



Translation

(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

TÜV 02 ATEX 1841

(4) Equipment: Display and switching device type AX11-....

(5) Manufacturer: BD SENSORS GmbH

(6) Address: D-95199 Thierstein, Sechsamterstraße 2

(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) The TÜV NORD CERT GmbH & Co. KG, TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), 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 the confidential report N° 02 YEX 15588801.

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

EN 50 014: 1997

EN 50 020: 1994

(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 tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

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



II (1) 2 G EEx ia IIC T4

TÜV NORD CERT GmbH & Co. KG
TÜV CERT-Certification Body
Am TÜV 1
D-30519 Hannover
Tel.: 0511 986-1470
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Head of the
Certification Body



TÜV NORD CERT

Hanover, 2002-06-05

(13)

SCHEDULE

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 02 ATEX 1841**

(15) Description of equipment

The display and switching device type AX11-.... will be switched into 4 to 20 mA loops and it is intended for the display of measured values inside of hazardous explosive areas that require equipment of category 2 resp. 3.

The 4 to 20 mA loop may also be led to transmitters that are certified as category 1 equipment.

The maximum permissible ambient temperature is 70°C.

Electrical data

Signal- and supply circuit
(plug, cable or single wire)

in type of protection „Intrinsic Safety“ EEx ia IIC
only for the connection to certified intrinsically safe circuits
maximum values see below
The effective internal capacitance and inductance are negligibly small.

Switching outputs (optional)
(plug, cable or single wire)

in type of protection „Intrinsic Safety“ EEx ia IIC
only for the connection to certified intrinsically safe circuits
Maximum values:

$$U_o = U_i$$

$$I_o = \sum I_i$$

$$P_o = \sum P_i$$

max. permissible outer sum capacitance 80 nF

max. permissible outer sum inductance 4,7 mH

The maximum values of the signal- and supply circuit and the optional switching circuits are:

$$U_i = 28 \text{ V}$$

$$\sum I_i = 93 \text{ mA}$$

$$\sum P_i = 660 \text{ mW}$$

(16) Test documents are listed in the test report No.: 02 YEX 15588801.

(17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements

no additional ones

Translation

1. SUPPLEMENT to

EC TYPE-EXAMINATION CERTIFICATE No. TÜV 02 ATEX 1841

of the company: BD SENSORS GmbH
BD-Sensors-Straße 1
D-95199 Thierstein

In the future, when assembled with a transmitter, the display and switching device type AX11- may also be manufactured and operated according to the test documents listed in the test report.

The amendments concern the internal design.

The electrical data and all other data apply unchanged for this supplement.

(16) Test documents are listed in the test report N° 04 YEX 551572-1.

(17) Special conditions for safe use
none

(18) Essential Health and Safety Requirements
no additional ones

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Hanover, 2004-06-24



Head of the
Certification Body