



NIPPON KAIJI KYOKAI

**TYPE APPROVAL CERTIFICATE
FOR AUTOMATIC DEVICES AND EQUIPMENT**

Certificate No. TA23192M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of “Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use” and the relevant Society's Rules.

This certificate is issued to

Manufacturer:	Imes GmbH
Place of Manufacturing:	Dr.-Herbert-Kittel-Str. 2, D-87600 Kaufbeuren Germany
Product description:	CCM Combustion Control Module
Model:	CCM
Approval No.:	23A008
Valid until:	26 April 2028

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 27 April 2023.



S. Oishi
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

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Attached sheet -1/2 to the Certificate No. TA23192M

Specification & documents:

1. Particulars: Power supply: DC 24V

2. Documents and reference drawings:
 - Data sheet : CCM_en_10_2022
 - Hardware Manual Version 1.9 (October 24, 2022)
 - Housing D. No. 905 206 (08.11.17)
 - Software Manual for CCM Visualization 4-Stroke Version 4.6.0.0 (April 13, 2021)

3. Test Reports:
 - Intertek Test Report : 2234679KAU001 (2019-01-09)
 - Intertek Test Report : 2235167KAU002 (2019-02-27)
 - TQ-Systems Test Report : CHK+IMS-22001-PR01-S01 (August 1, 2022)
 - TQ-Systems Test Report : IMS-22001-PR01-E01-01 (May 19, 2022)
 - IMES CCM Certification Performance Test Report V1.1 (20-10, 2022)

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.8 basis)		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 70°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±4.0g)		X
Inclination test		--
Cold test (Temperature 5°C × 2 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		X

2. Approval condition:

The product is not allowed to be installed in the bridge and on open decks.