



EC-Type Examination Certificate

Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 05 ATEX 0370

(4) Equipment: **Gas detector sensing head type: EKP-1/N, EKP-1/NW**

(5) Manufacturer: **Z.B.P. "SENSOR GAZ" Andrzej Rejowicz**

(6) Address: **ul. Biskupa Burschego 7, 43-100 Tychy, Poland**

(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°

05/0370 dated 30 November 2006

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 50014:1997 +A1, A2, EN 50020:2002 EN 50303:2000

(10) If the sign „X” is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

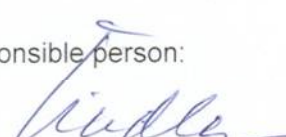
(11) This EC-TYPE EXAMINATION CERTIFICATE relates only to the design, examination and testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include following:

 **I M1 EEx ia I**

This EC-Type Examination Certificate is valid till: **31.12. 2011**

Responsible person:

Dipl. Ing. 
Sindler Jaroslav
Head of certification body



Date of issue: **11.12.2006**

Page: 1/3

Number of pages: 3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.
This certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 05 ATEX 0370**

(15) Description of Equipment:

The gas detector sensing head is apparatus consisting of steel chamber with breathing device of sintered metal. There are dust filter in front of sintered metal. In the chamber of sensing head of variant EKP-1/N it is installed one measuring sensor and variant EKP-1/NW has installed two measuring sensors. The measuring sensor consists of one active and one compensation or reference element. The connection device of the sensing head forms pins (rigid conductors) protruding the encapsulating resin or the sensing head is equipped by adapter with permanently connected cable.

Technical data:

Rated voltage:	$U_{(2-3)} = 3,0 \text{ V} \dots 3,5 \text{ V DC}$ (Pellistor PC - 31xx) $U_{(4-3)} = 2,0 \text{ V} \dots 3,0 \text{ V DC}$ (Pellistor PC - 32xx)
Rated current of each pellistor:	$\leq 60 \text{ mA}$
Degree of protection:	IP54
Ambient temperature:	$- 20^{\circ}\text{C} \leq T_a \leq + 40^{\circ}\text{C}$

Intrinsically safe parameters, terminals (3-2),(3-4): $U_i = 6 \text{ V}$, $I_i = 80 \text{ mA}$, $L_i = 200 \mu\text{H}$, $C_i \cong 0$

Total maximum input power of detector sensing head: $P_i = 1 \text{ W}$

The parameters on connection points marked (2-3) – valid for both product variants. Connection points marked (3-4) are only at variant EKP-1/NW.

(16) Report No. : 05/0370 (22 pages, 4 annexes)

(17) Special conditions for safe use: There are not defined.

(18) Essential Health and Safety Requirements: They are included in standards, which are mentioned in clause (9) of this certificate. The product was approved in accordance with above mentioned standards and manufacturer instruction. The certificate doesn't cover verification of performance (measuring function) of the apparatus.

Responsible person:


Dipl. Ing. Sindler Jaroslav
Head of certification body



Date of issue: 11.12.2006

Page: 2/3
Number of pages: 3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.
This certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 05 ATEX 0370**

(19)

LIST OF DOCUMENTATION

Instruction for use No.: IO 002/1	07/2006
Approval report No.: 2/10/05	07/2006
Technological procedures No.: IT 004/1	07/2006
Drawings No.:	
004.00 – 0/1	07/2006
004.00 – 1/1	09/2005
001.00 – 2/1	09/2005
001.00 – 5/1	09/2005
001.00 – 4/1	09/2005
001.00 – 3/1	09/2005
001.00 – 6/1	09/2005
001.00 – 7/1	09/2005
004.00 - 2/1	07/2006
004.01 - 0/1	07/2006
004.01 - 1/1	07/2006
004.01 - 2/1	07/2006
004.01 - 3/1	07/2006
001.00 - 8/1	09/2005
004.00 - 3/1	07/2006
001.00 - 10/1	09/2005
005.00 – 0/1	07/2006
002.00 – 5/1	09/2005
002.00 – 4/1	09/2005
002.00 – 3/1	09/2005
002.00 - 6/1	09/2005
004.01 - 4/1	07/2006
002.00 - 7/1	09/2005
005.00 - 1/1	07/2006
002.00 - 9/1	09/2005

Responsible person:



Date of issue: 11.12.2006

Dipl. Ing. Šindler Jaroslav
Head of certification body

Page: 3/3
Number of pages: 3

This certificate is granted subject to the general conditions of the Physical Technical Testing Institute.
This certificate may only be reproduced in its entirety and without any change, schedule included.



