

1 **EU - TYPE EXAMINATION CERTIFICATE**

2 **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU**

3 EU - Type Examination Certificate **Baseefa09ATEX0149 – Issue 7**
Number:

3.1 In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

4 Product: **MDM100 I.S. & MDM300 I.S. Dew-Point Hygrometers**

5 Manufacturer: **Michell Instruments Ltd.**

6 Address: **Unit 48, Lancaster Way Business Park, Ely, Cambs., CB6 3NW United Kingdom**

7 This re-issued certificate extends EC Type Examination Certificate No. **Baseefa09ATEX0149** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

8 SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

8.1 The original certificate was issued by SGS Baseefa Ltd (UK Notified Body 1180). It, and any supplements previously issued by SGS Baseefa Ltd have been transferred to the supervision of SGS Fimko Oy (EU Notified Body 0598). The original certificate number is retained.

The examination and test results are recorded in confidential Report No. **See Certificate History**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0: 2018 EN 60079-11: 2012

except in respect of those requirements listed at item 18 of the Schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

⊕ II 1G Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C)

SGS Fimko Oy Customer Reference No. **4014**

Project File No. **24/0381**

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13 Schedule

14 Certificate Number Baseefa09ATEX0149 – Issue 7

15 Description of Product

The MDM100 I.S. and MDM300 I.S. are portable Dew-Point Hygrometers. They comprise electronic circuitry powered by a rechargeable battery pack, a front panel LCD, custom rubber keypad and a humidity sensor that is connected to using rear panel pipe connections.

They also accept signals from an external 4-20mA dewpoint sensor that connects via a connector on the rear panel.

The terminal parameters for the equipment are:

Charging Socket

$$U_m = 18V$$

The MDM100 I.S and MDM300 I.S are designed to be charged from a charger with an output of no greater than 18V d.c.

External Sensor Socket

$$U_i = 28V$$

$$I_i = 93mA$$

$$P_i = 650mW$$

$$P_o = 0$$

$$C_i = 0$$

$$L_i = 0$$

The external Sensor Socket is designed to connect to an externally powered 4-20mA loop.

16 Report Number

See Certificate History.

17 Specific Conditions of Use

None.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product:

Clause	Subject	Compliance
1.2.7	Protection against other hazards (LVD type requirements, etc.)	Manufacturer responsibility
1.4.1	External effects	User/Installer responsibility
1.4.2	Aggressive substances, etc.	User/Installer responsibility

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
Ex90412	1 to 25	10	31/07/24	MDM300 I.S. DEW-POINT HYGROMETER ATEX/IECEX/UKCA CERTIFICATION DRAWING
Ex85466/PL	1	01	01/02/23	MDM300 I.S. Battery Pack PCB Assembly Parts List
Ex85469/PL	1	01	01/02/23	MDM300 I.S. Heater Interface PCB Assembly Parts List
Ex80796/PL	1	02	01/02/23	MDM300 I.S. Sensor PCB Assembly Parts List
Ex80701/PL	1 to 4	05	01/02/23	MDM300 I.S. Main PCB Assembly Parts List

Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
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All other drawings were considered obsolete and were removed.

20 Certificate History

Certificate No.	Date	Comments
Baseefa09ATEX0149	16 April 2010	The release of the prime certificate. The associated test and assessment against the requirements of EN 60079-0:2009, EN 60079-11:2007 and EN 60079-26:2007 is documented in Test Report No. GB/BAS/ExTR09.0089/00 and GB/BAS/ExTR09.0128/00 for project 08/0244.
Baseefa09ATEX0149/1	29 June 2011	To permit minor electrical changes that do not affect the existing certification. Report GB/BAS/ExTR11.0151/00 for project 11/0193.
Baseefa09ATEX0149/2	28 November 2011	To permit a change in value of two resistors. Report GB/BAS/ExTR11.0289/00 for project 11/0898.
Baseefa09ATEX0149/3	21 February 2012	To permit minor drawing changes not affecting certification. Report GB/BAS/ExTR12.0039/00 for Project 12/0083
Baseefa09ATEX0149/4	22 July 2013	To permit minor circuit changes to facilitate the use of a replacement LCD module and to permit the addition of model MDM100I.S. Portable Dewpoint meter into the certificate. Report GB/BAS/ExTR13.0156/00 for Project 13/0437.
Baseefa09ATEX0149 Issue 5	5 September 2019	This issue of the certificate incorporates previously issued primary & supplementary certificates into one certificate and confirms the design meets the requirements of EN IEC 60079-0:2018 & EN 60079-11:2012 following minor component changes and introduction of a new enclosure material. Report GB/BAS/ExTR18.0038/00 for Project 17/0855.
Baseefa09ATEX0149 Issue 6	9 October 2019	To permit a component change and an administrative drawing change. Report GB/BAS/ExTR19.0256/00 for Project 19/0529.
Baseefa09ATEX0149 Issue 7	11 October 2024	To permit minor drawing and product changes not affecting the original assessment. Product name has been changed. The associated test and assessment is documented in Test Report No. GB/SGS/ExTR24.0168/00. Project File No. 24/0381.

For drawings applicable to each issue, see original of that issue.