

Supplement No: 1
EU-Type Examination Certificate

- (1)
- (2) **Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres**
- Directive 2014/34/EU**
- (3) EU – Type Examination Certificate Number: **IEP 16 ATEX 0412 X**
- (4) Equipment: **TKx-EX model (Ø 100 and Ø 160), Inductive contacted temperature gauges, with zener barrier**
- (5) Manufacturer: **PAKKENS Yedek Parça Makina Sanayi ve Ticaret A.Ş.**
- (6) Address: **Organize Sanayi Bölgesi Sarı Cadde No:20 Bursa -TURKEY**
- (7) This product any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The IEP Uluslararası Enerji Petrol Gözetim, Sertifikasyon ve Teknik Hizmetler Organizasyonu Tic. Ltd. Şti., notified body number 2284 in accordance with Article 17 of the Directive 2014/34/EU of 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 Nr: IEP.Rp.Ex.10-928-1 date 10.04.2018.
- (9) Compliance with Essential Health and safety requirements has been assured by compliance with;
EN 13463-1/2009 ; EN 60079-11/ 2012 ; EN 60079-31/2014
- (10) If the sign “ X “ is placed after the certificate number, it indicates that the product is subject to specified conditions of safe 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 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 equipment or protective system shall include the following:



II 1G Ex ia IIC T4 Ga
II 1D Ex ta IIIC T 125 °C Da

Responsible Person:

Nurettin Terzioğlu
Head of Certification Body

Supplement Date of Issue : 12.04.2018



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(13) Schedule

(14) Certificate Nr: **IEP 16 ATEX 0412 X**

(15) Description of Equipment:

TKx-EX model inductive contacted temperature gauges is signaling device according to the temperature. Temperature gauges consists of mechanical and electrical parts. Signal output values are given below. TKx /EX degree of protection is IP 65. TKx-EX model inductive contacted temperature gauges are used explosive gas and dust area. The parts and materials that are used in TKx-EX model inductive contacted temperature gauges has been determined in the list of mechanical and electrical parts dated 10.2014. TKx /EX model temperature used in Zone 0 and Zone 20 with by intrinsically safe circuit zener barrier and certificate Nr DEKRA 11 ATEX 0244x.

TKx-EX inductive contacted temperature gauges

Type		TKx / EX (Ø 100 and Ø 160) type
Voltage supply	V DC	(9 ~35) V DC
Output range	mA	(4~20) mA
Ambient Temperature	T _A (°C)	(-40 ~ + 60) °C
Measurement Temperature	T _s (°C)	(-40 ~ + 500) °C
Degree of Protection (By the cable external diameter)	IP xy	IP 65
TKx /EX		x:Pakkens Code
Connection type		BSPP , BSPT , NPT , M
NOTE : (0412 X) X means : TKx-EX model inductive contacted temperature gauges must be use intrinsically safe circuit zener barrier . The zener barrier specifications are in certificate No DEKRA 11 ATEX 0244x . The same features can be used with another zener barrier.		

(16) List of Documentation;

Hazard analysis report : Total 2 page and date 01.2016,
Declaration of conformity : 1 page and date 01.2016,
Test reports : Total pages 2x6 and date 23.03.2016,
Marking label : 1 page and dated 04.04.2016,

(17) Essential Health and Safety Requirements :

17.1 This certificate is in the contents of standards that mentioned in item [9] It has been accepted that of inductive contacted temperature gauges are manufactured according to the producer instructions and the standards mentioned above.

17.2 Information's of assembled working of inductive contacted temperature gauges with other related equipments exist in instruction manual with 5 pages approved and date 01.2016. This equipment works with temperature measuring system. Should be according to the connection installation instructions.

Responsible Person:

Nurettin Terzioglu
Head of Certification Body



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(18) Certificate Nr: IEP 16 ATEX 0412 X

(19) Drawings:

<u>Drawing Number;</u>	<u>Drawing Name;</u>	<u>Drawing Date;</u>
9202B	Inductive contacted temperature gauges zener barrier	01.2016
Ø 100 and Ø 160	General drawings	03.04.2018
2650 95 04 10	Zener barrier connected scheme	01.2016

Other drawings :

Ø 100, Cl. 1,0, (200⁰C max) ksilen gas , TKx-EX inductive contacted temperature gauges ,
Ø 100, Cl. 1,0, (x ⁰C ≥ 250⁰C) Nitrogen gas, TKx-EX inductive contacted temperature gauges ,
Type of bottom connection, Spiral pipe, 0/250 ⁰C ...0/500 ⁰C, 30 pages, (2014-2016)
Type of direct bottom connection, -40/60 ⁰C ...0/200 ⁰C, 29 pages, (2014-2016)
Type of back connection, Spiral pipe, -40/60 ⁰C ...0/200 ⁰C, 30 pages, (2014-2016)
Type of direct back connection, -40/60 ⁰C ...0/200 ⁰C, 30 pages, (2014-2016)

For the validity of analysis type certificate, the parts that are used in TKx-EX model inductive contacted temperature gauges are determined in confirmed list of mechanical and electrical parts dated 01.2016.

TKx-EX model inductive contacted temperature gauges used in Zone 0 and Zone 20 must be use with by intrinsically safe barrier.

Certificate History

Supplement N°	Supplement Date	Summary Description of Variation
01	12.04.2018	· Upgrade to ATEX directive 2014/34/EU · Conformity to standard EN 60079-31/2014 · New model addition; TKx-EX model (Ø 160)
00	07.04.2016	First issue of certificate

Responsible Person:

Nurettin Terzioğlu
Head of Certification Body

Supplement Date of Issue : 12.04.2018

