MITSUBISHI ELECTRIC

IFC GA

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Manual

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IFC GA

Manual IFC GA

Foreword

This manual presents installation and function description for the expansion card IFC GA.
The module is connected to E900 and E910.
Besides this manual, the following manuals are also available.

– E900/E910, Installation

– E900/E910, Manual

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All examples in this manual are used solely to promote understanding of how the equipment works and its operation. Mitsubishi Electric Europe B.V.. takes no responsability if these examples are used in real applications.

Because of the great many application areas for this equipment, the user himself must acquire the appropriate knowledge needed to use the equipment correctly for particular applications.

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Safety precautions

General

– Check the delivery for transport damage. If damage is found, advise your supplier.
– Do not use the product in an explosive environment.
– Modifications, changes and additions to the product are forbidden.
– Use only spare parts approved by the manufacture.
– Read the user instructions carefully before use.
– This equipment should only be operated by qualified personnel.

At installation

– The product is constructed for stationary installation.
– Install the product according to the accompanying installation instructions.
– The product must be grounded according to the accompanying installation instructions.
– This equipment must be installed by qualified personnel.
– High voltage-, signal- and supply cables must be separated.

In use

– Keep the equipment clean.
– Emergency stop- and other safety functions should not be controlled from the terminal.

Service and maintenance

– The agreed guarantee applies.
– Repairs should be made by qualified personnel.

At disassembly and scrapping

– Local regulations apply concerning recycling of products or part.

1 Introduction

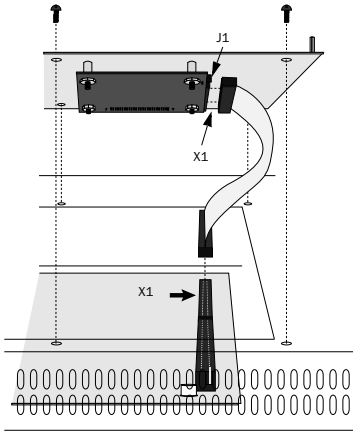
IFC GA is an expansion card which makes it possible to connect a bus connection module, A7GT-BUS-EUN/A7GT-BUS2-EUN, to the terminals E900 and E910. IFC GA supports bus connection on PLC type MELSEC AnA, AnS, AnSH, AnU, QnA and QnAS.

2 Installation

This chapter describes how the IFC GA card and the bus connection module are mounted in the terminal. Carry out the following procedures.

2.1 Installing IFC GA

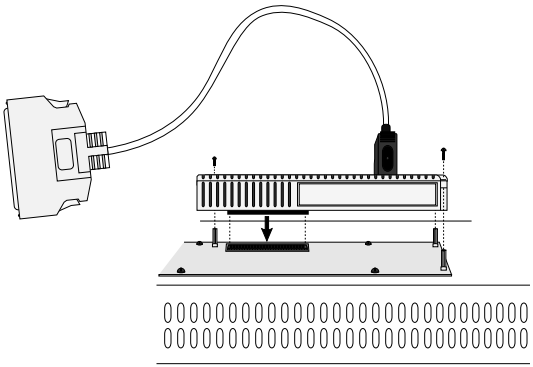
1. Switch off the terminal power and the PLC power.
2. Make sure that your ESD protection is good.
3. Remove the cover plate on the rear of the terminal.
4. Mount the expansion cables between X1 on the CPU card and X1 on the expansion card.
5. Put the jumper J1 on the expansion card in the position 1-2 if slot is chosen, and in position 2-3 if slot is chosen.
6. Replace the cover plate on the rear of the terminal with the expansion card according to the drawing. Fasten the card with the screws.



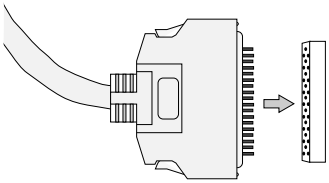
Mounting of the expansion card

2.2 Installing the bus connection module

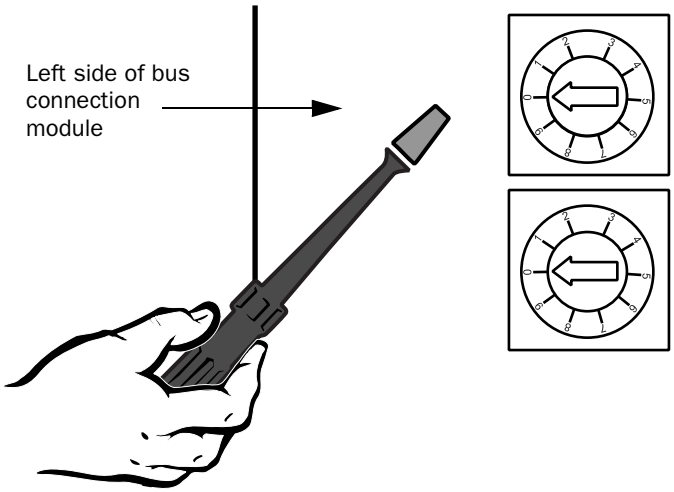
1. Switch off the terminal power and the PLC power.
2. Mount the bus connection module on top of the expansion card on the rear of the terminal according to the dawing. Fasten the module with the screws.



