**RI R** EC TYPE EXAMINATION (Module B)

# N. MED279818CS

*This is to certify* that RINA Services S.p.A. (Notified Body n° 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) 2019/1397

MED Items N <sup>•</sup>	MED/3.51c MED/3.51g MED/3.51d MED/3.53
Description	Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces
Туре	MD9910 Addressable Smoke and Heat point detector, including Short Circuit Isolator and Sounder; In conjunction with the fire detector bases: MD9900BS, MD9900BSI, MD9910-LP
<i>Applicant</i>	MICRODATA DUE SRL Via Greti del Vara, 9 19020 FOLLO (SP) ITALY
Testing Standards	EN 54-5:2000 incl. A1:2002; EN 54-5:2017; EN 54-7:2018; EN 54-17:2005 incl. AC:2007; EN 54-3:2014 + A1:2019; EN 54-29:2015 cl. 5.5; IEC 60092-504:2016; IEC 60533:2015
Reference Standards	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. MSC391(95)-(IGF Code) 11; IMO MSC.1/Circ 1242; RINA Rules for the certification of Marine Equipment
Issued in Genoa on March 31, 2020	This Certificate is valid until March 31, 2025

This Certificate consists of this sheet plus an attachment

Giovanni Carratino



**RINA Services S.p.A.** 

This is an electronically signed certificate



## Attachment to

## **CERTIFICATE N. MED279818CS**

#### Manufacturer:

#### **Microdata Due Srl**

#### Place of manufacturing:

Via Greti del Vara , 9 19020 Follo (SP) Italy

#### **Products description:**

**MD 9910** automatic analogue addressable multi-criteria Smoke and Heat Detector for indoor installation. MD 9910 heat detector according to Class A1 according to EN 54-5:2017

Detector main features:

- provide fire alarm for smoke presence
- provide fire alarm for high temperature
- survey the temperature inside the room where it is installed
- transmit to central Unit the analogue values of temperature and smoke that it measures
- perform, on demand, a test procedure name TOD (Test On Demand)
- notify the alarm state by the activation of the built-in Sounder
- notify the alarm by activation of two high intensity LEDs visible at 360° by means of light guides
- detect the presence of an obstruction that inhibits the revealing of the smoke

The detector is provided with a new feature named **TOD** (test on demand) that runs a test procedure on a command received by the Control Unit

The TOD checks the following circuits:

- Functionality of the IR detection chain

The functionality of the smoke measurement is fully tested. The test result is transmitted to the control panel.

- Functionality of the built in Sounder The sound pressure level generated by the Sounder is monitored to verify the correct acoustic level. The test result is transmitted to the control panel.
- Functionality of the Alarm LEDs The correct functionality of the alarm LEDs is verified. The test result is transmitted to the control panel.
- Functionality of the temperature detector The temperature circuit is tested by forcing a thermal alarm. The test result is transmitted to the con-
- The temperature circuit is tested by forcing a thermal alarm. The test result is transmitted to the control panel.
- Functionality detecting obstructions in front of the detector Sensor enclosure protection is detected as well as any obstacles nearby the sensor preventing the passage of smoke. The test result is transmitted to the control panel.

#### Note:

It can be assumed that the **T.O.D**. test procedure provides diagnostic results comparable with the ones obtained by manual test simulation performed locally by the operator.



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# Attachment to

# CERTIFICATE N. MED279818CS

#### Microdata Due Reference documents:

ST38822 Rev. E	Detector Technical specification
D38823 Rev. G	Sensor Data sheet
D40019 Rev. 0	Risk Assessment
SDD MD9910 Rev.1.1	Software description
SDD-39929_Rev.1	Software description doc. SWMD9910
CRISD-39930 Rev. 1	Computer Resource Integrated Support
VDD SW-29741 Rev.1	Version Description Doc. SW-29741 rev.1
IS40015 Rev.0	MD9910 Inspection and functional test
D36618 Rev. B	Detector Bases Short-Circuity Isolator_ Functional test procedure
IS39982 Rev. 0	Smoke Detector- Dust pollution test
ST39940 Rev. B	Low Profile Detector Base - MD9910-LP Technical Specification
D39924 Rev. B	Data sheet LP detector base
CM-29685-40007	Dwg. MD9910 LP
CM-29685-40010	Dwg. MD9910 LP
CM-29655-40006_p0-A	Dwg. MD9910 dimension with bases
CM-29655-40007	Dwg. MD9910 detector assembly
CM-29655-40010	Dwg. MD9910 detector Outline
ME-29737	Dwg. MD9910 ID Label
ME-29806 Rev.A	Dwg. MD9910-LP- ID Label

#### EVPU a.s. Test Reports:

0-0381B/19	EN54-3:2014+A1:2019
0-0381B/19	Amendment n. 01
0-0381B/1/19	EN 54-5:2017+A1:2018
0-0381B/2/19	EN 54-7:2018
0-0381B/3/19	EN 54-29:2015, cl 5.5
0-0381E/19	EN 54-3:2014+A1:2019
	EN 54-5:2017+A1:2018
	EN 54-7:2018; EN55032:2015
	EN50130-4:2011+A1:2014
0-0381S/19	EN 54-5:2017+A1:2018, cl. 4.27
0-0381S/1/19	EN 54-7:2018, cl.4.2.8
0-0381B/4/19	IEC 60092-504:2016, tab. 1
	EN 60529:1991+A1:2000+A2:2013
	(IP44 with base MD9900-BS)
	EN 60695.11.5:2017
0-0381E/1/19	IEC 60092-504:2017

#### EVPU a.s. Statement:

Doc. n. Ny-013/20 (10/03/2019)

#### TesLab Test Reports:

19A285F	IEC60092-504:2016 (IP22 with base MD9910-LP)
19B344A Rev.1	Additional Dust test
19A284F	EN54-17:2005
19A285F	EN60092-504:2016
19A286A	EN60529:1991+A1:2000+A2:2013



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# RIR

# **Attachment to**

# CERTIFICATE N. MED279818CS

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 condition 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.

Giovanni Carratino

#### **RINA Services S.p.A.**

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