Mitsubishi Electric Programmable Controller

Renewal Tool

Base Adapter

Model **ERNT-ASLB32 ERNT-ASLB33 ERNT-ASLB35** ERNT-ASLB38 **ERNT-ASLB52 ERNT-ASLB55 ERNT-ASLB58**



User's Manual

MITSUBISHI ELECTRIC ENGINEERING COMPANY LIMITED

HEAD OFFICE:Hulic KUDAN BLDG.1-13-5, KUDANKITA CHIYODA-KU, TOKYO 102-0073, JAPAN NAGOYA ENGINEERING OFFICE 139 SHIMOYASHIKICHO-SHIMOYASHIKI, KASUGAL, AICHI 486-0906, JAPAN

● 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 user's manual of the MELSEC-L series CPU module to

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

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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 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-L Series, be sure to consult user's manual supplied with individual module under the MELSEC-L Series to confirm differences in various aspects including performance and function between the two series.

[Installation Precautions]

MARNING

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 genera • specification. 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
- Fasten the Base Adapter 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-L Series module, possibly causing breakage thereof. Excessive tightness of the screws can lead to breakage of the screws, Base Adapter, possibly causing the dropping.

[Startup and Maintenance Precautions]

MARNING

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, possibly causing the dropping, shorting, and malfunction thereof

[Startup and Maintenance Precautions]

A CAUTION

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

[Disposal Precautions]

A 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,请参阅所使用的MELSEC-L系列CPU模块的用户手册。 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」。

	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<u>人</u>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,并请将本手册交给最终用户。

【使用前的注意事项】



【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 /!\

- 应在一般规格环境下使用基板适配器。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 11.
- 基板适配器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-L系列模块破损。如果螺钉拧得过紧,有可能造成螺钉及基板 话配器破损,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 会造成螺钉及基板适配器破损,从而导致掉落、短路或误动作。

破损

ſ	注 意
L	▶ 请勿使基板适配器掉落或受到强烈撞击。否则可能导致

【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

Make sure to read "Prior Requirements" (50 CM-

D180174) included with the product as well.

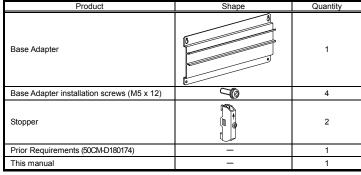
1. Overview

This manual describes specifications, handling and other information on the Mitsubishi Electric Programmable Controller renewal tool base adapter (ERNT-ASLB32, ERNT-ASLB33 ERNT-ASLB35, ERNT-ASLB38, ERNT-ASLB52, ERNT-ASLB55, ERNT-ASLB58, ERNT-ASLB65, ERNT-ASLB68, ERNT-ASLBJ),

The Base Adapter is a product that enables MELSEC-L series installation using the MELSEC-AnS series installation holes. (Additional screw hole machining not required) Before attempting to make a switch from MELSEC-AnS Series to MELSEC-L Series in your

installation, consult the user's manual supplied with individual 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.



2. General Specifications

Item			Specifi	cations		
Operating ambient temperature			0 to	55°C		
Storage ambient temperature	-25 to 75°C 5 to 95%RH, non-condensing					
Operating ambient humidity Storage ambient humidity						
			Frequency	Constant acceleration	Half amplitude	Sweep count
	Compliant with JIS B 3502 and IEC 61131-2	Under intermittent vibration	5 to 8.4Hz	-	3.5mm	10 line of the in
Vibration resistance			8.4 to 150Hz	9.8m/s ²	-	10 times each in X, Y, Z directions
		Under continuous vibration	5 to 8.4Hz	-	1.75mm	
			8.4 to 150Hz	4.9m/s ²	-	
Shock resistance	Compliant with JIS B 3502 and IEC 61131-2 (147 m/s ² , 3 times each in 3 directions X, Y, Z)					
Operating atmosphere	No corrosive gases					
Operating altitude *1	0 to 2000m					
Installation location	Inside a control panel					
Overvoltage category *2	II or less					
Pollution degree *3	2					

