



J.S. Hamilton Poland Sp. z o.o.

(until 30.04.2018 JOAiCW TEST Sp. z o.o.)

Notified Body No. 2057

ul. Wyzwolenia 14
41-103 Siemianowice Śląskie



EU-TYPE EXAMINATION CERTIFICATE

(1)

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

(3) EU-Type Examination Certificate Number: **JSHP 19 ATEX 0031X**

(4) Product: **TEMPERATURE SENSORS TYPE XD- ...T...**

(5) Producer: **TERMOAPARATURA WROCŁAW**

(6) Address: **55-010 ŚWIĘTA KATARZYNA, ZĘBICE,
RZEMIEŚLNICZA 4**

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

(8) J.S. Hamilton Poland S.A., Notified Body no. 2057, 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. JSHP/RW/44/19/KS.

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

EN 60079-0:2018
(PN-EN 60079-0:2018-09)
EN 60079-26:2015
(PN-EN 60079-26:2015-04)


EN 60079-1:2014
(PN-EN 60079-1:2014-12)
EN 60079-31:2014
(PN-EN 60079-31:2014-10)


(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.

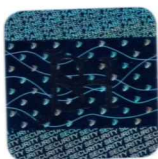
This certificate is valid in its entirety, schedule(s) included.

(12) The marking of the product shall include the following:

 **I M2 Ex db I Mb**

 **II 1/2G Ex db IIC TX Ga/Gb**

 **II 1/2D Ex ta/tb IIIC TX Da/Db**



Lukasz Brudny

Kierownik Jednostki
Certyfikującej

Siemianowice Śl., 28th August 2019

Page 1 of 3



(13)

SCHEDULE

(14)

CERTIFICATE No. JSHP 19 ATEX 0031X

(15)

Description of product:

Temperature sensor consists of measuring insert which on the one end contains single or double measuring sensor. Depending on type PT resistors or thermocouples are used. The second part of measuring insert is provided with terminal block or transmitter/display block, protected by flameproof connection head type XD-AD** series and XD-SD... series. Connection head body along with bush of measuring insert, creates flameproof joint. Connection heads were approved by separate EC/EU-Type Examination certificate FTZU 03 ATEX 0047U and FTZU 14 ATEX 0004U.

Technical characteristics:

Cable and conduit diameter* *other range available upon request	Ø 3.2 ÷ 8	mm
Maximum range of temperature measurement	-200°C to +550°C for resistance sensor -40°C to +1200°C for thermocouple	
Ambient temperature	-40 °C ≤ Tamb ≤ +75 °C	

Detailed parameters and type identification are included in Application manual.

(16)

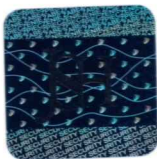
Report number:

– JSHP/RW/44/19/KS

(17)

Specific conditions of use:

- The sensing part of the sensor has a surface temperature equal to the process temperature, temperature class (T6-T1) and/or maximum surface temperature will strictly depends on it. When process temperature exceeds 450°C, maximum surface temperature should be indicate regarding to maximum measuring range of the sensor, and according EN 60079-0 standard requirements.
- The surface temperature of the sensor head depends on sensor type, process temperature, installation and ambient temperature. After sensor installation surface temperature should be determined individually and can't exceed ignition temperature of explosive gas atmosphere and/or 2/3 T_{cl} ignition temperature of dispersed dust. Permitted connection head service temperature can't be exceed.
- Ambient temperature range: -40 °C ≤ Tamb ≤ +75 °C is dedicated for sensor without electronic transmitter, classified to T6 temperature class, and process temperature not exceeds 75°C.



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SCHEDULE

CERTIFICATE No. JSHP 19 ATEX 0031X

(13)

(14)

- Ambient temperature range and temperature class for sensor with transmitter/display depends on their power dissipation. Temperature classes are given in tables 5, 6 and 7 listed in the Application Manual, Safety Instruction No. M-0804.
- Sensor must be grounded after installation.
- Service temperature is limited to 85°C (Tserv) for sensors using connection heads with windows

(18)

Essential Health and Safety Requirements:

These requirements (EHSRs) are covered by the standards listed at item 9.

(19)

Drawings and documents:

- Application Manual, Safety Instruction No. M-0804 ATEX FLAMEPROOF TEMPERATURE SENSORS FOR HAZARDOUS AREAS, dated 03.07.2019.
- Catalogue Temperature sensors for Hazardous Areas dated 2019-07-03.

Detailed list of documents required for certified type identification is included in Report mentioned in Clause (16).



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