P30024 □□□ /S8JX-P60024 □□□)
有关详情，请参见产品目录。
说明
1.不能允许峰值负载电流持续10秒钟以上，也不能允许负载循环超出图16中显示的条件。否则会损坏电源。
2.通过调整环境温度和安装方向来减少峰值负载电流的负载。
3.确保峰值电流一个循环的平均电流不会超过额定值。否则会损坏电源。

Fig.16



■ 信号I/O连接器导线制造方法
该产品使用由JAPAN SOLDERLESS TERMINAL MFG CO LTD制造的PHD连接器。对于连接器的制造，需要满足以下规则。
1.适用的导线和卷边工具
适用尺寸的导线为UL1007(标准导线)及相同规格的标准导线。对于AWG#22，请使用UL1061或相同规格的标准导线，原因在于UL1061的导线绝缘外直径较小。导线尺寸为AWG#26到AWG#22，绝缘外直径为ø1.0到ø1.5 mm。
卷边工具如下。

卷边工具	卷边器	模具
AP-K2 或 AP-KS	MKS-L-10 或 MKS-LS-10	SPHD-001-05

2.卷边
线带的参考值为2.3mm。根据所用的导线将卷边器的刻度调整到合适的卷边高度。
卷边高度表

导线尺寸	绝缘 O.D (mm)	卷边高度 (mm)	
		导体部分	绝缘部分(参考值)
UL1007 AWG26	1.3	0.60 到 0.70	1.7
UL1007 AWG24	1.5	0.65 到 0.75	1.8
UL1061 AWG22	1.4	0.70 到 0.80	1.8

注：
1.导线外圈的卷边高度应设为预订的参数。
2.调整导线绝缘外圈的卷边高度，使得导线绝缘被稍微压紧，并且卷边不会过度。
3.绝缘外圈上的卷边条件如下Fig.17。
操作结束后请检查卷边部位的抗张强度。
卷边部位的抗张强度表

导线尺寸	要求 N 分钟	参考值 N
UL1007 AWG26	20	39.2 到 45.1
UL1007 AWG24	30	68.6 到 74.5
UL1061 AWG22	40	92.1 到 96.0

参照 Fig.17 Fig.18 目测卷边外观，判断是否正确。
3. 将接触器插入机盒 Fig.19
(1) 握住接触器的头部，使机盒上的接触器导板与接触器头部对齐，然后将接触器平行插入插口。
(2) 将接触器完全插入机盒。接触器完全插入机盒时，机盒端会发出咔嗒声，并能感觉到反作用力。
(3) 将卷边部分插入机盒后进行检查。
用约为1N的力度拉动导线，以检查各个插入处的锁定是否牢固。

EN Precautions for Correct Use

■ Parallel operation Fig.12
When the CB pin (pin 5 on CN) and the CBG pin (pin 6 on CN) are connected, the current balance function operates and parallel operation is possible.
Up to 5 Units can be connected.
Notes:
1. Use 2-conductor shielded cable as connection wire (＊6).
2. Adjust the output voltage of each power supply to the same value within 1% or 100 mV, whichever is smaller.During parallel operation, it is possible that the load current will flow excessively to either power supply and damage internal components.
3. Parallel operation is used to increase static capacity. Output voltage may drop with sudden load fluctuations.
4. There may be steps in the rising waveform of the output voltage during parallel operation.
5. Remove the standard supplied connector and prepare a connector separately.
6. When N units are connected, a rush current equal to xN the current of one unit will flow.
Check the characteristics of the external fuse or breaker and select appropriately so that the fuse does not blow or the breaker does not trip due to the rush current.

■ Remote Sensing Function Fig.13
This function is used to compensate for voltage drops on the load lines.Connect the +S pin (pin 2 on CN) to the positive load terminal and the –S pin (pin 4 on CN) to the negative load terminal to enable remote sensing.
When not using the remote sensing function, use the standard connector. The + S and +V pins (pin 1 on CN) and the – S and – V pins (pin 3 on CN) will be connected.
Notes:
1. Use 2-conductor shielded cable as connection wire (＊7).
2 .Use as thick a wire as possible since high voltage drops on the load lines (＊8) may activate the overvoltage protection function.
3. The total line voltage drop (+ side line and – side line) must be less than 0.3 V.
4. If the sensing line is too long, it is necessary to put an electrolytic capacitor across the load terminals. Please take note that the electrolytic capacitor may generate heat due to the ripple current, depending on connected load. Therefore, the electrolytic capacitor must have a ripple current allowance higher then the output ripple current.
5. The stability and accuracy of the output will deteriorate if the +S or – S pins are open.
Always connect the +S and –S pins.
6. Remove the standard supplied connector and prepare a connector separately.
7. Make sure the remote sensing pins (+S, –S) are not open.

■ Remote Control Function Fig.14
This function turns outputs ON and OFF using an external signal while input voltage is applied, using the +RC pin (pin 7 on CN) and the –RC pin (pin 8 on CN). Connect a switch or transistor to the +RC and –RC pins to use the remote control function.
When not using this function, the +RC and –RC pins are shorted by using the standard connector.