Supplement No. 1 to EC-Type Examination Certificate

(2) Equipment or Protective Systems Intended for use
in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 05 ATEX 0370

(4) Equipment: **Gas detector sensing head type: EKP-1/N, EKP-1/NW**

(5) Manufacturer: **Z.B.P. "SENSOR GAZ" Andrzej Rejowicz**

(6) Address: **ul. Biskupa Burschego 7, 43-100 Tychy, Poland**

(7) This supplement of certificate is valid for: - prolongation of certificate validity,
- extension by a new variant, type **EKP-1/W**

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirement, which manufacturer shall fulfill before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfill by satisfying of following standards:

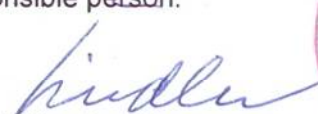
EN 60079-0:2006; EN 60079-11:2007; EN 50303:2000

(11) Marking of equipment designed according to this supplement shall contain symbols:

 **I M1 Ex ia I**

(12) This type examination certificate is valid till: **26. 01. 2015**

Responsible person:


Ing. Šindler Jaroslav
Head of certification body



Date of issue: **26. 01. 2010**

Number of pages: 2
Page: 1/2

This supplement to certificate is granted subject to the general conditions of the Physical Technical Testing Institute.
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14)

Supplement No. 1 to
EC-Type Examination Certificate N° FTZÚ 05 ATEX 0370

(15) Description of Equipment:

Neither the construction nor technical parameters of the gas detector sensing head type: EKP-1/N, EKP-1/NW were modified. A variant sensing head EKP-1/W which comprises the PC-32xxx pellistor is added.

Intrinsically safe parameters, (2-3): $U_i = 10V$, $I_i = 80\text{ mA}$, $L_i = 200\text{ }\mu\text{H}$, $C_i \cong 0$

The supplement verifies equipment conformity with requirements of new edition of standards mentioned in clause (10) and prolongs certificate validity.

(16) Report No.: 05/0370-1 on 22.01.2010

(17) Special conditions for safe use: None.

(18) Essential Health and Safety Requirements: They are included in standards, which are mentioned in clause (10) of this certificate supplement. The product was approved in accordance with above mentioned standards.

(19) List of documentation:

Update:	Instruction for use No.: IO 002/2	11/2009
	Approval report No.: 2/10/05-02	11/2009
	Technological procedures No.: IT 004/2	11/2009
Drawings No.:	004.00 - 0/2	11/2009
	005.00 - 0/2	11/2009
	004.00 - 1/2	11/2009
	001.00 - 4/2	11/2009
	001.00 - 5/2	11/2009
	001.00 - 7/2	11/2009
	002.00 - 6/2	11/2009
	001.00 - 3/2	11/2009
	001.00 - 8/2	11/2009
	004.00 - 3/2	11/2009
	005.00 - 1/2	11/2009
	004.01 - 3/2	11/2009
	001.00 - 10/2	11/2009
Supplement: Drawing No.	004.00 - 11/1	11/2009

Responsible person:

Date of issue: 26. 01. 2010

Ing. Šindler Jaroslav
Head of certification body



Page: 2/2

This supplement to certificate is granted subject to the general conditions of the Physical Technical Testing Institute.
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.



**Supplement No. 2 to
EC-Type Examination Certificate**

**Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 94/9/EC)**

(3) EC-Type Examination Certificate Number:

FTZÚ 05 ATEX 0370

(4) Equipment or protective system: **Gas detector sensing head type EKP-1/N, EKP-1/W, EKP-1/NW**

(5) Manufacturer: **Z.B.P. SENSOR GAZ Andrzej Rejowicz**

(6) Address: **ul.Przemysłowa 55, 43-100 Tychy, Poland**

(7) This supplement of certificate is valid for:

- change of marking
- prolongation of certificate validity
- application of new standards
- change of technical parameters
- change of manufacturer address

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains another requirements, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

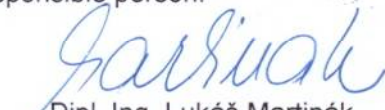
EN 60079-0:2012, EN 60079-11:2012, EN 50303:2000

(11) Marking of equipment shall contain symbols:

 **I M1 Ex ia I Ma**

(12) This type examination certificate is valid till: **30.09.2020**

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 30.09.2015

Page: 1/2

This supplement to certificate is granted subject to the general conditions of the FTZÚ, s.p.
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.



Physical Technical Testing Institute
Ostrava – Radvanice

(13)

Schedule

(14)

Supplement No. 2 to
EC-Type Examination Certificate N° FTZÚ 05 ATEX 0370

(15) Description of Equipment or Protective System:

The equipments type EKP-1/N, EKP-1/W and EKP-1/NW still without changes. The equipment is manufactured according to the verified documentation shown in the basic certificate, Supplement No. 1 and in this Supplement and complies with requirements of upgraded standards mentioned in clause (10). Technical parameters were modified.

The validity of the certificate is prolonged till 30.09.2020.

Technical parameters:

Type EKP-1/N and Type EKP-1/W:

Pins 2 – 3: $U_i = 10\text{ V}$, $P_i = 1\text{ W}$, $C_i \approx 0$, $L_i \approx 0$

Type EKP-1/NW:

Pins 4,2 – 3: $U_i = 6\text{ V}$, $P_i = 1\text{ W}$, $C_i \approx 0$, $L_i \approx 0$

(16) Report No.: 05/0370-2

(17) Special conditions for safe use: none

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standards mentioned in clause (10) of this supplement according which the new model was verified and in the manufacturer's Instruction for Using.

(19) List of Documentation:

Title:	Drawing No.:	Date:	Nr. of pages:
Recertification documentation	Nr 2/10/05-3	06.2015	4
List of documents	Nr 064.00-01	06.2015	1

Responsible person:


Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: 30.09.2015

Page: 2/2

This supplement to certificate is granted subject to the general conditions of the FTZÚ, s.p.
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.