

MITSUBISHI

Q Series Large Type Base Unit/Blank Cover (AnS Series Size)

User's Manual

| | | |
|---------------|-----------------|---------------|
| Q35BLS | Q35BLS-D | QG69LS |
| Q38BLS | Q38BLS-D | |
| Q65BLS | Q65BLS-D | |
| Q68BLS | Q68BLS-D | |
| Q55BLS | Q55BLS-D | |

Thank you for purchasing the Mitsubishi programmable controller MELSEC-Q series.

Prior to use, please read this and relevant manuals thoroughly to fully understand the product.

MELSEC-Q

Mitsubishi Programmable
Controller

| | |
|---------------------------|---------------|
| MODEL | ANS-Q-LARGE-U |
| MODEL CODE | 13J290 |
| IB(NA)-0800495-B(1302)MEE | |

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REVISIONS

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TERMS

Unless otherwise specified, this manual uses the following generic terms and abbreviations to explain the Q series large type base units (AnS series size) and Q series large type blank cover (AnS series size).

| Term | Description |
|---|---|
| Q series large type base unit (AnS series size) | A generic term for the Q series large type main base unit (AnS series size) and Q series large type extension base units (AnS series size) |
| Q series large type main base unit (AnS series size) | A generic term for the Q35BLS, Q38BLS, Q35BLS-D, and Q38BLS-D MELSEC-Q series main base units |
| Q series large type extension base unit (AnS series size) | A generic term for the Q65BLS, Q68BLS, Q55BLS, Q65BLS-D, Q68BLS-D, and Q55BLS-D MELSEC-Q series extension base units |
| Q series large type blank cover (AnS series size) | The abbreviation for the QG69LS MELSEC-Q series blank cover |
| Q series | The abbreviation for Mitsubishi MELSEC-Q series programmable controller |
| AnS series | The abbreviation for compact types of Mitsubishi MELSEC-A series programmable controller |
| High Performance model QCPU | A generic term for the Q02CPU, Q02HCPU, Q06HCPU, Q12HCPU, and Q25HCPU |
| Universal model QCPU | A generic term for the Q00UJCPU, Q00UCPU, Q01UCPU, Q02UCPU, Q03UDCPU, Q03UDVCPU, Q03UDECPU, Q04UDHCPU, Q04UDVCPU, Q04UDEHCPU, Q06UDHCPU, Q06UDVCPU, Q06UDEHCPU, Q10UDHCPU, Q10UDEHCPU, Q13UDHCPU, Q13UDVCPU, Q13UDEHCPU, Q20UDHCPU, Q20UDEHCPU, Q26UDHCPU, Q26UDVCPU, Q26UDEHCPU, Q50UDEHCPU, and Q100UDEHCPU |
| MELSECNET/H remote I/O module | A general term for the QJ72LP25-25, QJ72LP25G, and QJ72BR15 |
| Q3□B | A generic term for the Q33B, Q35B, Q38B, and Q312B main base units |
| Q3□DB | A generic term for the Q35DB, Q38DB, and Q312DB multiple CPU high speed main base units |
| Q5□B | A generic term for the Q52B and Q55B extension base units |
| Q6□B | A generic term for the Q63B, Q65B, Q68B, and Q612B extension base units |
| QA1S5□B | Another term for the QA1S51B extension base unit |
| QA1S6□B | A generic term for the QA1S65B and QA1S68B extension base units |
| QA6□B | A generic term for the QA65B and QA68B extension base units |

| Term | Description |
|------------------|--|
| A5□B | A generic term for the A52B, A55B, and A58B extension base units |
| A6□B | A generic term for the A62B, A65B, and A68B extension base units |
| QA6ADP | The abbreviation for the QA6ADP QA conversion adapter module |
| QA6ADP+A5□B/A6□B | The abbreviation for the A large type extension base unit on which QA6ADP is mounted |

1. OVERVIEW

1.1 Overview

The products are used to replace the AnS series with the Q series when the existing installation site and cables are utilized.

This manual explains specifications, component devices, part names, settings, mounting, and installation of the Q series large type base unit (AnS series size) and Q series large type blank cover (AnS series size). For contents not explained in this manual such as SAFETY PRECAUTIONS, EMC and Low Voltage Directives, and general specifications, refer to the following manual:



QCPU User's Manual (Hardware Design, Maintenance and Inspection)

1.2 Features

This section explains features of the Q series large type base unit (AnS series size) and Q series large type blank cover (AnS series size).

- (1) The Q series large type base unit (AnS series size) is available in two types; DIN rail mounting type and panel mounting type. Select the suitable type of a base unit for the operating environment.

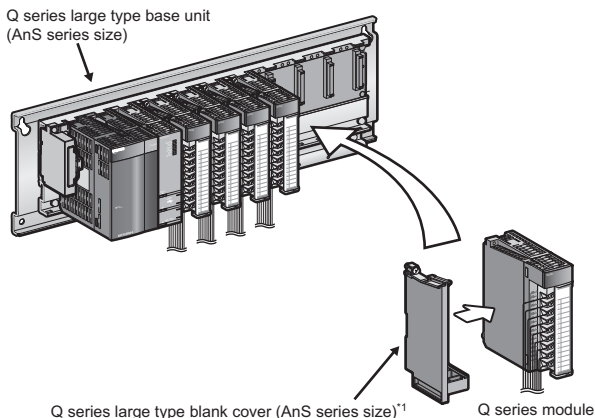
| Mounting type | Main base unit | Extension base unit |
|------------------------|----------------------|----------------------------------|
| Panel mounting type | Q35BLS Q38BLS | Q65BLS Q68BLS Q55BLS |
| DIN rail mounting type | Q35BLS-D Q38BLS-D | Q65BLS-D Q68BLS-D Q55BLS-D |

- (2) Since the Q series large type base unit (AnS series size) has the same mounting dimensions with the AnS series base unit, the same mounting holes can be utilized.