*2 : This indicates the section of the power supply to which the equipment is assumed to be connected between the public

Interinduces the exclusion of the exclusion of the machinery within premises. Category II applies to equipment for which electrical power is supplied from fixed facilities. This index indicates the degree to which conductive material is generated in terms of the environment in which the

equipment is used. Pollution level 2 is when only non-conductive pollution occurs. A temporary conductivity caused by condensing must be expected occasionally

3. Product Specifications

Dees Adepter	Specifications			
Base Adapter Model	Before replacement MELSEC-AnS Series Base Unit Model	Weight (g)		
ERNT-ASLB32	A1S32B	265		
ERNT-ASLB33	A1S33B	300		
ERNT-ASLB35	A1S35B	375		
ERNT-ASLB38	A1S38B, A1S38HB	485		
ERNT-ASLB52	A1S52B	200		
ERNT-ASLB55	A1S55B	305		
ERNT-ASLB58	A1S58B	415		
ERNT-ASLB65	A1S65B	365		
ERNT-ASLB68	A1S68B	475		
ERNT-ASLBJ	A1SJCPU,A1SJCPU-S3,A1SJHCPU	380		

4. Mounting and Installation

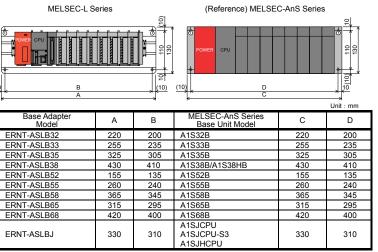
4.1. Handling Precautions

- (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 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-L Series module, possibly causing breakage thereof. Excessive tightness of the screws can lead to breakage of the screws, Base Adapter, possibly causing the dropping.
- (3) Do not drop the Base Adapter or do not give a strong impact to it. This will cause damage
- 4.2. Installation Environment
- The installation environment is the same as MELSEC-L series CPU Module to use. Refer to the user's manual of the MELSEC-L Series CPU Module to be used.



5. Installation Dimensions

(1) The base adapter installation holes (4 locations) have the same installation dimensions as those of the MELSEC-AnS Series Base Unit. There is no need for additional screw hole machining on the control panel.



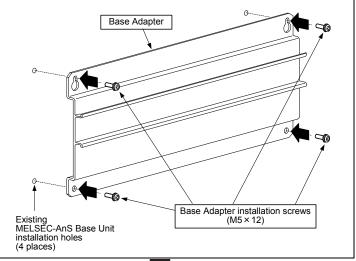
6. Part Names and Installation Method

6.1 Installation method

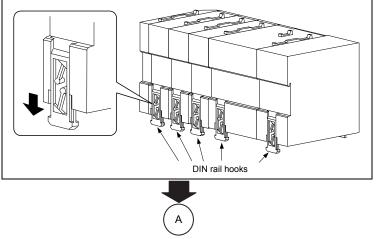
Perform the installation in the following procedure.

You can mount the MELSEC-L Series modules on the Base Adapter and then install the Base Adapter on the control panel as well.

Fasten the Base Adapter on the control panel with the supplied Base Adapter installation screws (M5×12). (4 places)



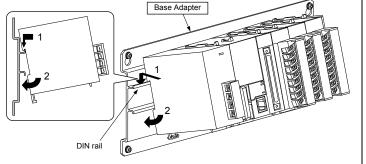
Pull down all the DIN rail hooks at the back of the MELSEC-L Series modules. (Pull down each hook until you hear it click.)



