



EC TYPE EXAMINATION (MODULE B)
CERTIFICATE No. MED037623CS/002

***This is to certify** that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2022/1157.*

<i>MED Item N°</i>	MED/3.51a; MED/3.51b
<i>Description</i>	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces (a) Control and indicating equipment (b) Power supply equipment
<i>Type</i>	MD 9800-LC; Control, Monitoring and Power Supply Equipment
<i>Applicant</i>	MICRODATA DUE SRL VIA GRETI DEL VARA 9 19020 FOLLO (SP) ITALY
<i>Testing standards</i>	EN 54-2:1997 incl. AC:1999 and A1:2006; EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006; IEC 60092-504:2016; IEC 60533:2015; Type Test IACS UR E10
<i>Reference standards</i>	SOLAS 74 Reg. II-2/7; SOLAS 74 Reg. X/3; IMO Res. MSC.36(63)-(1994 HSC Code) 7; IMO Res. MSC.97(73)-(2000 HSC code) 7; IMO Res. MSC.98(73)-(FSS Code) 9; IMO Res. MSC.391(95)-(IGF Code) 11; IMO Res. MSC.1/ Circ 1487; IMO MSC.1/Circ 1242; IMO MSC. 1/Circ 1528; IMO MSC. 1/Circ 1554; RINA Rules for the certification of Marine Equipment
<i>Issued in Genoa on</i>	<i>This Certificate is valid until</i>
February 22, 2023	August 14, 2025

This Certificate consists of this sheet plus an attachment

Luigi Benedetti

RINA Services S.p.A.



ATTACHMENT TO
CERTIFICATE No. MED037623CS/002

Page 1 of 3

Manufacturer

MICRODATA DUE SRL

Place of Manufacturer

VIA GRETI DEL VARA 9
19020 FOLLO (SP)
ITALY

Product description:

Analogue, addressable fire detection and fire alarm system type MD9800 LC, comprising:

Main Fire detection and alarm panel	MD 9800-LC - (four loops)
Power supply module	TRACO Series TCL 60124 / TCL 120124
Alarm repeater panel	MD9860; MD9860I

Software description:

Microdata Due doc. D29013 Rev. 0	EN 54-2 Software requirements conformity
Microdata Due doc. PDQ24748 Rev. B	Software FDS MD9800-LC quality plan
Microdata Due doc. D24746 Rev. C	MD9800-LC Fire Alarm Control panel Software Requirement
Microdata Due doc. D24727 Rev. E	MD9860 - Data Sheet
Microdata Due doc. PDQ24747 Rev. B	MD9800-LC Fire Detection System Architectural Design Document

Reference documents:

Microdata Due doc. n. ST25813 Rev. A	Technical specification
Microdata Due doc. n. D27933 rev. C	MD9800-LC Data sheet
Microdata Due doc. n. IM-27375 - 40014 rev. 0	System Test Drawing
Traco AC/DC TCL Series	TCL 60124/ TCL 120124 Datasheet
Microdata Due doc. n. IM29185_1-40014 rev.0	System Test Drawing (IEC 60092-504 2016)

Test reports:

Microdata Due doc. IS28961 rev. B Annex A (12/11/2008)	Conformity to EN 54-2 / EN 54-4
TesLab report n. 051014F-2; Microdata Due report IS24738_687	MD9860
RINA doc. 8CS 4221 01 (20/11/08)	Conformity to EN 54-2 / EN 54-4
Microdata Due doc. IS 28961 rev. B_ n° 474 (12/11/2008)	Functional test - Test Rule Fire Detection System IM-27375
TesLab doc. IS 28961 rev. B_ n° 13/9 (05/03/2009)	Functional test - Test Rule Fire detection System IM-27375
TesLab doc. IS28961 rev. B_ n° 514 to 533 (15/12/08-23/01/09)	Functional test - Test Rule Fire detection System IM-27375 Annex B
TesLab doc. 08C189F-1 (20/02/2009)	Environmental report
Microdata Due doc. IS24740 Rev.0 (14/10/2004)	Software test
Microdata Due doc. D31249 Rev. 0 (09/02/2012)	Failure Mode and Effect Analysis
Microdata Due doc. IS 32331 Rev. C Test n° 1000/17 (22/12/17)	Functional Test according to dwg. IM29185_1-40014 (IEC 60092-504_2016)
TesLab report n° 17C331E-C (EMC Test as IEC 60092-504_2016)	MD9860
TesLab report n° 17C330E-C (EMC Test as IEC 60092-504_2016)	MD9800-2L; TRACO TCL
Microdata Due doc. D36679 rev. 0 Risk Assessmant	MD9800-LC

General Remarks:

When the fire alarm and fire detection system is also used for monitoring and control of other fire safety systems, according to Resolution MSC.311(88) Amendments to FSS Code, chapter 9, a Failure Mode and Effect Analysis document of the integrated system is to be provided before of the installation on board.

Depending on the FMEA results, system redundancy may be requested, on a case by case bases.

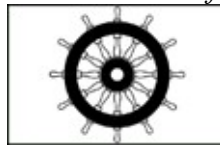
It shall be demonstrated that any malfunction of the interfaced and connected equipment should not propagate under any circumstance to the fire detection system.

A Block diagram including communication links, and power supply sources is to be sent for approval for each application on board.



**ATTACHMENT TO
CERTIFICATE No. MED037623CS/002
Page 2 of 4**

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body



XXXX/YYYY

"WHEELMARK FORMAT"

XXXX *Notified Body number undertaking surveillance module*
YYYY *The year in which the mark is affixed*

General conditions for the approval

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.

Luigi Benedetti