CHN 使用说明书

感谢您购买了S8VS的产品 此说明书内记载了S8VS使用时的功能、性能及使用方法。 •请由具备电气知识的人员来操作S8VS。

•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。

"明.2.7周读开生解本权而处别 1/10/19 在之后, 行正确模而本 请妥善保管本使用说明书以便作参考。 当使用S8VS-□□□24B□□/S8VS-□□□ 24BE□-□产品的时候,请结合《S8VS使用说明书》。

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警告标识的含义

切断电源后30秒内会残留此电压。

可能会引起触电、起火或产品损坏。安装过程中, 严禁金属片、导体、夹子或剪刀进入本产品。

△ 注意

苦操作不当的话有可能发生轻中度伤害或设备损

• 警告标识

■安装

安装方向

标准安装

向上安装

其他安装

* 1 空气的对流方向 * 2 75 (mm) 以上

* 3 75 (mm) 以上 * 4 20 (mm) 以上

■降额曲线

■容许输入电压

▲ 注意	
 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。 	
• 可能会引起烫伤。通电中或切断电源后请不要马上接触电源本体。	
• 可能会导致意外点火。请将终端螺钉拧紧至规定的 扭矩9.6in-lb(1.08N•m)。	0
• 可能会引起触电。通电中严禁触摸端子,配线后需 关闭端子盖。通电时,本体的电压最大为370V。	A

(1) 安装/存储环境

1. 请在环境温度为-25~+65°C,相对湿度为25~90%的条件下储藏本产品。

CHN 安装使用要求

(只有S8VS-□□□24A□□-□)请在以下条件下长期保管,以免影响更换

超过3个月时,请在温度为-25°C~+30°C,相对湿度为25~70%的环境

3. 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 维护预报监视功能也可能无法正常工作。所以在没有确定产品正确安装的情况下不要使用本产品。 Fig.3

情のドハマ安沢川本戸品。 4.可能会引起内部元件較損、悪化。 请不要在超过使用温度范围的情况下使用本产品。 5.请在相对湿度25~85%的场所介使用本产品。 6.请不要在日光直射的场所下使用本产品。 7.不要将本产品置于潮湿及腐蚀性的液体或气体的环境下。

8. 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

尽可能远的距离。 10. 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. 请连接地线,确保接地端子处于安全使用状态。如果没有接地线,可能会有

品,也在股地域,如水及也到了处了发生以内水池。对水及有效地域,可能会有触电危险或发生故障。 2. 有可能引起轻微的着火。请确认输入输出端子的正确配线。 3. 为了防止电源连接导线在过载时发烟起火等现象的发生,请选用以下材料作 为连接导线。

终端	型号	推荐使用线径
输入	S8VS-000240000-0	AWG14~20(横截面积0.517~2.081mm²)
输出	S8VS-06024□-□	AWG14~20 (横截面积0.517~2.081mm²)
	S8VS-09024	AWG14~20 (横截面积0.517~2.081mm²)
	S8VS-12024□□□-□	AWG14~18(横截面积0.823~2.081mm²)
	S8VS-18024□□□-□	AWG14~16 (横截面积1.309~2.081mm²)
	S8VS-24024□□□-□	AWG14 (横截面积2.081mm²)
警报输出终端	S8VS-000240000-0	AWG18~28(横截面积0.081~0.823mm²)
		(电线绝缘层剥出: 9~10mm)
接地终端	S8VS-000240000-0	AWG14或更大 (2.081mm²或更大)
输入、输出、接地终端	S8VS-□□□24□□□□-F	电线绝缘层剥出: 11mm

(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. 请确保在调整输出电压后,输出功率和输出电流不会超过额定值。

(4) 有关详情,请参阅产品目录。

CHN 使用时的注意事项

以下使用用途时,与本公司营业人员商谈、认真确认规格书的同时, 需确保 额定・性能上保有余量。或采取利用安全电路等安全对策,使发生故障时,

求不符的条件、环境下使用。

ネハで印京市、火場下近日。 助 核能设施、炭烙设施、铁路・航空・车辆设施、医用器械、娱乐器械、安全 装置及需满足行政机关或个别行业规定的设备。 c) 对生命、财产有影响的系统・器械・装置。 む 天然气、自来水管道、电力供给系统及24小时连续运转系统等需要较高信赖

e) 及其它, 如a) ~d) 需要高度安全性的用途。 *以上为适用条件的一部分。使用前请认真阅读本公司综合目录・指南的最新版

OMRON

Fig.5

SWITCHING POWER SUPPLY

EN INSTRUCTION MANUAL

Thank you for purchasing the S8VS. This Instruction Manual describes the functions, performance, and application methods required to use the S8VS.

Make sure that a specialist with electric knowledge operates the S8VS.
 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

When using S8VS-□□□24A□□/S8VS-□□□24B□□/ S8VS- $\square\square\square$ 24BE \square - \square , read the "S8VS Operation Manual" together without fail.