The following table shows the corresponding models for replacement.

| AnS series base unit | Q series large type base unit (AnS series size) |
|----------------------|--|
| A1S35B | Q35BLS |
| A1S38B | Q38BLS |
| A1S65B | Q65BLS |
| A1S68B | Q68BLS |
| A1S55B | Q55BLS |

- (3) Mount the Q series module on the Q series large type base unit (AnS series size).



The renewal tool manufactured by MITSUBISHI ELECTRIC ENGINEERING COMPANY LIMITED (hereafter, abbreviated as renewal tool) can be mounted on the module, and a connector and terminal block used with the AnS series can be used without wiring change.

*1 To mount the Q series module on the I/O slot of the Q series large type base unit (AnS series size), always attach the Q series large type blank cover (AnS series size).

1.3 Supplied Parts

- (1) Q series large type main base unit (AnS series size)
(panel mounting type)

| Product | Model | Quantity | Remarks |
|--|------------|----------|---------------|
| Q series large type main base unit (AnS series size) | Q35BLS | 1 | - |
| | Q38BLS | | |
| | Q65BLS | | |
| | Q68BLS | | |
| | Q55BLS | | |
| Base unit mounting screw | - | 4 | M5 × 25 screw |
| This manual | IB-0800495 | 1 | - |
| Safety Guidelines ^{*1} | IB-0800423 | 1 | - |

^{*1} The Q series large type extension base unit (AnS series size) does not include with the guidelines.

- (2) Q series large type main base unit (AnS series size)
(DIN rail mounting type)

| Product | Model | Quantity | Remarks |
|--|------------------|----------|---|
| Q series large type main base unit (AnS series size) | Q35BLS-D | 1 | - |
| | Q38BLS-D | | |
| | Q65BLS-D | | |
| | Q68BLS-D | | |
| | Q55BLS-D | | |
| DIN rail mounting adapter ^{*1*2} | Q6DIN1 or Q6DIN2 | 1 | Q6DIN1 (Includes 2 adapters (large), 4 adapters (small), 3 square washers, and 3 mounting screws (M5×10)) |
| | | | Q6DIN2 (Includes 2 adapters (large), 3 adapters (small), 2 square washers, and 2 mounting screws (M5×10)) |
| End fitting L | - | 1 | - |
| End fitting R | - | 1 | - |
| Fixing bracket for terminal block conversion adapter | - | 1 | - |
| Bracket fixing screw | - | 6 | M4×8 screw |

| Product | Model | Quantity | Remarks |
|---------------------------------|------------|----------|---------|
| This manual | IB-0800495 | 1 | - |
| Safety Guidelines ^{*3} | IB-0800423 | 1 | - |

*1 For a combination of the DIN rail mounting adapter, refer to the following:

Q6DIN1: Q38BLS-D and Q68BLS-D

Q6DIN2: Q35BLS-D, Q65BLS-D, and Q55BLS-D

*2 The stopper for DIN rail mounting adapter is not included with this base unit since the end fitting is substitutable.

*3 The Q series large type extension base unit (AnS series size) does not include with the guidelines.

(3) Q series large type blank cover (AnS series size)

| Product | Model | Quantity | Remarks |
|--|--------|----------|---------|
| Q series large type blank cover (AnS series size) | QG69LS | 1 | - |

2. SYSTEM CONFIGURATION

2.1 System Configuration

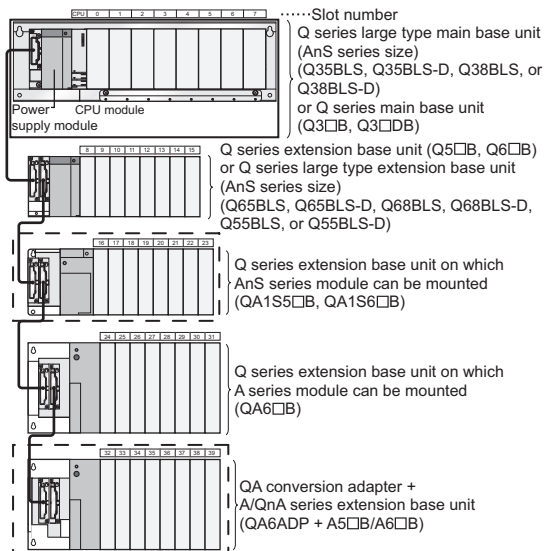
This section explains system configuration when using the Q series large type base unit (AnS series size). The following modules can be mounted on the CPU slot of the Q series large type base unit (AnS series size).

- High Performance model QCPU
- Universal model QCPU (except Q00UJCPU)
- MELSECNET/H remote I/O module

- (1) System configuration using the High Performance model QCPU and Universal model QCPU

■ Main base unit

■ Extension base unit



For a combination of the CPU modules and base units, refer to the "Precautions" section.

The following table shows restrictions on system configuration.

