

# Mitsubishi Electric Programmable Controller Upgrade Tool

## Base Adapter

Model

ERNT-ASQB32N  
ERNT-ASQB33N  
ERNT-ASQB35N  
ERNT-ASQB38N  
ERNT-ASQB52N  
ERNT-ASQB55N  
ERNT-ASQB58N

ERNT-ASQB65N  
ERNT-ASQB68N  
ERNT-ASQB00JN



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## MITSUBISHI ELECTRIC ENGINEERING COMPANY LIMITED

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### SAFETY PRECAUTIONS

(Always read these precautions prior to use.)

Before using this product, please read this manual carefully and pay full attention to safety to ensure that the product is used correctly.

The precautions presented in this manual are concerned with this product only. For Programmable Controller system safety precautions, refer to the following manuals.

- MELSEC-Q series: QCPU User's Manual (SH-080483ENG)
- MELSEC iQ-R series: Safety Guidelines (IB-0800525E)

In this manual, the safety precautions are ranked as "WARNING" and "CAUTION."

**WARNING**

Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.

**CAUTION**

Indicates that incorrect handling may cause hazardous conditions, resulting in medium or minor injury and/or property damage.

Note that failure to observe the CAUTION level instructions may lead to a serious consequence according to the circumstances. Always follow the precautions of both levels because they are important to personal safety.

Please keep this manual in an easy-to-access location for future reference, and be sure to provide the manual to the end user.

### Precautions before using

#### CAUTION

- When making a switch from the MELSEC-AnS Series to the MELSEC-Q Series or MELSEC iQ-R Series, be sure to consult user's manual supplied with individual module under Programmable Controller module to confirm differences in various aspects including performance and function between the two series.

### Installation Precautions

#### WARNING

- Before attempting to install the Unit, make certain that the external power supply, used in the system, is shut off on all three phases. Failure to do so may result in electric shock or damage to the product.

#### CAUTION

- Use the Base adapter in the environmental conditions that are specified in the general specification in the following manuals. If the Products are used in any environment beyond the bounds of the general specification, electric shock, fire, malfunction, or damage to or degradation of the Products will result.
  - MELSEC-Q series: QCPU User's Manual (SH-080483ENG)
  - MELSEC iQ-R series: Safety Guidelines (IB-0800525E)
- Fasten the Base Adapter and Programmable Controller Base Unit (MELSEC-Q Series, MELSEC iQ-R Series) securely with retaining screws, and tighten the screws by applying torque within specified limits. Loose screws can lead to the dropping of the Base Adapter or MELSEC-Q Series or MELSEC iQ-R Series Base Unit, possibly causing breakage thereof. Excessive tightness of the screws can lead to breakage of the screws, Base Adapter or Programmable Controller Base Unit (MELSEC-Q Series, MELSEC iQ-R Series), possibly causing the dropping.

### Startup and Maintenance Precautions

#### WARNING

- Shut off the external power supply for the system in all phases before cleaning or retightening the terminal screws. Failure to do so may result in electric shock. Loose screws can lead to dropping, shorting, and malfunction. Excessive tightness of the screws can lead to breakage of the screws, Base Adapter, or Programmable Controller Base Unit (MELSEC-Q Series, MELSEC iQ-R Series), possibly causing the dropping, shorting, and malfunction thereof.

### Startup and Maintenance Precautions

#### CAUTION

- Do not drop the Base Adapter or do not give a strong impact to it. This will cause damage.

### Disposal Precautions

#### CAUTION

- When disposing of the product, treat it as industrial waste.

## 安全注意事项

(使用前请务必阅读)

使用本产品时, 请仔细阅读本手册, 并充分注意安全, 正确地使用产品。本手册中标注的注意事项仅记载了与本产品相关的内容。关于可编程控制器系统的安全注意事项, 请参照下面的说明手册。

- MELSEC-Q series: QCPU User's Manual (SH-080483ENG)
- MELSEC iQ-R series: Safety Guidelines (IB-0800525E)

在本安全注意事项中, 安全注意事项的等级分为「警告」和「注意」。

**警告**

表示错误操作可能造成危险后果, 引起死亡或重伤事故。

**注意**

表示错误操作可能造成危险后果, 引起中度伤害、轻伤及财产损失。

另外, 根据情况不同, 即使是注意中记载的事项, 也可能引发严重后果。不管哪个记载的都是非常重要的内容, 请务必遵守。请妥善保管本手册, 以便需要时取阅, 并请本手册交给最终用户。

