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Type Examination Certificate

for Electrical Equipment used in Potentially Explosive Atmosphere

Issued by Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK	
Applicant	Vaisala Oyj Vanha Nurmijarventie 21, FI-01670 VANTAA, Finland
Manufacturer name	Vaisala Oyj Vanha Nurmijarventie 21, FI-01670 VANTAA, Finland
Product name	Humidity and Temperature Transmitter
Type/model code	HMT370EX
Type of protection	Intrinsic Safety
Group, Temperature Class and EPL	IIC, T4, Ga IIIC, T ₂₀₀ 85°C, Da
The equipment shall be marked with the following	Ex ia IIC T4 Ga Ex ia IIIC T ₂₀₀ 85°C Da
Ratings	See Attachment 1
Special condition for safe use	See Attachment 2
Certificate number	CML 21JPN2417X
Term of validity	From 18-05-2021 to 17-05-2024



This is to certify that the equipment specified above complies with the requirements stipulated in Ordinance on Examination of Machines and Other Equipment of the Ministry of Health, Labour and Welfare, Japan.

Issue date: 20-01-2022

Signature of chief examiner:



Attachment 1 - Ratings

Ambient: $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +60^{\circ}\text{C}$

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

- $U_i = 28 \text{ Vdc}$
- $I_i = 100 \text{ mA}$
- $P_i = 700 \text{ mW}$
- $C_i = 12.1 \text{ nF}$
- $L_i = 16 \text{ }\mu\text{H}$

Probe Models:

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



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Issue: 1

Attachment 2 – Special Conditions for Safe Use

- i. For EPL Ga Group II ensure that sparks due to impact or friction do not occur.
- ii. In explosive atmospheres the probe must be used together with the transmitter body only. In safe area, transmitter and probe can be used with Vaisala USB-cable connected to a PC.
- iii. Cables suitable for +80°C should be used.