



# 型号 MODEL S8VS(480W)

## 开关电源 SWITCHING POWER SUPPLY

CHN 使用说明书  
EN INSTRUCTION MANUAL

欢迎您购买S8VS-48024 □□产品。本使用说明书叙述了S8VS-48024 □□的功能、性能、以及要求的使用方法及内容。

- 使用S8VS-48024 □□时,请遵守以下要求:
- 请确保S8VS-48024 □□的操作者为具备一定电气知识的技术人员。
- 请仔细阅读使用说明书,在充分理解的基础上正确使用。
- 使用产品S8VS-48024 □□、S8VS-48024B □□时,请结合「S8VS操作说明书」一起阅读并严格遵守。

Thank you for purchasing the S8VS-48024□□. This Instruction Manual describes the functions, performance, and application methods required to use the S8VS-48024□□.

- Make sure that a specialist with electric knowledge operates the S8VS-48024□□.
- 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.
- When using S8VS-48024□□ or S8VS-48024B□□, read the "S8VS Operation Manual" together without fail.

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### 警告显示的含义

- 注意** 若操作不当的话有可能发生轻度伤害或设备损坏的危险。
- 警告显示**
- 注意**
- 可能会引起触电、起火或产品损坏。严禁拆分、改造、修理本产品或更换产品内部。
- 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产品本体。
- 可能会引起火灾。用规定扭矩 (1.08 N·m) 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。
- 可能会引起触电、起火或产品损坏。请不要使金属、导体或安装加工时产生的碎屑进入本产品内。
- 通电时, 产品内部电压最大为370V。切断电源30秒内会残留此电压。

### CHN 安全要点

- (1) 设置・储藏环境
- 储藏温度-25~+65℃、相对湿度25~90%的环境中。
  - 仅限S8VS-48024□□为维持长时间通知功能, 长期保管时要满足以下条件。储藏超过3个月时, 储藏温度-20~+30℃、相对湿度25~70%的环境中。
  - 不当安装将妨碍散热并可能导致内部零件老化、受损或使长时间通知功能不能正常工作。安装时请遵守标准安装方法。
  - 内部零件可能老化・受损。请不要在超过额定负载范围(衰减曲线的①的部分)的状态下使用。
  - 请在相对湿度为25~85%的场所使用。
  - 使用时请避免阳光直射。
  - 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。
  - 不要在振动、冲击剧烈的场所内使用。特别是在及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。
  - 产品发生振动、冲击时要使用铁制DIN导轨, 否则铝的摩擦可能产生金属屑。
  - 请在远离任何高强度、高频噪音和浪涌电流安装电源。
  - 请不要松动产品侧面的螺钉, 否则可能影响产品散热, 造成内部零件老化、破损。
- (2) 设置・配线
- 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电击或故障。
  - 确保输入和输出端子正确连接, 否则可能引发小型火灾。
  - 为防止负荷异常引起配线材料冒烟・着火, 请使用以下材料。

端子	推荐使用线径	扭矩
输入	AWG14-16(截面积1.309~2.081mm <sup>2</sup> ) (S8VS-48024□□: 裸线长度: 11mm)	1.08 N·M (S8VS-48024□□: F除外)
输出	AWG14(截面积2.081mm <sup>2</sup> ) (S8VS-48024□□: F, 裸线长度: 11mm)	(S8VS-48024□□: F除外)
警报输出	AWG18-28(截面积0.081~0.823mm <sup>2</sup> ) (裸线长度: 9~10mm)	

- (\*) 请使用铜绞线或实心线。
- 请使用UL认定温度为60℃、或60/75℃以上的线材。
  - 输出端子的额定电流是每个端子10A。若电流超过端子额定值, 必须同时使用多个端子。
  - 使用多重配线时, 输出方面的每个配线都要连接15A以下的过电流保护装置。
  - 紧固端子时请不要施加100N以上的力。
  - 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。
  - (仅S8VS-48024□□) 一个端子内不能插入多根电线。
  - (仅S8VS-48024□□: F) 将一字形螺丝刀等工具插入工具插入口中, 插入或拆卸输入、输出电线。配线后请确认电线与端子连接良好。
  - 绝不要将电线插入工具插入口中。
- (3) 输出电压调整
- 请不要以过大量转动输出电压调节器 (VADJ), 否则可能造成其受损。确保调整后的输出容量・输出电流在额定输出容量・额定总输出电流以下。

### 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 9.6 in. lb. (1.08 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.
- 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.
- This voltage can be also available 30s after the switch off.

