



TYPE APPROVAL CERTIFICATE

N. **ELE279818CS**

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA Type Approval system

Description	Fire Detectors
Type	MD9910 Addressable Smoke and Heat detector including Short Circuit Isolator and Sounder; In conjunction with fire detector bases: MD9900BS, MD9900BSI, MD9910-LP
Applicant	MICRODATA DUE SRL Via Greti del Vara 9 19020 Follo (SP) ITALY
Manufacturer	MICRODATA DUE SRL Via Greti del Vara 9 19020 Follo (SP) ITALY
Testing standards	Rules for the Classification of Ships – Part C – Machinery, Systems and Fire protection – Ch.3 Sect. 6 Tab. 1 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

Issued in Genova on **March 31, 2020**

This Certificate is valid until **March 31, 2025**

RINA Services S.p.A.

Luigi Benedetti



This is an electronically signed certificate



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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 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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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-Circuit 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	EN54-5:2017+A1:2018
0-0381B/2/19	EN54-7:2018
0-0381B/3/19	EN54-29:2015, cl 5.5
0-0381E/19	EN54-3:2014+A1:2019
	EN54-5:2017+A1:2018
	EN54-7:2018; 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)
	EN60695.11.5:2017
	IEC 60092-504:2017
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

