TYPE APPROVAL CERTIFICATE

N. ELE098021CS001

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	**Fixed fire detection and fire alarm system:** **Smoke detector including Short circuit isolator**
Type	**MD9900 smoke detector** **in conjunction with fire detector bases:** **MD9900 BC; MD9900 BCI; MD9900 BS; MD9900 BSI;** **MD9900 BBZ; MD9900 BBZI; MD9900 BSZ; MD9900 BSZI; MD9900-BC-PT;** **MD9900-BCI-PT; MD9900-BBZ-PT; MD9900-BBZI-PT; MD9900-BS-PT;** **MD9900-BSI-PT; MD9900-BSZ-PT; MD9900-BSZI-PT**
Applicant	**MICRODATA DUE S.r.l.** Via Greti del Vara 9 19020 Follo (SP) ITALY **MICRODATA DUE S.r.l.** Via Greti del Vara 9 19020 Follo (SP) ITALY
Testing Standards	**EN 54-7: 2018; EN 54-17: 2005 + AC: 2007** **IEC 60092-504: 2016; IEC 60533: 2016;** **IACS UR E10 Type Tests**
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. MSC.391(95)-(IGF Code) 11** **IMO MSC.1/Circ.1242**

Issued at Genoa on
June 21, 2021

This Certificate is valid until
June 21, 2026

This Certificate consists of 3 pages

RINA Services S.p.A.

Luigi Benedetti

RINA Services S.p.A.
Via Corsica 12- 16128 Genova

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Products description:

MD 9900 Smoke detector
Analogue, addressable microprocessor based photoelectric smoke detector including a temperature sensor for analog measurement

Reference documents:

Microdata Due	ST21405 rev. C	Technical specification
Microdata Due	D23583 rev. A	Software description
Microdata Due	D24728 rev. F	Data sheet:
Microdata Due	D36688 rev. 0	Risk Assessment
Microdata Due	D36647 rev. 0	Comparing Lexan 920 and Lexan 923 resin

Test Reports:

BRE Laboratory	Report n. TE 213449/A, (03 /10/2007)	Env./Performance
BRE Laboratory	Report n. TE 213449 SW, (17/11/2004)	Software Evaluation
Microdata Due	Report n. 196 annex to IS24743 Rev. 0 (22/02/2005)	Functional Test
Istituto Giordano Lab	Report n. 213254, (30/06/2006) IP 32 with detector bases MD9900-BC and MD9900BCI IP 65 with detector bases MD9900-BS and MD9900-BSI	Enclosure Protection
Teslab Laboratory	Report n. 17B302E-a	EMC (EN60092-504:2016)
Teslab/ Microdata Due	Report n. 0974-17 (28/11/2017) Functional test as procedure IS37789 Rev.0 (EMC_ IEC 60092-504:2016)	
Teslab Laboratory	Report n. 214123-E (2021-05-10) - (EMC_EN50130-4: 2011+A1:2014)	

Fire detector bases
The following detector bases may be used **in connection with MD9900 detectors**

Models MD9900 BC or **MD9900-BC-PT and MD9900 BCI** or **MD9900-BCI-PT detector bases**
(IP 32 in connection with the MD9900 detectors) for false ceiling installation;
Models MD9900-BCI or **MD9900-BCI-PT** in addition contain a short-circuit isolator
Models **MD9900-BC-PT** and **MD9900-BCI-PT** are suitable for connection to PTS Satellite

MD 9900 BS or **MD9900-BS-PT** and **MD 9900-BSI or MD9900-BSI-PT detector bases:**
(IP65 in connection with the MD9900 detectors)
Models **MD9900-BSI** or **MD9900-BSI-PT** in addition contain a short-circuit isolator
Models **MD9900-BS-PT** and **MD9900-BSI-PT** are suitable for connection to PTS Satellite

Reference documents:

Microdata Due	T21405 Rev. C	Technical specification
Microdata Due	D24729 Rev. E	Data sheet
Microdata Due	D24730 Rev. E	Data sheet
Microdata Due	D36618 Rev.0	Functional Test Procedure

Test reports:

Ist. Giordano Lab.	Report n.213254, (30/06/2006) IP32 and IP65 protection with MD9900 detector
BRE Laboratory	Report n. TE213449/A, (03/10/2007) _ Environmental / Performance
Microdata Due	Test procedure n. IS 34434 _ Report 822/14 testing on 16/05/2014
Microdata Due	Report n. 196 annex to IS-24743 Rev. 0, (22/02/2005) _ Functional Test
Microdata Due	Report n. D36618 Rev.0 (13/07/2016) - Functional Test Procedure
Microdata Due	Report n. 656/16 (02/08/2016)
Teslab Laboratory	Report n. 214123-E (2021-05-10) - (EMC_EN50130-4: 2011+A1:2014)

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Fire detector bases with buzzer
The following **detector bases** may be used **in connection with MD9900 detectors**:

MD9900-BBZ and **MD9900-BBZI** or **MD9900-BBZ-PT** and **MD9900-BBZI-PT** fire detector bases
(IP 32 in connection with the MD9900 detector) include a Buzzer suitable for warning a fire alarm in accommodation spaces.
Models **MD9900-BBZI** or **MD9900-BBZI-PT** in addition contain a short circuit isolator
Models **MD9900-BBZ-PT** and **MD9900-BBZI-PT** are suitable for connection to PTS Satellite

MD9900-BSZ or **MD9900-BSZ-PT** and **MD9900-BSZI** or **MD9900-BSZI -PT** fire detector bases
(IP 65 in connection with the MD9900 detector) include a Buzzer suitable for warning a fire alarm in a crew spaces.
Models **MD9900-BSZI** or **MD9900-BSZI -PT** in addition contain a short circuit isolator
Models **MD9900-BSZ-PT** and **MD9900-BSZI -PT** are suitable for connection to PTS Satellite

Reference documents:

Microdata Due	Data sheet n. D27897 Rev. E ;
Microdata Due	Data sheet n. D29020 Rev. B
Microdata Due	Report n. 474 annex to IS -28961 Rev. B, (12/11/2008) _ Functional tests
Microdata Due	Letter PRO051/09 (10/03/09)
Microdata Due	Functional Test Procedure n. D36618 Rev.0

Test reports:

Istituto Giordano	Report n. 213254, (30/06/2006)
TesLab Laboratory	Report n. 08C189F-3 (23/02/2009) _ Environmental / Performance
Microdata Due	Test Procedure n. IS 34434 report 822/14 testing on 16/05/2014
Microdata Due	Report n. D36618 Rev.0 (13/07/2016) - Functional Tests
Microdata Due	Report n. 656/16 (02/08/2016)
Teslab Laboratory	Report n. 214123-E (2021-05-10) - (EMC_EN50130-4: 2011+A1:2014)

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