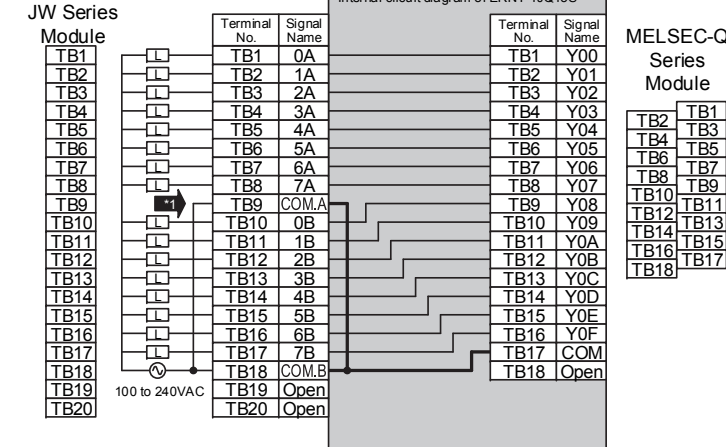


4. Product Specifications

For detail specifications which do not appear in the specification comparison charts contained herein, see the user's manual supplied with the MELSEC-Q Series Module you use. Also, check that the specifications of the connected devices meet the specifications of the MELSEC-Q Series Module.

| Conversion Adapter Model | Before replacement Module Model | No. of output points | After replacement MELSEC-Q Series Module Model | No. of modules | Conversion Adapter Weight (g) |
|--------------------------|---------------------------------|----------------------|--|----------------|-------------------------------|
| ERNT-1JQ13S | JW-13S | 16 | QY22 | 1 | 145 |

New Satellite JW Series



Precautions for wiring

➡ Because the switch concerned causes the number of points per common to change from 8 (two circuits) to 16 (one circuit), an alteration to the wiring is required if the commons on the existing modules have been used in separation from each other.

< Specification Comparison >

| Model | New Satellite JW Series | MELSEC-Q Series |
|-----------------------------|--|--|
| Specifications | JW-13S (TRIAC output) | QY22 (TRIAC output) |
| No. of output points | 16 points | 16 points |
| Rated load voltage | 100 to 240VAC 50/60Hz | 100 to 240VAC 50/60Hz |
| Maximum load current | 2A/point, 4A/common | 0.6A/point, 4.8A/common |
| Minimum load current | 10mA | 25mA |
| Maximum inrush current | 6A, 100ms or less | 20A/cycle or less |
| Leaked current at OFF | 1.5mA or lower (120V 60Hz) 3mA or lower (240V 60Hz) | 1.5mA or lower (120V 60Hz) 3mA or lower (240V 60Hz) |
| Maximum voltage drop at ON | 2V or lower(2A) | 1.5V or lower |
| Response time | OFF to ON: 1ms or less ON to OFF: 1ms + 0.5 cycle s or less | 1ms + 0.5 cycles or less 1ms + 0.5 cycles or less |
| Surge suppressor | CR absorber / Varistor | CR absorber |
| Fuse | 4A (unchangeable) | No |
| Isolation method | Photocoupler isolation | Photocoupler isolation |
| Common terminal arrangement | 8 points/common | 16 points/common |
| External connection system | 20-point terminal block | 18-point terminal block |

Make sure the section of the above table meets the specification of the machines and equipment connected to the MELSEC-Q Series Module.

5. Mounting and Installation

5.1 Handling Precautions

- Before attempting to install the Unit or carry out the necessary wiring, 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.
- Do not touch live terminals. There is a danger of electric shock or malfunction.
- Do not modify the Conversion Adapter or take it apart. Doing so will cause failure, malfunction, personal injury, or fire.
- Do not touch the energized part of the Conversion Adaptor directly. Contact will cause malfunction or failure in the system.
- Fasten the Conversion Adapter and the Mounting Bracket securely with retaining screws, and tighten the screws by applying torque within specified limits. Loose screws can lead to the dropping of the Conversion Adapter, or Mounting Bracket, possibly causing breakage thereof. Excessive tightness of the screws can lead to breakage of the screws, Converter Adaptor, Mounting Bracket, or MELSEC-Q Series Module, possibly causing the dropping, shorting, and malfunction thereof.
- Use care to prevent foreign materials including cuttings and wiring debris from entering the Conversion Adapter or the MELSEC-Q Series Module. These will be cause for fire, failure or malfunction.
- Do not drop the Conversion Adapter and Mounting Bracket or do not give a strong impact to it. This will cause damage.