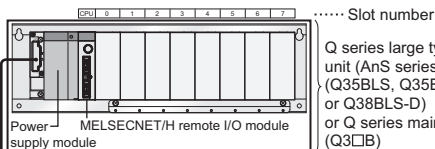
| | | |
|--|---|---|
| Maximum number of extension stages of extension base units | Q00UCPU, Q01UCPU, and Q02UCPU: 4 extension stages Modules other than the above: 7 extension stages | |
| Maximum number of mountable I/O modules | Q00UCPU and Q01UCPU: 24 modules Q02UCPU: 36 modules Modules other than the above: 64 modules | |
| Applicable main base unit model | Q33B, Q35B, Q38B, Q312B, Q35DB, Q38DB, Q312DB, Q35BLS, Q38BLS, Q35BLS-D, and Q38BLS-D | |
| Applicable extension base unit model | Model requiring no power supply module | Q52B, Q55B, QA6ADP+A5□B, Q55BLS, and Q55BLS-D |
| | Model requiring Q series power supply module | Q63B, Q65B, Q68B, Q612B, Q65BLS, Q68BLS, Q65BLS-D, and Q68BLS-D |
| | Model requiring no AnS series power supply module | QA1S51B |
| | Model requiring AnS series power supply module | QA1S65B and QA1S68B |
| | Model requiring A series power supply module | QA65B, QA68B, and QA6ADP+A6□B |
| Extension cable model | QC05B, QC06B, QC12B, QC30B, QC50B, and QC100B | |
| Q series power supply module model | Q61P-A1, Q61P-A2, Q61P, Q61P-D, Q62P, Q63P, Q64P, and Q64PN | |
| AnS series power supply module model | A1S61PN, A1S62PN, and A1S63P | |
| A series power supply module model | A61P, A61PN, A62P, A63P, A61PEU, and A62PEU | |

Precautions

- Use extension cable so that the overall extension length can be within 13.2m.
- Do not install the extension cable together with the main circuit (high voltage and high current) line or bring them close to each other.
Keep a distance of 100mm or more between them.
- Set the number of extension stages so that the number is not duplicated with another.
- When using extension base units on which AnS/A series modules can be mounted together with the other units, follow the instructions described below.
 - Connect the units in order of Q5□B/Q6□B→QA1S5□B/QA1S6□B→QA6□B→QA6ADP+A5□B/A6□B from the nearest position of the main base unit.
 - The QA1S6□B and QA6ADP+A5□B/A6□B cannot be used together.
 - Since the QA1S51B does not have an extension cable connector (OUT), it cannot be used with the QA6□B and QA6ADP+A5□B/A6□B.
- Assign module I/O number with putting each series in block so that the order can be "from Q series to A series" or "from A series to Q series". Failure to do so causes an error "SP.UNIT LAY ERR." (error code: 2120). In addition, do not duplicate the I/O number.
- Connect the extension cable from OUT of the extension cable connector on the base unit to IN of the extension base unit on the next stage.
- If the number of mounted modules exceeds the maximum number of mountable I/O modules, an error "SP.UNIT LAY ERR." (error code: 2124) occurs.
- To construct a multiple CPU system, use a main base unit, Q3□B or Q3□DB.
- To use the Universal model QCPU with the extension base units QA1S5□B, QA1S6□B, QA6□B, and QA6ADP+A5□B/A6□B, use the Universal model QCPU whose serial number (first five digits) is "13102" or later.

(2) System configuration using the MELSECNET/H remote I/O module

■ Main base unit

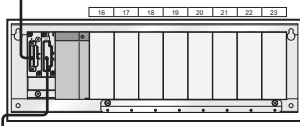


Q series large type main base unit (AnS series size)
(Q35BLS, Q35BLS-D, Q38BLS, or Q38BLS-D)
or Q series main base unit (Q3□B)

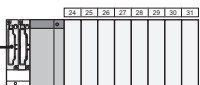
■ Extension base unit



Q series extension base unit (Q5□B, Q6□B)
or Q series large type extension base unit (AnS series size)
(Q65BLS, Q65BLS-D, Q68BLS, Q68BLS-D, Q55BLS, or Q55BLS-D)



Q series large type extension base unit (AnS series size)
(Q65BLS, Q65BLS-D, Q68BLS, Q68BLS-D, Q55BLS, or Q55BLS-D)
or Q series extension base unit (Q5□B, Q6□B)



Q series extension base unit (Q5□B, Q6□B)
or Q series large type extension base unit (AnS series size)
(Q65BLS, Q65BLS-D, Q68BLS, Q68BLS-D, Q55BLS, or Q55BLS-D)

The following table shows restrictions on system configuration.

| | | |
|--|---|---|
| Maximum number of extension stages of extension base units | 7 extension stages | |
| Maximum number of mountable I/O modules | 64 modules | |
| Applicable main base unit model | Q33B, Q35B, Q38B, Q35BLS, Q38BLS, Q35BLS-D, and Q38BLS-D | |
| Applicable extension base unit model | Model requiring no power supply module | Q52B, Q55B, Q55BLS, and Q55BLS-D |
| | Model requiring Q series power supply module | Q63B, Q65B, Q68B, Q612B, Q65BLS, Q68BLS, Q65BLS-D, and Q68BLS-D |
| Extension cable model | QC05B, QC06B, QC12B, QC30B, QC50B, and QC100B | |
| Q series power supply module model | Q61P-A1, Q61P-A2, Q61P, Q61P-D, Q62P, Q63P, Q64P, and Q64PN | |

Precautions

- Use extension cable so that the overall extension length can be within 13.2m.
- Do not install the extension cable together with the main circuit (high voltage and high current) line or bring them close to each other.
- Keep a distance of 100mm or more between them.
- Set the number of extension stages so that the number is not duplicated with another.
- Connect the extension cable from OUT of the extension cable connector on the base unit to IN of the extension base unit on the next stage.
- If the number of mounted modules exceeds the maximum number of mountable I/O modules, an error "SP.UNIT LAY ERR." (error code: 2124) occurs.

