

VARIATION

EC TYPE EXAMINATION CERTIFICATE N° ISSeP08ATEX024X/3

(14) Apparatus

- Pressure switches - B1X / B2X & D1X / D2X series.
- Temperature switches - L1X & T1X / T2X series.

(15) Description of the variation

- To change the marking IP65 by IP66 for both versions

Marking: Unchanged, except the codes:

-  II 2 D Ex tb IIIC T80°C Db IP66 and Ex tb IIIC T95°C Db IP66*

*For B1X/B2X LT version

Eventual prescriptions: Unchanged.

(16) Report N° 15113 dates of 23.11.2015 (5 pages) and 13 documents:

Drawing Number C227111 Rev AN dated of 09.10.2014 titled Explosion Proof Housing - Finish
Drawing Number D227116 Rev AK dated of 06.10.2014 titled Housing – Explosion Proof Machined
Drawing Number B2501018 Rev B dated of 18.11.2015 titled Nameplate, EPL Marks
Drawing Number B2501019 Rev B dated of 18.11.2015 titled Nameplate, EPL Marks
Drawing Number B2501020 Rev B dated of 18.11.2015 titled Nameplate, EPL Marks
Drawing Number B1X Rev E dated of 18.11.2015 titled Pressure Switch
Drawing Number B2X Rev E dated of 18.11.2015 titled Pressure Switch
Drawing Number D1X Rev D dated of 18.11.2015 titled Pressure Switch
Drawing Number D2X Rev D dated of 18.11.2015 titled Pressure Switch
Drawing Number L1X Rev D dated of 18.11.2015 titled Temperature Switch (2 sheets)
Drawing Number T1X Rev D dated of 18.11.2015 titled Temperature Switch (2 sheets)
Drawing Number T1X-Q102 Rev G dated of 18.11.2015 titled Special Temperature Switch
Drawing Number T2X Rev D dated of 18.11.2015 titled Temperature Switch (2 sheets)

(17) Special conditions for safe use: Symbol X: Unchanged.

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by:

- The conformity to the Standards listed at (15) of variation n°2.
- All safety measures taken by the manufacturer and described in the descriptive documentation listed at (16).

Colfontaine, the 25.11.2015.

INSTITUT SCIENTIFIQUE DE SERVICE PUBLIC
Zoning A. Schweitzer, rue de la Platinerie
B-7340 COLFONTAINE (Wasmes)
Tél: ++ 32 65 610811 – Fax: ++ 32 65 610808
colfontaine@issep.be


Marcel LAMBERT,
Directeur.

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VARIATION

EC TYPE EXAMINATION CERTIFICATE N° ISSeP08ATEX024X/2



(14) Apparatus

- Pressure switches - B1X / B2X & D1X / D2X series.
- Temperature switches - L1X & T1X / T2X series.

(15) Description of the variation

- To integrate in the B1X/B2X series an option "LT"
- To permit the updates of standards:
From: EN 60079-0: 2012 To : EN 60079-0:2012+A11:2013
EN 60079-1 : 2007 EN 60079-1 : 2014
EN 60079-31 : 2009 EN 60079-31 : 2014

Marking: Unchanged, except the codes:

-  II 2 G Ex db IIC T6 Gb and Ex db IIC T5 Gb*
-  II 2 D Ex tb IIIC T80°C Db IP65 and Ex tb IIIC T95°C Db IP65*

Ambient temperature range :

- -40°C < Ta < +75°C and -60°C < Ta < +85°C*

*For B1X/B2X LT version

Eventual prescriptions: Unchanged.

(16) Report N° 15117 completed by 11 documents.

(17) Special conditions for safe use: Symbol X: Unchanged.

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by:

- The conformity to the Standards listed at (15).
- All safety measures taken by the manufacturer and described in the descriptive documentation listed at (16).

Colfontaine, the 27.10.2015.

INSTITUT SCIENTIFIQUE DE SERVICE PUBLIC
Zoning A. Schweitzer, rue de la Platinerie
B-7340 COLFONTAINE (Wasmès)
Tél: ++ 32 65 610811 – Fax: ++ 32 65 610808
colfontaine@issep.be


Marcel LAMBERT,
Directeur.

VARIATION

EC TYPE EXAMINATION CERTIFICATE N° ISSeP08ATEX024X/1



(14) Apparatus

- Pressure switches - B1X / B2X & D1X / D2X series.
- Temperature switches - L1X & T1X / T2X series.

(15) Description of the variation

- To permit the updates of standards:
From: IEC 60079-0: 2007 To: IEC 60079-0: 2011
 IEC 61241-0: 2004 IEC 60079-0: 2011
 IEC 61241-1: 2004 IEC 60079-31: 2008
- Standard IEC 60079-1: 2007 remains identical.

Marking: Unchanged, except the codes:

-  II 2 G Ex d IIC T6 Gb
-  II 2 D Ex tb IIIC T80°C Db IP65

Eventual prescriptions: Unchanged.

(16) Report N° 13056 completed by 28 documents.

(17) Special conditions for safe use: Unchanged.