### 使用前的注意事项

#### 注意

- 从MELSEC-AnS系列替换至MELSEC-Q系列或者MELSEC iQ-R系列时, 为确认性能和功能等方面的差异, 请务必参照所使用的可编程控制器模块各模块的手册进行使用。

### 安装注意事项

#### 警告

- 请务必切断系统使用的所有相的外部供给电源后进行安装。如果不切断所有相的电源, 可能会触电或造成产品损坏。

#### 注意

- 应在被要求在下面手册里所记载的中记载的一般规格环境下使用转换适配器。如果在一般规格范围以外的环境中使用基板适配器, 可能导致触电、火灾、误动作、产品损坏或性能劣化。
  - MELSEC-Q series: QCPU User's Manual (SH-080483ENG)
  - MELSEC iQ-R series: Safety Guidelines (IB-0800525E)
- 基板适配器及所使用的可编程控制器模块基板(MELSEC-Q系列, MELSEC iQ-R系列)应通过安装螺钉切实加以固定, 安装螺钉应在规定的扭矩范围内切实地拧紧。如果螺钉拧得过松, 有可能因掉落而导致基板适配器及MELSEC-Q系列或者MELSEC iQ-R系列基板破损。如果螺钉拧得过紧, 有可能造成螺钉、基板适配器及所使用的可编程控制器模块列基板(MELSEC-Q系列, MELSEC iQ-R系列)破损, 从而导致掉落。

### 启动和维护注意事项

#### 警告

- 在清洁模块或重新紧固安装螺钉时, 必须将系统使用的外部供应电源全部断开后再进行操作。如果未全部断开, 有可能导致触电。如果螺钉拧得过松, 有可能导致掉落、短路或误动作。如果螺钉拧得过紧, 有可能造成螺钉、基板适配器和所使用的可编程控制器模块列基本(MELSEC-Q系列, MELSEC iQ-R系列)模块破损, 从而导致掉落、短路或误动作。

#### 注意

- 请勿使基板适配器掉落或受到强烈撞击。否则可能导致破损。

### 废弃注意事项

#### 注意

- 废弃时请将本产品作为工业废弃物处理。

## 1. Overview

This manual describes specifications, handling and other information on the Mitsubishi Electric Programmable Controller Upgrade Tool base adapter (ERNT-ASQB32N, ERNT-ASQB33N, ERNT-ASQB35N, ERNT-ASQB38N, ERNT-ASQB52N, ERNT-ASQB55N, ERNT-ASQB58N, ERNT-ASQB65N, ERNT-ASQB68N, ERNT-ASQB00JN). The Base Adapter is a product that enables MELSEC-Q series (hereinafter called Q series) or MELSEC iQ-R series (hereinafter called iQ-R series) installation using the MELSEC-AnS series (hereinafter called AnS series) installation holes. (Additional screw hole machining not required) Before attempting to make a switch from AnS Series to Q Series or iQ-R series in your installation, consult the user's manual supplied with Programmable Controller module under the latter series to learn about how they differ in various aspects including performance and function.

Once you have opened the packaging, verify that it contains the following products.

Product	Shape	Quantity
Base Adapter		1
Base Adapter installation screws (M5 x 12)		4
Base Unit installation screws (M4 x 10)		4
This manual	—	1

## 2. Product Specifications

Base Adapter Model	Specifications			Weight (g)
	AnS Series Compatible Module Model	Q Series Compatible Module Model	iQ-R Series Compatible Module Model	
ERNT-ASQB32N	A1S32B	Q33B	R33B	445
ERNT-ASQB33N	A1S33B	Q33B	R33B	490
ERNT-ASQB35N	A1S35B	Q35B	R35B	635
ERNT-ASQB38N	A1S38B, A1S38HB(EU)	Q38B	R38B	840
ERNT-ASQB52N	A1S52B	Q52B	No products available	300
ERNT-ASQB55N	A1S55B	Q55B		510
ERNT-ASQB58N	A1S58B	Q68B (*1)	R68B (*1)	720
ERNT-ASQB65N	A1S65B	Q65B	R65B	620
ERNT-ASQB68N	A1S68B	Q68B	R68B	825
ERNT-ASQB00JN	A1SJCPU, A1SJCPU-S3, A1SJHCPU	Q00JCPU, Q00UJCPU, Q35B	R35B	640

