



请务必将本使用说明书交给负责使用维修检查的工作人员。  
This manual should be given to the person who actually uses the products and is responsible for their maintenance.

上述型号中的\*部位，有时标注有以下列符号及这些设备的组装符号标记的附属型号。有关产品规格等详细内容，请参阅产品样本目录。

Suffixes listed below may be attached to the above types at portions marked with \*.  
For details regarding specifications, see the catalog.

\* : H

辅助触头单元  
Auxiliary contact unit

正面安装型 Front mounting type

Type

FSZ1KA40*	FSZ1KA31*
FSZ1KA22*	FSZ1KA13*
FSZ1KA04*	
FSZ1KA20*	FSZ1KA11*
FSZ1KA02*	

适用交流接触器型号 Type of applicable Magnetic contactor	CK3B-06,06/G CK3B-09,09/G CK3B-12,12/G
---	--

安全注意事项

在实施安装，操作运行，维修检查之前，请务必认真阅读本使用说明书，正确地操作使用本产品。

本使用说明书中，将安全注意事项划分为《警告》，《注意》这样两个等级。

**警告**：不解除的话，有可能造成死亡或重伤的危险状态。

**注意**：不解除的话，有可能造成中等程度的残疾，轻伤以及发生物质损伤事故。

另外，《注意》中所记载的事项，依据具体情况，仍然存在着导致严重后果的可能性。

因此任何一项内容都是十分重要的，请务必严格遵守执行。

**警告**

- 接通电源的过程中，请不要触摸或接近本产品。否则将有导致触电、烧伤的危险。
- 需实施维修检查工作时，请切断电源。否则将有导致触电的危险。

**注意**

- 安装时，请确保大于使用说明书中所规定的间隔距离。否则有烧伤、火灾的危险。
- 安装时，请使用能与外加电压，通过电流相匹配之尺寸规格的电线，依据使用说明书中所规定的紧固扭矩将其牢固地拧紧。否则将有导致火灾的危险。
- 请不要触摸刚切断电源后的产品。否则有可能因高温导致烧伤。
- 若需废弃产品时，请将此作为产业废弃物进行处理。

Safety Precautions

To ensure proper use of the product, be sure to read this manual and the other attached documents carefully before starting installation, operation, maintenance and inspection. Within this instruction manual, safety precautions are ranked, in order of importance, as either "Warning" or "Caution".

**WARNING**: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

**CAUTION**: Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or damage to the equipment.

Under certain conditions, improper operation may result in serious injury and/or damage even if it is labeled only as "Caution". Every item indicated by either "Warning" or "Caution" should be considered significant.

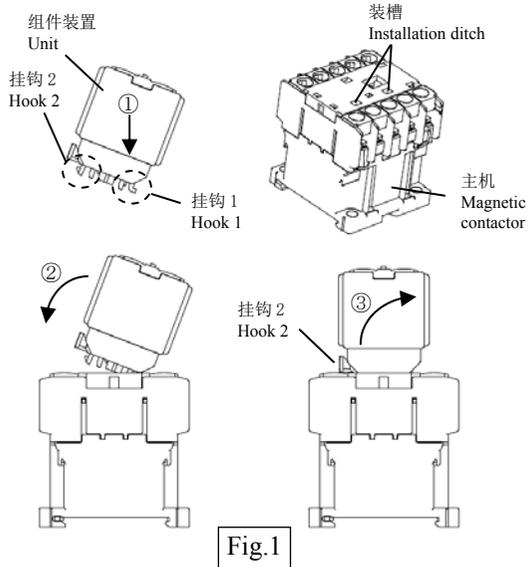
Be sure to give particular care to those items.

**WARNING**

- Do not touch the product or approach it when power connected. Electric shock or burns may result.
- Turn off the power before starting maintenance or inspection. Failure to do so may result in electric shock.

