

CERTIFICATE NUMBER 20-1978374 - PDA

EFFECTIVE DATE 8-May-2020

EXPIRATION DATE 7-May-2025

ABS TECHNICAL OFFICE Yokohama Engineering Services

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

MITSUBISHI ELECTRIC CORPORATION

located at

NAGOYA CITY

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Programmable Logic Controller

Model MELSEC iQ-R Series

This Product Design Assessment (PDA) Certificate remains valid until 8-May-2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Motohiro Tartura Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

MITSUBISHI ELECTRIC CORPORATION

NAGOYA WORKS

1-14 YADA-MINAMI 5-CHOME

HIGASHI-KU

NAGOYA AICHI

Japan 461-8670

Telephone: +81-52-712-2497

Fax: +81-52-712-2391

Email:

Web: http://www.mitsubishielectric.co.jp/fa

Tier: 5 - Unit Certification Required

Product: Programmable Logic Controller

Model: MELSEC iQ-R Series

Intended Service:

Programmable logic controllers that utilize a programmable memory for internal storage of commands and instructions for specific functions, such as logic, sequencing, counting, and controlling of several equipment via digital or analog inputs/outputs for ACC, ACCU, and ABCU Class Vessels, and offshore and industrial controls.

MELSEC iQ-R series are Modular type system consisted of various types of module components such as power supply modules, CPU modules, input and output modules, and other special function modules. System can be flexibly configured by selecting the required modules in accordance with the application.

Rating:

Power Supply: 100V-240VAC, Detailed module names listed in the attached component list.

Ambient temperature: 0 to 55 degree C

*No IP degree of protection.

Service Restriction:

- 1) Unit Certification is required for this product. The tests in the presence of the Surveyor are required in accordance with 4-9-9/13.3 and Table 2 of the Marine Vessels Rules "Performance Tests" where it is used for control, monitoring and safety systems of propulsion machinery, propulsion boilers, vital auxiliary pumps and electrical generating plants. The performance tests are to be carried out at the assembled plant before installation on-board or after installation onboard.
- 2) If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- 3) Environmental temperature of where this equipment is installed is not to be more than 55 °C.

Comments:

- 1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 2) The following is applicable to the computer-based system in accordance with 4-9-3 of the Marine Vessels Rules:
 - (a) The system is assigned as Category III
 - (b) The required evidence is to be kept by the manufacturer in accordance with 4-9-3/Table 2
- 3) The required evidence for the application software in accordance with 4-9-3/Table 2 of the Marine Vessels Rules to be submitted by manufacturer/vendor assembling the unit.
- 4) Unless specially directed by Administration, this approval is not to be construed as a substitute for flag Administration's approval for the purpose of SOLAS (2014 Consolidated Edition), as amended.

Notes/Drawing/Documentation:

Drawing No. 88000-0709, Test specification, Revision 0, Pages 34, dated 24 April 2014, Drawing No. 88000-0709-C, Test specification, Revision 0, Pages 38, dated 17 November 2014, Drawing No. BCN-88000-0708-a, Document list, Revision 0, Page 1,

Drawing No. BCN-88000-0708-c, Circuit diagram, Revision 0, Pages 81,

Drawing No. BCN-88000-0708-b, Materials, Revision 0, Pages 36,

Drawing No. BCN-88000-0708-e, Outline, Revision 0, Pages 56,

Drawing No. BCN-88000-0708-f, Parts list, Revision 0, Pages 576,

Drawing No. BCN-88000-0708-d, User's Manual, Revision 0, Pages 60,

Drawing No. BCN-88000-0736, Test Report, Revision 0, Pages 691, dated 26 November 2014, issued by Mitsubishi Electric Corporation Nagoya Works,

Drawing No. BCN-88000-0936-B, Test specification, Revision 0, Pages 35, dated 27 July 2016,

Drawing No. BCN-88000-0937-a, Circuit diagram, Revision 0, Pages 72,

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1-14 YADA-MINAMI 5-CHOME

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NAGOYA AICHI

Japan 461-8670

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Fax: +81-52-712-2391

Email:

Web: http://www.mitsubishielectric.co.jp/fa

Tier: 5 - Unit Certification Required

Drawing No. BCN-88000-0937-b, Document List, Document list, Revision 0, Page 1,

Drawing No. BCN-88000-0937-c, Materials, Revision 0, Pages 33,

Drawing No. BCN-88000-0937-d, Outline, Revision 0, Pages 37, Drawing No. BCN-88000-0997-A, Test Report, Revision 0, Pages 70, dated 28 November 2016, issued by Mitsubishi Electric Corporation Nagoya Works,