### EN Precautions for Safe Use

- (1) Installing/Storage Environment
- Store product with ambient temperature -25 to +65°C and relative humidity 25 to 90%.
  - Only for S8VS-48024□□ 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 function may not work correctly. Do not use the product in any way other than the standard mounting direction (Fig. 2).
  - The internal parts may occasionally be deteriorated or broken. Do not use the product in the condition over the derating (at the ① portion of derating curve).
  - Use the product where the relative humidity is 25 to 85%.
  - 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.
  - Electric shock or malfunctions may occur if the ground is not connected completely. Filings may be generated by abrasion. In this situation, use a metal DIN Rail.
  - 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 screw on the side face of the main body.
- (2) Arrangement/Wiring
- Connect the ground completely. A protective earthing terminal stipulated in safety standards is used. Electric shock or malfunctions may occur if the ground is not connected completely.
  - The light ignition may possibly be caused. Ensure that input and output terminals are wired correctly.
  - Use the following material to the wire to be applied to the product for preventing from the occurrence of the smoking or ignition caused by the abnormal load.

Terminal	Recommended Wire Type	Torque
Input (*)	AWG14 to 16 (1.309 to 2.081 mm <sup>2</sup> ) (S8VS-48024□□: F, wires to be stripped: 11mm)	9.6 in. lb. (1.08 N·m)
Output	AWG14 (2.081 mm <sup>2</sup> ) (S8VS-48024□□: F, wires to be stripped: 11mm)	(Except for S8VS-48024□□: F)
Alarm output	AWG18 to 28 (0.081 to 0.823 mm <sup>2</sup> ) (wires to be stripped: 9 to 10 mm)	

- (\*) Use copper stranded or solid wires.
- Use min. 60°C or 60/75°C wire.
  - The current rating for the output terminals is 10 A per terminal. Make sure to use two or more terminals together if a current exceeding the terminal rating is used.
  - Provide maximum 15 A overcurrent protection on each positive output wire.
  - Do not apply more than 100N force to the terminal block when tightening it.
  - Be sure to remove the sheet covering the product for machining before power-on.
  - (Only for S8VS-48024□□: F) Do not insert more than one line for each terminal.
  - (Only for S8VS-48024□□: F) Insert a tool into the tool insertion hole to insert or remove an I/O wire. After connecting a wire, but sure that it is firmly connected. Never insert a wire into the tool insertion hole.
- (3) Output Voltage Adjustment
- The output voltage adjuster (VADJ) may possibly be damaged. Do not add unnecessary power.
  - Do not exceed the rated output capacity and current after adjusting the output voltage.

### CHN 使用时的承诺事项

用于以下用途时, 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・性能上留有冗余或采用即使发生故障, 也能将危险控制在最小安全电路等

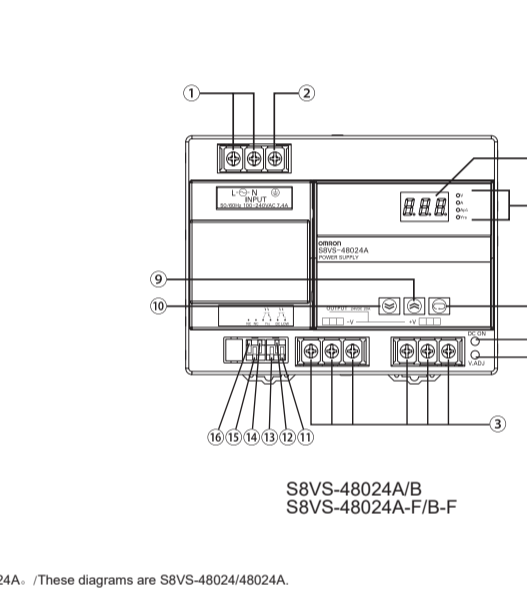
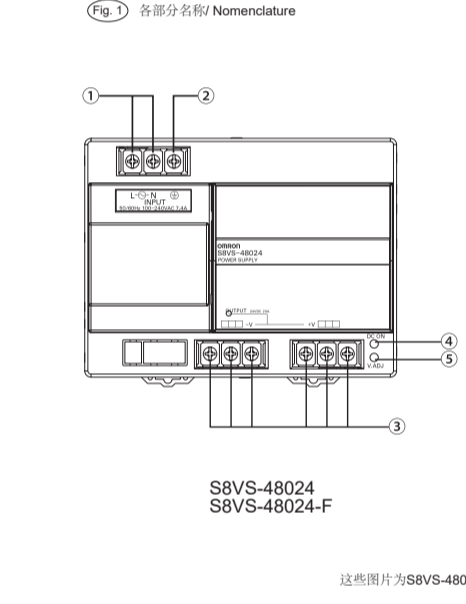
- 使用于户外、存在潜在化学污染或遭受电气干扰的环境中, 及产品目录、使用说明书中没有说明的其他环境、条件下的使用
- 用于核能控制设备、特种设备、铁道、航空、车辆设备、医用机械、娱乐机械、安全装置、及需要满足行政机关、特殊行业规定的设备
- 可能对人身财产产生危险的系统・机械、装置
- 水、电、气系统、24小时连续运转系统等需要较高可靠性的设备
- 其他如 a)~d) 需高度安全性的用途