**CAUTION**

- Install the product in space more than being provided by this manual. Failure to do so may result in fire or burns.
- For wiring, select wire size suitable for the applied voltage and current. Burns may result. Tighten wires with the tightening torque specified in the instruction manual. Failure to do so may result in fire.
- Do not touch the product immediately after the power is turned off. As it may still be hot, burns may result.
- Treat the product as industrial waste when discarding.



1. 开箱

(1) 请对型号，触头结构是否与贵方所要求的规格完全一致进行确认。

(2) 请对是否有因运输途中的事故等导致零部件脱落或破损等情况的发生进行确认。

2. 保管

请在没有高温潮湿，腐蚀性气体及直射日光的环境下梱包保管。

3. 安装及拆卸方法 (Fig.1)

安装时，请将组件装置按①方向倾斜着按入主机，将组件装置的挂钩1挂在主机装槽上后，按②方向滑动，并确认挂钩2是否已确切地安装在主机上。拆卸时，请用手指按住组件装置的挂钩2，按③方向滑动，待解除锁定状态后再将其卸下。

1. Unpacking

(1) Check that the type and coil contact arrangement match the requested specifications.

(2) Make sure that no parts have been lost or damaged.

2. Storage

Store the unit in the packing box. Do not store the packing box in a location subject to high temperature, high humidity, corrosive gas, or direct sunlight.

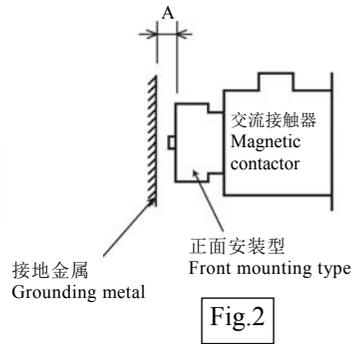
3. Mounting and removal (Fig.1)

- The installation tips a unit diagonally from the ① direction and pushes it to the main body, and please confirm that hook 1 of the unit hangs it on the installation ditch of the main body and moves it after a figure to the ② direction, and hook 2 is attached to the main body well.

- Please take it off after the disassembly moves to a course of ③ in the state that pushed hook 2 of the unit with a finger, and canceling a lock state.

**Table 1**

A [mm]
1



**Fig.2**

**Table 2**

直接接线 Direct connection	单线/Solid 【Note 1】	[mm]	1x(φ1.2 to 2) 2x(φ1.2 to 1.6) 2x(φ1.6 to 2)
		AWG	1x(16 to 12) 2x(16 to 14) 2x(14 to 12)
	绞合线/Stranded 软绞线(套筒) Flexible stranded with end sleeve 【Note 2】	[mm <sup>2</sup> ]	1x(0.75 to 2.5) 2x(0.75 to 1.5) 2x(1.5 to 2.5)
		AWG	1x(18 to 14) 2x(18 to 16) 2x(16 to 14)
电线剥皮尺寸(为单线/绞合线时) Stripped length(Solid and stranded)		[mm]	10
套筒尺寸(为软绞线时) Sleeve length(Flexible stranded)	【Note 3, 8】 	[mm]	10
压接端子连接 Connection with crimp terminal	绞合线/Stranded	[mm <sup>2</sup> ]	0.75 to 2.5
	软绞线/Flexible stranded	AWG	18 to 14
	端子最大宽度 Max. Width 【Note 5】	[mm]	7.7
端子螺钉尺寸/Terminal screw size			M3.5
紧固工具/Tool	【Note 6】		⊕ ⊖
紧固力矩/Tightening torque	【Note 7】	[N · m]	0.8 to 1

不进行布线的端子也要全部拧紧后使用。  
按 UL, CSA 标准要求, 电线尺寸不得小于 14AWG。16AWG 以下不可使用。  
Tighten all terminal screws, even if not use.  
14AWG and larger wire is available for UL and CSA.  
16AWG and smaller wire cannot used.

