

Specification	Item Model	MELSEC-AnS Series				MELSEC-Q Series
		A1S62RD3	A1S62RD4	A1S62RD3N	A1S62RD4N	Q64RD
Measuring method		3-wire type	4-wire type	3-wire type	4-wire type	3-wire type / 4-wire type
Usable platinum RTD		Pt100 (JIS C1604-1989, DIN 43760-1980) JPt100 (JIS C1604-1981)		Pt100 (JIS C1604-1989, DIN 43760-1980, JIS C1604-1997, IEC 751-am2) JPt100 (JIS C1604-1981)		Pt100 (JIS C1604-1997, IEC 751 1983) JPt100 (JIS C1604-1981)
Temperature detecting output current		4.2mA (MIN.) 4.7mA (MAX.)		1mA		1mA
Measured temperature range	Pt100	-180 to 600°C				-200 to 850°C
	JPt100	-180 to 600°C				-180 to 600°C
Range changing	Pt100	-				-20 to 120°C / -200 to 850°C
	JPt100	-				-20 to 120°C / -180 to 600°C
Output (Temperature conversion value)	16-bit signed binary data	-18000 to 60000: Value to the first decimal place × 10				-20000 to 85000: Value to the first decimal place × 10
	32-bit signed binary data	-180000 to 600000: Value to the third decimal place × 1000				-200000 to 850000: Value to the third decimal place × 1000
Accuracy		±1% (accuracy relative to full-scale)				Ambient temperature 0 to 55°C: ±0.25% (accuracy relative to maximum value(*1)) Ambient temperature 25±5°C: ±0.08% (accuracy relative to maximum value(*1))
Resolution		0.025°C				
Conversion speed		40ms/channel				
Number of analog input points		2 channels/module				4 channels/module
Wire break detection		Detected channel by channel	Batch-detected on all channels	Detected channel by channel	Batch-detected on all channels	Detected channel by channel
Isolation method	Between platinum RTD input and programmable controller power supply	Photocoupler isolation				
	Between platinum RTD input and channels	Non-isolation				
Number of I/O occupied points		32 points				16 points
Wiring connection system		20-pint terminal block				18-pint terminal block
Internal current consumption (5VDC)		0.54A	0.44A	0.49A	0.39A	0.60A

*1: The maximum range that was set

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

Precautions for the program	
1.	A1S62RD3N/A1S62RD4/A1S62RD3N/A1S62RD4N and Q64RD differ from each other in the way input/output signals (X, Y) and buffer memory addresses are allocated. Therefore, you need make necessary changes to the sequence program that is used.

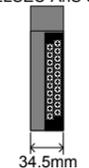
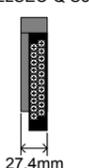
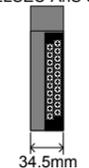
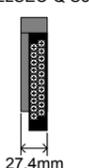
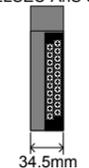
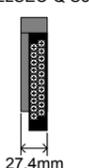
POINT			
1.	The criteria for the platinum RTD that can be used are different. Replace the platinum RTD with the one that can be used for the Q64RD.		
	MELSEC-AnS Series Module model	Platinum RTD	
		Platinum RTD that can be used for the Q64RD	Platinum RTD that cannot be used for the Q64RD
	A1S62RD3/A1S62RD4	JPt100 (JIS C1604-1981)	Pt100 (JIS C1604-1989, DIN 43760-1980)
	A1S62RD3N/A1S62RD4N	Pt100 (JIS C1604-1997) , JPt100 (JIS C1604-1981)	Pt100 (JIS C1604-1989, DIN 43760-1980, IEC 751-am2)
2.	When an error occurs in the measured temperature, the error can be corrected using the offset/gain setting of the Q64RD.		
3.	If the offset/gain setting has been configured in the A1S62RD3, A1S62RD4, A1S62RD3N, and A1S62RD4N, configure the offset/gain setting in the Q64RD as well.		