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Key to Warning Symbols

⚠ CAUTION

-(2)

■Mounting
•Mounting Direction

Standard Mounting

Others Mounting

Horizontal Mounting

■Input Voltage Tolerance

■Parallel Operation

■Dielectric Strength Test

■Insulation Resistance Test

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 1 touch the interior of the Product.
- Product while power is being supplied or immediately after power is turned OFF.

Minor burns may occasionally occur. Do not touch the

- The ignition may accidentally be caused. Tighten terminal screws to a specified torque 9.6in-lb(1.08N•m). 0
- 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 涇

EN Precautions for Safe Use

Installing/Storage Environment
 Store the product with ambient temperature –25 to +65°C, and relative humidity 25 to 90%.

25 to 90%.

2. (Only for S8VS-□□□24A□□-□) To maintain the function of the Maintenance forecast monitor function during storage over an extended period of time, satisfy the

following conditions:

Store the product with temperature –25 to +30°C and humidity 25 to 70% if the storage period exceeds three months.

The internal parts may occasionally deteriorate and be broken due to adverse heat radiation depending on the mounting status. The maintenance forecast monitor

radiation depending on the mounting status. The maintenance forecast monitor function may not work correctly. Do not use the product in any way other than the standard mounting direction.

4. The internal parts may occasionally be deteriorated or broken.

Do not use the product outside the operating temperature range.

5. Use the product where the relative humidity is 25 to 85%.

6. Avoid places where the product is subjected to direct sunlight.

. Avoid places where the product is subjected to penetration of liquid, foreign substance, or corrosive gas.

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.

sources of shock or vibration.

9. If the Power Supply is used in an area with excessive electronic noise or surge, be sure to separate the Power Supply as far as possible from the noise sources.

10. The internal parts may occasionally deteriorate and be broken due to adverse heat radiation. Do not loosen the screw on the side face of the main body.

(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

standards is used. Electric shock of manager of the light ignition may possibly be caused. 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.

Terminal	Model	Recommend Wire Type
Input	S8VS-000240000-0	AWG14 to 20(Cross section 0.517 to 2.081mm²)
Output	S8VS-06024	AWG14 to 20(Cross section 0.517 to 2.081mm²)
	S8VS-09024	AWG14 to 20(Cross section 0.517 to 2.081mm²)
	S8VS-12024	AWG14 to 18(Cross section 0.823 to 2.081mm²)
	S8VS-18024	AWG14 to 16(Cross section 1.309 to 2.081mm²)
	S8VS-24024	AWG14 (Cross section 2.081mm²)
Alarm output terminal	S8VS-000240000-0	AWG18 to 28(Cross section 0.081-0.823mm²) (wires to be stripped: 9-10mm)
Ground terminal	S8VS-000240000-0	AWG14 or more(2.081mm² or more)
Input,Output,Ground terminal	S8VS-000240000-F	wires to be stripped: 11mm

. Do not apply more than 75N force to the terminal block when tightening it.

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

(Only for S8VS-0024000-F) Do not insert more than one line for each (Fig.11)

terminal.

(Only for S8VS-124-10-F) If the insertion of wiring is insufficient or loosened, an electric shock, fire, or failure of equipment may be generated. Strip the electric wire as specified. Insert the electric wire until the stripped part disappears while inserting a tool such as a slotted screwdriver in the tool insertion slot and let go of the tool. After the wiring, check the electric wire is securely connected to the terminal block. Do not insert the electric wire in the tool insertion slot. (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

(4) See product catalogue for details.

CHN 各部位名称

注: 直流输入超出安全标准认证范围。)接地保护端子(金))

② B C 输出端子(-V), (+V) ② 输出指示灯(DC ON : 绿色) ⑤ 输出电压调整旋钮(V.ADJ)

输入端子(保险丝位于(L)侧。对DC输入而言, (L)侧必须为(+)) (Fig. D

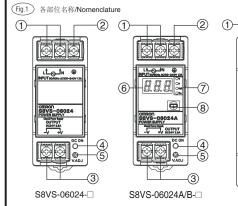
◬

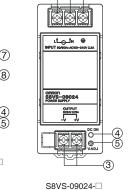
EN Suitability for Use

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.

Take all necessary steps to determine the suitability of the product for the systems, machines, and equipment with which it will be used. Know and observe all prohibitions of use applicable to this product. NEVER USE THE PRODUCTS FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMENON PRODUCT IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

See also Product catalog for Warranty and Limitation of Liability.