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by:

- The conformity to the Standards listed at (9).
- All safety measures taken by the manufacturer and described in the descriptive documentation listed at (16).

Colfontaine, the 08.08.2013.

INSTITUT SCIENTIFIQUE DE SERVICE PUBLIC
Zoning A. Schweitzer, rue de la Platinerie
B-7340 COLFONTAINE (Wasmès)
Tél: ++ 32 65 610811 – Fax: ++ 32 65 610808
colfontaine@issep.be


Marcel LAMBERT,
Director.

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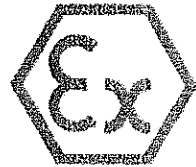
**Institut scientifique
de service public**
Métrologie environnementale
Recherche - Analyses
Essais - Expertises


**Siège social
et site de Liège :**
Rue du Chéra, 200
B-4000 Liège
Tél : +32(0)4.229.83.11
Fax : +32(0)4.252.46.65

Site de Colfontaine :
Zoning A. Schweitzer,
rue de la Platinerte
B-7340 Colfontaine
Tél : +32(0)85.61.08.11
Fax : +32(0)85.61.08.08

e-mail :
direction@issep.be

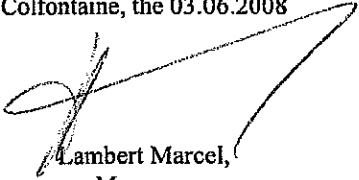
site web :
http://www.issep.be



- (1) **EC TYPE EXAMINATION CERTIFICATE**
- (2) **Equipment or protective system intended for use
in potentially explosive atmospheres
Directive 94/9/EC**
- (3) EC type examination certificate number: **ISSeP08ATEX024X**
- (4) Equipment : Pressure switches B1X / B2X & D1X / D2X series
Temperature switches: L1X & T1X / T2X series
- (5) Applicant – Manufacturer : **Barksdale Inc.** Manufacturer : **Barksdale GmBh**
- (6) Address: **3211 Fruitland Avenue** **Dorn-Assenheimer Str 27**
P.O. Box 58843 **D-61203 Reichelsheim**
Los Angeles CA 90058-0843
- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) ISSeP, notified body n° 492 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° 08049
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
IEC 60079-0: 2007 EN 60079-0:2006 (IEC 60079-0:2004) EN 60079-1: 2007 (IEC 60079-1:2007)
EN 61241-0: 2006 (IEC 61241-0: 2004) EN 61241-1: 2004 (IEC 61241-1: 2004)
- (10) If the symbol "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 tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of this Directive may 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 the following indications:
-  II 2 G Ex d IIC T6 (according to standard EN 60079-0 :2006)
II 2 D Ex tD A21 IP 65 T80°C (according to standard IEC 61241-0:2004)
II 2 G Ex d IIC T6 Gb (according to standard IEC 60079-0:2007)
II 2 D Ex tb IIIC IP65 T 80°C (according to standard IEC 60079-0:2007)

Colfontaine, the 03.06.2008

INSTITUT SCIENTIFIQUE DE SERVICE PUBLIC
Zoning A. Schweitzer - B7340 Colfontaine (Wasmès)
Tél: ++ 32 65 610811 – Fax: ++ 32 65 610808


Lambert Marcel,
Manager.

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(13)

SCHEDULE

(14)

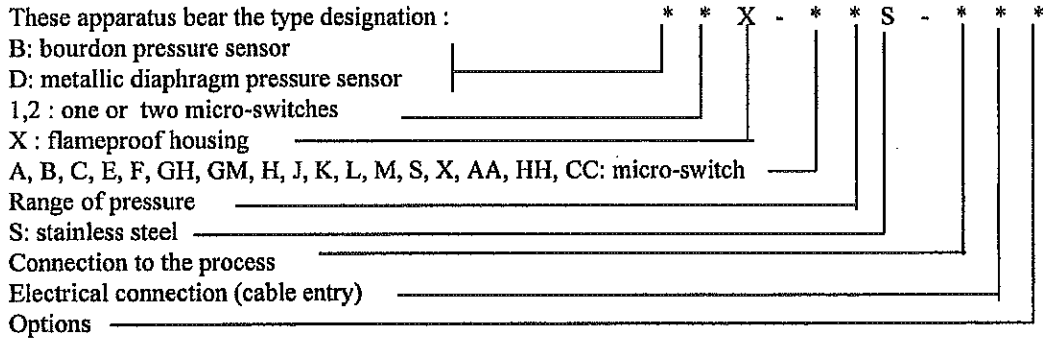
EC TYPE EXAMINATION CERTIFICATE No ISSeP08ATEX024X

(15)

Description of the equipment:

Aluminium alloy flameproof housing containing one or two micro-switches operated by the pressure and one terminal block.

