

Métrologie environnementale Recherche - Analyses Essais - Expertises (1)

(2)

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EC TYPE EXAMINATION CERTIFICATE

Equipment or protective system intended for use in potentially explosive atmospheres

Directive 94/9/EC

B) EC type examination certificate number: ISSeP08ATEX024X

(4) Equipment: Pressure switches B1X / B2X & D1X / D2X series
Temperature switches: L1X & T1X / T2X series

5) Applicant – Manufacturer : Manufacturer :

Barksdale Inc. Barksdale GmBh

) 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^r 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^r 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:
 - Ex d 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 th 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 (Wasmes) 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: B: bourdon pressure sensor D: metallic diaphragm pressure sensor 1,2: one or two micro-switches X: flameproof housing A, B, C, E, F, GH, GM, H, J, K, L, M, S, X, AA, HH, CC: micro-switch S: stainless steel Connection to the process Electrical connection (cable entry) Options 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: T: temperature sensor with capillary tube - remote bulb L: temperature sensor with capillary tube - remote bulb L: temperature sensor - local mounting 1,2: one or two micro-switches X: flameproof housing B, E, F, GH, GM, H, J, K, L, M, S, AA, HH, CC: micro-switch Range of temperature S: stainless steel Length of the capillary tube (optional) Electrical connection (cable entry) Options 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.
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SCHEDULE

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(16) Report nf 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. O 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

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(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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