



Marine & Offshore

Certificate number: 38513/B0 BV

File number: AP 4586

Product code: 4501H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

MITSUBISHI ELECTRIC CORPORATION Nagoya Works
Nagoya - JAPAN

for the type of product

PROGRAMMABLE LOGIC CONTROL UNITS
MELSEC iQ-R series

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.

EC Code: 31

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 02 Jul 2025

For Bureau Veritas Marine & Offshore,

At BV KOBE, on 02 Jul 2020,

Shinichi Takemoto



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 8 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Product model or type designation:

- **MELSEC iQ-R series**

Product description:

- Programmable Logic Control Unit includes the following items:

Module Name	Type Designation	Specification
Power supply Modules	R61P	100-240 V ac, 50/60 Hz, 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 24 V dc, 0.6 A output
	R64P	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 iQR-001
	R64RP	100-240 V ac, 50/60 Hz, MAX 160 VA; 9.0A, 5 V dc output
CPU Modules	R04CPU	5VDC 0.67A
	R08CPU	5VDC 0.67A
	R16CPU	5VDC 0.67A
	R32CPU	5VDC 0.67A
	R120CPU	5VDC 0.67A
	R04ENCPU	CC-Link IE embedded Program capacity: 40K steps basic operation processing speed (LD instruction): 0.98 ns
	R08ENCPU	CC-Link IE embedded Program capacity: 80K steps basic operation processing speed (LD instruction): 0.98 ns
	R16ENCPU	CC-Link IE embedded Program capacity: 160K steps basic operation processing speed (LD instruction): 0.98 ns
	R32ENCPU	CC-Link IE embedded Program capacity: 320K steps basic operation processing speed (LD instruction): 0.98 ns
	R120ENCPU	CC-Link IE embedded Program capacity: 1200K steps basic operation processing speed (LD instruction): 0.98 ns
	R12CCPU-V	5VDC 6.31A (MAX)
	R08PCPU	Program capacity: 80K steps Program memory: 320K bytes Basic operation processing speed (LD instruction): 0.98 ns
	R16PCPU	Program capacity: 160K steps Program memory: 640K bytes Basic operation processing speed (LD instruction): 0.98 ns
	R32PCPU	Program capacity: 320K steps Program memory: 1280K bytes Basic operation processing speed (LD instruction): 0.98 ns
	R120PCPU	Program capacity: 1200K steps Program memory: 4800K bytes Basic operation processing speed (LD instruction): 0.98 ns
	R00CPU	5VDC, 0.67A
	R01CPU	5VDC, 0.67A
	R02CPU	5VDC, 0.67A
	R08PSFCPU	5VDC, 0.76A
	R16PSFCPU	5VDC, 0.76A
	R32PSFCPU	5VDC, 0.76A
	R120PSFCPU	5VDC, 0.76A