Drawing No. BCN-88000-0997-a, Test Report Appendix, Revision 0, Pages 84, dated 13 July 2016, issued by

Mitsubishi Electric Corporation Nagoya Works,

Drawing No. BCN-88000-1023-a, Circuit diagram, Revision 0, Pages 65,

Drawing No. BCN-88000-1023-b, Document list, Revision 0, Page 1,

Drawing No. BCN-88000-1023-c, Materials, Revision 0, Pages 29,

Drawing No. BCN-88000-1023-d, Outline, Revision 0, Pages 28,

Drawing No. BCN-88000-1023-e, Parts list, Revision 0, Pages 704,

Drawing No. BCN-88000-1061, Test specification, Revision 0, Pages 31, dated 5 June 2017, Drawing No. BCN-88000-1239, Test Report, Revision 0, Pages 225, dated 22 March 2018, issued by Mitsubishi

Electric Corporation Nagoya Works,

Drawing No. BCN-88000-1177, Software design rules, Revision 0, Pages 15, Drawing No. BCN-88000-1196, Design change rule, Revision 0, Pages 7,

Drawing No. BCN-88000-1197, Version control provision, Revision 0, Pages 8,

Drawing No. BCN-88000-1198, Quality control procedures in software production, Revision 0, Pages 3,

Drawing No. BCN-P4000-4010, Software test report, Revision 0, Pages 4,

Drawing No. RCPU-U-OU-J, Manual, Revision 0, Pages 126,

Drawing No. BCN-88000-1389, Circuit diagram, Revision 0, Pages 29, dated 15 November 2018,

Drawing No. BCN-88000-1391, Materials, Revision 0, Pages 7, dated 15 November 2018,

Drawing No. BCN-88000-1392, Outline, Revision 0, Pages 10, dated 15 November 2018, Drawing No. BCN-88000-1393, Parts List, Revision 0, Pages 65, dated 15 November 2018,

Drawing No. BCN-88000-1439, test Report, Revision 0, Pages 154, dated 7 May 2019, issued by Mitsubishi Electric Corporation Nagoya Works,

Drawing No. BCN-88000-1529, Circuit diagram, Revision 0, Pages 18, dated 29 October 2019,

Drawing No. BCN-88000-1533, Materials, Revision 0, Pages 9, dated 29 October 2019, Drawing No. BCN-88000-1535, Outline, Revision 0, Pages 6, dated 29 October 2019,

Drawing No. BCN-88000-1537, Parts List, Revision 0, Pages 29, dated 29 October 2019,

Drawing No. BCN-P5999-0192-E, Manual, Revision 0, Pages 1,

Drawing No. R-CCIETSN- U-IN-E, MELSEC iQ-R CC-Link IE TSN User's Manual (Startup), Revision 0, Pages 60,

Drawing No. R-ETHER CCIE-U-IN-E, MELSEC iQ-R Ethernet/CC-Link IE User's Manual (Startup), Revision 0,

Drawing No. R60ADI8-HA-U-IN-E, MELSEC iO-R HART-Enabled Analog-Digital Converter Module User's Manual (Startup), Revision 0, Pages 52,

Drawing No. BCN-88000-1527-A, Test specification, Revision 0, Pages 27, dated 29 October 2019,

Drawing No. BCN-88000-1603, test Report, Revision 0, Pages 199, dated 26 March 2020, issued by Mitsubishi Electric Corporation Nagoya Works,

Terms of Validity:

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STANDARDS

ABS Rules:

2020 Marine Vessel Rules 1-1-4/7.7, 1-1-A3 & A4, 4-9-3 (Cat III) and 4-9-9/3 and 13; 2020 High-Speed Craft 1-1-4/11.9, 1-1-A2, 1-1-A3, 4-6-3/3.13, 4-7-8 (Cat III) and 4-7-9/15, 2020 Mobile Offshore Units 1-1-4/7.7, 1-1-A3 & A4 and 4-3-4/5;

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

IACS UR E10 Rev.7 (Oct. 2018) and E22 Rev.2 (June 2016)