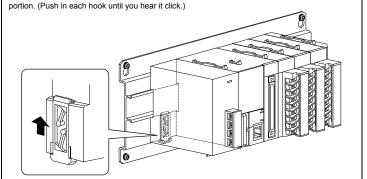
(to the rear side)



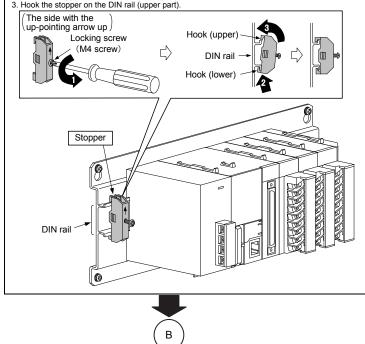
Hook the upper tabs of the MELSEC-L Series modules to the upper rail of the DIN rail portion, and then push the modules toward the DIN rail portion.

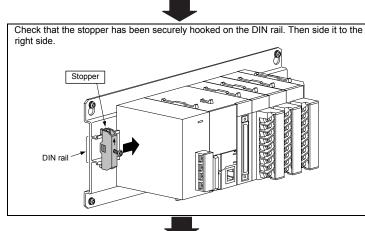


Lock all the DIN rail hooks of the MELSEC-L Series modules to fit the modules to the DIN rail



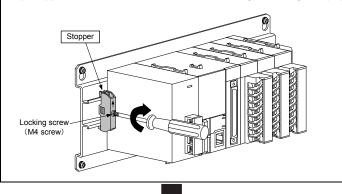
Install the stopper to the DIN rail of Base adapted 1. Loosen the locking screw(M4 screw) of the stopper. (Make sure that the screw will not drop off.) 2. Hook the stopper on the DIN rail (lower part).



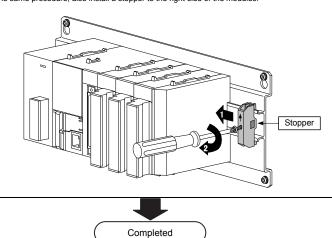


В

Keep a stopper in contact with the MELSEC-L Series module, and tighten a locking screw (M4).

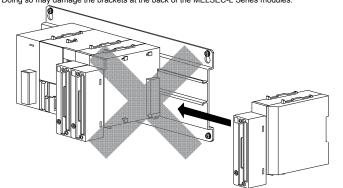


In the same procedure, also install a stopper to the right side of the modules.



Point

To install the MELSEC-L Series modules to the DIN rail portion of the Base Adapter, do not slide the modules from the edge of the DIN rail portion. Doing so may damage the brackets at the back of the MELSEC-L Series modules.

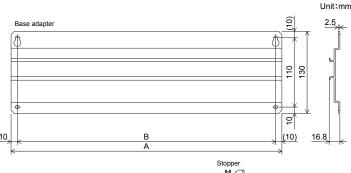


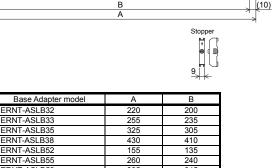
6.2. Tightening Torque

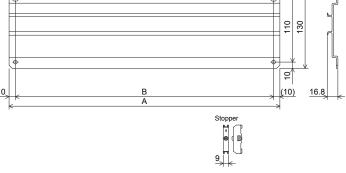
Tighten the installation screws to the specified torque below. An inappropriate tightening torque could cause the product to fall or result in a short circuit, product failure or malfunction

Screw Location	Lightening Torque Range
Locking screw (M4)	1.39 to 1.89 N ⋅ m
Base Adapter installation screw (M5×12)	2.75 to 3.63 N ⋅ m

7. External Dimensions







Base Adapter model	A	В
ERNT-ASLB32	220	200
ERNT-ASLB33	255	235
ERNT-ASLB35	325	305
ERNT-ASLB38	430	410
ERNT-ASLB52	155	135
ERNT-ASLB55	260	240
ERNT-ASLB58	365	345
ERNT-ASLB65	315	295
ERNT-ASLB68	420	400
ERNT-ASLBJ	330	310

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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 December 2016 Specifications are subject to change without notice.