

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **Presafe 18 ATEX 12778X** **Issue 2**

[4] Product: **Compact pressure and temperature switches series PCA and TCA**

[5] Manufacturer: **Euromisure WIKA Instruments S.a.s. di WIKA 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 Product Assurance AS, notified body number 2460, 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 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 and EN 60079-1:2014; EN 60079-26:2015 and EN 60079-31:2014**

Where additional criteria beyond those given here have been used, they are listed at item 18 in 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" listed under item 17 of this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. 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 1/2 G Ex db IIC T6 or T4 Ga/Gb
II 2 G Ex db IIC T6 or T4 Gb
I M2 Ex db I Mb

 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:
2025-04-07



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** Presafe 18 ATEX 12778X Issue 2

[15] **Description of Product**

The CCE04 and CCE07 flameproof enclosure for PCA*** and TCA*** 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). Within the equipment there is a partition wall element on the border between zone 0 (20) and zone 1 (21), which is made up of a measuring diaphragm and a natural ventilation opening. There is only mechanical part inside the Zone 0/20. The degree of protection is IP66 according to the Standard IEC 60529:2001

Type designation

Compact pressure and temperature switches series PCA and TCA (CCE04 and CCE07)

The instruments series PCA*V*, PCA*T*, PCA*M*, PCA*G*, PCA*P* and TCA*** are classified as equipment belonging to groups II and III.

The instruments series PCA*V*, PCA*T*, PCA*M*, PCA*G* are 1/2 category equipment intended to be used on surface (not in mines).

The instruments series PCA*P* and TCA*** are 2 category equipment intended to be used on surface (not in mines).

The instruments series PCA4**, PCA5**, TCA4** and TCA5** (enclosure in AISI316) are also classified as electrical equipment belonging to group I (mines).

Electrical Data

380 V / 15 A c.a. or 250V / 15 A c.a.

125 V / 0.5 A (28V / 5A) 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):

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	5A@28V dc; 15A@250V a.c; (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 TCA*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	5A@28V dc; 15A@250V a.c; (see nameplate)
T5			
T4			
T3	-60 ..+85 °C		
T2			
T1			

For the instrument model TCA*C*, TCA*Q*, TCA*R* (stem for remote mounting) and TCA*S* (helical bulb for ambient temperature) the following table is applicable

Temperature Classification	Ambient temperature range (Tamb)	Max Current (resistive load)
T6	-60 ..+60 °C	5A@28V dc; 15A@250V a.c; (see nameplate)
T5		
T4	-60 ..+85 °C	
T3		
T2		
T1		

Warning label

Do not open while energized.

If the ambient temperature exceeds 60°C, use suitable cable for operating temperature > 105°C

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 46 bar for ambient temperature of –60°C.

[16] **Report No.:** SC187568-20200701-DA-TLM-12778_02
Project No: PRJN-767532

[17] **Specific Condition(s) of Use**

1. The instruments series PCA*V*, PCA*T*, PCA*M*, PCA*G* can be mounted on a boundary wall between zone 20 and zone 21.

2. 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.

3. 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

Met by compliance with the requirements mentioned in item 9.

[19] Drawings and documents

Number	Title	Rev.	Date
SP-TC.795E	Technical specification	6	2024-06
NI.709E	Safety Instructions	3	2024-06
CCE04U	Drawing CCE04	5	2024/06/07
CCE04D	Drawing CCE04	5	2024/06/07
CCE07U	Drawing CCE07	2	2024/06/07
CCE07D	Drawing CCE07	2	2024/06/07
PC.9909	Drawing PC9909	0	2017/10/05
SP-TC.787E	Data sheet sealing material	1	2024-06
DGT.ATEX-A	Drawing marking plate	3	2024/06/17
DGT.ATEX-D	Drawing marking plate	2	2024/06/17
DG.LABEL-A	Drawing warning plate	4	2024/06/17

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2018-09-18	Z0576726-20180705-DA-I-TLM-12778
1	Change of company name New standard edition	2020-08-10	SC187568-20200701-DA-TLM-12778
2	Change of company name	2025-04-07	SC187568-20200701-DA-TLM-12778_02

Compliance of the product with the applicable safety requirements of the relevant industrial standards has not been verified and is not covered by this certificate.

END OF CERTIFICATE