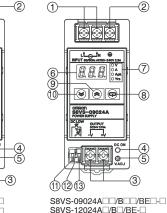


CHN 正确的使用方法

(Fig.4)

Fig.5

Fig.6 Fig.7



■耐电压实验 3000VAC于 < 所有输入端子① > 和 < 所有输出端子 ③, ⑪, ⑫, ⑬ >

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。请不要连续超过20s以上。 2.电源内部元器件性能可能恶化或损坏。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。

■20 中压压水7° 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130%以上时,过电压保护开始工作,无输出电压。 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

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。

止. 实验时,短接所有输出端子以避免电源受损。

■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%,过载保护开开始工作。 当输出电流回到额定值范围以内时,过载保护自动取消。

在重新开启电源之前,请确保引起过电压的原因已被排除。

■警报输出 (只有SBVS-□□□24A□□/B□□-□, 但 -06024A/B-□除外) 晶体管输出:sink type (NPN type) (S8VS-□□□2 (S8VS-□□□2

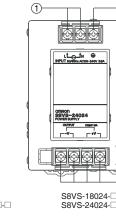
DC 30V max., 50mA max. ON时残留电压2V以下,OFF时漏电流0.1mA以下

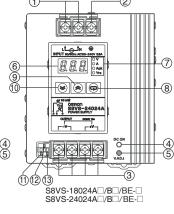
■绝缘电阻实验 实验采用直流500VDC欧姆表。

■过电压保护

重新开启电源

±: 1. 突然加载 3000VAC高压可能产生电压冲击而损坏电源。





S8VS-24024□的外形图/These diagrams are S8VS-24024□

Fig.2 Valid

Invalid

Install the power supply so that the air flow circulates around the power supply, as the power supply is designed to radiate heat by means of natural air flow.

1 Direction of air circulation

2 75 (mm) or more

3 75 (mm) or more

4 20 (mm) or more

Input Voltane Tolera

The product is not designed for parallel operation. The internal parts may Fig.8 occasionally be broken due to excessive heat.

occasionally be broken due to excessive heat.

©Output Voltage Adjustment
Default Setting: Set at the rated voltage
Algustable Range: Adjustable with "V.ADJ" § on the front surface of the product from —10% to +15% of the rated output voltage. (except for S8VS-09024□□□□S-□)
Turning clockwise increases the output voltage, and turning counterclockwise decreases the output voltage.
Notes:

Notes:

1. If output voltage is set under 20V when detection voltage of the undervoltage

1. If output voltage is featon setting the function may be activated. (Only for

alarm function is factory setting, the function may be activated. (Only for \$8VS-□□□24A□□/B□□/BĒ□□)

2. The output voltage may increase beyond the allowable voltage range when "V.ADJ" (⑤) operation is performed. When adjusting the output voltage, check the output voltage of the power supply and be sure that the load is not destroyed.

■ Diolectic Strength Test

Rated dielectric strength: 3000VAC between <input terminals ① together > and <output terminals ③, ①, ②, ③ together > for 1 minute.

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

damaging the power supply. Increase/decrease test voltage gradually.

2. Be sure to short-circuit all the output terminals and the Alarm output terminals of the power supply to protect the power supply from damage.

3. For 180W devices only according to UL508, 2500VAC between < input terminals

When testing the insulation resistance of the power supply, use a DC ohmmeter at 500VDC

Roce:

Be sure to short-circuit all the output terminals and the Alarm output Terminals.

Notes:

1. Sudden switching of 3000VAC may possibly cause a voltage surge

together > and < output terminals 3, 11, 12, 13 together >

of the power supply to protect the power supply from damage

Fig.3

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 100-240VAC.

3下调键 沙黎·维翰出端子:不是电压检出输出端子(DC LOW) 沙黎·维翰出端子: 更换时间提示输出端子(Yrs) (只有SW2-CIII-24ALII-LI),但-06024A-口除外) 工作时间累计输出端子(Kh) (只有S8VS-□□□24B□□-□, 但-06024B-□除外) 警报输出共用端子(⑪~⑬ 仅限S8VS-□□□24A□□/B□□-□, -06024A/B-□除外 EN Nomenclature EN Safety standards Input terminal (The fuse is located on the (L) side. For DC input, (L) side mustbe (+1) (Fig.1)

Note:

DC input is out of the scope of safety standard certificate.

Ground terminal (

)

■Overload Protection

.DC output terminals (③) are galvanically isolated from the input terminals (①). Overvoltage category III. This equipment is for prote

CHN 安全规格

候等级: 根据 EN50178 (=VDE0160)

E category II。 UL60950-1 和 EN60950-1

. DC输出端子(③)与 输入端子(①)是相互

l 细琢的。 过电压 category III。 这个设备为防护等级1。

S8VS-24024□□□-□: CSA Level 5

CSA Level 5 S8VS-24024□□□-□以外: CSA Level 3 符合UL508規定的环境气温: 40°C(S8VS-06024□-□,

S. Time equipment is not protection class 1.

Climatic class: 3K3

**According to EN50178 (=VDE0 Overvoltage category II.

**According to UL60950-1 and EN60950-1.

S8VS-2402400-0-0-0.

CSA Level 5

Uservoltage category II.

**CSA Level S. Time Company III.

**CSA Level S. Time Com CSA Level 3
Surrounding Air Temperature iccording to UL508 Listing: 10°C (S8VS-06024□-□,

EN Precautions for Correct Use

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 When the output current returns within the rated range, overload protection is

1. If the power supply has been short-circuited or supplied with an overcurrent

 1. If the power supply has been single-circulted or supplied with an overcome longer than 20 seconds, the internal parts of the power supply may occasionally be deteriorated or 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.

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. 130% of the rated output voltage.
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.