2.2 Precautions for System Configuration

This section explains precautions for using the products.

- (1) A multiple CPU system cannot be constructed using the Q series large type main base unit (AnS series size).
- (2) To construct a multiple CPU system with the Q series large type extension base unit (AnS series size), use a main base unit, Q3□B or Q3□DB.



QCPU User's Manual (Multiple CPU System)

When read the manual, regard the descriptions for the Q5□B/Q6□B as the Q series large type extension base unit (AnS series size) because the handling of the Q series large type extension base unit (AnS series size) is the same as that of the Q5□B/Q6□B.

- (3) To mount the Q series module on Q series large type base unit (AnS series size), always attach the Q series large type blank cover (AnS series size).
(The cover is not necessary for a module mounted on CPU slot and power supply.)
- (4) In Q series large type (AnS series size), the extension cable connector is not on the right side of the base unit. When the extension cable is used, make sure the cable lengths and the way to connect the cable.

2.3 Modules That Cannot be Mounted on the Q Series Large Type Base Unit (AnS Series Size)

This section explains modules that cannot be mounted on the Q series large type base unit (AnS series size).

(1) Two-slot module

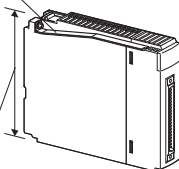
Ex. Q64TCRTBW, Q64TCRTBWN, Q64TCTTBW,
Q64TCTTBWN, QD70D4, QD70D8, QJ71LP21S-25, and
QJ71GP21S-SX

(2) Module on which the Q series large type blank cover (AnS series size) cannot be attached

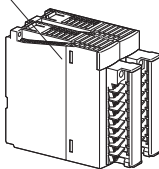
- Module whose height exceeds 98mm
- Module with a bracket on its top
- Module having a projection (such as a connector) on its bottom
- Module on which the Q7BAT-SET has been mounted

Ex. Q66AD-DG, Q66DA-G, Q68AD-G, Q68RD3-G, Q68TD-G-H02,
Q64AD2DA, QD75M1, QD75MH1, QD75M2, QD75MH2, QD75M4,
QD75MH4, and the QJ71WS96 on which the Q7BAT-SET has been
mounted

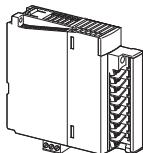
A module with a bracket cannot be mounted.



A two-slot module cannot be mounted.



A module with the height exceeding 98mm cannot be mounted.



A module having a projection (such as a connector)
on its bottom cannot be mounted.

3. SPECIFICATIONS

3.1 Specifications of the Q Series Large Type Base Unit (AnS Series Size)

The following tables show performance specifications of the Q series large type base unit (AnS series size).

(1) Q series large type main base unit (AnS series size)

| Item | Model | | | |
|------------------------------------|------------------------|--------|-----------------|-------------|
| | Q35BLS | Q38BLS | Q35BLS-D | Q38BLS-D |
| Number of mountable I/O modules | 5 | 8 | 5 | 8 |
| Extendability | Extendable | | | |
| Applicable module | Q series module | | | |
| 5 VDC internal current consumption | 0.11A | 0.12A | 0.11A | 0.12A |
| Size of mounting hole | φ6 hole (for M5 screw) | | - | |
| External dimensions | H | 130mm | | 118mm |
| | W | 325mm | 430mm | 311mm 416mm |
| | D | 53mm | | 48.5mm |
| Weight | 0.82kg | 1.32kg | 0.59kg | 0.72kg |
| Accessory | Section 1.3 (1) | | Section 1.3 (2) | |
| DIN rail installation | Not installable | | Installable | |

(2) Q series large type extension base unit (AnS series size)

| Item | Model | | | |
|------------------------------------|------------------------|--------|-----------------|-------------|
| | Q65BLS | Q68BLS | Q65BLS-D | Q68BLS-D |
| Number of mountable I/O modules | 5 | 8 | 5 | 8 |
| Extendability | Extendable | | | |
| Applicable module | Q series module | | | |
| 5 VDC internal current consumption | 0.11A | 0.12A | 0.11A | 0.12A |
| Size of mounting hole | φ6 hole (for M5 screw) | | - | |
| External dimensions | H | 130mm | | 118mm |
| | W | 315mm | 420mm | 304mm 409mm |
| | D | 53mm | | 48.5mm |
| Weight | 0.98kg | 1.32kg | 0.57kg | 0.74kg |
| Accessory | Section 1.3 (1) | | Section 1.3 (2) | |
| DIN rail installation | Not installable | | Installable | |

(3) Q series large type extension base unit (Ans series size)
(without power supply)

| Item | Model | |
|------------------------------------|------------------------|-----------------|
| | Q55BLS | Q55BLS-D |
| Number of mountable I/O modules | 5 | |
| Extendability | Extendable | |
| Applicable module | Q series module | |
| 5 VDC internal current consumption | 0.1A | |
| Size of mounting hole | φ6 hole (for M5 screw) | - |
| External dimensions | H | 130mm 118mm |
| | W | 260mm 248mm |
| | D | 53mm 48.5mm |
| Weight | 0.82kg | 0.51kg |
| Accessory | Section 1.3 (1) | Section 1.3 (2) |
| DIN rail installation | Not installable | Installable |

3.2 Specifications of the Q Series Large Type Blank Cover (AnS Series Size)

The following tables show performance specifications of the Q series large type blank cover (AnS series size).

