OMRON 型号 S8VS(15/30W)

使用说明书

欢迎您购买S8VS-015□□/030□□。 该使用说明书记述了使用S8VS-015□□/030□□时所必要的机能、性能、使用 方法等内容.

刀広子1943. 使用S8V\$-015□□/030□□.时,请遵守以下要求. ·请确保S8V\$-015□□/030□□的操作者为具备一定电气知识的技术员. ·请存细阅读该使用说明书, 以各随时参阅。 请安善保管该使用说明书, 以各随时参阅。

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Fig. 1) 各部分名称 / Nomenclature

Fig. 2 标准安装状态

2157362-5B

*警告显示 ⚠ 注意 ·请勿分解、更改、修理产品或触摸产品内部。否则可能发生较小的电击、 火灾或产品故障。 (1) •电源接通时或电源刚关闭时切勿触摸产品。否则可能发生轻度烫伤。 ·用指定扭矩(0.8~1.0 N·m)紧固端子螺丝。否则可能发生火灾。 0 •电源接通时切勿触摸端子。接线后盖上端子盖。否则可能发生电击而造 ⇗ 成轻度伤害。 ·切勿使金属片、导线或安装加工中的碎屑进入产品中。否则可能发生较小的电击、火灾或产品故障。 0 ·通电时,产品内部电压最大可达到370V。该电压在电源OFF后的30秒 A 内残留。 安全要点 (1) 设置·储藏环境 1. 储藏在温度-25~+65℃、相对湿度25~90%的环境中。 2. 内部部件可能会劣化或损坏。任何安装方向下,都请勿在超过工作温度范围的状态下使用本产品。

错误使用时, 有发生轻伤, 中等程度伤害或物质损害的危险,

下使用本产品。
3. 请在相对湿度为25~85%的场所使用.
4. 使用时请避免阳光直射.

5. 不要在液体、杂质或腐蚀性气体可能进入产品内部的场所内使用。

6. 不要在振动,冲击剧烈的场所内使用。特别是要在尽可能远离电流接触器或其他可能成为振动源的设备处安装开关电源。另外,请在产品两端安装端板(PFP-M)。

7. 请在远离任何高强度、高频率噪音和浪涌处安装电源。

警告显示的含义

⚠ 注意

完全接地。使用了安全标准中规定的PE(保护接地),若未完全接地可能发生

2. 确保输入和输出端子正确连接,否则可能发生小型火灾。

3. 为防止负荷异常引起配线材料冒烟·着火,请使用以下材料。

型号 多股线 S8VS-03005 AWG18 to 14 (0.9 to 2.0mm²) AWG18 to 16 (0.9 to 1.1mm²) 其他型号 AWG20 to 14 (0.5 to 2.0mm²) AWG20 to 16 (0.5 to 1.1mm²)

4. 紧固端子时请不要施加100N以上的力。

5. 通电前请务必拆除加工时盖在产品上的垫板,以确保散热良好。 (3) 输出电压调整

 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。

使用时的承诺事项

以下用途时,在咨询本公司营业人员并确认规格书的同时,需采用以下安全对策。即在额定值 上前有负量或采用即使发生故障。也能将怎般控制在最小的安全电路等 现时了外,存在潜在化学与政策处置使电气干扰的环境中,及产品目录。使用说明书中没有说 的其他环境、条件下的使用 用于核能控制设备、焚烧设备、铁道・航空・车辆设备、医用机械、娱乐机械、安全装置、及

)用于條Ê控制设备、实践设备、实现"加工"于中以即、自2019年8、外分享2019 要据是行政财产,特殊行业联定的设备)可能的认身财产产生危险的系统,利威、装置)对、电、气供给系统、24小时连续运转系统等需要较高信赖性的设备)买做如。9一约需要强度安全性的用途 以上为运用条件的一部分,使用前销仔细阅读本公司的综合目录,手册等最新版的产品目录

OMRON MODEL S8VS(15/30W)

SWITCHING POWER SUPPLY

EN INSTRUCTION MANUAL

Thank you for purchasing the S8VS-015□□/030□□. This Instruction Manual describes the f<u>unctions, p</u>erformance, and application methods required to use

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Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage. 若未能正確使用產品,危險時恐怕會造成輕度, 中等程度或物質上的損害。

Key to Warning Symbols

warning Symbols				
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.				
Fire may occasionally occur. Tighten terminal screws to the specified torque 7.1~8.8 in-lb (0.8~1.0 N•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.	A			

0

A

(Fig.1)

Fig.1

This voltage can be also available 30s after the switch off. EN Precautions for Safe Use

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.

Working voltage can be 370V max. inside.

