



A6TE2-16SRN Relay Terminal Module

Thank you for buying the Mitsubishi general-purpose programmable controller MELSEC-A Series

Prior to use, please read both this manual and detailed manual thoroughly and familiarize yourself with the product.

User's Manual(Hardware)

MODEL A6TE2-16SRN-U-E
MODEL CODE 13JL53
IB(NA)-66833-H (1803) MEE

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SAFETY PRECAUTIONS

(Read these precautions before using this product.) Before using this product, please read this manual and the relevant manuals carefully and pay full attention to safety to handle the product correctly.

The instructions given in this manual are concerned with this product. For the safety instructions of the programmable controller system, please read the CPU module user's manual.

In this manual, the safety precautions are classified into two levels: "WARNING" and "CAUTION".

Table with 2 columns: Symbol (Warning/ Caution) and Description (Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.)

Under some circumstances, failure to observe the precautions given under "CAUTION" may lead to serious consequences. Observe the precautions of both levels because they are important for personal and system safety.

DESIGN PRECAUTIONS

- WARNING: Install a safety circuit external to the programmable controller that keeps the entire system safe even when there are problems with the external power supply or the programmable controller main module.
CAUTION: Do not bunch the control wires or communication cables with the main circuit or power wires, or install them close to each other.

DESIGN PRECAUTIONS

- CAUTION: Do not bunch the control wires or communication cables with the main circuit or power wires, or install them close to each other. They should be installed 100mm (3.9 in) or more from each other.

INSTALLATION PRECAUTIONS

- CAUTION: Use the module in the environment given in the general specifications of CPU module user's manual.
Load a module by pressing against the DIN rail until a clicking sound comes. Check any looseness after the loading.

WIRING PRECAUTIONS

- WARNING: Before beginning any installation or wiring work, make sure all phases of the power supply have been obstructed from the outside.
Failure to completely shut off the power supply phases may cause electric shock and/or damage to the module.

WIRING PRECAUTIONS

- CAUTION: When wiring the programmable controller, check the rated voltage and terminal layout of the wiring, and make sure the wiring is done correctly.
Be sure there are no foreign substances such as sawdust or wiring debris inside the module.

STARTING AND MAINTENANCE PRECAUTIONS

- WARNING: Do not touch the terminals while the power is on. Doing so may cause electric shock or malfunction.
Switch off all phases of the externally supplied power used in the system when cleaning the module or retightening the terminal or module mounting screws.

STARTING AND MAINTENANCE PRECAUTIONS

- CAUTION: Do not disassemble or modify the modules. Doing so could cause failure, malfunction, injury or fire.
When detaching the communication cable or power cable from the module, do not pull the cable portion.

DISPOSAL PRECAUTIONS

- CAUTION: When disposing of this product, treat it as industrial waste.

安全注意事项

(使用之前请务必阅读)

在使用本产品之前, 应仔细阅读本手册以及本手册中所介绍的相关手册, 同时在充分注意安全的前提下正确操作。

Warning and Caution symbols with Chinese text: 表示错误操作可能造成危险后果, 导致死亡或重伤事故。 表示错误操作可能造成危险后果, 导致中度伤害、轻伤或财产损失。

此外, 根据情况不同, 即使标注为“注意”的事项也有可能引发严重事故。这两个等级的注意事项记载的均为重要内容, 请务必遵守。

设计注意事项

- 警告: 应在可编程控制器外部设置一个安全电路, 以保证整个系统在外围电源异常或可编程控制器本体故障时也能安全运行。
输出模块的继电器以及晶体管等的故障可能会导致输出保持ON状态或OFF状态。

