

[1] UNITED KINGDOM CONFORMITY ASSESSMENT

UK TYPE EXAMINATION CERTIFICATE

[2] Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

[3] Type Examination Certificate Number: **DNV 22 UKEX 23506X** **Issue 0**

[4] Product: **Pressure switches series MA and temperature switches series TAH**

[5] Manufacturer: **WIK A Instruments Italia S.r.l.**

[6] Address: **Viale De Gasperi, 48
20008 – Bareggio (MI)
Italy**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Business Assurance UK Ltd, Approved Body number 8501 in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

The examination and test results are recorded in confidential reports listed in item 16.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **EN IEC 60079-0:2018; EN 60079-1:2014; EN 60079-26:2015 and EN 60079-31:2014**

Except in respect of those requirements listed at section 18 of the schedule to this certificate.

[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 TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of this product shall include the following:

 **II 1/2 G Ex db IIC T6 or T4 Ga/Gb
II 2 G Ex db IIC T6 or T4 Gb**

 **II 1/2 D Ex tb IIIC T85°C or T135°C Db
II 2 D Ex tb IIIC T85°C or T135°C Db**



Date of issue:
2022-03-14



Asle Kaastad
For DNV Business Assurance UK Ltd
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info

[13]

Schedule

[14] **Type Examination Certificate No:**

DNV 22 UKEX 23506X

Issue 0

[15] **Description of Product**

The CCE01 flameproof enclosure for models MA**** and TAH**** is intended to contain one or two microswitches and a terminal block used to connect them electrically to an external control circuit. The microswitches are operated by a flameproof joint (operating rod).

The operating rod is actuated by a sensitive to pressure element (models MA****) or temperature (models TAH****) externally fixed to the enclosure.

The degree of protection is IP66 according to the Standard IEC 60529:2001

Type designation

Pressure switches series MA and temperature switches series TAH (CCE01)

The instruments models MA****, MAB****, MAG****, MAH**** and TAH**** are classified as electrical equipment for potentially explosive atmospheres because of the presence of: gas, vapors and fogs of the IIC group, combustible dusts of the IIIC group.

The instruments of the models MA****, MAB****, MAG**** are 1/2 category equipment intended to be used on surface (not in mines).

The instruments of the models MAH**** and TAH**** are 2 category equipment intended to be used on surface (not in mines).

Electrical Data

380 V / 20 A c.a. or 250V /20 A c.a.

220 V / 0.5 A (30V / 2A) d.c.

Degrees of protection (IP Code)

IP66

Ambient temperature:

-60°C to +60°C for T6

-60°C to +85°C for T4

Pressure switch: process temperature (media temperature at the process connection):

The limits of process temperature are: -60 ÷ +85 °C

Temperature Classification	Ambient temperature range (Tamb)	Min process temperature (Media temperature at the process connection of the instrument)	Max process temperature (Media temperature at the process connection of the instrument)	Max Current (resistive load)		
T6	-60 ..+60 °C	-60 °C	+60 °C	(depending on the microswitches selected) See Nameplate		
T5						
T4	-60 ..+85 °C		+85 °C			
T3						
T2						
T1						

Temperature switch: process temperature (media temperature at the bulb):

For the instrument model TAH*B** (stem for direct mounting) the following table is applicable

Table – Media temperature at the stem

Temperature Classification	Ambient temperature range (Tamb)	Max. working temperature (T max.)	Max Current (resistive load)
T6	-60 ..+60 °C	Shall not exceed the maximum temperature specified on the nameplate	(depending on the microswitches selected) See Nameplate
T5			
T4			
T3			
T2			
T1			
	-60 ..+85 °C		

For the instrument model TAH*C**, TAH*E**, TAH*L**, TAH*R** (stem for remote mounting) the following table is applicable

Temperature Classification	Ambient temperature range (Tamb)	Max Current (resistive load)
T6	-60 ..+60 °C	(depending on the microswitches selected) See Nameplate
T5		
T4	-60 ..+85 °C	
T3		
T2		
T1		

Warning label

Power off before opening

Installation conditions

The accessories used for cable entries and for closing unused openings shall be certified according to EN 60079-0, EN 60079-1 and EN 60079-31 standards.

A minimum degree of protection IP66 shall be guaranteed according to EN 60529 standard.

Routine tests

The manufacturer shall carried out the routine test prescribed at clauses 27 of the EN 60079-0 standard.

The equipment are exempted from overpressure routine test, according to clause 16.2 of the EN 60079-1 standard, since they have been submitted to an overpressure test at 4 times reference pressure under 40 bar for ambient temperature of –60°C.

[16] **Report No.:** SC354721-20220304-DR_23506X-UKCA-GBR
Project No.: PRJN-354721

[17] Specific Conditions of Use

The instruments series MAB****, MA**** and MAG**** can be mounted on a boundary wall between zone 20 and zone 21.

Due to the thickness less than 1mm of the membrane, the user should take into consideration that the equipment shall not be subject to environmental conditions which might adversely affect the partition membrane.

The width of the flameproof joints is greater than the values specified in the tables of 60079-1 standard.

[18] Essential Health and Safety Requirements (Regulations Schedule 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

[19] Drawings and documents

Number	Title	Rev.	Date
SP-TC.790E	Technical specification	6	2019-09
NI.709E	Safety Instructions	2	2019-05
CCE01U	Drawing CCE01	8	2019/09/16
CCE01D	Drawing CCE01	8	2019/09/16
DGT.ATEX-A	Drawing marking plate	2	2018/06/15
SP-TC.787	Data sheet sealing material	0	2013-03
DG.LABEL-A	Drawing warning plate	3	2018/06/18
-	DNV Letter & Registration Company	-	2020/06/03
DGLABEL_LVD_AT1	Drawing warning plate	1	2019/09/16
DGTUKEX_AT0	Drawing marking plate for UKCA	0	2021/07/27

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2022-03-14	SC354721-20220304-DR_23506X-UKCA-GBR

END OF CERTIFICATE