DA Certificate No: 20-1978374-PDA Issue Date: 8 May 2020 Expire Date: 7 May 2025

Company: Mitsubishi Electric Corporation

Factory or Works: Nagoya Works

Product/Equipment: Programmable Logic Controller

Model: MELSEC iQ-R Series

MELSEC iQ-R series

Product	Type	Specification
Battery-less option	NZ1BLC	3.3VDC, 0.15A
cassette	R00CPU	5VDC 0.67A
	R01CPU	5VDC 0.67A 5VDC 0.67A
	R02CPU	5VDC 0.67A
	R04CPU	5VDC 0.67A
	R08CPU	5VDC 0.67A
	R08PSFCPU	5VDC 0.76A
	R16CPU	5VDC 0.67A
	R16PSFCPU	5VDC 0.76A
	R32CPU	5VDC 0.67A
	R32PSFCPU	5VDC 0.76A
	R120CPU	5VDC 0.67A
	R120PSFCPU	5VDC 0.76A
		CC-Link IE embedded
	R04ENCPU	Program capacity: 40K steps
		basic operation processing speed (LD instruction): 0.98 ns
CPU Modules		CC-Link IE embedded
Of O Modules	R08ENCPU	Program capacity: 80K steps -
		basic operation processing speed (LD instruction): 0.98 ns CC-Link IE embedded
	R16ENCPU	Program capacity: 160K steps
	KIOLINGFO	basic operation processing speed (LD instruction): 0.98 ns
		CC-Link IE embedded
	R32ENCPU	Program capacity: 320K steps
		basic operation processing speed (LD instruction): 0.98 ns
		CC-Link IE embedded
	R120ENCPU	Program capacity: 1200K steps
		basic operation processing speed (LD instruction): 0.98 ns
	R12CCPU-V	5VDC 6.31A (MAX) -
	R08PCPU	5VDC 0.76A
	R16PCPU	5VDC 0.76A
	R32PCPU	5VDC 0.76A
	R120PCPU	5VDC 0.76A
Extended temperature	R310B-HT	5VDC 0.82A
range base	R610B-HT	5VDC 0.85A
Base Unit Model	R312B	5VDC 0.88A
Dase Utili Model	R38B	5VDC 0.71A
	R35B	5VDC 0.58A
	R612B	5VDC 0.92A
	R68B	5VDC 0.81A
	R65B	5VDC 0.70A
	RQ612B	5VDC 0.32A
	RQ68B	5VDC 0.31A
	RQ65B	5VDC 0.28A
	R310RB	5VDC 0.91A
	R38RB-HT	5VDC 0.86A
	R610RB	5VDC 0.97A
	R68RB-HT	5VDC 0.93A
Positioning Modules	RD75P2	2 axes, Pulse output transistor,
		5/24 V dc, 5 mA input; 24 V dc, 0.1A output; (5 V dc, MAX 0.38 A)
	RD75P4	4 axes, Pulse output transistor,
	RD75D2	5/24 V dc, 5 mA input; 24 V dc, 0.1A output; (5 V dc, MAX 0.42 A) 2 axes, Pulse differential output,
	KD/3D2	2 axes, Pulse differential output, 5/24 V dc, 5 mA input; 24 V dc, 0.1A output; (5 V dc, MAX 0.54 A)
	RD75D4	4 axes, Pulse differential output,
	1,007,004	5/24 V dc, 5 mA input; 24 V dc, 0.1A output; (5 V dc, MAX 0.78 A)
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DA Certificate No: 20-1978374-PDA Issue Date: 8 May 2020 Expire Date: 7 May 2025