注意

- 请勿将控制线及通信电缆与主电路及动力线等捆扎在一起或相互靠得太近。应相距大约100mm以上距离。

安装注意事项

- 注意: 应在手册记载的一般规格环境下使用可编程控制器。
如果在一般规格范围以外的环境中使用可编程控制器, 可能导致触电、火灾、误动作、产品损坏或性能劣化。

配线注意事项

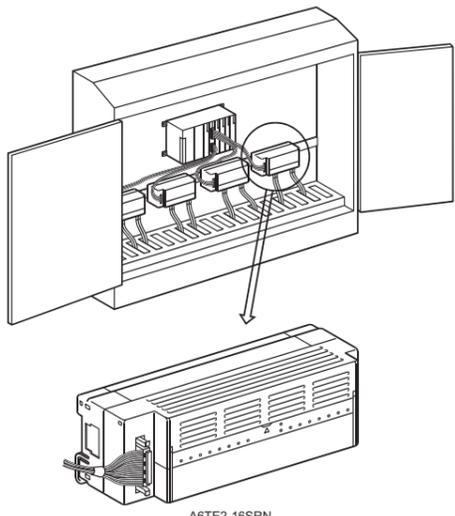
- 警告: 在配线作业等时, 必须将系统使用的外部供应电源全部断开后再进行操作。
配线作业结束后进行通电、运行时, 必须安装产品自带的端子盖板。

注意

- 进行模块配线作业时, 应在确认产品的额定电压及端子排列的基础上正确进行操作。
如果连接了与额定值不符的电源或配线错误, 可能导致火灾或故障。

1. Overview

This User's Manual explains the specifications and part identification of A6TE2-16SRN Relay Terminal Module (abbreviated as A6TE2-16SRN hereafter).



- The A6TE2-16SRN can be used in combination with sink type output modules having the following connectors (40-pin connector)

Table with 2 columns: Classification (MELSEC IQ-R series, MELSEC-L series, etc.) and Applicable Models (RY41NT2P, LY41NT1P, etc.)

- One cable (separate arrangement; For details on the cable, refer to Section 4.2 Connection Cable.) and two relay terminal modules can share 32 points (one connector).

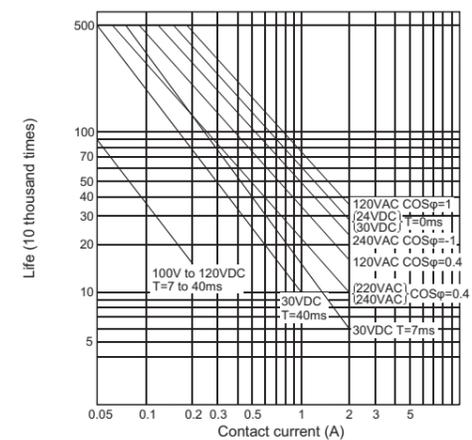
2. Specifications

See the User's Manual of the programmable controller CPU for the general specification. Do not use A6TE2-16SRN under pressure higher than the atmospheric pressure of 0m altitude.

Performance Specifications

Table with 2 columns: Item (Number of output, Isolation method, etc.) and Specifications (16 points, Relay insulation, etc.)

*1 For details, refer to the following.



*2 For the maximum switching frequency when load L is driven, set ON for 1 second or longer and OFF for 1 second or longer.

3. Part Identification and External Dimensions

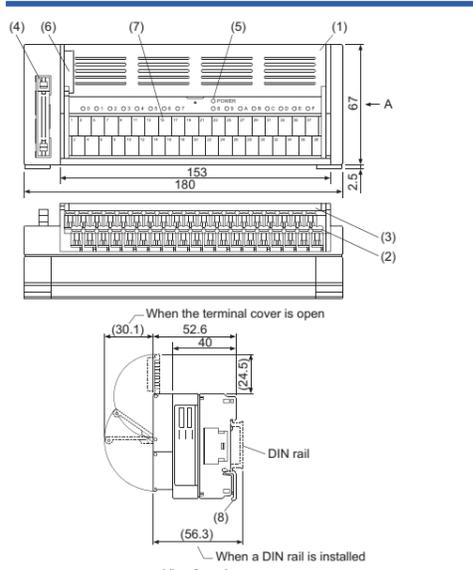


Table with 2 columns: Number (1-8) and Name (Cover, Terminal block, Connector, etc.)

Table with 2 columns: Number (1-8) and Name (Cover, Terminal block, Connector, etc.)