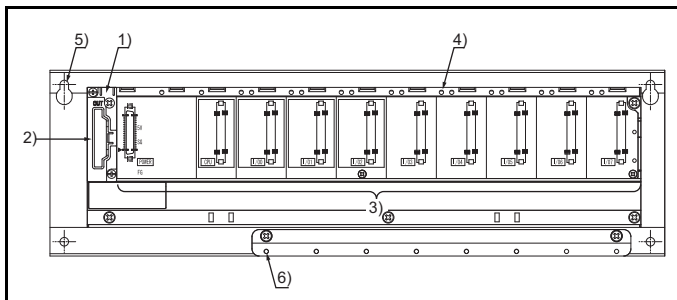
| Item | | Model |
|---------------------|---|--------|
| | | QG69LS |
| External dimensions | H | 108mm |
| | W | 34.5mm |
| | D | 54mm |
| Weight | | 0.03kg |

4. PARTS NAMES

4.1 Parts Names

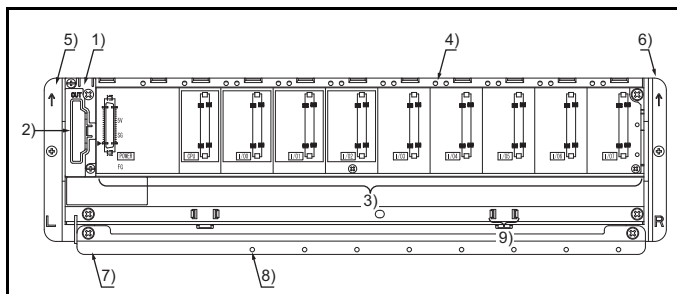
This section explains the part names of the Q series large type base unit (AnS series size) and Q series large type blank cover (AnS series size).

- (1) Q series large type base unit (AnS series size)
(panel mounting type)



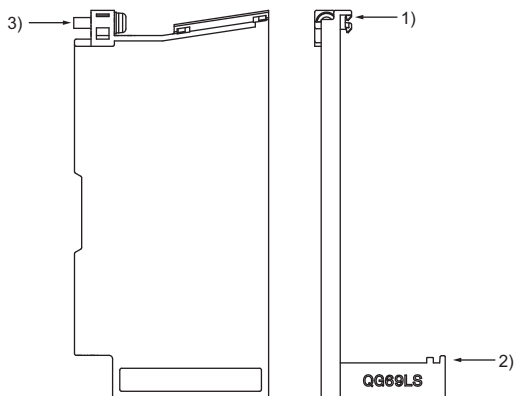
| No. | Name | Description |
|-----|---|--|
| 1) | Extension cable connector | Connector for connecting an extension cable (for signal communications with the extension base unit) |
| 2) | Base cover | Protective cover of extension cable connector |
| 3) | Module connector | Connector for mounting power supply module, CPU module, Q series large type I/O module, and MELSEC-Q series module |
| 4) | Module fixing screw hole | Screw hole for fixing a module to the base unit (screw size: M3×12) |
| 5) | Base mounting hole | Hole for installing the base unit on a panel such as control panel (for M5 screw) |
| 6) | Terminal block conversion adapter fixing hole | Screw hole for fixing a terminal block conversion adapter (screw size: M3×8) |

(2) Q series large type base unit (AnS series size)
(DIN rail mounting type)



| No. | Name | Description |
|-----|--|---|
| 1) | Extension cable | Connector for connecting an extension cable (for signal communications with the extension base unit) |
| 2) | Base cover | Protective cover of extension cable connector |
| 3) | Module connector | Connector for mounting power supply module, CPU module, Q series large type I/O module, and MELSEC-Q series module |
| 4) | Module fixing screw hole | Screw hole for fixing a module to the base unit (screw size: M3×12) |
| 5) | End fitting L | End stop bracket for fixing a module to the base unit. End fitting L is engraved with "L" and end fitting R is engraved with "R". |
| 6) | End fitting R | |
| 7) | Fixing bracket for terminal block conversion adapter | Bracket for fixing a terminal block conversion adapter |
| 8) | Terminal block conversion adapter fixing hole | Screw hole for fixing a terminal block conversion adapter (screw size: M3×8) |
| 9) | DIN rail adapter installation hole | Hole for installing a DIN rail adapter |

(3) Part names of the Q series large type blank cover (AnS series size)



| No. | Name | Description |
|-----|---------------------|---|
| 1) | Top fixing hook | Hook for fixing the Q series large type blank cover (AnS series size) to the Q series module top |
| 2) | Bottom fixing hook | Hook for fixing the Q series large type blank cover (AnS series size) to the Q series module bottom |
| 3) | Module fixing screw | Screw for fixing a module to the Q series large type base unit (AnS series size). (screw size: M3×12) |

5. MOUNTING AND INSTALLATION

5.1 Handling Precautions

This section explains handling precautions for the Q series large type base unit (AnS series size) and Q series large type blank cover (AnS series size).

- (1) Do not disassemble the Q series large type base unit (AnS series size) since it is precision apparatus.
- (2) Always mount the power supply module on the Q series large type extension base unit (AnS series size) excluding the Q55BLS and Q55BLS-D.

When the load of a module used is light, the module may operate without power supply module; however, the operation cannot be guaranteed because of its instability.

