

# FX3U-CF-ADP INSTALLATION MANUAL



Manual Number	JY997D35201
Revision	E
Date	July 2018



This manual describes the part names, dimensions, mounting, and specifications of the product. Before use, read this manual and the manuals of all relevant products fully to acquire proficiency in handling and operating the product. Make sure to learn all the product information, safety information, and precautions. Store this manual in a safe place so that it can be taken out and read whenever necessary. Always forward it to the end user.  
Registration:  
CompactFlash is a trademark of SanDisk Corporation in the United States and other countries.  
The company and product names described in this manual are registered trademarks or the trademarks of their respective companies.

Effective July 2018  
Specifications are subject to change without notice.  
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## Safety Precautions (Read these precautions before use.)

This manual classifies the safety precautions into two categories:

**WARNING** and **CAUTION**

	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
	Indicates that incorrect handling may cause hazardous conditions, resulting in medium or slight personal injury or physical damage.

Depending on the circumstances, procedures indicated by **CAUTION** may also cause severe injury. It is important to follow all precautions for personal safety.

## Associated Manuals

Manual name	Manual No.	Description
FX3U-CF-ADP User's Manual	JY997D35401 MODEL CODE: 09R720	Describes details of the FX3U-CF-ADP CF card special adapter.
FX3S/FX3G/FX3GC/FX3U/FX3UC Series Programming Manual - Basic & Applied Instruction Edition	JY997D16601 MODEL CODE: 09R517	Describes PLC programming for basic/applied instructions and devices.
FX3U Series User's Manual - Hardware Edition	JY997D16501 MODEL CODE: 09R516	Explains the FX3U Series PLC specifications for I/O, wiring, installation, and maintenance.
FX3UC Series User's Manual - Hardware Edition	JY997D28701 MODEL CODE: 09R519	Explains the FX3UC Series PLC specifications for I/O, wiring, installation, and maintenance.

## How to obtain manuals

For product manuals or documents, consult with the Mitsubishi Electric dealer from who you purchased your product.

## Certification of UL, cUL standards

FX3U-CF-ADP units comply with the UL standards (UL, cUL).  
UL, cUL File Number: E95239

Regarding the standards that comply with the main unit, please refer to either the FX series product catalog or consult with your nearest Mitsubishi product provider.

## Compliance with EC directive (CE Marking)

This note does not guarantee that an entire mechanical module produced in accordance with the contents of this note will comply with the following standards. Compliance to EMC directive and LVD directive for the entire mechanical module should be checked by the user / manufacturer. For more information please consult with your nearest Mitsubishi product provider.  
Regarding the standards that comply with the main unit, please refer to either the FX series product catalog or consult with your nearest Mitsubishi product provider.

## Attention

This product is designed for use in industrial applications.

## Requirement for Compliance with EMC directive

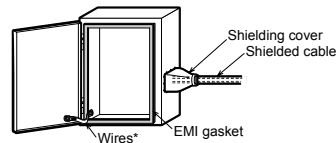
The following products have shown compliance through direct testing (of the identified standards below) and design analysis (through the creation of a technical construction file) to the European Directive for Electromagnetic Compatibility (2014/30/EU) when used as directed by the appropriate documentation.

Type: Programmable Controller (Open Type Equipment)  
Models: MELSEC FX3U series manufactured from June 1st, 2009 FX3U-CF-ADP

Standard	Remark
EN61131-2:2007 Programmable controllers - Equipment requirements and tests	Compliance with all relevant aspects of the standard. <b>EMI</b> • Radiated Emission • Conducted Emission <b>EMS</b> • Radiated electromagnetic field • Fast transient burst • Electrostatic discharge • High-energy surge • Voltage drops and interruptions • Conducted RF • Power frequency magnetic field

## Caution for EC Directive

- Installation in Enclosure  
Programmable controllers are open-type devices that must be installed and used within conductive control cabinets. Please use the programmable controller while installed within a conductive shielded control cabinet. Please secure the cabinet door to the control cabinet (for conduction). Installation within a control cabinet greatly affects the safety of the system and aids in shielding noise from the programmable controller.
- Control cabinet
  - The control cabinet must be conductive.
  - Ground the control cabinet with the thickest possible grounding cable.
  - To ensure that there is electric contact between the control cabinet and its door, connect the cabinet and its doors with thick wires.
  - In order to suppress the leakage of radio waves, the control cabinet structure must have minimal openings. Also, wrap the cable holes with a shielding cover or other shielding devices.
  - The gap between the control cabinet and its door must be as small as possible by attaching EMI gaskets between them.



\* These wires are used to improve the conductivity between the door and control cabinet.