以上为适用条件的一部分。使用前请仔细阅读本公司的综合目录・手册等最新版的产目录。

### 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 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.



这些图片为S8VS-48024/48024A。/These diagrams are S8VS-48024/48024A.

### CHN 各部位名称

- 交流输入端子(L, N) (保险丝在(L)侧。)
- PE(保护接地)端子 (安全规格规定的PE(保护接地)端子, 必须接地。)
- 直流输出端子(+V, +V)
- 输出指示灯(DC ON: 绿)
- 主显示窗
- 输出电压调整器(V.ADJ)
- 模式键
- 上键
- 下键
- 警报输出端子
- 低电压检测输出端子(DC LOW) (发射极)
- 低电压检测输出端子(DC LOW) (集电极)
- 交换时点通知输出端子(Yra) (发射极)
- 交换时点通知输出端子(Yra) (集电极)
- 交换时点通知输出端子(Yrs) (发射极)
- 交换时点通知输出端子(Yrs) (集电极)
- (未连接)

### EN Nomenclature

- AC input terminal (The fuse is located on the (L) side.)
- Protective earthing terminal (PE) (A protective earthing terminal stipulated in safety standards is used. Connect the ground completely.)
- DC output terminal (+V, +V)
- Output indicator (DC ON: green)
- Main display unit
- Operation display unit
- Mode key
- Up key
- Down key
- Alarm output terminal
  - Undervoltage alarm output terminal (DC LOW) (emitter)
  - Undervoltage alarm output terminal (DC LOW) (collector)
- Maintenance forecast monitor terminal (Yrs) (emitter)
- Maintenance forecast monitor terminal (Yrs) (collector)
- Exchange point notification terminal (Yra) (emitter)
- Exchange point notification terminal (Yra) (collector)
- Total run time monitor terminal (kh) (emitter)
- Total run time monitor terminal (kh) (collector)
- No connect

### CHN 安全规格

- 直流输出端子(③)与交流输入端子(①)在电气上是分离的。
- 过电压类别III 3. 机器为保护等级 I 气候条件: 3K3 符合EN50178
- 过电压类别II 遵照UL62368-1, EN62368-1, CSA C22.2 No.62368-1
- 在2级污染环境中使用。
- 环境温度/周围空气温度在60%负载下最高60℃, 在100%负载下最高40℃。

### EN Safety standards

- DC output terminals (3) are galvanically isolated from the AC input terminals (1).
- Overvoltage category III. 3. This equipment is for protection class I. Climatic class: 3K3. According to EN50178.
- Overvoltage category II. According to UL62368-1, EN62368-1, CSA C22.2 No. 62368-1
- Use in pollution degree 2 environment.
- Ambient temperature/Surrounding Air Temperature Max. 60°C at 60% load 40°C at 100% load.
- Caution: For Use in A Controlled Environment. Refer To Manual For Environmental Conditions. ATTENTION : POUR UTILISATION EN ATMOSPHERE CONTRÔLÉE. CONSULTER LA NOTICE TECHNIQUE.