Module Name	Type Designation	Specification
Base unit model	R312B	5VDC 0.88A
	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	Redundant power supply main base unit Number of slots to install I/O modules: 10 slots
	R610RB	Redundant power supply extension base unit Number of slots to install I/O modules: 10 slots
	R38RB-HT	Extended temperature range main base unit Number of slots to install I/O modules: 8 slots
	R68RB-HT	Extended temperature range extension base unit Number of slots to install I/O modules: 8 slots
	R60AD16-G	Channel Isolated Analog-Digital Converter Module Number of analog input points: 16 points(16 channels) Analog input (voltage): -10 to 10VDC Analog input (current): 0 to 20mADC
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, 5/24 V dc, 5 mA input; 24 V dc, 0.1A output; (5 V dc, MAX 0.42 A)
	RD75D2	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, 5/24 V dc, 5 mA input; 24 V dc, 0.1A output; (5 V dc, MAX 0.78 A)
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)
High Speed Data Logger Module	RD81DL96	5VDC 6.31A (MAX)
A/D Conversion Modules	R60AD4	Number of analog input points: 4 points(4 channels) Analog input(voltage): -10 to 10VDC(Input resistance 1M Ω) Analog input(current): 0 to 20mADC(Input resistance 250 Ω)
	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 250 Ω)
	R60ADH4	Number of analog input points: 4 points(4 channels) Analog input(voltage): -10 to 10VDC(Input resistance 1MW) Analog input(current): 0 to 20mADC(Input resistance 250W)
	R60AD8-G	Channel Isolated Analog-Digital Converter Module Number of analog input points: 8 points(8 channels) Analog input (voltage): -10 to 10VDC Analog input (current): 0 to 20mADC
	R60DA4	Number of analog output points: 4 points(4 channels) Analog output(voltage): -10 to 10VDC(External load resistance 1KW to 1MW) Analog output(current): 0 to 20mADC(External load resistance 0W to 600W)
	R60DAV8	Number of analog output points: 8 points(8 channels) Analog output(voltage): -10 to 10VDC(External load resistance 1KW to 1MW)
	R60DAI8	Number of analog output points: 8 points(8 channels) Analog output(current): 0 to 20mADC(External load resistance 0W to 600W)
	R60DA8-G	Channel Isolated Digital-Analog Converter Module Number of analog input points: 8 points(8 channels) Analog input (voltage): -10 to 10VDC Analog input (current): 0 to 20mADC
	R60DA16-G	Channel Isolated Digital-Analog Converter Module Number of analog input points: 16 points(16 channels) Analog input (voltage): -10 to 10VDC Analog input (current): 0 to 20mADC

Module Name	Type Designation	Specification
D/A Conversion Modules	R60DAH4	Number of analog output points: 4 channels Analog output(voltage): -10 to 10VDC Analog output(current): 0 to 20mADC
I/O Modules	RH42C4NT2P	Input/Output module 24VDC 4.0mA input, 12/24VDC 0.2A 2A/Common output; (Sink type)
	RX40C7	Input module 16point 24 V dc, 7.0 mA input;s
	RX41C4	Input module 32points 24 V dc, 4.0 mA input;
	RX42C4	Input module 64points 24 V dc, 4.0 mA input;
	RY40NT5P	Output module 16points 12/24 V dc, 0.5A 5A/Common output; (sink type)
	RY40PT5P	Output module 16points 12/24VDC 0.5A 5A/Common output;(Source type)
	RY41NT2P	Output module 32points 12/24 V dc, 0.2A 2A/Common output; (sink type)
	RY41PT1P	Output module 32points 12/24VDC 0.1A 2A/Common output;(Source type)
	RY42NT2P	Output module 64points 12/24 V dc, 0.2A 2A/Common output; (sink type)
	RY42PT1P	Output module 64points 12/24VDC 0.1A 2A/Common output;(Source type)
	RX10	Input module 16points 100-120 V ac, 6.8 - 9.8 mA 50/60Hz input;
	RY10R2	Output module 16points 24 V dc / 240 V ac, 2A/point, 8A/Common output;
	RX41C6HS	Input module 32points 24 V dc, 6.0 mA input;
	RX61C6HS	nput module 32points 5 V dc, 6.0 mA input;
	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. Maximum load current is 0.2A/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.
	RX28	8-points input module. 100-240VAC, 6.8-19.7 mA input
	RX40NC6B	Input module with diagnostic functions Number of input points:16points Rated input voltage:24VDC Rated input current:6.0mA TYP
	RY18R2A	8-points all independent output module Rated output voltage is 24VDC or 100-240VAC Maximum load current is 2A/point, 8A/unit
	RY20S6	16-points triac output module Rated output voltage is 100-240VAC Maximum load current is 0.6A/point, 4.8A/common
	RY40PT5B	Output module with diagnostic functions Number of output points:16points Rated load voltage:24V dc Maximum load current:0.5A/point, 5A/common
	RX10-TS	Input module 16 points, 100 to 120 VAC, 8.2mA(100VAC, 60Hz), 6.8mA(100VAC, 50Hz)
	RX40C7-TS	Input module 16 points 24VDC, 7.0mA
	RX41C4-TS	Input module 32 points 24VDC, 4.0mA
	RX70C4	Input module 16 points 5VDC, 1.7mA / 12VDC, 4.8mA
	RX71C4	Input module 32 points 5VDC, 1.7mA / 12VDC, 4.8mA
	RX72C4	Input module 64 points 5VDC, 1.7mA / 12VDC, 4.8mA
	RY10R2-TS	Output module 16 points 24VDC / 240VDC, 2A/point, 8A/common

