TYPE APPROVAL CERTIFICATE
No. **ELE201125CS**

This is to certify that the product below is found to be in compliance with the applicable requirement of the RINA type approval system.

Description	**Fire detectors**
Type	**Smoke and Heat detector (A1 Class):** **MD9910 with TOD, Integrated Sounder and Obstruction detector** **MD9910-LT with Integrated Sounder and not including TOD and Obstruction detector** **MD9910-LTNB not including TOD, Integrated Sounder and Obstruction detector** **In conjunction with fire detector bases: MD9900-BC, MD9900-BCI, MD9900-BS, MD9900-BSI, MD9910-LP**
Applicant	**MICRODATA DUE - SOCIETA' A RESPONSABILITA' LIMITATA** **VIA GRETI DEL VARA 9** **19020 Follo (SP)** **ITALY**
Manufacturer	**MICRODATA DUE SRL**
Place of manufacture	**Via Greti Del Vara 9, 19020 Follo, La Spezia** **ITALY**
Reference standards	**Rules for the Classification of Naval Ship - Machinery, Systems and Fire Protection Pt C, Ch 3, Sec 8, Table 1; EN 54-5:2017+A1:2018; 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**

Issued in **Genoa** on **March 31, 2025**. *This Certificate is valid until* **March 31, 2030**

RINA Services S.p.A.
Luigi Benedetti

This certificate consists of this page and 1 enclosure

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000

TYPE APPROVAL CERTIFICATE
No. **ELE201125CS**
Enclosure - Page 1 of 1
Smoke and Heat detector (A1 Class):
MD9910 with TOD, Integrated Sounder and Obstruction detector
MD9910-LT with Integrated Sounder and not including TOD and Obstruction detector
MD9910-LTNB not including TOD, Integrated Sounder and Obstruction detector

Product information:

Product:

Combined Smoke and Heat detector (MD9910, MD9910-LT, MD9910-LTNB)

Description

MD9910 automatic analogue addressable multi-criteria combined Smoke and Heat Detector suitable for indoor installation.

The detector MD9910 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 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.

The MD9910 detector can also be supplied without the TOD (Test On Demand) functionality in two versions that differ in the presence (MD9910-LT) and absence (MD9910-LTNB) of the integrated sounder.

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Via Corsica, 12 - 16128 Genova
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Rating and main characteristics:

Protection Index with base MD9910-LP	IP22
Protection Index with base MD9900-BS/BSI	IP44
Sounder type	Type A
Sound Max output	81dB(A)@1mt
Sound nominal output	75dB(A)@1mt
Frequency	2400 Hz
Weight (detector only)	125 gr
Weight (with LP base)	180 gr
Weight (with BS/BSI base)	280 gr
Material	Polycarbonate Flame Retarded CI. UL94V0
Colour	White RAL9010
Operating Temperature	- 25°C / +75°C
Power Supply	24Vdc (modulated)
Max Current	350 uA
Max Current with Sounder on	550 uA

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 named 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 MD9910-LT and MD9910-LTNB versions are derived from the standard MD9910 sensor, from which they differ due to the absence of certain electronic circuits that are not required for the Test On Demand (TOD) function.

Datasheet:

D38823_J - Datasheet detector MD9910
ST38822_F - Technical Specification MD9910 (23.04.2025)
D44604_A - Technical assessment MD9910-LT & MD9910_LTNB (24.04.2025)

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Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000

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_0	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
19268/09/S	Certificate ISO 9001:2015 (13/02/2024) Accredia

EVPU a.s. Test Reports:

0-0381B/19	EN54-3:2014+A1:2019	4/12/2019
0-0381B/19	Amendment n. 01	8/01/2020
0-0381B/1/19	EN54-5:2017+A1:2018	4/12/2019
0-0381B/2/19	EN54-7:2018	4/12/2019
0-0381B/3/19	EN54-29:2015, cl 5.5	4/12/2019
0-0381E/19	EN54-3:2014+A1:2019	4/12/2019
	EN54-5:2017+A1:2018	4/12/2019
	EN54-7:2018; EN55032:2015	4/12/2019
	EN50130-4:2011+A1:2014	4/12/2019
	EN55032:2015	4/12/2019
0-0381S/19	EN 54-5:2017+A1:2018, cl. 4.27	4/12/2019
0-0381S/1/19	EN 54-7:2018, cl.4.2.8	4/12/2019
0-0381B/4/19	IEC 60092-504:2016, tab. 1	4/12/2019
	EN 60529:1991+A1:2000+A2:2013 (IP44 with base MD9900-BS)	4/12/2019
	EN60695.11.5:2017	4/12/2019
0-0381E/1/19	IEC60092-504:2017	4/12/2019

EVPU a.s. Statement:

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

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000

TesLab Test Reports:

19A285F	IEC 60092-504:2016 (IP22 with base MD9910-LP)	19/12/2019
19B344A Rev.1	Additional Dust Test	27/02/2020
19A284F	EN 54-17:2005	28/12/2019
19A285F	60092-504:2016 (MD9910-LP)	19/12/2019
19A286A	EN 60529:1991 + A1:2000 + A2:2013	26/11/2019

Genoa May 21, 2025

RINA Services S.p.A.
Via Corsica, 12 - 16128 Genova
Tel +39 010 53851
Fax +39 010 5351000