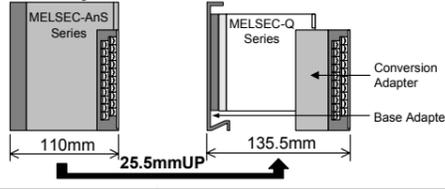
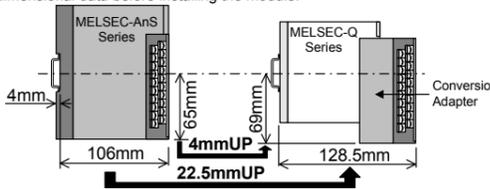
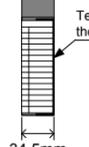
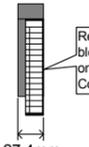
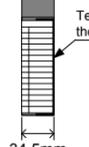
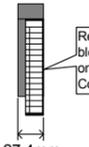
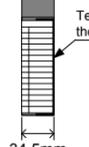
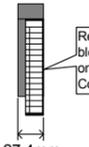
4. Mounting and Installation

4.1 Handling Precautions

- Before installing 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 Adapter 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 Adapter, 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.

4.2 Use Precautions

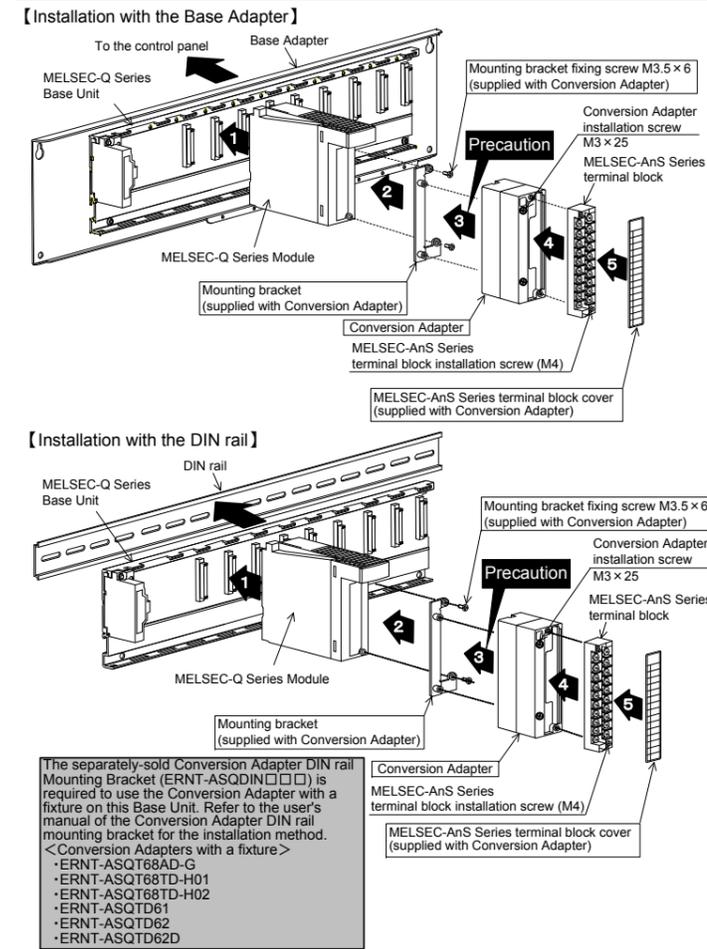
Item	Use Precautions				
Width dimension of module	Because the module is reduced in width dimension (34.5mm→27.4mm) and thus in area available for wiring, check dimensional data before installing the module.				
	<table border="0"> <tr> <td><MELSEC-AnS Series></td> <td><MELSEC-Q Series></td> </tr> <tr> <td></td> <td></td> </tr> </table>	<MELSEC-AnS Series>	<MELSEC-Q Series>		
<MELSEC-AnS Series>	<MELSEC-Q Series>				
					

