**1. Outline**

FX3U-4AD-PNK-ADP (hereinafter called PNK-ADP) is an analog special adapter for measuring temperature via four channels (2-wire or 3-wire sensors) of a connected Pt1000/Ni1000 resistance thermometer.

1.1 Incorporation of items

Verify that the following product and items are included in the package:

- Product: FX3U-4AD-PNK-ADP, Pt1000/NI1000 temperature sensor input special adapters

**Accessories**

- User's manual (This manual)
- FX3U Series PLC (48 points)
- User's manual (This manual)
- Special adapter
- Terminal block (European type) [7]
- 24+ (24 V DC power supply)
- Screw [2], [6], [8] for fixing the special adapter
- Screen cloth (for excluding interference) [10]
- Connecting wire [3]
- Shield wire [4]
- Ferrite core*1 [2], [5], [9]
- Special adapter fixing hook [10]
- Connector cover [9]
- Connector hole [6]
- φ17.6 × 15.1 mm (mounting hole pitch)
- Weight: Approx. 0.1 kg (0.22 lbs)

**2. INSTALLATION**

For installation/uninstallation details, refer to the respective PLC User's manual Hardware Edition.

**INSTALLATION PRECAUTIONS**

- Make sure to cut off all phases of the power supply externally before attempting installation or wiring work.
- Failure to do so may cause electric shock or damage to the product.

**3. Wiring**

**WIRING PRECAUTIONS**

- When drilling screw holes or wiring, make sure cutting or wire debris does not enter the ventilation slits.
- Failure to do so may cause fire, equipment failures or malfunctions.

**CAUTION**

- Make sure to observe the following precautions in order to prevent any damage to the machinery or accidents due to abnormal data written to the PLC under the influence of noises:
  1. Do not bundle the power line or shield of the analog input/output cable together with or lay it close to the main circuit, high-voltage line, or load line.
  2. Connect the shield of the analog input/output cable at one point on the signal receiving side. However, do not use common grounding with heavy electrical systems.

**INSTALLATION PRECAUTIONS**

- Do not connect the special adapter to the PLC main unit. Otherwise, noise disturbance and/or surge induction are likely to take place.
3.1 Applicable cable and terminal tightening torque

3.1.1 Terminal block (European type)

1) Wire size
- The power supply wire should use 22-20 AWG wire.

2) Applicable cable
- Separate the cable of the resistance thermometer sensors from the other power cables or areas easily affected by inductive noise (of the commercial with a torque outside the above-mentioned range. Failure to do so may cause electric shock, equipment failures, a short-circuit, or accidents, and compensation for damages to products other than Mitsubishi products.
- The tightening torque must be 0.22 to 0.25 Nm. Failure to do so may cause damage.

*1 Old model name: CRIMPFOX ZA 3
*2 Old model name: CRIMPFOX 6T

- Do not connect more than the specified number of wires or electric wires of unspecified size.
- Affix the wires so that neither the terminal block nor the connected parts are directly stressed.

3) Terminal block and cable
- Strip the coating of strand wire and twist the cable core before connecting it, or strip the coating of single wire before connecting it. An alternative connection is to use a ferrule with insulating sleeve.
- AWG 20-22 should be used for 22-20 AWG wire. Failure to do so may cause electric shock, equipment failures, a short-circuit, or accidents, and compensation for damages to products other than Mitsubishi products.
- Insulation sleeve with a torque outside the above dimensions, or otherwise, the wire cannot be inserted into the terminal block.

- The power supply wire should use 22-20 AWG wire.

- When installing the product where major accidents or losses could occur if the product fails, install appropriate backup or fail-safe functions in the system.