\*1: Base unit that requires installation of a power supply module

## 3. Mounting and Installation

### 3.1. Handling Precautions

- (1) Before attempting to install the Unit, make certain that the external power supply, used in the system, is shut off on all three phases. Failure to do so may result in electric shock or damage to the product.
- (2) Fasten the Base Adapter and the Programmable Controller Base Unit (Q series, iQ-R series) securely with retaining screws, and tighten the screws by applying torque within specified limits. Loose screws can lead to the dropping of the Base Adapter or Q Series or iQ-R Series Base Unit, possibly causing breakage thereof. Excessive tightness of the screws can lead to breakage of the screws, Base Adapter or Programmable Controller Base Unit (Q Series, iQ-R Series), possibly causing the dropping.
- (3) Do not drop the Base Adapter or do not give a strong impact to it. This will cause damage.

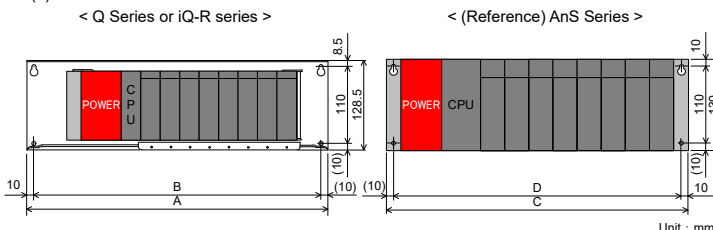
### 3.2. Installation Environment

The installation environment is the same as Q series or iQ-R series to use. Refer to the user's manual of the Q Series CPU Module to be used.

- MELSEC-Q series: QCPU User's Manual (SH-080483ENG)
- MELSEC iQ-R series: Safety Guidelines (IB-0800525E)

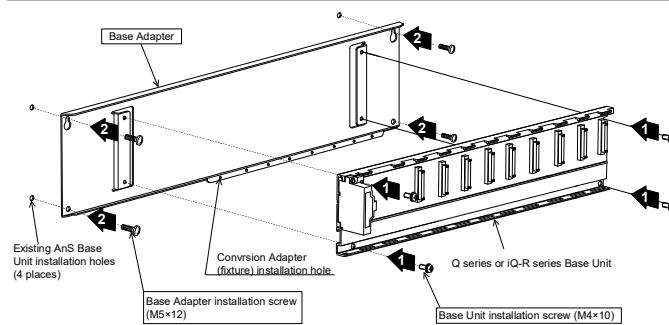
## 4. Installation Dimensions

- (1) The base adapter installation holes (4 locations) have the same installation dimensions as those of the AnS Series Base Unit. There is no need for additional screw hole machining on the control panel.
- (2) The width dimension is 1.5mm smaller than that of the AnS series.



Base Adapter Model	A	B	AnS Series Base Unit Model	C	D
ERNT-ASQB32N	220	200	A1S32B	220	200
ERNT-ASQB33N	255	235	A1S33B	255	235
ERNT-ASQB35N	325	305	A1S35B	325	305
ERNT-ASQB38N	430	410	A1S38B/A1S38HB(EU)	430	410
ERNT-ASQB52N	155	135	A1S52B	155	135
ERNT-ASQB55N	260	240	A1S55B	260	240
ERNT-ASQB58N	365	345	A1S58B	365	345
ERNT-ASQB65N	315	295	A1S65B	315	295
ERNT-ASQB68N	420	400	A1S68B	420	400
ERNT-ASQB00JN	330	310	A1SJCPU, A1SJCPU-S3, A1SJHCPU	330	310

## 5. Part Names and Installation Method



### 5.1. Installation method

- Secure the Q Series or iQ-R Series Base Unit using the Base Unit installation screws (M4×10) included with the Base Adapter. (4 places)
- Secure the Base Adapter to the control panel using the included Base Adapter installation screws (M5×12). (4 places)

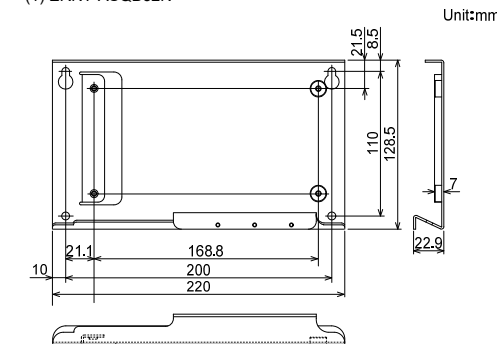
### 5.2. Tightening Torque

Tighten the installation screws to the specified torque below. An inappropriate tightening torque could cause the product to fall or result in a short circuit, product failure or malfunction.