##Alarm Output

##Only for S8VS-|---|24A|-|/B|---|, except for -06024A/B-|-|)

##Ig.9 Fig.10

| Conjugate | Conj

1. For the undervoltage alarm function, maintenance forecast monitor function, and total run time monitor function, refer to the "S8VS Operation Manual" he alarm output function is not provided for S8VS- $\square\square\square$ 24B

In Case there is No Output Voltage
The possible cause for no output voltage may be the presence of an overload or overvoltage condition, or may be due to the functioning of an latching protective device. The latching protection may operate if a large amount of surge voltage such as a lightening surge occurs while turning on the power supply.

In case there is no output voltage, please check the following points before contacting up.

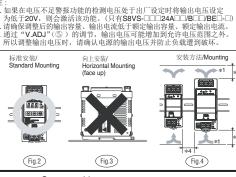
contacting us: Check the Overload Protected Status: Check whether the load is in overload status or is short-circuited. Remove

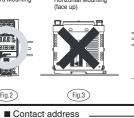
 when to load when checking.
 Attempt to clear the overvoltage or latching protection function: Turn the power supply off once, and leave it off for at least 3 minutes. Then turn it on again to see if this clears the condition

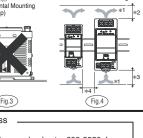
Conformance to EU Directives
Refer to the catalogue and this instruction manual for details on the operating condition for EMC-compliance.

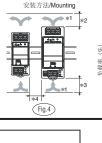
Note:

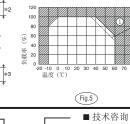
Note:
This is a class A product. In a residential, commercial or light industrial environment it may cause radio interference. This product is not intended to be installed in a residential environment; in a commercial and light industrial environment with connection to the public mains supply, the user may be resident to the public mains to reduce interference. required to take adequate measures to reduce interference. 警报输出/Alarm Output

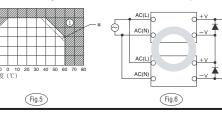












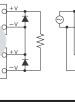
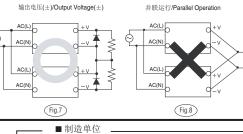
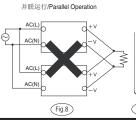
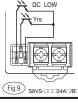


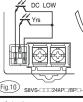
Fig.9 Fig.10

(S8VS-□□□24AP□/BP□-□)











电线插入孔/

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OMRON Corporation Shiokoji Horikawa, Shimogyo-ku, kyoto, 600-8530 Japan OMRON Europe B.V Wegalaan 67-69, 2132 JD Hoofddorp, The Netherlands

网 址: http://www.fa.omron.com.cn

欧姆龙(上海)有限公司

地 址, 上海市浦东新区金桥出口加工区金吉路 789 号 邮 编: 201206

Fig.9) S8VS-00024A0/B0-F (Fig.10) S8VS-00024AP0/BP0-F ■ 联系方式

肖特基二极管 额定输出电压的2倍及以上 额定输出电流的2倍及以上

2.可对不同规格进行串联,但需确保流入负荷的电流小于两者中额定输出电流 较小的额定输出电流。 ■并联运行 产品设计不适用于并联工作。如遇过热情况,内部零件有可能会损坏。 Fig.8

耐压 (VRRM) 顺方向电流 (IF)

(Fig.2)

(Fig.3)

安裝空间 为了保持安装产品的长期信赖性,请注意散热。 本品采用空气自然对流散热方式,安装时请使电源周围的空气流通。

侧面安装型(形S82Y-VS10S)右侧安装时(-24024□□□-□除外)

EU 指令和各种安全标准(UL、EN、其它)的适用范围为100~240 VAC

2. 周围温度是在电源安装位置以下50mm处测得。 3. 上下安装空间不满75mm时,每少于5mm,降额曲线(Fq.5)需降低1°C。 (最小空间为25mm。)

. . 降额出现问题时,请在强制空冷下使用。

(85~264 VAC)。 仅限于UL508,额定电压为100-240VAC。

■串联连接、输出电压(±) 可串联2台电源,产生输出(±)的效果。

破损,请如图连接二极管

100~240 VAC(允许范围: 85~264 VAC、80~370 VDC)

可以

不可以

不可以

厂面放订小追用了开联工作。如過20.然情况,內部专件有可能宏坝外。
■輸出电压调整
■比厂时:设定输出电压为额定电压。
调整范围:调节产围从额定输出
电压的 10%→15%(除了S8VS-09024□□□S-□)。
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. 关于不足电压检出功能、更换时间提示功能、工作时间累计功能请阅读 《操作说明》 2. 报警器输出功能不适用于S8VS-□□□24BE□-□。

2. 报音益调出切压不退用了80V3○□□□□240□□□。 ■如果没有输出电压 导致无输出电压的原因可能是处于过载或过电压保护状态,或是闩锁保护 功能状态。当在输入上施加诸如雷击等很大的浪涌电压时,闩锁保护功能 可能投入工作。 如果电源没有输出,请在与敝公司联系之前先检查以下2点: ır。 有输出,请在与敝公司联系之前先检查以下**2**点:

如果电源没有输出,请在与敝公司联系之前先检查以下2点:
•检查过载保护状况: 检查页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删除。 •为了清除过电压或闩锁保护功能: 关闭电源,放置3分钟以上,然后再开启电源,看上述状态是否已被清除。

■补充说明:安全规格对应(IEC/EN规格对应) 本产品为Class A。在住所、商业或轻工业环境下使用可能会产生辐射, 请以上环境中的使用者做好防辐射对策。

串联运行/Series Operation 降额曲线/Derating Curve



OMRON

型 S8VS 开关电源

CHN

操作说明

感谢购买使用欧姆龙产品

为了安全、正确使用本产品,使用前请认真阅读、理解《操作说明》,阅读后请放在身边,便于需

阅读时请结合《S8VS使用说明书》。

OMRON Corporation

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更换时间提示功能(显示•输出) (仅限S8VS-□□□24A□□-□)

■所谓更换时间提示功能

电解电容从生产成品(※2)开始,其电解液就会逐渐渗 透密封橡胶,随时间增长渐渐挥发,从而产生以静电容 量减少(※3)为主的特性恶化。

由于电解电容特性恶化, 电源经过一段时间后便不能发挥 出预期的性能。更换时间提示功能可以显示随电容电解特 性恶化, 电源还能发挥预期性能的预计时间。另外。达到 设定值时, 会提示并输出警报。

可利用此功能来预计电源本体的更换时间。

更换时间提示功能只提示由于电解电容恶化引起的电源性 能不能发挥的预计时间,不包括由其他原因引起的故障。

电解电容的恶化速度与周围温度密切相关。(一般为10℃时 候的2倍、遵照阿伦尼乌斯法则)。仅限

S8VS-□□□24A□□-□通过监测通电状态下电源的内部温度, 根据工作时间与内部温度计算出电解电容的恶化量,然后通过 显示与输出提示更换时间。

- 1. 由于电子产品的耐久性,无论更换时间提示与否,在购入 15年后请进行更换。
- 2. 更换时间会随着使用条件发生增减变化。请定期进行确认。
- 3. 由于更换时间的增减变化,有时输出会ON、OFF反复。 4. 交流输入ON/OFF的反复应用,有时会影响到更换时间提示 功能的精度。

购买时显示为FUL(※4)。由于使用,随着电解电容恶化, 显示变为HLF(※5)。到距离更换不足2年时自动变为数字 显示(※6),并随着工作时间的增加逐步减少为1.5、1.0、

当更换时间提示的设定值大于2年时,一旦距离更换剩余时间 低于设定值,自动变为数值显示。

剩余时间少于设定值L(0~5.0年间可任意设定)时,警报 (802)与剩余时间交替显示。

S8VS-□□□24A□□-□(-06024A-□除外)为晶体管 (⑫Yrs) 输出,提示更换时间。(到达更换时间时OFF; 12-13非导通)

8.8.8. ⇔ **8.8.8**. ≥

在距离替换时间0.5年以下时,

Fig.3

1. 剩余时间不包括非通电时间。

2. 工作时间累计达到约1个月前,由于推断恶化速度,显示 固定为FUL,输出保持ON(⑫-⑬导通)。

■定期检查(S8VS-□□□24A□□/B□□-□, -06024A/B-□除外) ·般使用条件下,本产品到达提示更换时间需要几年到十几年 (S8VS-□□□24A□□-□)。另外,累计工作时间根据设定值有 时会与更换时间提示的年数相同。(S8VS-□□□24B□□-□)长期使用时,请定期按照以下步骤对更换时间提示输出(⑫Yrs) 或累计工作时间输出(⑫kh)是否正常工作进行确认。

2. 请确认输出(⑫Yrs/kh)为ON(⑫-⑬导通)

3. 运行模式下, ≫(⑩) 和 ☲(⑧) <u>同时连续</u>按3秒以上。 主显示部 (⑥) 变为**ЯЗ**Э #02显示中输出(⑫ Yrs/kh)如果为OFF(⑫-⑬ 非导通)

4. 松开按键即返回通常状态。

注:定期检查中,直流输出不为OFF。

OMRON

MODEL **S8VS** SWITCHING POWER SUPPLY

EN Operation Manual

Thank you for purchasing this OMRON product. This manual primarily describes precautions required in operating the power supply. Before operating the product, read this manual thoroughly to acquire sufficient knowledge of the product to use it safely and correctly. Keep this manual close at hand and use for reference during operation. Read the S8VS Instruction Manual together with this manual without fail.

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Maintenance Forecast Monitor Function (Indication and output) (Only for S8VS-\(\square\) \(\square\) 24A\(\square\)-\(\square\)

■What is "Maintenance Forecast Monitor Function" ? The power supply unit is equipped with electrolytic capacitors The electrolyte inside the electrolytic capacitor penetrates the sealing rubber and evaporates as time passes since it is manufactured, which causes deterioration of characteristics such as decreasing the

Due to this deterioration of the characteristics of the electrolytic capacitor, the power supply unit decreases its performance as time passes. The maintenance forecast monitor function shows an approximate period left for maintenance of the power supply unit due to deterioration of electrolytic capacitors. When the period left for maintenance that the power supply forecasts reaches the set value, an alarm is indicated and an output signal is triggered.