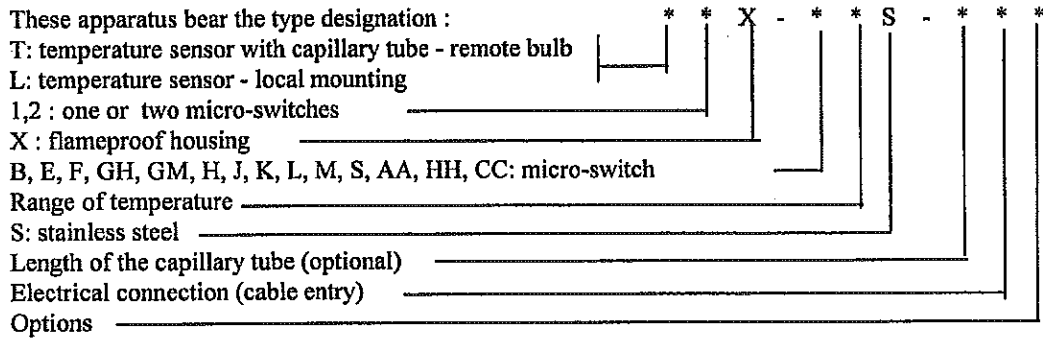
These apparatus bear the type designation :



The letter H is placed in front of the designation when hermetically micro-switches are used

Aluminium alloy flameproof housing containing one or two micro-switches operated by the temperature and one terminal block.

These apparatus bear the type designation :



The letter H is placed in front of the designation when hermetically micro-switches are used

The connection of the apparatus shall be made either by certified Ex d IIC cable entries or by threaded conduits. In this case a stopping box of a certified Ex d IIC model shall be placed between each conduit and the housing

The unused threaded holes shall be plugged by means of threaded certified Ex d IIC plugs

Electrical parameters and pressure ranges

To see drawings and instruction manual

Eventual prescriptions

Ambient temperature range : -40°C up to +75°C

Routine tests

The manufacturer shall make the routine verifications and tests to ensure that the electrical apparatus produced complies with the specification submitted to the testing station together with the prototype.

The housing is exempted from the overpressure routine test.

SCHEDULE

EC TYPE EXAMINATION CERTIFICATE No ISSeP08ATEX024X

- (16) Report n° 08049 of 2.06.2008 composed of 31 pages
The technical note from Barksdale GmbH signed on 17.03.2008 (6 pages)
The e-mail from Barksdale Inc of 21.05.2008
The instructions manuals (German + English) related to
- The pressure switches BS/BT/BX (6 + 6 sheets)
 - The pressure switches D1S/D2S and D1X/D2X (6 + 6 sheets)
 - The temperature switches MTH/TH/TX/MLH/LH/LX (8 + 8 sheets)
- The drawings
- B1X Rev. C of 15.05.2008
B2X Rev. C of 15.05.2008
C98253 Rev P of 3.11.2003
C98254 Rev. P of 3.11.2003
D227116 Rev. AG of 15.02.2006
C21150 Rev. U of 18.07.2007
B20876 Rev. Y of 19.05.2005
B974724 of 30.05.2003 Rev. X1
D1X Rev. B of 16.05.2008
D2X Rev B of 16.05.2008
C98251 Rev. Q of 3.11.2003
C98252 Rev. P of 3.11.2003
C227111 Rev. AL 20.07.2007
C21145 Rev. V of 3.04.2006
B20875 Rev. Q of 4.04.2006
A974723 of 30.05.2003 Rev. X1
T1X Rev. B of 16.05.2008 (2 sheets)
T2X Rev. B of 16.05.2008 (2 sheets)
C98371 Rev. N of 3.11.2003
C98541 Rev.H of 3.11.2003
T1X-Q102 Rev. C of 8.04.2005
C981396 Rev. A of 2.11.2004
B974726 of 3.06.2003 Rev. X1
A20542 Rev. S of 4.05.2006
A34654 Rev. J of 12.08.2003
A2501016 of 14.05.2008 Rev. X1
D227175 Rev. AD of 22.10.2003
B211117 Rev. V of 4.04.2006
L1X Rev. B of 16.05.2008 (2 sheets)
C98392 Rev. M of 3.11.2003
922-0542 Rev. A of 29.10.2003
B250907 Rev. X5 of 5.10.2007
B250912 Rev. X6 of 15.03.2008
B250913 Rev. J.2 of 15.03.2008
B250914 Rev. C2 of 15.03.2008
B250915 Rev. D of 15.05.2008
B2501017 of 29.05.2008 Rev.X1.2
B2501018 of 29.05.2008 Rev.X1.2
B2501019 of 29.05.2008 Rev.X1.2
B2501020 of 29.05.2008 Rev.X1.2

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SCHEDULE

EC TYPE EXAMINATION CERTIFICATE N° ISSeP08ATEX024X

- (17) **Special conditions for safe use: Symbol X**
The metallic diaphragm is designed for an expected life time of 1 million cycles (normal use).
The operating and maintenance instructions of the device foreseen by the manufacturer shall be carefully fulfilled
The temperature class T6 may be invalidated when the temperature of the fluid (or the installation) subject of the temperature or pressure measurement exceeds 80°C
Any dust accumulation on the housing shall be avoided
- (18) **Essential Health and Safety Requirements:** covered by the standards listed at point 9 and by the descriptive documents of the manufacturer

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