Module Name	Type Designation	Specification
I/O Modules	RY40NT5P-TS	Output module 16 points (sink type) 12/24 VDC, 0.5A/point, 5A/common
	RY40PT5P-TS	Output module 16 points (source type) 12/24 VDC, 0.5A/point, 5A/common
	RY41NT2P-TS	Output module 32 points (sink type) 12/24 VDC, 0.2A/point, 2A/common
	RY41PT1P-TS	Output module 32 points (source type) 12/24 VDC, 0.1A/point, 2A/common
Serial Communication Modules	RJ71C24	Serial communication module Ch1:RS-232-compliance, Ch2:RS-422/485-compliance
	RJ71C24-R2	Serial communication module Ch1:RS-232-compliance, Ch2:RS-232-compliance
	RJ71C24-R4	Serial communication module Ch1:RS-422/485-compliance, Ch2:RS-422/485-compliance
CC-Link IE Field Network Master/Local	RJ71GF11-T2	CC-Link IE Field Network Master/Local module Connection cable: Ethernet cable which satisfies 1000BASE-T standard.
Ethernet Interface with CC-Link IE	RJ71EN71	Ethernet Interface module with CC-Link IE 1000BASE-T/ 100BASE-TX/ 10BASE-T-compliance
CC-Link System Master/Local	RJ61BT11	CC-Link System Master/Local Module Communication cable :CC-Link dedicated cable
CC-Link IE Controller Network (Optical fiber type)	RJ71GP21-SX	CC-Link IE Controller Network module Connection cable:Optical fiber cable which satisfies 1000BASE-SX standard.
Accessory, Extension cables	RC06B	5VDC
	RC12B	5VDC
	RC30B	5VDC
	RC50B	5VDC
Accessory, Extended SRAM unit	NZ2MC-1MBS	3.3VDC 0.03A
	NZ2MC-2MBS	3.3VDC 0.03A
	NZ2MC-4MBS	3.3VDC 0.03A
	NZ2MC-8MBS	3.3VDC 0.03A
SD Memory Card	L1MEM-2GBSD	3.3VDC
	L1MEM-4GBSD	3.3VDC
Extended temperature range base	R310B-HT	5VDC 0.82A
	R610B-HT	5VDC 0.85A
MES Interface Module	RD81MES96	5VDC 6.31A (MAX)
Intelligent Communication Module	RD55UP06-V	5VDC 6.31A (MAX)
Temperature Control Module	R60TCTRT2TT2	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
	R60TCTRT2TT2BW	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 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

Module Name	Type Designation	Specification
Temperature Control Module	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
Extended SRAM cassette	NZ2MC-16MBS	3.3VDC 0.05A 16M bytes
Channel Isolated Thermocouple Input Module	R60TD8-G	Channel Isolated Thermocouple Input Module Number of analog output points: 8 channels + Cold junction compensation channel per module
Channel Isolated RTD Input Module	R60RD8-G	Channel Isolated RTD Input Module Number of analog input points: 8 points (8 channels)
Redundant Function Module	R6RFM	Redundant function module Tracking cable: An optical fiber cable compliant with the following standards (multimode optical fiber (GI)) - IEEE802.3 (1000BASE-SX) - IEC 60793-2-10 Types A1a.1
SRAM cassette	NZ2MC-8MBSE	Extended SRAM cassette Memory Capacity: 8M bytes
Remote Head Module	RJ72GF15-T2	
Battery- less option cassette	NZ1BLC	3.3VDC, 0.15A
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	PROFINE IO Controller Module
EtherNet/IP Module	RJ71EIP91	EtherNet/IP Network Interface

