1. Outline
FX3U-4HSX-ADP high-speed input special adapter (hereafter called high-speed input special adapter) is a terminal adapter designed for FX3U PLC. It permits four high-speed input terminals for the PLC. This adapter is connectable to the main unit per system. For details on system configuration, refer to the following manual:

1.2 Input Allocation and Useable High-Speed Counter
When the power is turned on, six input units of the high-speed input special adapters are allocated in the following order (from the left side). Refer to the table below for usable device number of associated high-speed counter. For details on high-speed counter, refer to the following manual:

1.3 External Dimensions, Part Names, and Terminal Layout

2. Installation
The product can be installed an DIN rail (EN 50022) or earthen directly using screws. Refer to the installation precautions given below to ensure safe and easy installation.

2.1 Installation Precautions
- Make sure to install all parts of the power supply unit in the specified locations to prevent electrical hazards or equipment failures.
- Follow the procedure below for connecting to a DIN rail or rack.

2.2 Connecting to the FX3U Series PLC
- Refer to the procedure for connecting to a system, or refer to the following manual:
- Placing products directly on a high-speed input special adapter may cause damage to the PLC. For details, refer to the following manual:

2.3 Connections precautions
- Install the expansion board twice used before connecting a special adapter.
- Consult with the Mitsubishi Electric dealer when purchasing a special adapter for the system configuration. For details, refer to the following manual:

2.4 Connectable Device Caution
Failure to install the terminal of FX3U-4HSX-ADP has to be I/O of the following conditions.

3. Used cables and Tightening Torque on Terminal
For connection operation is easily, refer to the following manual:

4. Specification

5. Construction and Mounting
When using a female with insulation sleeves, choose a wire with proper cable size to enable the indicated load. For details, refer to the following manual:

6. Power Supply Specification
When selecting the power supply, refer to the following manual:

7. Performance Specification

Note: This manual is for China only.
1. Outline

FX3U-4HSX-ADP high-speed input/output special adapter (hereafter called high-speed special adapter) is a terminal adapter in FX3U series PLCs. It mounts a high-speed counter in PLC and communicates with the main unit via high-speed counter of PLC instruction (FNC 56). This product can be used as a high-speed input/output special adapter in FX3U-4HSX-ADP. It is currently used in a high-speed counter circuit or a program instruction (FNC 56). High-speed special adapter can be connected to the main unit per system. For details on system configuration, refer to the following manual.

2. Installation

The product can be installed in an DIN slot (EMC017207) or installed directly using the slot holes of the PLC main unit. Be sure to use the mounting screws (M3 x 6 mm, 

3. Used cables and Tightening Torque on Terminal

For connection equipment, we refer to the following manual.

4. Specification

4.1 Applicable PLC

4.2 General Specification

For the general specification, refer to the manual of the PLC main unit.

The items other than the following are applicable to the FX3U main unit. For details, refer to the following manual.


5. Connectable Device Caution

The input terminal FX3U-4HSX-ADP has to be L-type at the following conditions.

6. Internal Circuit of Input Interface

For connection equipment and examples, refer to the following manual.

1. Outline
FX3U-4HSX-ADP high-speed terminal special adapter (hereafter called high-speed terminal special adapter) is a terminal adapter designed for FX3U-PLC series. It is provided as a terminal adapter to be connected to the terminal in the same unit per system. For details on system configuration, refer to the following manual. (P/N: 2BF0901000FX3U Series User’s Manual - Hardware Edition)

1.1. Incorporated Items
Mitsubishi Electric Corporation has incorporated the following items:
- FX3U-4HSX-ADP high-speed terminal special adapter

1.2. Input Allocation and Unused High-Count Input Number
When the power is turned on, the input numbers of the high-speed terminal special adapters are allocated in the order of high-speed terminal special adapters connected to the main unit per system. For details on system configuration, refer to the following manual. (P/N: 2BF0901000FX3U Series User’s Manual - Hardware Edition)

Effective July 2018
Specifications are subject to change without notice.

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Safety Precaution
Read these precautions before use.
This manual is made up of two categories

3. Used cables and Tightening Torque on Terminal
When wiring, make sure cutting or wire debris does not enter the ventilation section.

- The disposal size of the cable end should follow the dimensions described with 
  [1] Fig. A and B (right).  
- Tighten the terminal screws by hand or by a screwdriver. If it does not come contact more than 10% to 15% of the terminal screws are not in contact.


3.3. Applicable Standard
UL (Underwriters Laboratories) and cUL (Underwriters Laboratories Canada) are used as the standards for high-speed terminal special adapters. Further information can be found in the following manual. (P/N: 2BF0901000FX3U Series User’s Manual - Hardware Edition)

Applicable Standard
- UL, cUL

3.4. Mechanical design and interface design

For the mechanical product manuals or documents, consult with the Mitsubishi Electric dealers where purchased or our sales representatives.

Applicable Standard

4. Specification

4.1. Applicable PLC

The version number can be checked by monitoring DM080-DM081 of the last three digits, included in 

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

4.2. General Specification

For the general specification, refer to the manual of the PLC main unit. The items with the following are opposite in the PLC main unit:

4.3. Power Supply Specification

[Note] The power supply is supplied from the PLC main unit or service power supply. 

4.4. Performance Specification

Input type: Normal open (NO), normal close (NC)

[Note] FX3U-4HSX-ADP High-Speed Terminal Special Adapter

1) All the high-speed terminal special adapters are directly stressed.

2) When using a ferrule with insulation sleeve, choose a wire with proper cable size and ensure that it is inserted as far as possible.


1.3. External Dimensions, Part Names, and Terminal Layout

By using a female with insulation sleeve, choose a wire with proper cable size that fits the above dimensions. Insert the wire as far as possible. 

The tightening torque for the terminal screws is 1.0 to 1.5 kgf cm (0.01 to 0.02 Nm). Failure to do so may cause equipment failure or malfunction.

Note: This manual is for China only.

Component amount and specification of this equipment may be different from that of similar products. For details, refer to the following manual. (P/N: 2BF0901000FX3U Series User’s Manual - Hardware Edition)

4.5. Connectable Device Caution

Connection precautions
- [Note]: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

4.6. Internal Circuit of Interface

Precautions: For connection examples and applications, refer to the manual of the PLC main unit.

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

When using a ferrule with insulation sleeve, choose a wire with proper cable size that fits the above dimensions. Insert the wire as far as possible.


1.2. Input Allocation and Unused High-Count Input Number

Must be used as a caution in any case.

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2. Installation

The product can be ordered in a DIN rail (2005BD027C) or unscrewed directly using tools. 


Installation Precautions
- [Note]: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.2. Connection to the FX3U Series PLC

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

Installation Precautions
- [Note]: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.3. Connection to the FX3U Series PLC

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.4. Installation Precautions

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.5. Installation Precautions

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter


2.6. Installation Precautions

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.7. Installation Precautions

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.8. Installation Precautions

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.9. Installation Precautions

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter

2.10. Installation Precautions

Note: Cannot be connected to FX3U-4HSX-ADP high-speed terminal special adapter