## 1. Introduction

The CF card special adapter FX3U-CF-ADP (hereinafter abbreviated as "CF-ADP") stores data to and reads data from the CompactFlash™ card (CF card) in accordance with applied instructions for the CF-ADP sent from the FX3U/FX3UC PLC. Data is stored in CSV format on the CompactFlash™ card. Only one CF-ADP unit can be connected to a single main unit. For system configuration, refer to the following manual.  
→ FX3U-CF-ADP User's Manual

### 1.1 Function outline

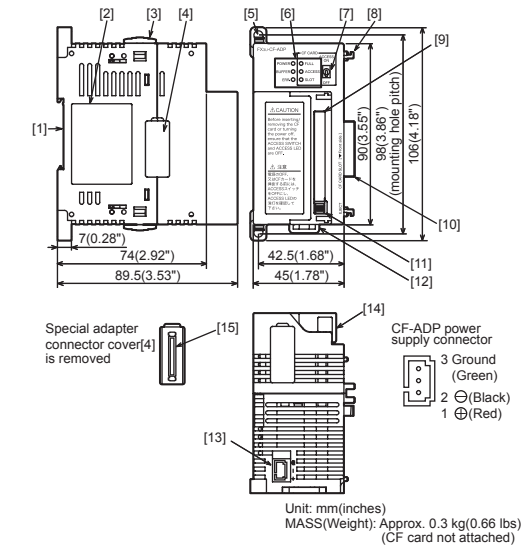
- Data can be saved in the CompactFlash™ card in files with the FIFO (first in, first out) function.
- Data can be saved in a specified file stored in the CompactFlash™ card.
- Data can be read from the CompactFlash™ card.

### 1.2 Incorporated Items

Check to ensure the following product and items are included in the package:

<b>Product</b>	FX3U-CF-ADP CF card special adapter
<b>Accessories</b>	FX2NC-100MPCB Power supply cable [1m (3'3") x 1 cable Dust proof protection sheet x 1 sheet Installation manual (This manual)

### 1.3 External Dimensions and Part Names




- |  |                                    |
|--|------------------------------------|
| [1] DIN rail mounting groove (DIN rail: DIN46277, 35mm (1.38") width)              | [10] Special adapter connector     |
| [2] Nameplate  | [11] EJECT button                  |
| [3] Special adapter slide hook   | [12] DIN rail mounting hook        |
| [4] Special adapter connector cover  | [13] CF-ADP power supply connector |
| [5] Direct mounting hole (2 holes of $\phi$ 4.5 (0.18") (mounting screw: M4 screw) | [14] CF card cover                 |
| [6] Status LEDs  | [15] Special adapter connector     |
| [7] CF card ACCESS switch  |                                    |
| [8] Special adapter fixing hook  |                                    |
| [9] CF card slot   |                                    |


### 1.4 Power and status LEDs

LED display	LED color	Status	Description
POWER	Green	OFF	Power is not being supplied from the external power supply (24V DC).
		ON	Power is being supplied from the external power supply (24V DC).
BUFFER	Green	OFF	Data is not stored in the internal buffer.
		ON	Data is stored in the internal buffer.
ERR.	Red	OFF	No errors.
		ON	CF write error, CompactFlash™ card error, etc. has occurred.
FULL	Red	OFF	The CompactFlash™ card has free space.
		Flicker	The free space in the CompactFlash™ card is 20% or less of the full capacity.
		ON	The CompactFlash™ card has no free space. The free space in the CompactFlash™ card is 1% or less of the full capacity.
ACCESS	Green	OFF	CompactFlash™ card not accessed.
		ON	CompactFlash™ card accessed.
SLOT	Green	OFF	The CompactFlash™ card is not inserted, or the slot is in the CompactFlash™ card unmounted status.
		ON	The CompactFlash™ card is inserted, or the slot is in the card mounted status.

## 2. Installation

For installation details, refer to the following manuals.  
→ Refer to the FX3U-CF-ADP User's Manual.

INSTALLATION PRECAUTIONS	
• Make sure to shut down all phases of the power supply externally before installing the CF-ADP. Failure to do so may cause electric shock or damage to the product.	

INSTALLATION PRECAUTIONS	
<ul style="list-style-type: none"> <li>Use the product within the generic environment specifications described in PLC main unit manual (Hardware Edition). Never use the product in areas with excessive dust, oily smoke, conductive dusts, corrosive gas (salt air, Cl<sub>2</sub>, H<sub>2</sub>S, SO<sub>2</sub>, or NO<sub>2</sub>), flammable gas, vibration or impacts, or expose it to high temperature, condensation, or rain and wind. If the product is used in such conditions, electric shock, fire, malfunctions, deterioration or damage may occur.</li> <li>Do not touch the conductive parts of the product directly. Doing so may cause device failures or malfunctions.</li> <li>Install the product securely using a DIN rail or mounting screws.</li> <li>Install the product on a flat surface. If the mounting surface is rough, undue force will be applied to the PC board, thereby causing nonconformities.</li> <li>When drilling screw holes or wiring, make sure that cutting and wiring debris do not enter the ventilation slits. Failure to do so may cause fire, equipment failures or malfunctions.</li> <li>Be sure to remove the dust proof sheet from the PLC's ventilation port when installation work is completed. Failure to do so may cause fire, equipment failures or malfunctions.</li> <li>Connect the CF-ADP securely to special adapter connector. Loose connections may cause malfunctions.</li> <li>Connect the power connector of the power supply cable securely to the CF-ADP power supply connector. Loose connections may cause malfunctions.</li> <li>When inserting a CompactFlash™ card into the CF-ADP, push it into the CF card slot until the EJECT button pops out. Loose connections may cause malfunctions.</li> </ul>	