- 安装预留位置 (Fig.2)  
请在安装时预留大于 Table 1 所示尺寸以上。
- 布线  
最大规格尺寸电线与推荐紧固扭矩  
请参照 Table 2
- 维修·检查
- 运行前的检查  
(1) 请确认螺钉是否出现松动。  
(2) 请确认本产品中是否夹卡有电线断头, 垫圈等。并请用手推移可移动部位, 对其能否轻巧地滑动进行确认。
- 运行后的检查  
请尽快实施初始检查, 并应在此后实施定期检查。
- 触头的更换  
仅触头不能予以更换。需更换时, 则请更换整个辅助触头单元。

- 【Note 1】用 2 根单芯线进行接线的时候请使用相同尺寸的电线。  
【Note 2】软绞线没有端子不可使用。使用软绞线时, 请在压接端子(金属环)后使用。  
● 绞合线为 0.75 ~ 2.5mm<sup>2</sup> 时: 内线要在 7 根以下  
● 软绞线 : 比上述多芯的电线  
【Note 3】套筒请使用符合 DIN46228 标准的产品。根据使用的压接工具, 套筒有可能不能插进端子。  
请使用以下或同等压接形状的压接工具。  
套筒推荐使用以下压接工具: Phoenix Contact 公司的 CRIMPFOX 6  
电线剥皮尺寸请依据套筒厂家的要求。  
【Note 4】各端子都能连接 2 个压接端子。  
【Note 5】请使用端子最大宽度以下的压接端子时。  
【Note 6】⊕ : 飞利浦 H 型 2 号 ⊖ : I 型槽头螺钉 I-1x5.5xL 型号 B  
【Note 7】接线后, 对连接电线进行整理时, 若发生折弯现象, 请再次确认紧固力矩。  
【Note 8】为 1.5 ~ 2.5 mm<sup>2</sup> (16~ 14AWG)时, 请使用没有绝缘膜被的套筒。  
【Note 1】When connecting two solid wires, use the same wire.  
【Note 2】Finely stranded wire without end sleeve. Use finely stranded wire with end sleeve.  
● Stranded wire 0.75 to 2.5mm<sup>2</sup> : Number of solids ≦ 7  
● Flexible stranded wire : Number of solid is more than the above-mentioned value.  
【Note 3】Use the sleeves (ferrules) according to DIN46228.  
The below or equivalent crimping tool for sleeves is recommended.  
Recommended crimping tool : Phoenix Contact, CRIMPFOX 6  
Follow manufacturer's instruction for stripping length of wire.  
【Note 4】When connecting two round crimp terminals.  
【Note 5】Use round crimp terminal which width is the size specified at the maximum terminal width or less.  
【Note 6】⊕ : Philips PH2 φ6 ⊖ : Slotted-head screw I-1x5.5xL Type B  
【Note 7】After alignment or bending back of connected wires, check the tightening torque again.  
【Note 8】Use the sleeves without plastic insulating cover for 1.5 to 2.5 mm<sup>2</sup> (16 to 14AWG).

- Mounting space (Fig.2)  
Mount the products at distance of at least that shown in the Table 1.
- Connection  
Connectable wire size and proper tightening torque  
See Table 2.
- Maintenance and inspection
  - Inspection before operation  
(1) Check that all screws are tightened.  
(2) Check that there is no foreign matter in the unit, such as wire chips or washers, and that movable parts can be moved smoothly with the fingers.
  - Inspection after operation  
Perform initial inspection early, and perform subsequent inspections on a regular basis.
  - Replacement of contact  
Contact cannot be replaced alone. It should be replaced together with the auxiliary contact block unit.

常熟开关制造有限公司 (原常熟开关厂)

地址: 中国江苏省常熟市建业路 8 号  
电话: 0512-52842237 52846851  
URL <http://www.riyue.com.cn>

CHANGSHU SWITCHGEAR MFG. CO., LTD  
(FORMER CHANGSHU SWITCHGEAR PLANT)

No.8 Jianye Road, Changshu Jiangsu P.R. China  
Phone: 0512-52842237 52846851  
URL <http://www.riyue.com.cn>