Use this function to know the approximate replacement timing of the

THE MAINTENUNCE FORECAST MONITOR FUNCTION INDICATES AN APPROXIMATE PERIOD LEFT FOR MAINTENANCE, BASED ON DETERIORATION OF THE ELECTROLYTIC CAPACITOR. IT DOES NOT PREDICT FAILURES CAUSED BY OTHER REASONS

Fig. 3

■Principle of operation

The deterioration speed of the electrolytic capacitor varies considerably according to the ambient temperature. (Generally the speed follows "Rule of Two for every 10°C"; for every 10°C increase in temperature the rate of degradation doubles according to Arrhenius's equation.) The

S8VSand calculates the mount of deterioration according to the running hours and inside temperature. Judging by this amount of deterioration, the power supply will give the alarm indication and output when the period left for maintenance reaches the set value. Notes:

- 1. Due to degradation of internal electronic parts, replace the power supply at least once every 15 years even if indication and output of maintenance forecast monitor are not issued.
- 2. The maintenance forecast is accelerated or decelerated according to operating conditions. Periodically check indication.
- S. The output may turn ON and OFF alternately according to the acceleration or deceleration of Maintenance forecast.

 4. The accuracy of Maintenance forecast monitor may become worse in the application having frequent ON/OFF for AC power.
- ■Indication and Output

When the product is purchased, "FUL" (%4) will be indicated. As electrolytic capacitors deteriorate, indication changes to "HLF" (%5). After the remaining time to maintenance is reduced to two years, indication automatically changes to a value (%6), which decreases from "1.5" to "1.0" to "1.5" to "1.5" to "0.7" (year) as

the running hours increase.

If the maintenance forecast monitor setting is set to a value larger than two years, value indication automatically begins after the remaining time to maintenance is reduced to the set years.

If the remaining time becomes smaller than setting L (which can be set arbitrarily between 0 and 5.0 years), an alarm (RG2) and the remaining time

an external device from a transistor (22 Yrs) to notify of the replacement timing, together with indication. (The output is turned off after the replacemen

timing is reached; with no continuity across @ and 3.)



In the case that the remaining time is reduced to smaller than 0.5 year and an alarm is issued.

- .The remaining time to maintenance is based on continuous operation, not
- including the time when the power supply is turned off, and so may take longer to reach than the actual time indicated.

 2. Until the power supply has been turned for about one month in total, indication is fixed at "FIL" to estimate the extent of deterioration, while the output remains turned on (with continuity across (2) and (3)). ■PERIODIC CHECK (S8VS-□□□24A□□/B□□-□, except for-06024A/B-□)

t may takes from several vears to several tens of years under general operating conditions for the power supply to give the maintenance forecast monitor alarm (S8VS-□□□24A□□-□). The total run time monitor (S8VS-□□□24B□□-□) may be a similar number of years to the maintenance forecast monitor according to some setting. During operation over an extended period of time, periodically check if the maintenance forecast monitor output ([®] Yrs) or total run time monitor output ([®] kh) is correctly functioning by the following procedure. 1.Select the operation mode

- 2.Check that the output (12) Yrs / kh) is turned on (with continuity across 12)
- and ⊕).

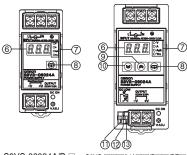
 3.In the operation mode, press and hold the ⋟(⑩) and ॡ (⑧) keys simultaneously for at least three seconds.

 The main display (⑥) changes to "802."
- An inactive output (12 Yrs / kh) (no continuity across (12 and (3)) in the "####
- indication indicates the correct function

设定值为2.5~5年时/

Release keys to return to the regular state.
 Note: DC output stays ON while the periodical check

(Fig. 1) 各部位名称/Nomenclature



S8VS-06024A/B-□ S8VS-□□□24A□□/B□□/BE□-□(-06024A/B-□除外) 轮廓尺寸图适用于S8VS-09024A。

Fig. 2 电压不足检测机能/Unsdervoltage alarm function

交流输入/ AC input 电压不足检测值/ 输出电压/ Detection value of Output voltage Undervoltage alarm 输出电压不足/ Undervoltage output 主表示部位 ⑥ 电压表示 运行模式/ Operation | RC (=>Lowest value of output Main display 6 Voltage indication voltage

注:产品通电约3秒后动作开始/ **%2** L-0.5 **※**4 HLF 1.5 **%3 %** 5 1.0

Fig.3

% 6 主表示部分 ⑥/ 电容容量/ Capacitance Main display 6

In case of setting L between 2.5 and 5 years L-0.5≦T<L 1.5≦T<2.0 1.0≦T<1.5 0.5 0.5≦T<1.0 0.0 0≦T<0.5 设定值 0~2 年时/ 还剩余的替换时间/

Notes:

In case of setting L

*The reverse video indicates the shipmen setting.