Company: Mitsubishi Electric Corporation

Factory or Works: Nagoya Works

Product/Equipment: Programmable Logic Controller

Product	Туре	Specification
High-speed Counter Modules	RD62P2	DC input, 2 channel, Transistor/sink type,
		5/12/24 V dc, 10 mA input; 12/24 V dc,
		0.5A 2A/common output (5 V dc , MAX 0.11 A)
	RD62D2	Difference input, 2 channel, Transistor/sink type,
		5/12/24 V dc, 10 mA input; 12/24 V dc,
		0.5A 2A/common output (5 V dc , MAX 0.17 A)
	RD62P2E	DC input, 2 channel, Transistor/source type,
		5/12/24 V dc, 10 mA input; 12/24 V dc,
		0.1A 0.4A/common output (5 V dc , MAX 0.20 A)
	RD81DL96	5VDC 6.31A (MAX)
A/D Conversion	R60AD4	Number of analog input points: 4 points(4 channels)
Modules		Analog input(voltage): -10 to 10VDC(Input resistance $1M\Omega$)
		Analog input(current): 0 to 20mADC(Input resistance 250Ω)
	R60ADV8	Number of analog input points: 8 points(8 channels)
		Analog input(voltage): -10 to 10VDC(Input resistance 1M Ω)
	R60ADI8	Number of analog input points: 8 points(8 channels)
		Analog input(current): 0 to 20mADC(Input resistance 250Ω)
D/A Conversion	R60DA4	Number of analog output points: 4 points(4 channels)
Modules		Analog output(voltage): -10 to 10VDC(External load resistance 1K Ω to 1M Ω)
		Analog output(current): 0 to 20mADC(External load resistance 0Ω to 600Ω)
	R60DAV8	Number of analog output points: 8 points(8 channels)
		Analog output(voltage): -10 to 10VDC(External load resistance 1KΩ to 1MΩ)
	R60DAI8	Number of analog output points: 8 points(8 channels)
		Analog output(current): 0 to 20mADC(External load resistance 0Ω to 600Ω)
A/D Conversion		Number of analog input points: 4 points(4 channels)
Modules	R60ADH4	Analog input(voltage): -10 to 10VDC(Input resistance 1MΩ)
		Analog input(current): 0 to 20mADC(Input resistance 250Ω)
	R60AD8-G	Channel Isolated Analog-Digital Converter Module
		Number of analog input points: 8 points(8 channels)
	R60AD16-G	Channel Isolated Analog-Digital Converter Module
D/A 0		Number of analog input points: 16 points(16 channels)
D/A Conversion	R60DA8-G	Channel Isolated Digital-Analog Converter Module
Modules		Number of analog output points: 8 points(8 channels)
	R60DA16-G	Channel Isolated Digital-Analog Converter Module
		Number of analog output points: 16 points(16 channels)
	R60DAH4	High Speed Digital-Analog Converter Module
		Number of analog output points: 4 points(4 channels)
		Analog output(voltage): -10 to 10VDC(external load resistance value 1k Ω or higher)
		,
		0 to 5VDC(external load resistance value 500 Ω or higher)
		Analog output(current):
	D01D	0 to 20mADC(external load resistance value 50 to 600 Ω)
Power supply	R61P	100-240 V ac, 50/60 Hz,
Modules	Doop	6.5A, 5 V dc output
	R63P	24 V dc; 5 V dc, 6.5A output
	R62P	100-240 V ac, 50/60 Hz, MAX 120 VA;
		5V dc, 3.5A output
	R64P	24 V dc, 0.6 A output
		100-240 V ac, 50/60 Hz, MAX 160 VA;
		9.0A, 5 V dc output
	R63RP	24 V dc, MAX 50 W; 5 V dc, 6.5A output
	R64RP	100-240 V ac, 50/60 Hz, MAX 160 VA;
	-	9.0A, 5 V dc output

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Factory or Works: Nagoya Works