启动/维护注意事项

- 警告: 在通电状态下请勿触摸端子。否则可能导致触电。
在清洁模块或重新紧固端子螺栓、模块固定螺栓时, 必须将系统使用的外部供应电源全部断开后再进行操作。

注意

- 请勿拆解或改造各模块。否则可能导致故障、误动作、人身伤害或火灾。
在拆卸与模块相连接的通信电缆及电源电缆时, 请勿用手拉扯电缆部分。

报废处理注意事项

- 注意: 本产品报废时, 应当作为工业废物处理。

CONDITIONS OF USE FOR THE PRODUCT

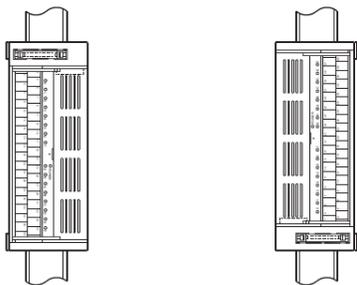
- Mitsubishi programmable controller ("the PRODUCT") shall be used in conditions:
i) where any problem, fault or failure occurring in the PRODUCT, if any, shall not lead to any major or serious accident; and

5. Installation

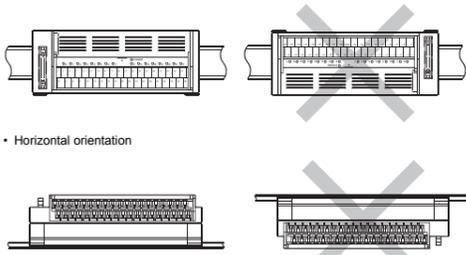
5.1 Installation Orientation

The following figures show the orientation of installation.

- Vertical orientation



- Horizontal orientation



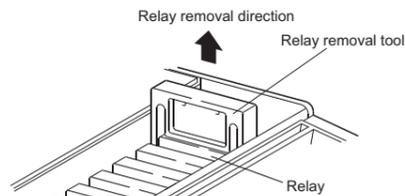
Point

Confirm that the relay is securely installed before turning on the power supply for the first time after installation.

5.2 Replacing the Relay

The relay is replaced in the following manner.

- Open the top cover of the module.
- Pull out the red relay removal tool at the left end.
- Insert the relay removal tool from top of the relay and pull out the relay.

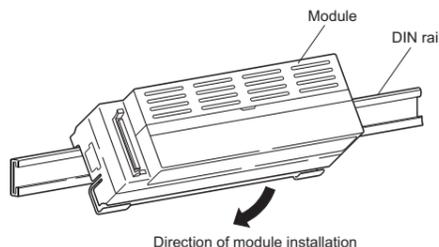


- Mount a new relay from the upper direction, taking note of the relay installation direction.
- After confirming that the relay is firmly connected and there is no bent in its lead, turn on the power supply.

5.3 Installation and Removal to/from a DIN Rail

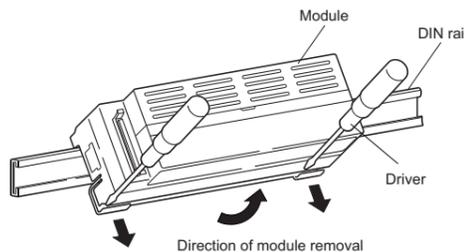
Installation to a DIN Rail

- Insert the top of the DIN rail to the upper side of the groove for the DIN rail.
- Fix the module to the DIN rail by pressing against the rail.



Removal from a DIN Rail

- Pull down the hook at the bottom of the module with a flat blade screwdriver.
- Pull the module forward while the hook is pulled down, then remove the module from the DIN rail.



6. Precautionary Items for Relay Replacement

When the A6TE2-16SRN relay is replaced, always use a relay that is compatible with the A6TE2-16SRN.

The following table shows the relationship between the relay terminal module types and applicable relays for replacement.

Relay terminal module	Relay for replacement (○: usable, ×: unusable)		
	New type replacement relay	New type replacement relay (with an adapter)	Existing replacement relay
	RV3T-3G24	RV3T-3G24MA	RV3S-3B24S
A6TE2-16SRN	○	×	×
A6TE2-16SR ^{*1}	×	○	○

*1 Conventional relay terminal module

7. Information for the New China RoHS and the Chinese Standardized Low

「电器电子产品有害物质限制使用标识要求」的表示方式



Note: This symbol mark is for China only.

含有有害物质的名称, 含有量, 含有部品

本产品中所含有的有害物质的名称, 含有量, 含有部品如下表所示。

产品中有有害物质的名称及含量

部件名称	有害物质					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷基板	×	○	○	○	○	○
外壳	○	○	○	○	○	○

本表格依据SJ/T 11364 的规定编制。

○:表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572 规定的限量要求以下。

×:表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572 规定的限量要求。

基于中国标准法的参考规格: GB/T15969. 2

WARRANTY

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

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Specifications subject to change without notice.