



TYPE APPROVAL CERTIFICATE
No. **ELE037623CS005**

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

<i>Description</i>	Baro-Thermo-Hygrometer
<i>Type</i>	Sensor MD2207 in connection with module MD9850
<i>Applicant</i>	MICRODATA DUE SRL Via Greti Del Vara 9 , 19020 Follo, La Spezia ITALY
<i>Manufacturer</i>	MICRODATA DUE SRL
<i>Place of manufacture</i>	Via Greti Del Vara 9, 19020 Follo, La Spezia ITALY
<i>Reference standards</i>	Rules for the Classification of Ships - Part C - Machinery, Systems and Fire Protection; Ch. 3; Sec. 6, Table 1

Issued in **Genoa** on **February 22, 2023**. *This Certificate is valid until* **February 21, 2028**

RINA Services S.p.A.
Luigi Benedetti

This certificate consists of this page and 1 enclosure

TYPE APPROVAL CERTIFICATE
No. ELE037623CS005
Enclosure - Page 1 of 1
Sensor MD2207 in connection with
module MD9850

The **Baro-Thermo-Hygrometer model MD2207** for measuring the pressure, the temperature and the Humidity (RH) of the ambient where it is installed.

The measure PCB board is enclosed in aluminum case.

MD 2207 Sensor may be installed in potentially explosive atmosphere, with the use of additional Zener Barrier, contained in Module MD9850. Module **MD9850** allows the galvanic isolation between the detection Loop and the Ex detector line.

MD2207 Mechanical protection: IP65

MD2207 Max ambient temperature Operating Condition: -20°C to +75°C

MD9850 Max ambient temperature Operating Condition: -5°C to +60°C

Sensors features:

Humidity:

Measurement range: 0 to 100% RH

Accuracy: typ. $\pm 3.0\%$ RH (20 to 80% RH)

Temperature:

Measurement range: -40 to 120 °C

Accuracy: typ. $\pm 0.3^\circ\text{C}$ (0 to 60°C)

Pressure:

Measurement range: 260 to 1260 mbar absolute

Accuracy: typ. ± 5 mbar

EU-Type Examination Certificate

Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 2014/34/EU

EU-Type Examination Certificate:

IMQ 16ATEX 003X (2017-01-24)

Product: Baro-Thermo_Igrometer type MD2207

Marking:

II 2 G Ex ia IIC T5 Gb

II 2 D Ex ia IIIC T100°C Db

Safety Standard:

EN 60079-0:2012+A11:2013; EN 60079-11:2012

General remarks:

Condition of installation to be in accordance with **IMQ 16ATEX 003X** Eu-type Examination Certificate Requirements.

Technical description:

Microdata Due doc n.D35514 rev.A

Microdata Due doc n.D29010 rev B

Test Report:

Microdata Due doc. IS37739 rev.0 (2017/06/01)

TesLab doc. 17165F (2017/08/23)

TesLab doc. 17B302E-c (2018/01/12)

Genoa February 22, 2023

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