



EC TYPE EXAMINATION (MODULE B)
CERTIFICATE No. MED064024CS

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) 2023/1667.

<i>MED Item N°</i>	MED/3.51g; MED/3.51e
<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 (g) Short circuit isolators (e) Flame detectors: Point detectors
<i>Type</i>	MD9902-Ex
<i>Applicant</i>	MICRODATA DUE SRL VIA GRETI DEL VARA 9 19020 FOLLO (SP) ITALY
<i>Testing standards</i>	EN 54-10 (2002) incl. A1 (2005) ; EN 54-17 (2007) incl. AC (2007); IEC 60092-504 (2016); IEC 60533 (2015); RINA Rules for the certification of Marine Equipment.
<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 MSC.1/Circ 1242; RINA Rules for the certification of Marine Equipment

Issued in Genoa on
April 18, 2024

This Certificate is valid until
April 18, 2029

This Certificate consists of this sheet plus an attachment

Luigi Benedetti

RINA Services S.p.A.



**ATTACHMENT TO
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Manufacturer

MICRODATA DUE SRL

Place of Manufacturer

VIA GRETI DEL VARA 9
19020 FOLLO (SP)
ITALY

Product description:

MD9902-Ex: 3IR Flame detector

Automatic addressable flame detector able to provide fire alarm in case of flame presence.

The MD9902-Ex is the Ex version (Flameproof Exd) of the MD9902 flame detector.

It can be used either connected to the Loop of a Fire Detection System of Microdata Due and as standalone detector.

The flame is detected by three sensors working simultaneously; one of them is working on the hot carbon dioxide specific flame wavelength, the two other measure the interference radiation on the near wavelengths. Sensitivity Class 1, 2, 3 as defined on the EN 54-10 Requirements is complied with.

In case a failure occurs in the fire detection and alarm system (eg. loss of communication with detectors through loop card), the degraded mode is activated and a digital signal is sent to the central unit to activate the relevant loop led on the central unit.

A signalling LED on the detector housing is also flashing when a fire alarm is detected. The detector warns its failure conditions or degradation.

Detector housing: IP 66/ 67 _Aluminium

Reference documents:

<i>Microdata Due</i>	Technical specification:	ST40100 Rev. C RINA id. n. ELET/32832
<i>Microdata Due</i>	Data sheets:	D40101 Rev. E RINA id. n. ELET/32833
<i>Microdata Due</i>	Software description:	SDD42325 Rev.0 RINA id. n. ELET/32838
<i>Microdata Due</i>	User manual - Operating instructions:	IS41219 Rev.B - IS42308 Rev. A RINA id. n. ELET/32835-ELET/32837
<i>Microdata Due</i>	Risk Assessment:	D43453 Rev.0 RINA id. n. ELET/32834
<i>IMQ</i>	ATEX - IECEx safety certificates:	IMQ 21 ATEX 062 X - IECEx IMQ 21.0015X RINA id. n. ELET/34344-ELET/34345

Test reports:

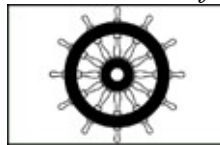
<i>CNBOP-PIB</i>	Performance	Test Report_1285_BA_21 (05/05/2023) RINA id. n. ELET/32859
<i>TESLAB</i>	Environmental	Test Report 232049F (30/03/2023) RINA id. n. ELET/32861



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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 not 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

RINA Services S.p.A.