



Translation

**STATEMENT OF CONFORMITY**

- (1)
- (2) Equipment or Protective System intended for use in potentially explosive atmospheres - **Directive 94/9/EC**
- (3) Test certificate number



**TÜV 02 ATEX 1943 X**

- (4) Equipment: Positioner type TZID-Cxxx
- (5) Manufacturer: ABB Automation Products GmbH
- (6) Address: Schillerstraße 72  
D-32425 Minden
- (7) This equipment 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 94/9/EC of March 23, 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° 02YEX 182036.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 50021:1999**
- (10) If the sign "X" is placed after the certification 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 statement of conformity 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 or protective system. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include the following:

II 3 G EEx n A II T6

TÜV NORD CERT GmbH & Co. KG  
TÜV CERT-Certification Body

Hanover, 2002-10-26

*[Handwritten signature]*  
Head of the  
Certification Body



TÜV CERT A4 07.01 10.000 L6

This statement of conformity may only be reproduced without any change, schedule included. Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH & Co. KG

(13)

## SCHEDULE

(14) **STATEMENT OF CONFORMITY N° TÜV 02 ATEX 1943 X**

(15) Description of equipment or protective system

The positioner type TZID-Cxxx is used for the control resp. closed loop control of pneumatically actuated valves.

The positioner type TZID-C110 resp. TZID-C110 transfers the reference value via a field bus signal.

The positioner type TZID-C transfers the reference value via a current loop of 4 ... 20 mA.

The positioner type TZID-Cxxx may be installed in explosion hazardous areas that require apparatus of the category 3.

The permissible ambient temperature range in dependence of the temperature class has to be taken from the following table:

Temperature class	Ambient temperature range
T6	-40°C to +50°C
T5	-40°C to +65°C
T4	-40°C to +85°C

### Electrical data

#### **Type TZID-C**

Signal circuit ..... U = 8,7 V d. c.; 4 ... 20 mA, max. 21,5 mA  
(Terminals 12[-], 11[+])

Digital input ..... U = 12 ... 24 V DC, 4mA  
(Terminals 82[-], 81[+])

Digital output ..... U = 11 V DC  
(Terminals 84[-], 83[+])

#### **Options for TZID-C**

Circuit for

analog position feedback .... U = 10 ... 30 V d. c.; 4 ... 20 mA, max. 21,5 mA  
(Terminals 32[-], 31[+])

Circuit for

digital position feedback ..... U = 5 ... 11 V d. c.  
(Terminals 42[-], 41[+]  
resp. 52[-], 51[+])

#### **Type TZID-C110**

Input circuit ..... U = 9 ... 32 V d. c.; 10,5 mA  
(Terminals 12[-], 11[+])

Schedule statement of conformity N° TÜV 02 ATEX 1943 X

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**Type TZID-C120**

Input circuit ..... U = 9 ... 32 V d. c.; 11,5 mA  
(Terminals 12[-], 11[+])

**Options for all Types**

Circuit for  
shutdown function..... U = 20 ... 30 V d. c.  
(Terminals 86[-], 85[+])

Circuit for digital  
position feedback with  
proximity switches ..... U = 5 ... 11 V d. c.  
(Terminals Limit 1 52[-], 51[+]  
resp. Limit 2 42[-], 41[+])

(16) Test documents are listed in the test report no. 02YEX182036.

(17) Special conditions for safe use

1. Only devices, which are suitable for the operation in explosion hazardous areas of the zone 2 and the conditions available at the place of operation (Declaration of conformity or certificate of a testing department), are allowed to be connected to non intrinsically safe circuits in the zone 2.
2. The connecting and disconnecting as well as the switching of circuits under voltage, is only permitted during installation, for maintenance or for repair purposes.  
Note: The temporal coincidence of explosion hazardous atmosphere and installation, maintenance resp. repair purposes is assessed as unlikely.
3. For the circuit "digital position feedback with proximity switches" measures have to be taken outside the device, that the rated voltage is exceeded not more than 40% by transient disturbances.
4. Only non combustible gases are allowed to be used as pneumatic auxiliary energy.
5. Only suitable cable entries, which meet the requirements of EN 50 021, are allowed to be used.

