

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 Number: **EESF 20 ATEX 085X Issue 2**
4. Product: **Humidity and Temperature Transmitter**
Certified types: **HMT370EX**
5. Manufacturer: **Vaisala Oyj**
6. Address: **Vanha Nurmijärventie 21, FI-01670 VANTAA, Finland**
7. This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
8. Eurofins Electric & Electronics Finland Oy, Notified Body number 0537, 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.

The examination and test results are recorded in confidential report No EUFI29-23002595-T1.
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-11:2012**
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
II 1D Ex ia IIIC T₂₀₀ 85 °C Da
-40 °C ≤ Tamb ≤ +60 °C

Espoo, 16.8.2023
Eurofins Electric & Electronics Finland Oy

Jenni Hirvelä
Senior Expert

Kari Koskela
Senior Expert

This document is digitally signed.



13. **Schedule**
14. **EU-Type Examination Certificate EESF 20 ATEX 085X Issue 2**
15. **Description of Product**

Vaisala Intrinsically Safe Humidity and Temperature Transmitter HMT370EX Series is designed with the protection concept Ex ia and is intended to be used in Groups IIC and IIIC. Equipment consists of the HMT370EX transmitter and HMP370EX probe. The HMT370EX consist of three main parts: transmitter body, detachable probe body and probe head attached to the probe body, either directly or with a cable. The enclosure Type of Protection of the transmitter body is IP54 (IEC 60079-0), but IP66 (IEC 60079-0) when the probe body is attached.

Input values of 4...20 mA loops (ch. 1 and 2):

U_i = 28 Vdc I_i = 100 mA P_i = 700 mW C_i = 12.1 nF L_i = 16 µH.

Two transmitter body types are available in HMT370EX series:

Model Explanation	Tamb range	Temperature class
Display and 4 button keypad	-40 °C ... +60 °C	T4
LED indicator	-40 °C ... +60 °C	T4

The probe can only be used together with the transmitter body in explosive atmospheres. In safe area, transmitter and probe can be used with Vaisala USB-cable connected to a PC.

A series of probes (HMP370EX) are available in the HMT370EX series. They all have the same probe body, but different probe head. The differences between the probes are process interface, temperature range and pressure range. Probe heads come with three different cable lengths. The available probe models are listed below:

Model	Explanation	Cable lengths	Ambient temperature range	Probe head temperature	Probe head temp. class	Probe head pressure range
1	for wall mounting	No Cable	-40 °C ... +60 °C	-40 °C ... +60 °C	T4	
3	for confined spaces	2, 5 and 10 m	-40 °C ... +60 °C	-40 °C ... +55 °C -40 °C ... +100 °C -40 °C ... +120 °C	T6 T5 T4	
4	for pressurized spaces	2, 5 and 10 m	-40 °C ... +60 °C	-70 °C ... +55 °C -70 °C ... +100 °C -70 °C ... +135 °C -70 °C ... +180 °C	T6 T5 T4 T3	0 ... 10 MPa
5	for high temperatures	2, 5 and 10 m	-40 °C ... +60 °C	-70 °C ... +55 °C -70 °C ... +100 °C -70 °C ... +135 °C -70 °C ... +180 °C	T6 T5 T4 T3	
7	for high humidities	2, 5 and 10 m	-40 °C ... +60 °C	-70 °C ... +55 °C -70 °C ... +100 °C -70 °C ... +135 °C -70 °C ... +180 °C	T6 T5 T4 T3	0... 1 MPa
8	for pressurized pipelines	2, 5 and 10 m	-40 °C ... +60 °C	-70 °C ... +55 °C -70 °C ... +100 °C -70 °C ... +135 °C -70 °C ... +180 °C	T6 T5 T4 T3	0 ... 4 MPa
F	for moisture in oil	2, 5 and 10 m	-40 °C ... +60 °C	-70 °C ... +55 °C -70 °C ... +100 °C -70 °C ... +135 °C -70 °C ... +180 °C	T6 T5 T4 T3	0 ... 4 MPa
H	for moisture in fuel	2, 5 and 10 m	-40 °C ... +60 °C	-70 °C ... +55 °C -70 °C ... +100 °C -70 °C ... +135 °C -70 °C ... +180 °C	T6 T5 T4 T3	0 ... 4 MPa

16. Report Number

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17. Specific Conditions of Use

1. The cable glands and blanking elements used with the transmitter shall conform to requirements of IEC 60079-0 with IP66 Type of Protection.
2. For EPL Ga Group II it has to be ensured that sparks due to impact or friction do not occur.

18. Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

19. Drawings and Documents

Drawings and documents are listed in the confidential report.

20. Certificate History

Issue	Date	Report No.	Change
-	08.02.2021	EUFI29-20002009-T1	Original release.
1	08.06.2021	EUFI29-20002945-T1	Probe head temperature ranges and Temperature Classifications revised.
2	16.8.2023	EUFI29-23002595-T1	New window materials introduced. IP66 in accordance with EN 60079-0:2018 assessed when probe body is attached to transmitter.