- (3) Tighten the module fixing screws and other screws within the following range.

| Location of screw | Tightening torque range |
|---|-------------------------|
| Module fixing screw (M3×12 screws) | 0.36 to 0.48N•m |
| Base cover fixing screw | 0.36 to 0.48N•m |
| Bracket fixing screw (M4×8 screws) | 1.00 to 1.35N•m |
| End fitting stopper screw (M4×8 screws) | 1.00 to 1.35N•m |

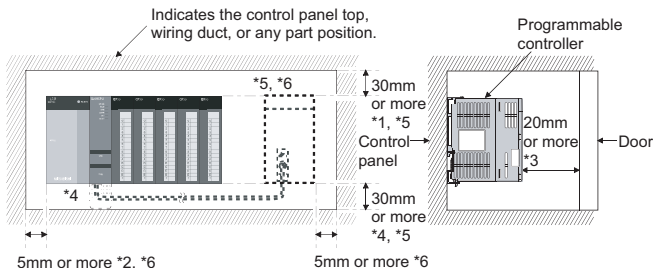
- (4) Do not install the extension cable together with the main circuit (high voltage and high current) line or bring them close to each other.

Keep a distance of 100mm or more between them.

5.2 Precautions for Installing the Q Series Large Type Base Unit (AnS Series Size)

(1) Module installation position

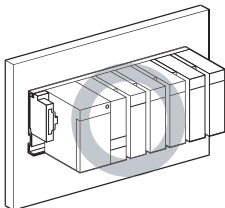
Provide the following distances between the top and bottom of the module and other structure or components to ensure ventilation for heat dissipation and to change the module easily.



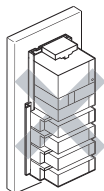
- *1 30mm or more is required when wiring duct is 50mm or less in height. Otherwise, at least 40mm is required.
- *2 20mm or more is required when the extension cable is connected without removing adjacent modules.
- *3 80mm or more is required when the connector type is used. For Q8BAT, 80mm or more is required when the connection cable for Q8BAT is used.
- *4 For Q7BAT, 45mm or more is required.
- *5 For Q8BAT, 30mm or more is required from both top and bottom sides of the module.
- *6 For Q8BAT, 5mm or more is required from both left and right sides of the module.

(2) Module installation direction

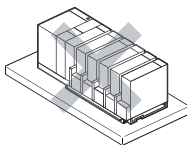
- (a) Install the programmable controller in the direction shown below to ensure ventilation for heat dissipation.



(b) Do not install it in the directions shown below.

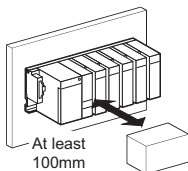


Vertical mounting



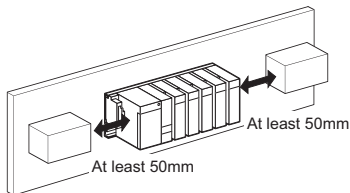
Horizontal installation

- (3) Install the base unit on a flat surface.
When the base unit is installed on an uneven surface, the printed-circuit board may be strained, resulting in a malfunction.
- (4) Do not install the programmable controller together with a vibration source such as a large electromagnetic contactor or non-fuse breaker. Install the programmable controller to the separate panel or isolate it as far as possible.
- (5) Provide the following distances between the programmable controller and devices (contactor and relay) to avoid the influence of radiated noise or heat.
- Device installed in front of the programmable controller: 100mm or more
 - Device installed on either side of the programmable controller: 50mm or more



At least
100mm

Contactor, relay, etc.



At least 50mm

At least 50mm

5.3 Mounting and Installation of the Q Series Large Type Base Unit (AnS Series Size)

The following explains how to mount or install the Q series large type base unit (AnS series size).

(1) Installing a base unit on a panel

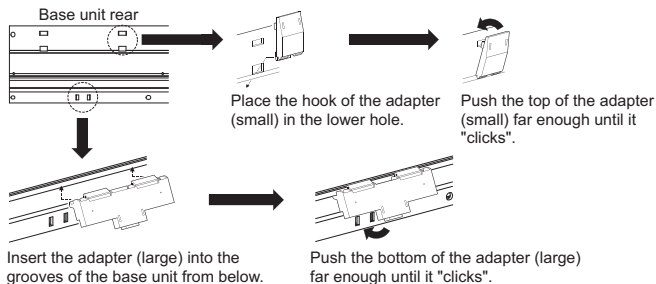
To install a base unit on a panel such as a control panel, tighten the base unit mounting screws.

(2) Mounting a base unit on a DIN rail

The following shows a procedure to mount the base unit on a DIN rail.

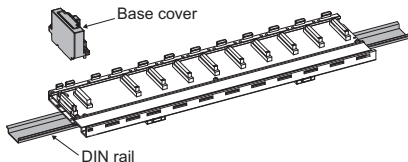
(a) Installing DIN rail mounting adapter

The following figures show how to install the DIN rail mounting adapters on the base unit rear.



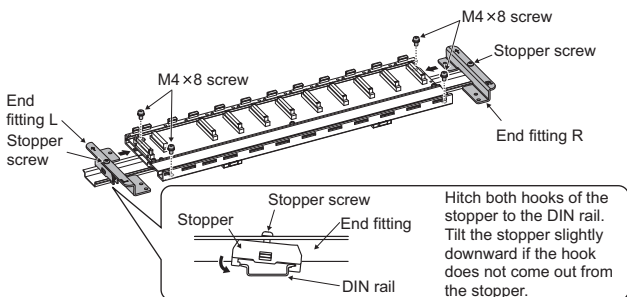
(b) Mounting on a DIN rail

Remove the base cover and mount the base unit on a DIN rail. Put the base cover on after the completion of the next step, (c). When extension bases are used, determine the number of extension stages in this step.