(18) Essential Health and Safety Requirements

no additional ones

Translation

**1. SUPPLEMENT**

to Certificate No. **TÜV 02 ATEX 1943 X**

Equipment: Positioner type TZIDC-xxx

Manufacturer: ABB Automation Products GmbH  
 Address: Schillerstraße 72  
 32425 Minden  
 Germany

Order number: 8000354654

Date of issue: 2008-07-09

Amendments:

In future, the positioner type TZIDC-xxx may be manufactured according to the test documents listed in the test report. The modifications refer to the internal construction, the electrical data and the marking of the equipment.

In future, the marking of the positioner will be:

 **II 3 G Ex nL IIC T6 bzw. II 3 G Ex nA II T6**

The permissible ambient temperature ranges in dependence of the temperature class resp. enclosure surface temperature have to be taken from the following table:

Temperature class	Ambient temperature range
T4	-40 °C to +85 °C
T5	-40 °C to +65 °C
T6	-40 °C to +50 °C

Electrical Data

**Type TZIDC, TZIDC-110 resp. TZIDC-120 with marking II 3 G Ex nA II T6**

**Type TZIDC**

Signal circuit U = 9.7 VDC; 4...20 mA, max. 21.5 mA  
 (terminals 11(+), 12(-))

Switch input U = 12...24 VDC; 4 mA  
 (terminals 81(+), 82(-))

Switch output U = 11 VDC  
 (terminals 83(+), 84(-))

**Options for TZIDC**

Plug-In module for digital feedback (terminals +51, -52 resp. +41, -42) U = 5...11 VDC

Plug-In module for analogue feedback (terminals +31, -32) U = 10...30 VDC; 4...20 mA, max. 21.5 mA

**Type TZIDC-110**

Input circuit (terminals +11, -12) U = 9..32 VDC; 10.5 mA

**Type TZIDC-120**

Input circuit (terminals +11, -12) U = 9..32 VDC; 11.5 mA

**Options for all types**

Plug-In module for shutdown-function (terminals +51, -52 resp. +85, -86) U = 20...30 VDC

Mechanical digital feedback (terminals Limit1 +51, -52 resp. Limit2 +41, -42) U = 5...11 VDC

**Electrical data for type TZIDC-110 resp. TZIDC-120 with marking II 3 G Ex nL IIC T6**

**Type TZIDC-110**

Input circuit (terminals +11, -12) FNICO field device

**Type TZIDC-120**

Input circuit (terminals +11, -12) FNICO field device

All other data apply unchanged for this supplement.

1. Supplement to Certificate No. TÜV 02 ATEX 1943 X

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The equipment incl. of this supplement meets also the requirements of these standards:

**EN 60079-0:2006**      **EN 60079-15:2005**      **EN 60079-27:2006**

(16) The test documents are listed in the test report No. 08 204 354654-1.

(17) Special conditions for safe use

Special conditions will be in the future:

1. Only devices which are suitable for the operation in explosion hazardous areas declared as zone 2 and the conditions available at the place of operation are allowed to be connected to circuits in the zone 2 (Manufacturer declaration or certificate of a notified body).
2. For the circuit "Mechanical digital feedback" measures have to be taken outside the device that the rated voltage is exceeded not more than 40% by transient disturbances.
3. The connecting and disconnecting as well as the switching of circuits under voltage are only permitted during installation, for maintenance or repair purposes.  
Note: The temporal coincidence of explosion hazardous atmosphere and installation, maintenance resp. repair purposes is assessed as improbably.
4. Only non combustible gases are allowed to be used as pneumatic auxiliary energy.
5. Only suitable cable entries which meet the requirements of EN 60079-15 are allowed to be used.

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body



Schwedt

Hanover office, Am TÜV 1, 30519 Hannover, Tel.: +49 (0) 511 986-1455, Fax: +49 (0) 511 986-1590

**Translation**  
**2. SUPPLEMENT**

**to Certificate No.** TÜV 02 ATEX 1943 X

**Equipment:** Positioner type TZIDC-xxx

**Manufacturer:** ABB Automation Products GmbH  
**Address:** Schillerstraße 72  
 32425 Minden  
 Germany

**Order number:** 8000413410

**Date of issue:** 2012-11-19

**Amendments:**

In future, the positioner type TZIDC-xxx may be manufactured according to the test documents listed in the test report. The modifications refer to an extension of the IP Electronic by a SMD variant and the marking of the equipment.