Remaining years to

Further, the alarm is output from the transistor (iii) DC LOW) to an external device with the S8VS-_24A_B_\B_\-\ (except for-06024A/B-_).

(Upon output voltage alarm: OFF; with no continuity across ① and ③)

In the case that the output voltage drops below the set value (19) and an alarm is issued

Operation begins after about 3 seconds since

the AC power is supplied.

The alarm is not indicated in the setting mode

The undervoltage alarm function monitors the output terminal voltage of the power supply unit. To check the voltage accurately, measure the

3. Press the 🚾 ((8)) after the output voltage is

5.Detecting function for undervoltage may be

■Total run time monitor Indication and Alarm

(The output is turned off when the total run ti

across ② and ③.)The alarm set value can be changed in the setting mode.

reaches the alarm set value; with no continuity

In the case that the total run time reaches the set value (88kh) and

1.The total run time cannot be reset. To reset the

alarm, increase the alarm set value beyond the

2. The alarm function (setting, indication, and output

activated when AC power fails and recovers

activated when the output current over the rated

Output (S8VS-CC24BCC/BEC-C)

The cumulative running hours of the power supply

unit are monitored as total run time. When the total

run time reaches the predetermined alarm set value an alarm ($\Re \mathcal{Z}$) and the total run time monitor are indicated alternately with an output issued from the transistor (\Re kh) to an external device.

restored, to reset alarm indication.

voltage at the load end.

within 20 ms or more

one is flown at the start.

The outline dimentional drawing is for S8VS-09024A.

■部品名称与功能 名称 ⑥主显示部 显示测量值或设定值 输出电压显示中连续发光。 不足电压检出值设定中闪烁 输出电流显示中连续发光。 Α 峰值电流显示中连续发光 Apk (7)动作 显示部 显示更换时间提示中连续发光 Yrs 更换时间提示值设定中闪烁 (S8VS-□□□24A□□-□)

累计工作时间显示中连续发光 累计工作时间值设定中闪烁 (S8VS-□□□24B□□/BE□-□) 切换显示参数时或设定峰 ⑧模式键 电流值时使用 转为设定模式时或调高 ⑨上调键 设定值时使用

■模式切换

⑩下调键

电源输入 形式表示 运转模式

☆ 或

※ 按3秒以上 ▶ 设定模式

转为设定模式时或调低

设定值时使用

安 按3秒以上或者30秒内无操作

S8VS-06024A/B-□没有设定模式 ■运行模式



动作表示部 (⑦)的状态 ●连续发光 明暗交替闪烁

P

(S8VS-□□□24B□□/ BE□-□)

出厂时以输出电压显示状态启动。以后以 输入断路前的状态启动。

操作方法和功能

■设置模式 (S8VS-06024A/B-□ 除外) 显示电源的各种参数设定

18.5~ 2000~27.5(V) ○ 替换时间提示 ○ (S8VS-□□□ ★ 24A□□-□) 0.0~0.5~5.0(年)

* 颜色反转的字体为

○ 或 ○ 累计运行时间报警 1~50~150(kh) 1kh跳动/次 24B□□/BE□-□)

 (⑨)或
 (⑩)连续按2秒以上, 设定值可以快进。 2. S8VS-06024A/B-□没有设置模式。

各种参数为出厂时的固定值。 ■输出电压・电流显示功能

监视、显示电源的输出电压和电流。

本体通电约3秒后启动。

■峰值电流显示功能 记忆、显示输出电流的最大值。 与显示模式无关,输出电流的最大值一直 另外,即使输入断路,峰电流值也会保持。

本体通电约3秒后启动。

■峰电流值重置

重置

运行模式

峰值电流不能在设置模式下重置。

峰值电流测定用

■不足电压检出功能(显示・输出) Fig2 如果检出输出电压过低,警报(**RC I**)和输出电压下限值会交替显示。 检出电压可在设定模式下变更 (S8VS-06024A/B-□固定为20.0V) (-06024A/B-□除外)通过晶体管

(⑪ DC LOW)输出提示异常。 (输出电压过低时OFF;⑪~⑬非导通)

1. 本体通电约3秒后启动。 2. 警报显示在设置模式下不能显示。

3. 输出电压过低恢复后,接回(8) 可解除警报显示。 4. 不足电压检出功能监视的是电源输出端 子部的电压。确认正确的电压状态时,

请测量负荷端的电压。 5. 即使交流输入20ms以上的断电复归, 不足电压检出功能有时仍能运作。 6. 启动时输出电流超过额定的情况下,

有时电压检出功能仍能运作。

■累计工作时间显示•警报输出 (S8VS-DDD24BDD/BFD-D) 累计工作时间显示电源工作时间的累计值。 累计工作时间超过预定的警报设定值时,警报(802)和累计工作时间会交替显示, 同时会通过晶体管(⑫kh)输出。 (到达警报设定值时**OFF**; ⑫~⑬非导通) 警报设定值可在设置模式下变更。