Item	Use Precautions				
Depth and Height dimension	Installation with the Base Adapter Because the module is increased in depth dimension, check dimensional data before installing the module. 				
	Installation with the DIN rail Because the module is increased in depth and height dimension, check dimensional data before installing the module. 				
Terminal block cover	The terminal block cover for MELSEC-AnS Series is bigger than the width of the MELSEC-Q Series Module. Therefore, it is necessary to replace it with the terminal block cover supplied with the converter adapter. <table border="0"> <tr> <td><MELSEC-AnS Series></td> <td><MELSEC-Q Series></td> </tr> <tr> <td></td> <td></td> </tr> </table> Replace the terminal block cover with the one supplied with the Conversion Adapter.	<MELSEC-AnS Series>	<MELSEC-Q Series>		
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4.3 Installation Environment

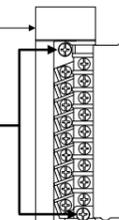
For details of the installation environment, refer to the user's manual of the MELSEC-Q series CPU module to be used.

5. Part Names and Installation Method



5.1 Installation Method

- | Installation with the Base Adapter | Installation with the DIN rail |
|---|---|
| Mount the MELSEC-Q Series Base Unit to the Base Adapter. Refer to the Base Adapter's manual for how to install them to the control panel. | Mount the DIN rail mounting adapter manufactured by Mitsubishi Electric to the MELSEC-Q Series Base Unit. For how to install the adapter to the MELSEC-Q Series Base Unit, refer to the QCPU User's Manual. |

- Install the MELSEC-Q Series module to the MELSEC-Q Series Base Unit. In addition, remove the terminal block attached with the MELSEC-Q Series module after loosening the terminal block installation screws (2 places up and down).
 
- Secure the mounting bracket to the MELSEC-Q Series module using the mounting bracket fixing screws (M3.5 × 6). (2 places)
- Install the Conversion Adapter to the mounting bracket, and secure it using the Conversion Adapter installation screws (M3 × 25). (2 places)

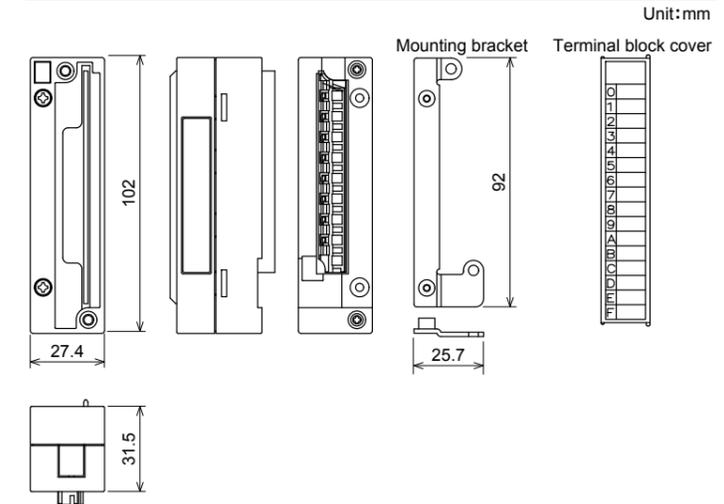
Precaution
Before tightening the installation screws, check that the Conversion Adapter has been securely installed on the MELSEC-Q Series module. Tightening the screws in floating-off state or tilting state will damage the Conversion Adapter installation screws and the mounting bracket.
- Secure the MELSEC-AnS Series terminal block to the Conversion Adapter with the supplied terminal block installation screw (M4). (2 places, top and bottom.)
- Remove the terminal block cover from the MELSEC-AnS Series terminal block and fit the terminal block cover supplied with the Conversion Adapter.

5.2 Tightening Torque

Tighten the module 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
Mounting bracket fixing screw (M3.5×6)	0.68 to 0.92N·m
Conversion Adapter installation screw (M3×25)	0.43 to 0.57N·m
MELSEC-AnS Series terminal block installation screw (M4 screw)	0.78 to 1.18N·m

6. External Dimensions



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 March 2016. Specifications are subject to change without notice.