Furthermore the equipment was evaluated according to the newest standards.

In future, the marking of the positioner will be:

**Ex II 3G Ex nA IIC T6 resp. T4 Gc**

The permissible ambient temperature ranges in dependence of the temperature class resp. enclosure surface temperature have to be taken from the following table:

Temperature class	Ambient temperature range
T4	-40 °C to +85 °C
T6	-40 °C to +50 °C

Electrical Data

**Type TZIDC, TZIDC-110 resp. TZIDC-120**  
**with marking II 3G Ex nA II T6 resp. T4 Gc**

**Type TZIDC**

Signal circuit U = 9.7 VDC; 4...20 mA, max. 21.5 mA  
 (terminals 11(+), 12(-))

Switch input U = 12...24 VDC; 4 mA  
 (terminals 81(+), 82(-))

Switch output U = 11 VDC  
 (terminals 83(+), 84(-))

2. Supplement to Certificate No. TÜV 02 ATEX 1943 X

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**Options for TZIDC**

Plug-In module for digital feedback (terminals +51, -52 resp. +41, -42) U = 5...11 VDC

Plug-In module for analogue feedback (terminals +31, -32) U = 10...30 VDC; 4...20 mA, max. 21.5 mA

**Type TZIDC-110**

Input circuit (terminals +11, -12) U = 9...32 VDC; 10.5 mA

**Type TZIDC-120**

Input circuit (terminals +11, -12) U = 9...32 VDC; 11.5 mA

**Options for all types**

Plug-In module for shutdown-function (terminals +51, -52 resp. +85, -86) U = 20...30 VDC

Mechanical digital feedback (terminals Limit1 +51, -52 resp. Limit2 +41, -42) U = 5...11 VDC

The equipment incl. of this supplement meets also the requirements of these standards:

**EN 60079-0:2009      EN 60079-15:2010**

All other data apply unchanged for this supplement.

(16) The test documents are listed in the test report No. 12 214 109654.



2. Supplement to Certificate No. TÜV 02 ATEX 1943 X

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(17) Special conditions for safe use

Special conditions will be in the future:

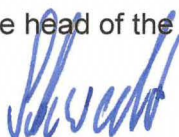
1. Only devices which are suitable for the operation in explosion hazardous areas declared as zone 2 and the conditions available at the place of operation are allowed to be connected to circuits in the zone 2 (Manufacturer declaration or certificate of a notified body).
2. For the circuit "Mechanical digital feedback" measures have to be taken outside the device that the rated voltage is exceeded not more than 40% by transient disturbances.
3. The connecting and disconnecting as well as the switching of circuits under voltage are only permitted during installation, for maintenance or repair purposes.  
Note: The temporal coincidence of explosion hazardous atmosphere and installation, maintenance resp. repair purposes is assessed as improbably.
4. Only non combustible gases are allowed to be used as pneumatic auxiliary energy.
5. Only suitable cable entries which meet the requirements of EN 60079-15 are allowed to be used.

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body



Schwedt

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Translation

**3. SUPPLEMENT**

to Certificate No. **TÜV 02 ATEX 1943 X**

Equipment: Positioner type TZIDC-xxx

Manufacturer: ABB Automation Products GmbH  
Address: Schillerstraße 72  
32425 Minden  
Germany

Order number: 8000428259

Date of issue: 2013-12-11

Amendments:

In future, the positioner type TZIDC-xxx may be manufactured according to the test documents listed in the test report. The modifications refer to the construction of the PCB for the types TZIDC-110 and TZIDC-120.

Further the equipment was evaluated according to the newest standards.

The equipment incl. of this supplement meets the requirements of these standards:

**EN 60079-0:2012      EN 60079-15:2010**

All other data apply unchanged for this supplement.

(16) The test documents are listed in the test report No. 13 214 132695.

(17) Special conditions for safe use

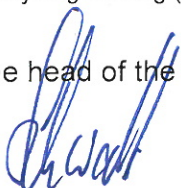
no additional ones

(18) Essential Health and Safety Requirements

no additional ones

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The head of the notified body



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