Modification for B0 version:

Module Name	Type Designation	Specification
HART analog module	R60ADI8-HA	HART Analog-Digital Converter Module Number of analog input points#8points current range#4 to 20mA
CC-Link IE TSN MASTER/LOCAL	RJ71GN11-T2	5VDC 0.81A
CC-Link IE Controller Network module	RJ71GP21S-SX	5VDC 0.95A 24VDC 0.28A(External power supply)
Extended SRAM uni	NZ2MC-2MBSE	3.3VDC 0.11A

Notes:

The products provided with specialty coatings resistant to corrosive gas are designated by the suffix "(C)" following the type designation.

1.2 - Software(GXWorks3):

Version : Ver. 1.052E

2. DOCUMENTS AND DRAWINGS:

Mitsubishi Electric Corporation:

- BCN-88000-0708(CERTIFICATION OF MATERIAL), dated Feb 17, 2014
- BCN-88000-0708(DOCUMENT LIST OF TYPE APPROVAL APPLICATION MODULES)
- BCN-88000-0709(Test specification), dated Apr 24, 2014
- BCN-88000-0708(OUTLINE), dated Mar 2014
- BCN-88000-0708(MANUAL), dated 2014
- BCN-88000-0708(CIRCUIT DIAGRAM), dated 2013
- BCN-88000-0708(PARTS LIST)_1, dated Jan 07, 2014
- BCN-88000-0708(PARTS LIST)_2, dated Apr 01, 2014
- BCN-88000-0708(CIRCUIT DIAGRAM)_2, dated 2013
- BCN-88000-0709-A Test Specification, dated June 12, 2014
- BCN-88000-0708-A(OUTLINE additional) No. BD690D587 & BD690D588 Rev. C, dated Apr 22, 2010
- BCN-88000-0708-A(MANUAL additional) SD Memory Card, undated
- BCN-88000-0708-A(PART LIST additional) No. GD916A944G51 Rev.A, dated Mar 24, 2014
- BCN-88000-0709_C(Test specification), dated Nov 17, 2014
- Appendix - Test program Ref. BCN-88000-0997, dated Nov 28, 2016
- Test Specification CC-Link IE & Type MELSEC iQ-R Ref. BCN-88000-0936-B, dated Jul 27, 2016
- BCN-88000-0937(OUTLINE), dated Mar 2016
- BCN-88000-0937(Parts_list), dated Mar 2016
- BCN-88000-0937(Circuit_diagram), dated Jun 2015
- BCN-88000-0937(Materials), dated Mar 2015
- BCN-88000-0937(DOCUMENT_LIST_OF_TYPE_APPROVAL_APPLICATION_MODULES), dated Jul 2016
- BCN-88000-1023 (Outline for MELSEC iQ-R), dated 05 Jun 2017
- BCN-88000-1023 (Circuit diagram for MELSEC iQ-R), dated 05 Jun 2017
- BCN-88000-1023 (Materials for MELSEC iQ-R), dated 05 Jun 2017
- BCN-88000-1023(MELSEC iQ-R Series, DOCUMENT LIST OF TYPE APPROVAL), dated 05 Jun 2017
- BCN-88000-1023 (Parts list for MELSEC iQ-R), dated 05 Jun 2017
- BCN-88000-1299 (MELSEC iQ-R Series, Software Version List), dated Jul 25 2018
- BCN-88000-1365 (Test Specification for MELSEC iQ-R Series Programmable Logic Controller) , dated 27 Nov 2018
- BCN-88000-1389 (Circuit diagram for MELSEC iQ-R Series Programmable Logic Controller) , dated 15 Nov 2018
- BCN-88000-1391 (Materials for MELSEC iQ-R Series Programmable Logic Controller) , dated 15 Nov 2018
- BCN-88000-1392 (Outline for MELSEC iQ-R Series Programmable Logic Controller) , dated 15 Nov 2018
- BCN-88000-1393 (Parts List for MELSEC iQ-R Series Programmable Logic Controller) , dated 15 Nov 2018