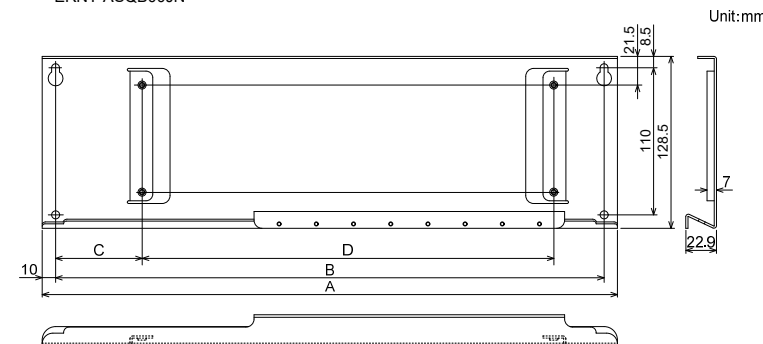
Screw Location	Tightening Torque Range
Base Unit installation screw (M4x10)	1.39 to 1.89 N·m
Base Adapter installation screw (M5x12)	2.75 to 3.63 N·m

## 6. External Dimensions

(1) ERNT-ASQB32N



(2) ERNT-ASQB33N, ERNT-ASQB35N, ERNT-ASQB38N, ERNT-ASQB52N, ERNT-ASQB55N, ERNT-ASQB58N, ERNT-ASQB65N, ERNT-ASQB68N, ERNT-ASQB00JN



Base Adapter model	A	B	C	D
ERNT-ASQB33N	255	235	46.6	168.8
ERNT-ASQB35N	325	305	53.8	224.4
ERNT-ASQB38N	430	410	64.6	307.8
ERNT-ASQB52N	155	135	30.3	83.4
ERNT-ASQB55N	260	240	51.8	166.8
ERNT-ASQB58N	365	345	21.1	305.8
ERNT-ASQB65N	315	295	51.2	222.4
ERNT-ASQB68N	420	400	62	305.8
ERNT-ASQB00JN	330	310	58.8	224.4

### Duplication Prohibited

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## Product Warranty Details

Please confirm the following product warranty details prior to product use.

### Gratis Warranty Terms and Gratis Warranty Range

If any fault or defect (hereinafter referred to as "Failure") attributable to Mitsubishi Electric Engineering Company Limited (hereinafter referred to as "MEE") should occur within the gratis warranty period, MEE shall repair the product free of charge via the distributor from whom you made your purchase.

#### Gratis Warranty Period

The gratis warranty period of this product shall be one (1) year from the date of purchase or delivery to the designated place.

Note that after manufacture and shipment from MEE, the maximum distribution period shall be six (6) months, and the gratis warranty period after manufacturing shall be limited to eighteen (18) months. In addition, the gratis warranty period for repaired products shall not exceed the gratis warranty period established prior to repair.

#### Gratis Warranty Range

The gratis warranty range shall be limited to normal use based on the usage conditions, methods and environment, etc., defined by the terms and precautions, etc., given in the instruction manual, user's manual and caution labels on the product.

### Warranty Period after Discontinuation of Production

- (1) MEE shall offer product repair services (fee applied) for seven (7) years after production of the product has been discontinued. Discontinuation of production shall be reported via distributors.
- (2) Product supply (including spare parts) is not possible after production has been discontinued.

### Exclusion of Opportunity Loss and Secondary Loss from Warranty Liability

Regardless of the gratis warranty period, MEE shall not be liable for compensation for damages arising from causes not attributable to MEE, opportunity losses or lost profits incurred by the user due to Failures of MEE products, damages or secondary damages arising from special circumstances, whether foreseen or unforeseen by MEE, compensation for accidents, compensation for damages to products other than MEE products, or compensation for other work carried out by the user.

### Changes in Product Specifications

The specifications given in the catalogs, manuals and technical documents are subject to change without notice.

This document is a new publication, effective June 2020 Specifications are subject to change without notice.