RIR EC TYPE EXAMINATION (Module B)

N. MED070321CS003

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) 2020/1170

MED Items N•	MED/ 3.51 (c); MED/ 3,51 (d); MED/ (g)
Description	Fixed fire detection and fire alarm systems, components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces.
	 (c) Heat detectors - Point detectors (d) Smoke detectors - Point detectors using scattered light, transmitted light or ionization (g) Short circuit isolators
Туре	MD9901 Smoke and Heat detector, including short circuit isolator; MD9901-EX Smoke and heat detector (I.S.); 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
Testing Standards	EN 54-5:2017 incl. A1:2018; EN 54-7:2018; EN 54-17:2005 incl. AC:2007; IEC 60092-504:2016; IEC 60533:2015; 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. MSC391(95)-(IGF Code) 11 IMO MSC.1/Circ.1242 RINA Rules for the certification of Marine Equipment.
Issued at Genoa on June 21, 2021	This Certificate is valid until June 21, 2026

This Certificate consists of 4 pages

RINA Services S.p.A.

RINA Services S.p.A Quigi Benedetti



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

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RI R EC TYPE EXAMINATION (Module B)

N. MED070321CS003

Manufacturer:

MICRODATA DUE S.r.l.

Place of manufacturing:

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

Products description:

MD 9901 Combined Smoke and Heat Detector

Analogue, Addressable microprocessor based photoelectric Smoke detector including separate Heat sensors. A further sensor is exclusively used for analog measurement of temperature . MD 9901 detector responds to para. 4.1 C) of CEA 4021 : July 2003 requirements Temperature sensor complies with Class A1, B and C as defined on EN 54-5:2017 incl. A1:2018 requirements.

Reference documents

Rejerence aucuments				
Microdata Due	ST24736 Rev. B	Technical specification		
Microdata Due	D24735 Rev. 0	Software description		
Microdata Due	D24731 Rev. F	Data sheet		
Microdata Due	D36689 Rev. 0	Risk Assessment		
Microdata Due	D36647 Rev. 0	Comparing Lexan 920 and Lexan 923 r	resin	
Test Reports				
-				
BRE Laboratory	Report n. TE 220	0771, (25 /06/2005)	Env. / Performance	
BRE Laboratory	Report n. TE 220	0771 SW, (25/04/2005)	Software Evaluation	
Microdata Due	Report n. 1058 annex to IS-25793 rev. 0, (14/09/2005) Functional Tests			
Istituto Giordano Lab	Report n. 213254, (30/06/2006) Enclosure Protection			
	IP 32 with detector bases MD9900-BC and MD9900-BCI			
	IP 65 with detector	IP 65 with detector bases MD9900-BS and MD9900-BSI		
TesLab Laboratory	Report n. 17B302	E-b (EMC_ EN60092-504 (2016)		

TesLab Laboratory TesLab / Microdata Due TesLab Laboratory

e Report n. 0974-17 (28/11/2017) Functional test as procedure IS37789 Rev.0 (EMC IEC 60092-504:2016) Report n. 214123-E (2021-05-10) - (EMC_EN50130-4: 2011+A1:2014)

MD9901-EX IS Combined Smoke and Heat Detector

Analogue, Addressable Intrinsically Safe multicriteria fire detector, model MD9901-EX

Reference documents

Microdata Due Microdata Due Microdata Due Microdata Due Microdata Due ST28999 Rev. BTechnical SpecificationD29009 Rev. EData sheetPRO076/10Letter (10/05/2010)D24735 Rev. 0Software descriptionD36689 Rev.0Risk Assessment

Safety references:

Certificate: Marking: Safety Standard: Certification Authority:

Test reports:

Bre Global Laboratory Bre Laboratory Istituto Giordano Lab.

TesLab Laboratory TesLab / Microdata Due TesLab Laboratory IMQ 09 ATEX 025 X (2015-11-13) II 2GD Ex ia IIC T5 Ga ; Ex ia IIIC T100°C Da EN60079-0:2012+A11:2013; EN60079-11:2012 IMQ S.p.A

 Report n. TE 255351 (14/04/2010)
 Environmental / Performance

 Report n. TE220771SW (25/04/2005)
 Software Evaluation

 Report n. 213254 (30/06/06)
 Enclosure Protection

 IP65 with detector base MD9900-BS
 Enclosure Protection

 Report n. 17B302E-c
 (EMC) EN60092-504 (2016)

 Report n. 0974-17 (28/11/2017) Functional test as procedure IS37789 Rev.0 (EMC IEC 60092-504:2016)

 Report n. 214123-E (2021-05-10) - (EMC_EN50130-4: 2011+A1:2014)



RI R EC TYPE EXAMINATION (Module B)

N. MED070321CS003

Fire detector bases:

The following detectors bases may be used in connection with MD9901 detectors

Models MD9900 BC or MD9900-BC-PT and MD9900 BCI or MD9900-BCI-PT detector bases (IP 32 in connection with MD9901 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 MD9901 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	Technical specification n. ST21405 rev. C
Microdata Due	Data sheet n. D24729 Rev. E
Microdata Due	Data sheet n. D24730 Rev. E
Microdata Due	Functional Test Procedure n . D36618 Rev.0

Test reports:

1 correpond.	
Ist. Giordano Lab.	Report n. 213254, (30/06/2006) IP32 and IP65 protection with the MD9901 detectors
BRE Laboratory	Report n. TE213449/A, (03/10/2007) _ Environmental / Performance
Microdata Due	Test procedure n° IS 34434 _ report n. 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)

Fire detector bases with buzzer

The following detector bases may be used in connection with MD9901 detectors:

MD9900-BBZ and MD9900-BBZI or MD9900-BBZ-PT and MD9900-BBZI-PT fire detector bases (IP 32 in connection with the 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 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 DueData sheet n. D27897 Rev. E ; Microdata Due Data sheet n. D29020 Rev. BMicrodata DueReport n. 474 annex to IS -28961 Rev. B, (12/11/2008) _ Functional testsMicrodata DueLetter PRO051/09 (10/03/09)Microdata DueFunctional 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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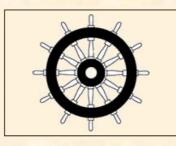
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attachnment to

CERTIFICATE n. MED070321CS003

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.

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RINA Services S.p.A.

Luigi Benedetti



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