

## **INSTRUCTION SHEET** **MICROSmart**

### **FC6A Series** **Digital I/O cartridge**

This sheet provides brief operating instructions of the MicroSmart programmable controller. For details, see the MicroSmart User's Manual.

## **Safety Precautions**

Special expertise is required to use the MicroSmart.

- Read this instruction sheet and the user's manual to make sure of correct operation before starting installation, wiring, operation, maintenance, and inspection of the MicroSmart.
- Keep this instruction sheet where it can be accessed by the end user.
- All MicroSmart modules are manufactured under IDEC's rigorous quality control system, but users must add backup or failsafe provisions to control systems use the MicroSmart in applications where heavy damage or personal injury may be caused if the MicroSmart should fail.
- Install the MicroSmart according to the instructions described in this instruction sheet and the user's manual. Improper installation will result in falling, failure, or malfunction of the MicroSmart.
- Make sure that the operating conditions are as described in the user's manual. If you are uncertain about the specifications, contact IDEC before using the MicroSmart.
- In this instruction sheet, safety precautions are categorized in order of importance from Warning and Caution:

## **WARNING**

Warning notices are used to emphasize that improper operation may cause severe personal injury or death.

## **CAUTION**

Caution notices are used where inattention might cause personal injury or damage to equipment.

## **WARNING**

- Turn off the power to the the FC6A and FT1A before starting installation, removal, wiring, maintenance, or inspection on the FC6A and FT1A.
- Failure to turn off the power may cause electrical shocks or fire hazard. Emergency stop and interlocking circuits must be configured outside the FC6A and FT1A. If such a circuit is configured inside the FC6A and FT1A, failure of the FC6A and FT1A may cause disorder of the control system, damage, or accidents.
- Use minimum 60°C wire copper conductor only.

## **CAUTION**

- The MicroSmart is designed for installation in equipment. Do not install the MicroSmart outside of equipment.

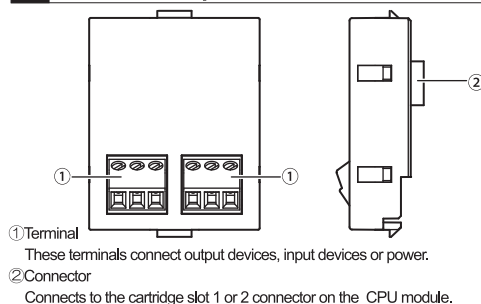
- Install the MicroSmart in environments as described in the user's manual. If the MicroSmart is used in places where it is subjected to high-temperature, high-humidity, condensation, corrosive gases, excessive vibrations, or excessive shocks it will result in electrical shocks, fire hazard, or malfunction.
- The environment rating for using the MicroSmart is "Pollution degree 2."
- Prevent metal fragments and pieces of wire from dropping inside the MicroSmart housing. Ingress of such fragments and chips may cause fire hazard, damage, or malfunction.
- Use wires of a proper size to meet voltage and current requirements. Tighten terminal screws to the proper tightening torque of 0.2N·m.
- Do not disassemble, repair, or modify MicroSmart modules.

## **1 TYPE**

Transistor Sink out : FC6A-PTK4  
 Transistor Source out : FC6A-PTS4  
 DC input : FC6A-PN4

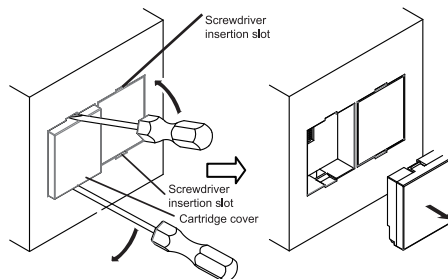
Applicable model  
 FC6A Series MicroSmart CPU module  
 SmartAXIS Series FT1A Controller TOUCH (Display type)

## **2 Parts Description**

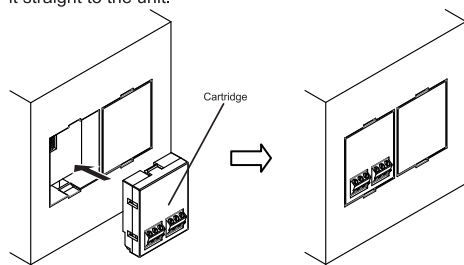


## **3 Connecting Cartridge**

Step 1.  
 Insert two flathead screwdrivers into the screwdriver insertion slots in both locations of the unit, and while pushing the tabs of the cartridge cover, remove the cartridge cover straight off of the unit.



Step 2.  
 Pay careful attention to the direction of the cartridge and attach it straight to the unit.

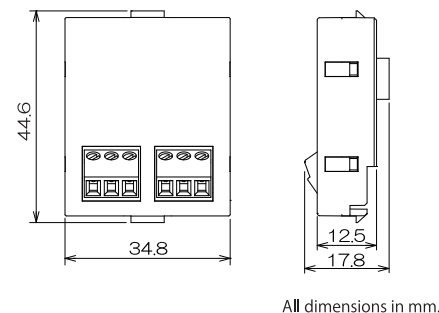


To remove the cartridge, perform the work detailed in step 1.

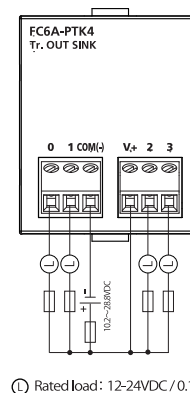
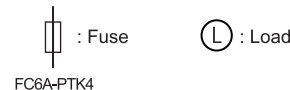
## **CAUTION**

Attach or remove the cartridge straight to the unit. If the cartridge is attached or removed when tilted, it may be damaged or cause operating problems. When not using Cartridge, attach the Cartridge cover.

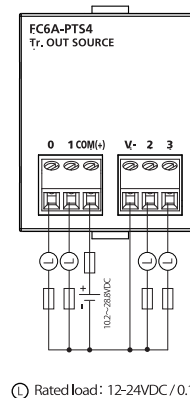
## **4 Dimensions**



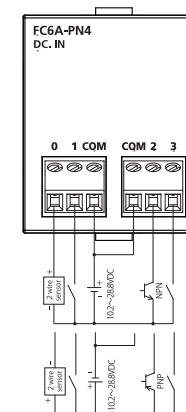
## **5 Wiring**



FC6A-PTS4



FC6A-PN4



## **6 Applicable Ferrule**

The recommended ferrule is made by Phoenix Contact. To crimp the ferrules shown below, use a special crimping tool (CRIMPFOX 6 (1212034))

AI 0,25-6 (3203040)  
 AI 0,34-6 (3203053)  
 AI 0,5-6 (3200687)

( ) indicates the Type No. of PHOENIX CONTACT GmbH & Co. KG

## **7 Recommended Screwdriver / Tighting torque**

To wire the terminal block, use the recommended screwdriver made by Phoenix Contact and tighten terminal screws to the proper tightening torque.

Screwdriver : SZS 0,4x2,5 (1205037)  
 Tighten torque : 0.2 N · m

( ) indicates the Type No. of PHOENIX CONTACT GmbH & Co. KG

MicroSmart User's manual can be downloaded from  
<http://www.idec.com/download>

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**IDEC CORPORATION**