For modification B0 version:

Mitsubishi Electric Corporation:

- MELSEC iQ-R HART-Enabled Converter Module User's Manual, No. SH(NA)-082047ENG-A, dated October 2018.
- MELSEC iQ-R CC-Link IE TSN User's Manual, No. SH(NA)-082127ENG-A, dated May 2019.
- MELSEC iQ-R Ethernet/CC-Link IE User's Manual, No. SH(NA)-081256ENG-M, dated April 2019.
- BCN-88000-1529 (Circuit diagram), dated 29 Oct 2019.
- BCN-88000-1533 (Materials), dated 29 Oct 2019.
- BCN-88000-1535 (Outline), dated 29 Oct 2019.
- BCN-88000-1537 (Part list), dated 29 Oct 2019.
- BCN-88000-1527-A Type Approval Application Test Specificate, dated 29 Oct 2019.

3. TEST REPORTS:

Mitsubishi Electric Corporation:

- Test Report Ref. BCN-88000-0736, dated Nov 26, 2014.
- Test Program for System Configuration Ref. BCN-88000-0736, dated Mar 02, 2015
- Test Report Ref. BCN-88000-0997, dated Nov 26, 2016 - witnessed by BV Surveyor on Sep 12, 2016

JQA:

- Test Report Ref. BCN-88000-1239, dated Mar 22, 2018
- Test Report Ref. BCN-88000-1439, dated May 07, 2019

For modification B0 version:

JQA:

- Test Report No. KL80190534, dated 24-01-2020.
- Test Report No. KL05190120-1, dated 17-03-2020.
- Test Report No. KL05190120-2, dated 17-03-2020.

4. APPLICATION / LIMITATION:

- 4.1 - **BUREAU VERITAS** Rules for the Classification of Steel Ships.
- 4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - **BUREAU VERITAS** Environmental Category, **EC Code: 31.**
- 4.4 - The equipment installed within a metallic cabinet fulfils the EMC requirements for installation in the bridge and deck zone.
- 4.5 - Sensors used in the system and required as per Rules are to be duly approved by the Society.
- 4.6 - Each application is to be submitted to the Society's consideration.
- 4.7 - Where the system is used for machinery safeguards required by the Rules, the equipment is to be duplicated by another and different system.
- 4.8 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.
- 4.9 - Automation systems associated with essential services based on PLC's, once installed onboard ships, are to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.
- 4.10 - Depending on the Application, Factory Acceptance and On-board Tests are to be performed in accordance with requirements for Category II or III Equipment.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 - The above products are to be supplied by **MITSUBISHI ELECTRIC CORPORATION Nagoya Works** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 - **MITSUBISHI ELECTRIC CORPORATION Nagoya Works** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 - For information, **MITSUBISHI ELECTRIC CORPORATION Nagoya Works** has declared to Bureau Veritas the following production site(s):

MITSUBISHI ELECTRIC CORPORATION
Nagoya Works
5-1-14, Yada-Minami, Higashi-ku
Nagoya, 461-8670
JAPAN

6. MARKING OF PRODUCT:

- 6.1 - Maker's name or trade mark.
- 6.2 - Serial number of the units.
- 6.3 - Equipment type number or model identification under which it was type-tested.
- 6.4 - The title and version of each software element included in the installed software system shall be either marked or displayed on command on the equipment.

7. OTHERS:

- 7.1 - It is **MITSUBISHI ELECTRIC CORPORATION Nagoya Works - JAPAN's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 - This certificate supersedes the Type Approval Certificate No. 38513/A3 BV issued on 25 Jul 2019 by the Society.

*** END OF CERTIFICATE ***