3. Connect the bus connection module and the main base/expansion base module using the expansion cable.



4. Set the expansion stage switch and I/O slot switch of the bus connection module.



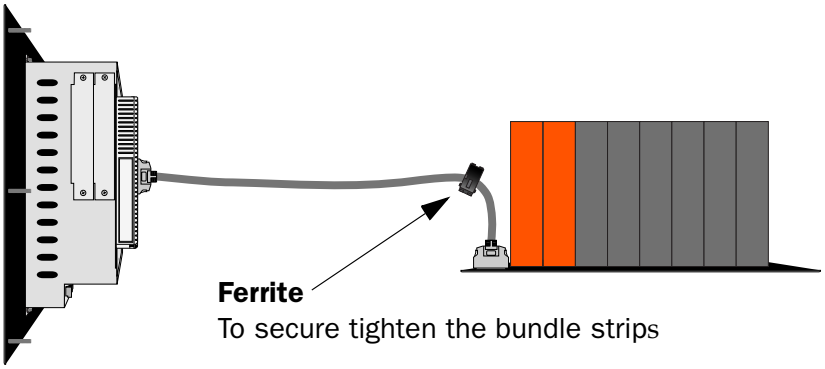
5. Turn on the power supplies to the terminal and the PLC

For more detailed information on installing the bus connection module and entering the settings, please refer to the A7GT-BUS-EUN/ A7GT-BUS2-EUN User's Manual.

2.3 Placing the ferrites

A system

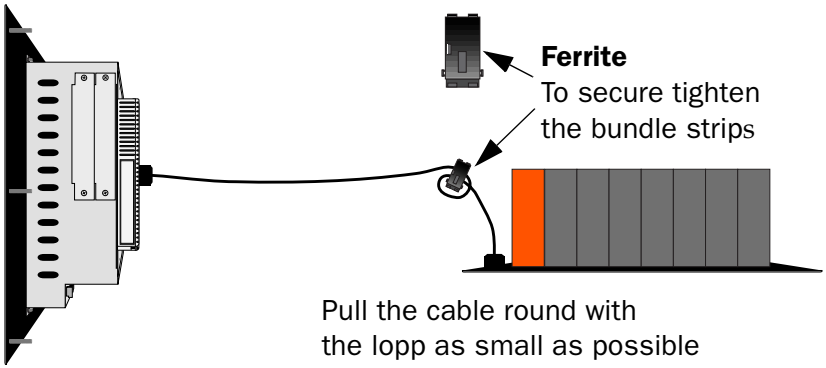
MAC PLC, A-CPU



Approved cables: AC-06B, AC 12B and AC-30B

A1S System

MAC PLC, A-CPU



Approved cables: A1S-C03B, A1S-C01BA1S-C05NB, A1S-C06B, A1S-C12B and A1S-C30B

The cables A1S-C03B and A1S-C01B does not need ferrites.

Note! The cables A1S-C50NB and A1S-C60B must not be used.

3 Install and update driver

When installing MAC Programmer+ the drivers available at the time of release are installed too. A new driver can be added into MAC Programmer+ either with MAC Programmer+ using an Internet connection or from diskette. A driver can be updated to a newer version in the same ways.

3.1 Installation of driver using Internet

To update available drivers to the latest version or to install new drivers you can use the function Update terminal drivers, from Internet in the File menu in MAC Programmer+. All projects must be closed before this function is used and the computer must be able to make an Internet connection. You don't need a browser. When the connection is established a list is shown with all drivers that can be downloaded from Internet to the computer. The list shows the version number of available drivers and the version number of installed drivers. Mark the driver/drivers you want to install in the MAC Programmer+. The function Mark Newer will mark all drivers that are available in a newer version then the one installed and the drivers not installed. Then you select Download. Each drivers is approximately 500 kb and it is ready to use when the download is ready.