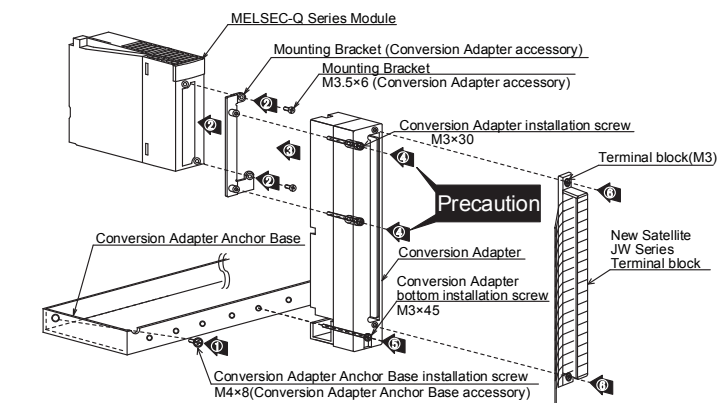
5.2 Use Precautions

| Item | Use Precautions |
|------------------------------------|--|
| Width dimension of module | <p>Because the module is reduced in width dimension (33.5mm→27.4mm) and thus in area available for wiring, check dimensional data before installing the module.</p> <p>Unit:mm</p> |
| Depth dimension | <p>The depth dimension required for installation is 154mm. Check the installation condition.</p> <p>Unit:mm</p> <p>*The each depth dimension is measured from the panel surface. New Satellite JW Series: Base Unit + Input/output Module + Terminal block, MELSEC-Q Series + Renewal Tool: Base Unit + Input/output Module + Conversion Adapter + Terminal block</p> |
| Interference of the terminal block | <p>When mounting one of the following Conversion Adapter on the left side of the Conversion Adapter leave one slot open between them or use the Q series Large Type Base Unit (Q □ □ BL) manufactured by Mitsubishi Electric so that the Conversion Adapter does not interfere with the terminal block of the existing modules.</p> <p>Conversion Adapters : ERNT-1JQ11N12N, ERNT-1JQ32N34N, ERNT-1JQ12S, ERNT-1JQ32S, ERNT-1JQ31N34S</p> <p>The Conversion Adapter interferes with the terminal block of the New Satellite JW Series.</p> <p>Leave one slot open.</p> <p>Terminal block of the New Satellite JW Series</p> <p>Conversion Adapter</p> <p>Input / Output Module</p> <p>Conversion Adapter -ERNT-1JQ11N12N -ERNT-1JQ32N34N -ERNT-1JQ12S -ERNT-1JQ32S -ERNT-1JQ31N34S</p> |

5.3 Installation Environment

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

6. Part Names and Installation Method



6.1 Installation Method

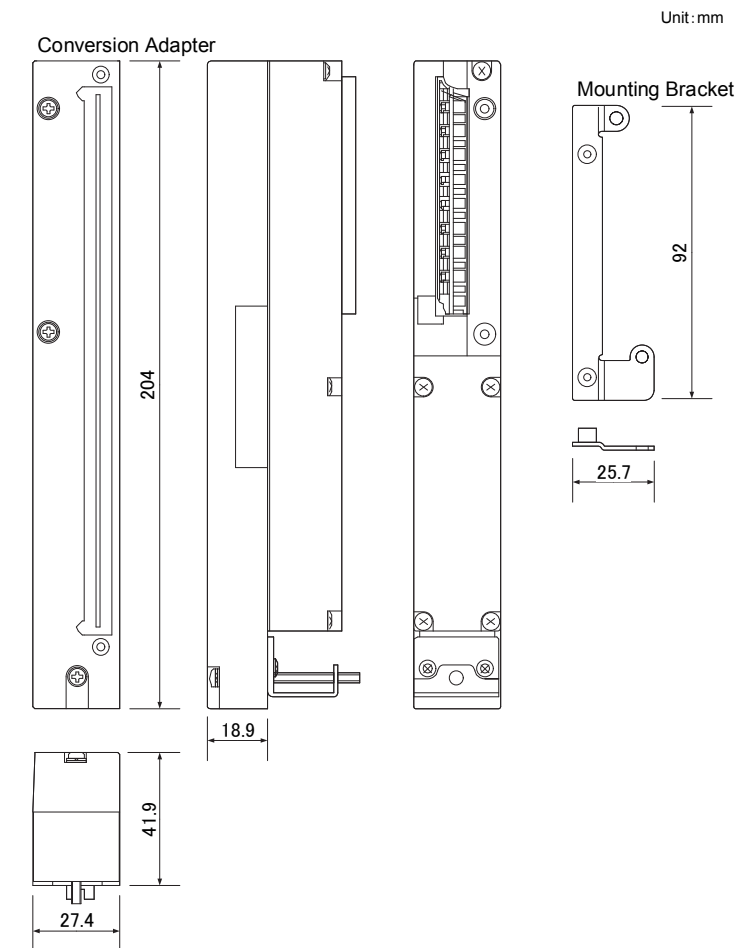
- Secure the Conversion Adapter Anchor Base to the Base Adapter or control panel using the Conversion Adapter Anchor Base installation screws (M4 × 8) provided as an accessory. (Two end locations)
- Remove the terminal block attached with the MELSEC-Q Series Module after loosening the terminal block installation screws (2 places top and bottom).
- Secure the Mounting Bracket to the Q Series Module using the Mounting Bracket fixing screws [M3.5 × 6 (Conversion Adapter accessory); two upper/lower locations].
- Mount the Conversion Adapter onto the Mounting Bracket.
- Secure the Conversion Adapter using the Conversion Adapter installation screws (M3 × 30; 2 locations).
- Secure the Conversion Adapter using the Conversion Adapter bottom installation screw (M3 × 45; 1 location).
- Secure the terminal block of the New Satellite JW Series to the Conversion Adapter with the terminal block installation screws (M3; two upper/lower locations).

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 | Tightening Torque Range |
|--|-------------------------|
| Conversion Adapter Anchor Base installation screw (M4×8) | 1.39 to 1.89N·m |
| Mounting Bracket fixing screw (M3.5×6) | 0.68 to 0.92N·m |
| Conversion Adapter installation screw (M3×30) | 0.43 to 0.57N·m |
| Conversion Adapter bottom installation screw (M3×45) | 0.5 to 0.6N·m |
| Terminal block installation screw (M3) | 0.5 to 0.6N·m |

7. External Dimensions



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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

- 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.
- 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 November 2016. Specifications are subject to change without notice.