### CHN 正确使用的要点

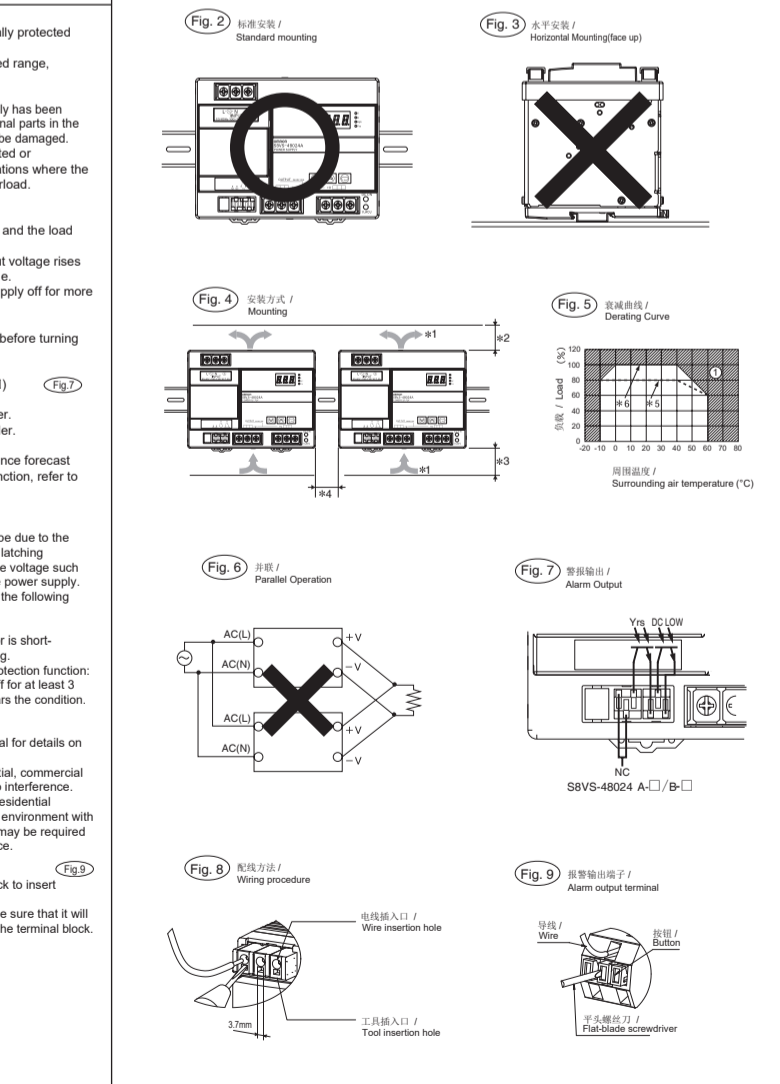
- 安装方向**

标准安装	可
向上安装	不可
其他安装	不可
- 安装空间
  - 为提高产品的长期可靠性, 安装时请特别注意散热。该产品为自然对流散热, 安装时需确保电源周围空气对流良好。
  - 空气对流
    - \*1 75 (mm) 以上
    - \*2 75 (mm) 以上
    - \*3 20 (mm) 以上
- 衰减曲线
  - \*5 输入电压范围: 85~95VAC
  - \*6 输入电压范围: 95~264VAC
- 警告输出(仅限S8VS-48024□□/B□□) 三极管输出: DC30V max., 50mA max. ON时残留电压低于2V, OFF时漏电流小于0.1mA
- 不足电压检测功能、交换时点通知功能请参照「操作相关说明」。
- 无输出电压的情况可能是由于过电流保护或过电压保护功能处于启动状态。此外, 也有可能是雷涌、过大的浪涌施加在输入端上, 启动了自锁保护回路。检查过以下两点后仍无输出的情况下, 请向本公司联系咨询。
  - 过电流保护的检查方法 检查负载是否处于过电流状态(包括短路)。(检查时请拔掉负载线)
  - 过电压保护的检查方法 暂时关闭输入电源, 放置3分钟以上, 再次通电。
- 报警输出 为确定EMC指令, 使用条件请参照产品目录和本使用说明书。警告: 本产品属于Class A。在住宅区、商业区或轻工业产区内可能会引起无线干扰。本产品不适用于居住区、商业及轻工业环境。请不要连接到商用电源。如需用于上述用途, 请做好充分措施, 以防使用者受到无线干扰。
- 耐压测试 产品设计为<全体输入①>和<全体输出③, ④, ⑤, ⑥, ⑦>间能承受3000VAC、1分钟。试验时将耐压测试仪的检测电压设为20mA。
- 绝缘电阻测试 请使用DC绝缘电阻计 (DC500V) 实施绝缘电阻测试。注: 为防止测试时警报输出端子端子破损, 请务必将所有端子短路。