1. 累计工作时间不能重置。解除警报时,

请将警报设定值变更为大于累计工作 时间显示值的数值即可。 2. S8VS-06024B-□没有警报功能(设置

3. 报警器输出功能不适用于 S8VS-□□□24BE□-□ 自我诊断功能 没有变化

8.8.8 检出电压或电流值 中有干扰 没有变化 自动复归 8.8.8 没有变化 12 OFF 自动复归 不足电压设定值记忆异常 *8.8.3.* ① OFF *8.8.8.* 12 OFF 8.8.8. ①② OFF

2. Hot 发生的原因,主要考虑为超过降额曲线条件下的使用、通风异常、安装方向

错误等。 3. Mok状态持续3小时以上时,更换时间提示功能无效。即使过热状态解除,更换时间提示显示仍持续显示为MokYrs输出(⑫) 持续为OFF(⑫~⑬非导通)。即便能 够正常直流输出,由于内部部品可能已经恶化,请更换本体。

4. 只有S8VS-□□□24A□□-□有光oと的检出功能。

Operation and Function

⑥Main display Indicates the measurement or set value. Lights up when the output voltage is indicated Blinks during setup of undervoltage alarm valu Lights up during indication of output current. Apk Lights up during indication of peak hold current Lights up during indication of maintenance forecast monitor. Blinks during setup of maintenance forecast monitor setting. (S8VS-\(\sigma\)24A\(\sigma\)-\(\sigma\)
Lights up during indication of total run time monito

Blinks during setup of total run time monitor. (S8VS-\(\square\) (S8US-\(\square\)) Use the mode key to change the indicate parameter or reset the peak hold current Use the up key to change to the setting mode or to increase the set value. Use the down key to change to the setting mode or to decrease the set value.

■Mode Change Power-ON Model indication Press and hold or of three sec

■Name and Function of Each Part

Function

Name

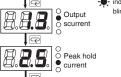
(8) Mode key

(1) Down key

■Operation Mode

Note No setting mode is provided for the S8VS-06024A/B-

Various states of the power supply unit are indicated Output voltage At operation indicator (?



Maintenance forecast monitor

(S8VS-□□□24A□□-□)

Or total run time monitor
(S8VS-□□□24B□□/BΕ□-□)

The output voltage will be displayed when the powe supply is first turned on after it is received from the factory. Thereafter, the output voltage will be indicated in the same display when shutting down

■Setting Mode (except for S8VS-06024A/B-□)

8.8.8.

18.5 - 20.0 - 27.5(V) 0.1V intervals

.Press and hold \diamondsuit (9) or \diamondsuit (10) for two seconds or more to increase or decrease the value rapidly. 2.The S8VS-06024A/B-□ is not provided with the setting mode and its parameters are fixed at the

■Output Voltage and Current Indication Function The output voltage and current of the power supply unit are monitored and indicated. Note: Operation begins after about 3 seconds since

■Peak Hold Current Indication Function The maximum output current is memorized and indicated The maximum output current is always updated whatever the indication mode is. The peak hold

Operation begins after about 3 seconds since the

8.8.8 8.8.8.

■Undervoltage alarm Function (Indication and output When output voltage drop is detected, an alarm (RG I

and lowest output voltage value are indicated alternately. The preset value of detection voltage can be changed in the setting mode. (S8VS-06024A/B-□: The value of detection voltages is fixed at 20.0V)

is not provided for S8VS-06024B- ... 3.The alarm output function is not provided for S8VS-□□□24BE□-□.

value indicated as total run time.

Self-diagnostic Function

6 Main display	Description	Output state	Restoration method	Setting after restoration
8.8.8.	Noise detected in voltage or current	No change	Automatic restoration	No change
8.8.8.	Overheated	@ OFF	Automatic restoration	No change
8.8.8 .	Undervoltage alarm set value memory error	① OFF	Press and hold \otimes (@) or \otimes (@) for three seconds and check the set value	Shipment setting or
8.8.8 .	Memory error of alarm set value of maintenance forecast monitor or total run time monitor	@ OFF	of the corresponding point. The set value must return to the shipment setting	value set in the setting mode again
8.8.8 .	Other memory error	(1)@OFF	Turn the AC input off then on again. If the product is not reset, contact the dealer.	No change
Motoo:				

1.External noise is probable as a cause of "---" and "Ea * " errors.

2. Operation out of the derating curve area, ventilation error, and incorrect mounting direction are probable as a cause of "h.t" error.

as a cause of in, e for.

3.If the "Mot." error state continues for about three hours, the maintenance forecast smonitor function (S8VS-□□□24A□ only) becomes invalid. The indication for maintenance forecast monitor remains as "ዛሬ೬" even after the overheat condition is removed, and the Yrs output (⑫) remains OFF (with no continuity across (12 and (13))

REPLACE THE POWER SUPPLY IF THIS CONDITION OCCURS EVEN IF THE DE OUTPUT IS CORRECT, AS INTERNAL PARTS MAY BE DETERIORATED.

The "#ab" error detection function is only for the S8VS-□□24A□□-□.