) Installing/Storage Environment . Store the product with ambient temperature –25 to +65°C, and relative humidity 25 to 90% Store the product with amoient temperature –25 to +65°C, and relative humidity 25 to 90%.
 The internal parts may occasionally be deteriorated or broken. Do not use in a state that exceeds the operating temperature range in each mounting orientation.
 Use the product where the relative humidity is 25 to 85%.
 Avoid places where the product is subjected to direct sun light.
 Avoid places where the product is subjected to penetration of liquid, foreign

- 5. Avoid places where the product is subjected to penetration or inquity, no eight substance, or corrosive gas.
 6. 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. Additionally, install a PFP-M End Plate on each end of the Product.
 7. 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.
- (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 possible be caused. Ensure that input and output terminals are wired corre
- 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.

	riccommended wife Type.				
	Model	Stranded wire	Solid wire		
	S8VS-03005	AWG18 to 14 (0.9 to 2.0mm²)	AWG18 to 16 (0.9 to 1.1mm²)		
	Other models	AWG20 to 14 (0.5 to 2.0mm²)	AWG20 to 16 (0.5 to 1.1mm²)		
4. Do not apply more than 100N 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.

 (4) See product catalogue for details.

EN Suitability for Use

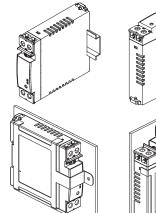
OMRON shall not be responsible for conformity with any standards, codes, or regulations that

OWN-UN snail 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 OWER ALLED FOR THE INTENDED USE WITHIN THE OVERALLE QUIPMENT OR SYSTEM. See also Product catalon for Warraphy and Limitation of Liability and the product of the pr See also Product catalog for Warranty and Limitation of Liability.

EN Nomenclature

DC input is out of the scope of safety standard certificate. Protective earthing terminal (
)
(A protective earthing terminal stipulated in safety standards is used.



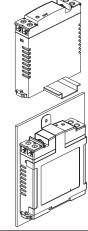
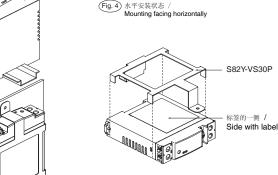
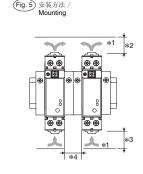


Fig. 3 向上安装状态 /





)输入端子(保险丝位于(L)侧。 对DC输入而言。(L)侧必须为(+)) 注:直流输入超出安全标准认证范围。 PE(保护接处)端子 (◆) (此为安全标准中指定的PE(接地保护)端子。 CHN 安全规格

CHN 各部位名称

1.直流输出端子(3)与交流输入端子(1) 2.过电压范畴III. 3.机器的保护等级1

4.气候条件: 3K3 :以上速守ENS0178 (=VDE0160) CSA 等级 3 过电压 category II : 符合 UL60980-1 和 EN60950-1标准。 符合UL508晚近的环境气温: 25℃ 在2度污染环境中使用。

EN Safety standards .DC output terminals (③) are galvanically isolated from the AC input terminals (①). 2.Overvoltage category III.
3.This equipment is for protection class 1.
4.Climatic class: 3K3

:According to EN50178 (=VDE0160). CSA Level 3

Obervoltage category II.

:According to UL60950-1 and EN60950-1.

Surrounding Air Temperature according to UL508: 25°C

Use in pullution degree2 environment.

■安装 ・安装方向

标准安装

1. 当产品水平安装时使用安装支架(S82Y-VS30P: 另售)。 2.散热将受反向影响。当水平安装产品时,总是将有标签的一侧朝上。

为提高产品的长期信赖性,安装时请特别注意散热。 该产品为自然对流散热,安装时需确保电源单元周围对流良好。

■安装孔加工尺寸

■选择输入电压

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

EU 指令和各种安全标准 (UL、EN、其它) 的适用范围为 100~240 VAC (85-264 VAC)

仅限于UL508,额定电压为100-240VAC。 ■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。 ■输出电压调整 出厂设置,设置为频定电压。 调整范围、利用前面的"VADJ"⑥,在额定电压的 10%到 +15% 的范围内可以调整。 右转输出电压上升,左转输出电压下降。

1.输出电压设为低于-10%时,欠电压报警功能可能运作。

2. 通过[V.ADJ] ⑥,输出电压可能会超过电压可变范围(额定电压的+15%)。 调整输出电压时需注意电源的输出电压,防止负载损坏。

耐压试验

产品设计为电源单元的(全体输入①)和(全体输出③)间能承受3000VAC、 1分钟。试验时请将耐压试验机的检测电流设为20mA。

1. 若通过试验机的开关直接施加或切断3000V. 产生的脉冲电压可能损坏电源单元。应通过试验机族租赁慢改变施加电压。 2.为防止试验时输出端于破损,务必将所有端子短路。

■绝缘电阻试验 使用DC绝缘电阻表(DC500V)实施绝缘电阻试验。

为防止试验时输出端子受损,务必将所有端子短路。

■过电流保护功能

过电流保护电路(超过额定电流的105%时运作)会针对短路·过电流自动降低输出电压, 保护电源产品。过电流状态一经解除,电源单元会自动恢复为正常运作。

— 1.短路及过电流状态下的持续使用可能造成内部部件老化、破损。

1.思始及过电流从态下的疗珠使用可能追放内部部什老化、败烦。 请不要连续超过20s以上。 2.考虑到内部部件可能发生老化、破损,请不要在负载频繁载有的浪涌电流或 过载的应用中使用。