- Mounting**
  - Mounting Direction
    - Standard Mounting (Fig. 2) Valid
    - Horizontal Mounting (Fig. 3) Invalid
    - Others Mounting Invalid
  - 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.
    - \*1 Direction of air circulation
    - \*2 75 (mm) or more
    - \*3 75 (mm) or more
    - \*4 20 (mm) or more
  - Derating Curve
    - \*5 Under reduced voltage conditions: 85 to 95 VAC
    - \*6 Normal operating voltage: 100 to 240 VAC (Voltage tolerance: 95 to 264 VAC)
- Notes:
  - If natural air circulation is limited, use forced air cooling to prevent overheating.
  - The peripheral temperature is specified at the place 50 mm downward from the main body of the power supply.
  - In the case of reducing the upper and lower attaching space to under 75mm, use the power supply applying the derating curve (Fig. 5) with the curve lowered by 1°C for every 5mm of reducing space.
- Parallel Operation The product is not designed for parallel operation.
- Output Voltage Adjustment Default Setting: Set at the rated voltage Adjustable Range: Adjustable with "VADJ" (3) on the front surface of the product from -10% to +15% of the rated output voltage. Turning clockwise increases the output voltage, and turning counterclockwise decreases the output voltage.
- Notes:
  - If the output voltage is adjusted to less than 20V (factory setting), the undervoltage alarm function may be activated. (Only for S8VS-48024□□/B□□)
  - Do not exceed the rated output capacity and current after adjusting the output voltage.
  - The output voltage may increase beyond the allowable voltage range when the operation is performed for "VADJ" (3). 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 terminals ① together > and <output terminals ③, ④, ⑤, ⑥ together > for 1 minute. When testing, set the cutoff current for the withstand voltage test device to 20mA.
- Notes:
  - Sudden switching of 3000VAC may possibly cause a voltage surge, damaging the power supply. Increase/reduce test voltage gradually.
  - 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.
- Insulation Resistance Test When testing the insulation resistance of the power supply, use a DC ohmmeter at 500 VDC. Note: 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.

### EN Precautions for Correct Use

- Overload Protection** The load and the power supply are automatically protected from overcurrent damage by this function. When the output current returns within the rated range, overload protection is automatically cleared.
- Notes:
  - 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.
  - 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. 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-48024□□/B□□)** Transistor Output: 30VDC max., 50 mA max. Residual voltage upon power-off: 2 V or smaller. Leakage current upon shutoff: 0.1 mA or smaller.
- Note: For the undervoltage alarm function, maintenance forecast monitor function, and total run time monitor function, refer to the "S8VS Operation Manual".
- In Case there is No Output Voltage** Refer to the catalogue for this instruction manual for details on the operating condition for EMC-compliance. Warning: 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 required to take adequate measures to reduce interference.
- Wiring to Alarm Output Terminal** Push the button at the center of the terminal block to insert or pull the wire out of the terminal. After the insertion, pull gently on the wire to make sure that it will not come off and the wire is securely fastened to the terminal block.



### CHN 联系方式

- 联系地址 OMRON Corporation Shiohkoji Horikawa, Shimogyo-ku, Kyoto, 600-8530 Japan OMRON Europe B.V. Wegalaan 67-69, 2132 JD Hoofddorp, The Netherlands
- 技术咨询 800免费技术咨询电话: 800-820-4535 (仅限于中国大陆) 网址: http://www.fa.omron.com.cn
- 制造单位 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 邮编: 201206

### EN Contact address

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- OMRON CANADA INC. Phone: 1-416-286-6465 Phone: 1-866-986-6766 (French Language) Fax: 1-416-286-6648 进口商 台湾欧姆龙股份有限公司 地址: 台湾 台北市復興北路363號6樓 TEL: 02-2715-3331
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