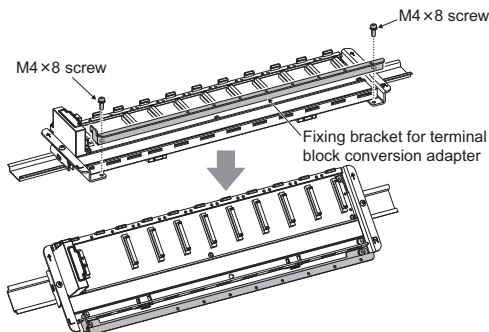
(c) Attaching the end fitting

Attach the end fitting L and R on the both ends of a DIN rail. Slide them to the position of the end fitting mounting holes on the base unit. Loosen the stopper screws and hitch the hooks of the stopper to the DIN rail. Tighten the bracket fixing screws on each corner to firmly lock the end fitting in place.



(d) Fixing bracket for terminal block conversion adapter installation

Hook the fixing bracket for terminal block conversion adapter to the bottom side of a DIN rail. Place the bracket to the mounting hole for the end fitting L and R, then tighten the bracket fixing screws on each side to fix the bracket.

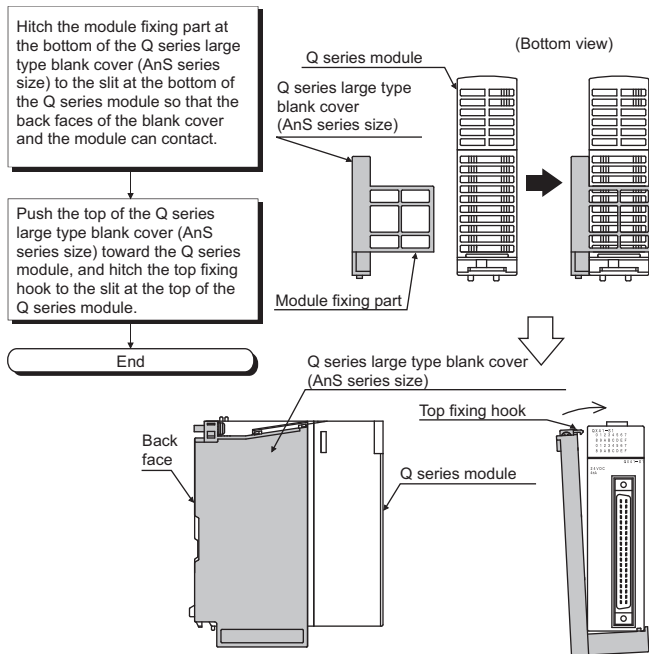


5.4 Mounting/Removing the Q Series Module

The following shows procedures for mounting the Q series module on the Q series large type base unit (AnS series size).


(1) Attaching the Q series large type blank cover

The following shows a procedure for attaching the Q series large type blank cover (AnS series size) to the Q series module.



Point

When mounting the Q series module with Q series large type blank cover (AnS series size) on the Q series large type base unit (AnS series size), always tighten the module fixing screws of the Q series large type blank cover (AnS series size).

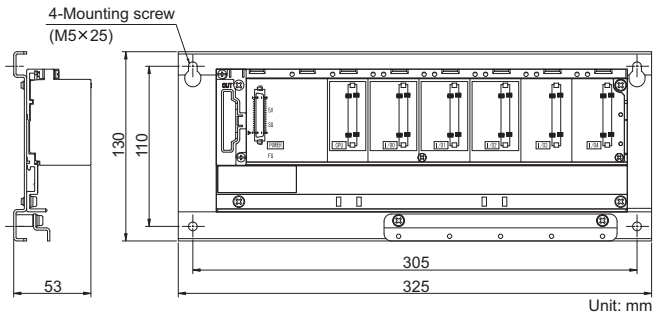
- (2) Removing the Q series large type blank cover (AnS series size)
To remove the Q series large type blank cover (AnS series size) from the Q series module, remove the bottom fixing hook first.
- (3) Mounting to/removal from the Q series large type base unit
For procedures of mounting/removing the Q series module on/from the Q series large type base unit, refer to the following manual.
-  QCPU User's Manual (Hardware Design, Maintenance and Inspection)

6. EXTERNAL DIMENSIONS

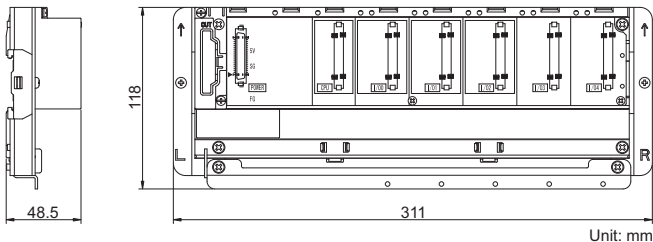
The following shows external dimensions diagrams of the Q series large type base unit (AnS series size) and Q series large type blank cover (AnS series size).