Product/Equipment: Programmable Logic Controller

Product	Туре	Specification
I/O Modules	RH42C4NT2P	Input/Output module
	RX10-TS	24VDC 4.0mA input, 12/24VDC 0.2A 2A/Common output; (Sink type) Input module 16 points
	10(10 10	100 to 120VAC,
	D)/ 40.07	8.2mA(100VAC, 60Hz), 6.8mA(100VAC, 50Hz)
	RX40C7	Input module 16point 24 V dc, 7.0 mA input;
	RX40C7-TS	Input module 16 points
	DV4404	24VDC, 7.0mA
	RX41C4	Input module 32points 24 V dc, 4.0 mA input;
	RX41C4-TS	Input module 32 points
	DV4004	24VDC, 4.0mA
	RX42C4	Input module 64points 24 V dc, 4.0 mA input;
	RY40NT5P	Output module 16points
	RY40PT5P	12/24 V dc, 0.5A 5A/Common output; (sink type) Output module 16points
	K140P15P	12/24VDC 0.5A 5A/Common output;(Source type)
	RY41NT2P	Output module 32points
	RY41PT1P	12/24 V dc, 0.2A 2A/Common output; (sink type) Output module 32points
	RITIPLIP	12/24VDC 0.1A 2A/Common output;(Source type)
	RY42NT2P	Output module 64points
	RY42PT1P	12/24 V dc, 0.2A 2A/Common output; (sink type) Output module 64points
	K142F11F	12/24VDC 0.1A 2A/Common output;(Source type)
	RX10	Input module 16points
	RY10R2	100-120 V ac, 6.8 - 9.8 mA 50/60Hz input; Output module 16points
	10102	24 V dc / 240 V ac, 2A/point, 8A/Common output;
	RX41C6HS	Input module 32points
	RX61C6HS	24 V dc, 6.0 mA input; Input module 32points
		5 V dc, 6.0 mA input;
	RX70C4	Input module 16 points
	RX71C4	5VDC, 1.7mA / 12VDC, 4.8mA Input module 32 points
		5VDC, 1.7mA / 12VDC, 4.8mA
	RX72C4	Input module 64 points 5VDC, 1.7mA / 12VDC, 4.8mA
	RX40PC6H	16-point high-speed input module.(positive common type.)
		24 V dc, 6.0 mA input
	RX40NC6H	16-point high-speed input module.(negative common type.) 24 V dc, 6.0 mA input
	RY41NT2H	32-point high-speed output module.(sink type)
		Rated output voltage is DC5/12/24V.
	RY10R2-TS	Maximum load current is 0.2A/point, 2A/common. Output module 16 points
		24VDC/240VAC, 2A/point, 8A/common
	RY40NT5P-TS	Output module 16 points (sink type)
	RY40PT5P-TS	12/24VDC, 0.5A/point, 5A/common Output module 16 points (source type)
		12/24VDC, 0.5A/point, 5A/common
	RY41NT2P-TS	Output module 32 points (sink type) 12/24VDC, 0.2A/point, 2A/common
	RY41PT1P-TS	Output module 32 points (source type)
		12/24VDC, 0.1A/point, 2A/common
	RY41PT2H	32-point high-speed output module.(source type)
		Rated output voltage is DC5/12/24V.
		Maximum load current is 0.2A/point, 2A/common.

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Factory or Works: Nagoya Works

Product/Equipment: Programmable Logic Controller

Product	Туре	Specification
I/O Modules	RX40NC6B	Input module with diagnostic functions
		Number of input points:16points
		Rated input voltage:24V dc
		Rated input current:6.0mA TYP
	RY40PT5B	Output module with diagnostic functions
		Number of output points:16points
		Rated load voltage:24V dc
		Maximum load current:0.5A/point, 5A/common
	RX28	8-points input module. 100-240VAC, 6.8-19.7 mA input;
	RY20S6	16-point triac output module.
		Rated output voltage is 100-240VAC.
		Maximum load current is 0.6A/point, 4.8A/common.
	RY18R2A	8-points all independent output module.
		Rated output voltage is 24VDC or 100-240VAC.
		Maximum load current is 2A/point, 8A/unit.
Serial Communication	RJ71C24	Serial communication module
Modules		Ch1:RS-232-compliance, Ch2:RS-422/485-compliance
	RJ71C24-R2	Serial communication module
	D 1= 100 1 D 1	Ch1:RS-232-compliance, Ch2:RS-232-compliance
	RJ71C24-R4	Serial communication module
MEC Interfere Medule	DD04ME000	Ch1:RS-422/485-compliance, Ch2:RS-422/485-compliance
MES Interface Module		5VDC 6.31A (MAX)
Intelligent	RD55UP06-V	5VDC 6.31A (MAX)
Communication		
Module Redundant Function	R6RFM	Tracking cable:An optical fiber cable compliant
Modules	KOKFIVI	with the following standards (multimode optical fiber (GI))
Modules		• IEEE802.3 (1000BASE-SX)
		• IEC 60793-2-10 Types A1a.1
Remote Head Module	R.J72GF15-T2	CC-Link IE Field Network remote head
		1Gbps, remote station
Ethernet Interface with	RJ71EN71	Ethernet Interface module with CC-Link IE
CC-Link IE		1000BASE-T/100BASE-TX/10BASE-T-conpliance
CC-Link System	RJ61BT11	CC-Link System Master/Local Module
Master/Local		Communication cable :CC-Link dedicated cable
CC-Link IE Field	RJ71GF11-T2	CC-Link IE Field Network Master/Local module
Network Master/Local		Connection cable: Ethernet cable which satisfies 1000BASE-T standard.
CC-Link IE Controller	RJ71GP21-SX	CC-Link IE Controller Network module
Network		Connection cable: Optical fiber cable which satisfies 1000BASE-SX standard.
(Optical fiber type)		
Accessory, Extension	RC06B	5VDC
cables		
	RC12B	5VDC
	RC30B	5VDC 5VDC
	RC50B	5VDC 5VDC
	RC100B	5VDC 5VDC
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Design Assessment (DA) Certificate Attachment for Component DA Certificate No: 20-1978374-PDA