输出电压为额定输出电压的约130%以上时,输出电压将关闭,以防止由于过电压造成负载损坏。 关闭输入电源至少3分钟并重新打开来复位开关电源。 (Fig.5)

正确使用的要点

造成过电压的原因被消除之前不要再次打开电源。

■欠电压显示功能

.... (DC LOW: 红色) 亮以发出输出电压下降警告。检测电压设为额定输出电压的约80%

Fig.6

.... 欠电压显示功能监测的是电源的输出端子部的电压。要检查正确的电压状态,应在负载端测量 电压。 ■无输出电压的情况

可能是过电流或过电压保护在作用。也有可能是大量浪涌电压诸如在开关电源打开时发生的浪涌使内部保护发生作用。 确认以下2点后仍无输出电压时,请与我们联系。

过电流保护的确认方法 确认负载是否处于过电流状态(或短路)。检查时移出除负载线。 为了消除过电压或闩锁保护功能: 将电源关闭3分钟以上,重新打开,查看状态是否已经清除。

■符合EU指令

EN Precautions for Correct Use Mounting
- Mounting Direction

Standard Mounting Fig.2 Valid
Horizontal Mounting Fig.3 Valid
Mounting facing horizontally (Fig.4)

Mounting facing horizontally (Fig.4)

Notes:

1. Use a mounting bracket (S82Y-VS30P, sold separately) when the Product is mounted facing horizon 2. Heat dissipation will be adversely affected. When the Product is mounted facing horizontally, always side with the label facing upward.

Mounting Space

Mounting Space

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.

2 To (mm) or more

2 To (mm) or more

4 4 Qu (mm) or more

4 Departments where the product of the product of the power supply are the power supply and the power supply are the power supply is designed to radiate heat by means of natural air flow.

Panel Mounting Holes
(when Using a Mounting Bracket)
Selecting Input Voltage

Rating: 100 to 240 VAC (allowable range: 85 to 264 VAC, 80 to 370 VDC)

The applicable range of EU directives and various safety standards (UL, EN, others) is 100 to 240 VAC (85 to 284 VAC).

r UL508 only, the rating is 100-240VAC.

For ULDisk only, the rating is 100-200940.

Parallel Operation
The product is not designed for parallel operation. The internal parts may occasionally be broken due to excessive heart.

Fig.2:

■ Output Voltage Adjustment
Default Setting: Set at the rated voltage
Adjustable Range: Adjustable with "V.ADJ" ® on the front surface of the product from ~10% to +15% of the rated output voltage.

rated output voltage. Turning clockwise increases the output voltage, and turning counterclockwise decreases the output voltage lotes:
If the output voltage is adjusted to less than –10 % of the rated value by the V.ADJ adjuster, the undervoltag alarm indicator may operate.

The output voltage may increase beyond the allowable voltage range when the operation is performed for "VAD". 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:
3000/AC between -input terminals ③ together > and <output terminals ③ together > for 1 minute.
When testing, set the cutoff current for the withstand voltage test device to 20mA.
Notes:

Notes:

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

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 dar

Insulation Resistance Test

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

Note:

hen performing the test, be sure to short-circuit all the output terminals to protect them from damage Overload Protection

The power supply is automatically protected from short-circuit or overcurrent damage by the overload pr function. Overfload protection is activated if the output current rises above 105% of the rated current. When the output current returns within the rated range, overfload protection is automatically cleared. Notes: 1.1 the power supply has been short-circuited or supplied with an overcurrent longer than 20 seconds,

Connect the ground completely.)
DC output terminal (-V), (+V)
Output indicator (DC ON: green)
Undervoltage Alarm Indicator(DC LOW:Red) Output voltage adjuster (V. ADJ)

Overvoltage Protection his power supply automatically protects itself and the load from overvoltag vervoltage protection is activated if the output voltage rises above approx.

Overcontage processors as a security of the second process 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 ag . ure to clear the cause of the overvoltage, before turning on the power supply.

Detection voltage action. Note:
This function monitors the voltage at the power supply output terminals. To check actual voltage, measure voltage on the load side.

To check actual voltage, measure voltage on the load side.

If no set here 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 internal protective device. The internal protection may operate if a large amount
of surge voltage, such as a lightening surge, occurs while turning on the power supply. If there is no output
voltage, please check the following points before contacting us:

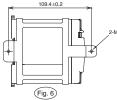
- Check the Overload Protected Status: Fig.6

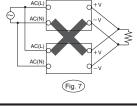
Check whether the load is in overload status or is short-circuited. Remove wires to load when checking

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-

组装孔示意图 / Mounting Bracket Hole Dimensions





■制造商

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并联操作 / Parallel Operation

欧姆龙 (上海) 有限公司

the internal parts of the power supply may occasionally be deteriorated or damaged.

The internal parts may possibly be deteriorated or damaged. Do not use the product for applications where the load causes frequent innuit current and overload.