6.1 Q Series Large Type Base Unit (AnS Series Size)

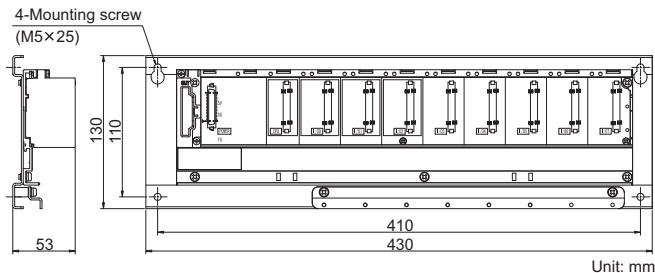
(1) Q35BLS



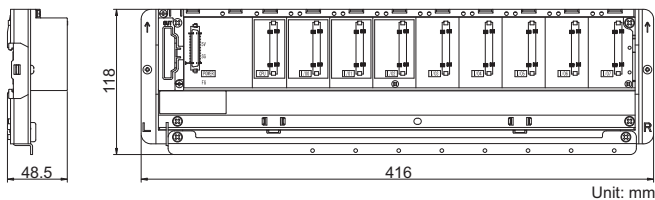
(2) Q35BLS-D



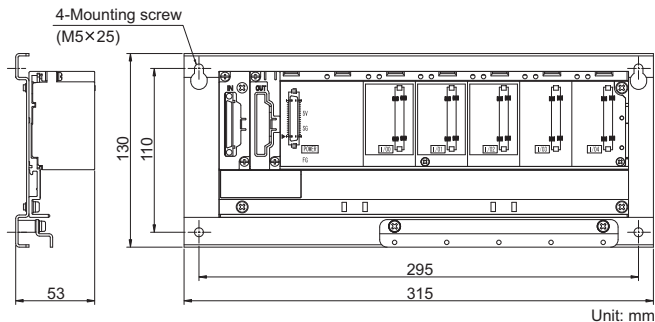
(3) Q38BLS



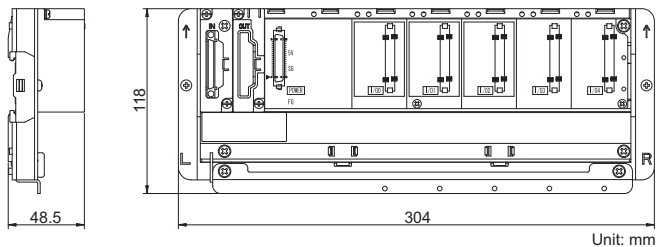
(4) Q38BLS-D



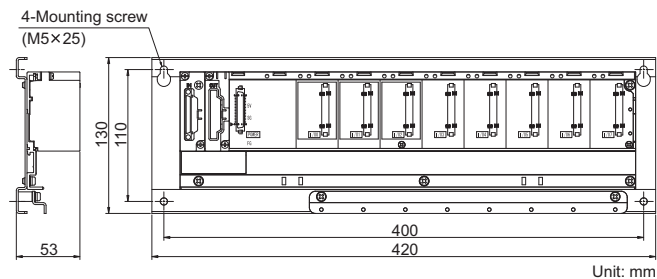
(5) Q65BLS



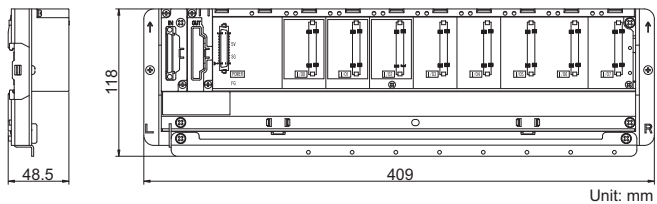
(6) Q65BLS-D



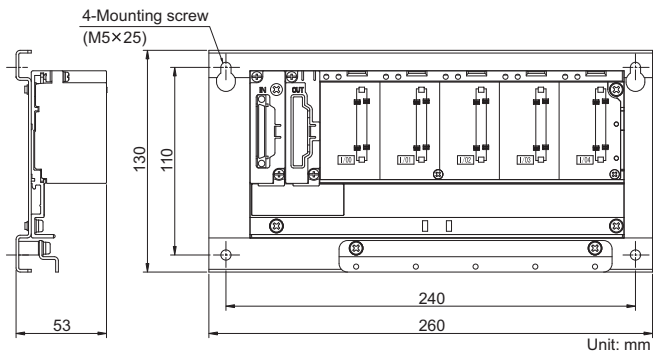
(7) Q68BLS



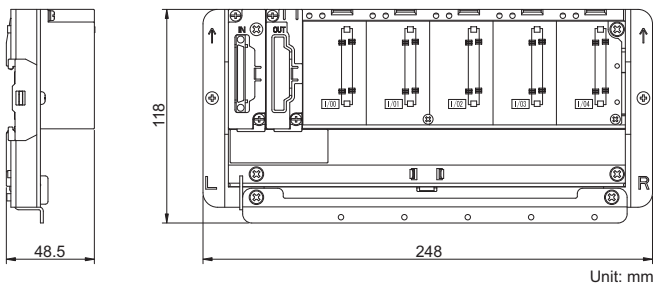
(8) Q68BLS-D



(9) Q55BLS

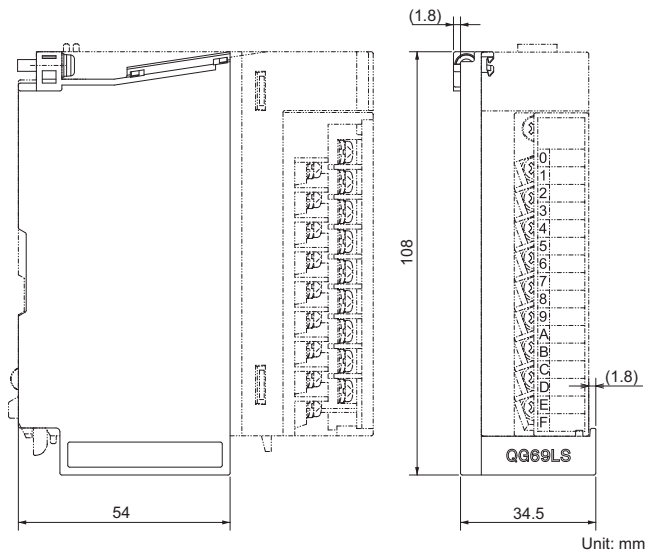


(10) Q55BLS-D



6.2 Q Series Large Type Blank Cover (AnS Series Size)

(1) QG69LS



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