 DA Certificate No:
 20-1978374-PDA

 Issue Date:
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Company: Mitsubishi Electric Corporation

Factory or Works: Nagoya Works

Product/Equipment: Programmable Logic Controller

Product	Туре	Specification
Accessory, Extended	NZ2MC-1MBS	3.3VDC 0.03A
SRAM unit	NZ2MC-2MBS	3.3VDC 0.03A
	NZ2MC-4MBS	3.3VDC 0.03A
	NZ2MC-8MBS	3.3VDC 0.03A
	NZ2MC-8MBSE	3.3VDC 0.11A
SD Memory Card	L1MEM-2GBSD	3.3VDC
-	L1MEM-4GBSD	3.3VDC
Temperature Control Module	ROUTCIRIZITZ	Number of temperature input points: 4 points Type of temperature sensors (thermocouple): R,K,J,T,S,B,E,N,U,L,PL II ,W5Re/W26Re Type of temperature sensors (platinum resistance thermometer): Pt100,JPt100 Number of transistor output (sink type) points: 4 points Rated load voltage: 10 to 30VDC Maximum load current: 0.1A/point, 0.4A/common
Temperature Control Module	R60TCTRT2TT2B W	Number of temperature input points: 4 points Type of temperature sensors (thermocouple): R,K,J,T,S,B,E,N,U,L,PL II ,W5Re/W26Re Type of temperature sensors (platinum resistance thermometer): Pt100,JPt100
	R60TCRT4	Number of temperature input points: 4 points Type of temperature sensors (platinum resistance thermometer): Pt100,JPt100 Number of transistor output (sink type) points: 4 points Rated load voltage: 10 to 30VDC Maximum load current: 0.1A/point, 0.4A/common
	R60TCRT4BW	Number of temperature input points: 4 points Type of temperature sensors (platinum resistance thermometer): Pt100,JPt100 Number of transistor output (sink type) points: 4 points — Rated load voltage: 10 to 30VDC Maximum load current: 0.1A/point, 0.4A/common Number of current input points: 8points Type of current sensors: CTL-12-S36-10,CTL-12-S56-10,CTL-6-P-H,CTL-6-S-H,CTL-12L-8
Temperature Input Modules	R60TD8-G	Channel Isolated Thermocouple Input Module Number of analog output points: 8 channels + Cold junction compensation channel per module
	R60RD8-G	Channel Isolated RTD Input Module Number of analog output points: 8 points(8 channels)
Extended SRAM cassette	NZ2MC-16MBS	3.3VDC 0.05A 16M bytes
SIL2 Function Module	R6PSFM	5VDC 0.67A
DeviceNet Module	RJ71DN91	DeviceNet Master/Slave Module
PROFIBUS-DP Module	RJ71PB91V	PROFIBUS-DP Master/Slave Module
CANopen module	RJ71CN91	CANopen module
PROFINET Module	RJ71PN92	PROFINET IO Controller Module
EtherNet/IP Module	RJ71EIP91	EtherNet/IP Network Interface Module

 DA Certificate No:
 20-1978374-PDA

 Issue Date:
 8 May 2020

 Expire Date:
 7 May 2025

Company: Mitsubishi Electric Corporation

Factory or Works: Nagoya Works

Product/Equipment: Programmable Logic Controller

Model: MELSEC iQ-R Series

Product	Туре	Specification
HART analog	R60ADI8-HA	HART Analog-Digital Converter Module
module		Number of analog input points : 8points
		current range:4 to 20mA
CC-Link IE TSN	RJ71GN11-T2	5VDC 0.81A
MASTER/LOCAL		
CC-Link IE		5VDC 0.95A
Controller		24VDC 0.28A(External power supply)
Network module		24VDC 0.26A(External power supply)
Extended SRAM unit	NZ2MC-2MBSE	3.3VDC 0.11A

* Additional Model

The products listed above are the ones without coating. When special coating is applied for the purpose to enhancing resistant to corrosive gas (not for insulation protection), suffix "(C)" will be added at the end of the product type designation.