3.2 Installation of driver from disk

To update available drivers to the latest version or to install new drivers you can use the function Update terminal drivers, from Disk in the File menu in MAC Programmer+. All projects must be closed before this function is used. Select the folder with the new driver and choose to open the mpd-file. A list is shown with all drivers that can be installed showing the version number of available drivers and the version number of installed drivers. Mark the driver/drivers you want to install in the MAC Programmer+. The function Mark Newer will mark all drivers that are available in a newer version then the one installed and the drivers not installed. Then you select Install.

How to select the MELSEC A BUS driver in the project and how to transfer it to the terminal are described in *chapter 4*.

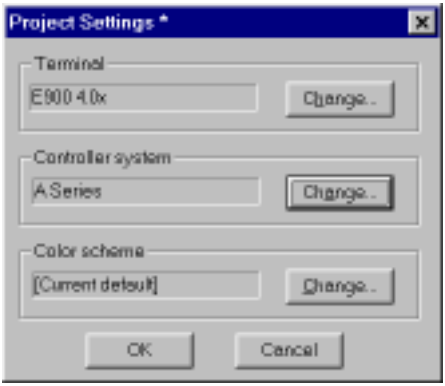
4 Settings in MAC Programmer+

Communications setup

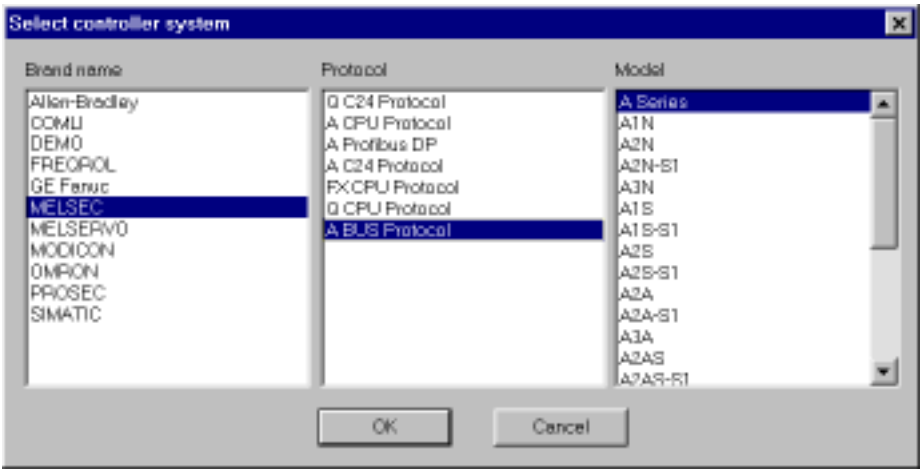
For communication with MELSEC PLC systems via the bus connectionthe following settings must be made in the programming tool MAC Programmer+.

Driver selection

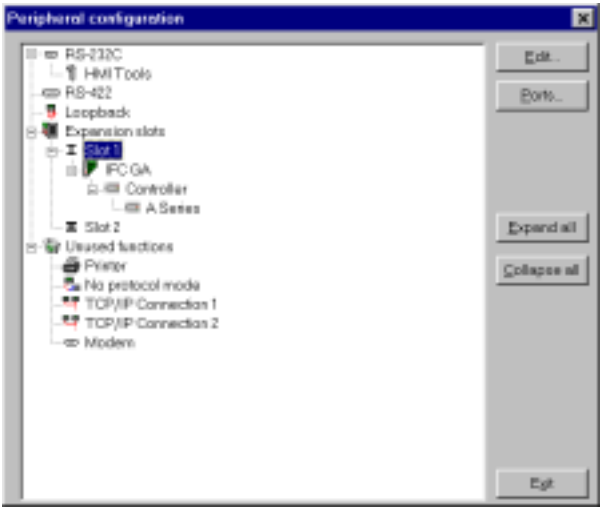
1. Choosing **New** in the **File** menu creates a new project and the dialog **Project Settings** is shown. In an existing project, the dialog is shown by selecting **Project Settings** in the **File** menu.



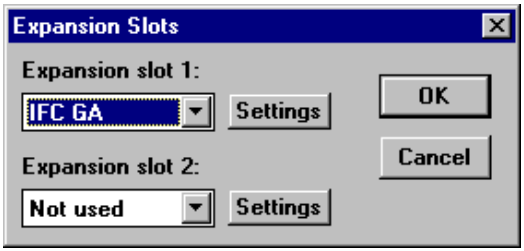
2. Press **Change…** under Controller System to get the choice list of available drivers. Choose Brand name, Protocol and and then press OK. Press OK again to confirm the project settings.



3. Select the slot you define with the jumper J1 on the expansion card and press **Edit...**



4. Select type of expansion card, in this case IFC GA.



6. Then click **OK.**
7. Then click **Exit.**