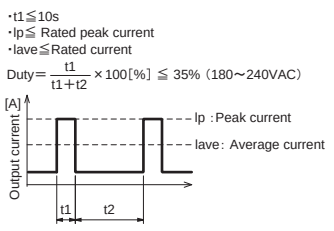
+RC Level for –RC	Output	Built-in Fan Motor
Short or L (0 to 0.8V)	ON	Rotate
Open or H (2.4 to 12V)	OFF	Stop

The Maximum input voltage: 12V max.
The Maximum allowable reverse voltage: –1V max. Sink Current: 3.5mA
Notes:
1. Use 2-conductor shielded cable or twisted-pair cable as connection wire.
2. The remote control circuit is isolated from the input and output circuits of the power supply.
3. Remove the standard supplied connector and prepare a connector separately.
4. If a reverse voltage is applied to the remote control pin, output voltage ON/OFF will not be possible. Exercise caution when wiring.

■ Alarm output function Fig.15
The Power failure alarm indicator will light red to indicate an output voltage error if overload, overvoltage, or overheat protection is activated, if a drop in the input voltage causes the output voltage to drop, if the built-in fan motor stops, and during remote control standby. The alarm is also output externally by a transistor.
Transistor output: 30 VDC max., 50 mA max. Residual voltage when ON: 2 V max, leakage current when OFF: 0.1 mA max.
Alarm detection voltage: Approx. 80% of output voltage setting The transistor output is turned OFF if an alarm is detected (no power to pins 11 and 12 on CN), and the LED indicator is lit (⑥ : red).
Notes:
1. This function monitors the voltage at the power supply output terminals. To check actual voltage, measure the voltage on the load side.
2.Remove the standard supplied connector and prepare a connector separately.

■ Peak Output Current Fig.16
(S8JX-P30024 □□□ /S8JX-P60024 □□□)
See product catalogue for details.
Notes:
1. Do not allow the peak load current to continue for more than 10 seconds, and do not allow the duty cycle to exceed the conditions indicated in Fig. 16. This may damage the power supply.
2. Lessen the load of the peak load current by adjusting the ambient temperature and the mounting orientation.
3. Ensure that the average current of one cycle of the peak current does not exceed the rating. This may damage the power supply.

Fig.16



■ Signal I/O Connector Harness Manufacture Method
This product is using PHD connector made from JAPAN SOLDERLESS TERMINAL MFG CO LTD. Regarding to manufacture of a connector, it becomes the regulation as following.
1. Appricable Wire and Crimping tool
Appreciable wire per barrel size is UL1007 (standard wire) and its equivalent standard wire can be used. Regarding the AWG#22, use UL1061 or its equivalent standard wire, because wire insulation outer diameter of UL1061 is small. Wire size is AWG#26 to AWG#22 and insulation outer dia is ø1.0 to ø1.5 mm.
Crimping tool is as below.

Crimping tool	Crimping applicator	Dies
AP-K2 or AP-KS	MKS-L-10 or MKS-LS-10	SPHD-001-05

2. Crimping
The reference value of wire strip is 2.3mm. Addording to wire to be used, adjust dials of applicator to a proper crimp height.
Table of crimp height

Wire size	Insulation O.D (mm)	Crimp height (mm)	
		Conductor part	Insulation part (Ref.value)
UL1007 AWG26	1.3	0.60 to 0.70	1.7
UL1007 AWG24	1.5	0.65 to 0.75	1.8
UL1061 AWG22	1.4	0.70 to 0.80	1.8

Notes:
1. Crimp height at wire barrel should be set to pre-determined dimensions.
2. Adjust crimp height at wire insulation barrel to the extent that wire insulation is slightly pressed, and set it so that crimping is not excessivery.
3. Crimping condition at wire insulation barrel is as below Fig.17.
Check the tensile strength at crimped part when operation finishes.
Table of tensile strength at crimped part

Wire size	Requirement N min.	Reference value N
UL1007 AWG26	20	39.2 to 45.1
UL1007 AWG24	30	68.6 to 74.5
UL1061 AWG22	40	92.1 to 96.0

Check of crimping appearance visually for correct crimping as referring to Fig.17 Fig.18
3. Inserting contact into housing Fig.19
(1) Hold contact with its lance part upland align contact lance guide at housing with contact lance, and then insert contact parallel to insertion axis.
(2) Insert contact into housing without stopping to innermost. When contact is fully inserted into housing,housing lance clicks and there is feeling of response.
(3) Check after inserting crimped contact into housing.
Check secure locking per each insertion by pulling wire softly with a force of approx. 1N

CHN 制造商 / CHN 技术咨询

欧姆龙（上海）有限公司
地址：中国(上海)自由贸易实验区金吉路789号
电话：（86）21-5050-9988

欧姆龙自动化（中国）有限公司
地址：中国上海市浦东新区银城中路200号中银大厦2211室
电话：（86）21-6023-0333

技术咨询热线：400-820-4535
网址：http://www.fa.omron.com.cn