



## (1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

**PTB 12 ATEX 2002 X**



(4) Equipment: Voice station, series DX resp. DXG

(5) Manufacturer: INDUSTRONIC Industrie-Electronic GmbH & Co. KG

(6) Address: Carl-Jacob-Kolb-Weg 1, 97877 Wertheim, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment 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 test report PTB Ex 12-20254.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 60079-0:2009      EN 60079-1:2007      EN 60079-7:2007      EN 60079-11:2007**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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 shall include the following:

**II 2 G Ex d e ib IIC T4/T6 Gb resp. Ex d e ib [ib] IIC T4 Gb**

Zertifizierungssektor Explosionsschutz  
On behalf of PTB:

Braunschweig, March 9, 2012

Dr.-Ing. U. Johannsmeyer  
Direktor und Professor



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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

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## SCHEDULE

(13)

(14)

### EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2002 X

(15) Description of equipment

The voice station of series DX resp. DXG serves the purpose of communication and is intended for installation in hazardous areas. The voice station consists basically of the electrical modules supply and interface electronics (1 DEX 02), controller electronics (6 DSX 04) and an optional selector keypad with micro-controller (12 DMW 12). Non-intrinsically safe parts of the circuitry are installed in a flameproof enclosure. An amplifier (25 DVX 02) feeding an external speaker may also be installed in the flameproof enclosure as an option. Both, the flameproof enclosure and the intrinsically safe controller electronic system are mounted in an installation housing.

The installation housing of the voice station of type series DX or DXG consists of an electrostatically non-conductive material.

For relationship between temperature class, ambient temperature and marking, reference is made to the table below:

Type	Marking	Temperature class	Ambient temperature
Series DX and DXG with additional amplifier (25 DVX 02)	Ex d e ib IIC	T4	-40 °C up to +55 °C
Series DX.../HS with intrinsically safe interface and/or additional amplifier (25 DVX 02)	Ex d e ib [ib] IIC	T4	-20 °C up to +55 °C
Series DX 004/T6 without additional amplifier (25 DVX 02)	Ex d e ib IIC	T6	-20 °C up to +40 °C

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Electrical data

Supply voltage, max. [La(+), Lb(-) and V+, V-]	72 V (DC) safety-related maximum voltage 90 V
Floating relay contacts [NO, NO Opt, COM, NC]	direct voltage, $I < 1$ A, $P < 30$ W safety-related maximum voltage 90 V
Additional speaker output [L100, L0]	100 V, 25 W, 300-3400 Hz only for connection to a passive loudspeaker
Interface to Listen/talk-system or switch unit [Flange socket, plug connector]	type of protection Intrinsic Safety Ex ib IIC, Maximum values: $U_o = 8.34$ V $I_o = 1.12$ A $P_o = 600$ mW $L_i$ negligibly low $C_i$ negligibly low  <b>or</b> for connection to the listen/talk-system according to TÜV 11 ATEX 079072

(16) Test report PTB Ex 12-20254

(17) Special conditions for safe use

The installation housing of the voice station of type series DX or DXG consists of an electrostatically non-conductive material. A warning note on the type label points to the risk of electrostatic discharge.

The voice station shall only be installed in locations where flowing atmospheres (e.g. caused by artificial ventilation) do not need to be reckoned with, i.e. charge generating processes are prevented.

The equipment shall only be cleaned by appropriate measures, e.g. using a damp cloth. The operation of the equipment is excepted from this condition.

When cable glands made of metal are used for the installation housing, these shall be included in the equipotential bonding system according to the operating instructions manual.

# Physikalisch-Technische Bundesanstalt



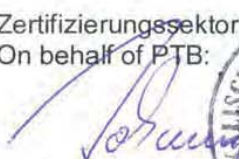
Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2002 X

- (18) Essential health and safety requirements  
met by compliance with the standard mentioned above

Zertifizierungssektor Explosionschutz  
On behalf of PTB:

Braunschweig, March 9, 2012

  
Dr.-Ing. U. Johannsmeyer  
Direktor und Professor



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**1. SUPPLEMENT**  
according to Directive 94/9/EC Annex III.6  
**to EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2002 X**  
**(Translation)**

Equipment: Voice station, type series DX 0.5 and DXE 0.5

Marking:  **II 2 G Ex d e ib IIC T4 Gb**

Manufacturer: INDUSTRONIC Industrie-Electronic GmbH & Co. KG

Address: Carl-Jacob-Kolb-Weg 1, 97877 Wertheim, Germany

Description of supplements and modifications

The voice stations of type series DX or DXG are extended by the voice stations of type series DX 0.5 and DXE 0.5.

The voice station consists basically of the electrical modules supply and interface electronics (1 DEX 02), controller electronics (6 DSX 04) and an optional keypad with micro-controller (12 DMW 12). Non-intrinsically safe parts of the circuitry are installed in a flameproof enclosure. An amplifier (25 DVX 02) feeding an external speaker may also be installed in the flameproof enclosure as an option. Both, the flameproof enclosure and the intrinsically safe controller electronic system are mounted in an installation housing.

The installation housing of the voice station of type series DX 0.5 or DXE 0.5 consists of an electrostatically non-conductive material.

For relationship between temperature class and ambient temperature, reference is made to the table below:

Type	Marking	Temperature class	Ambient temperature
Series DX without additional amplifier (25 DVX 02)	<b>Ex d e ib IIC</b>	T4	-40°C up to +70°C
Series DX with additional amplifier (25 DVX 02)	<b>Ex d e ib IIC</b>	T4	-40°C up to +55°C
Series DXE with intrinsically safe interface and additional amplifier (25 DVX 02)	<b>Ex d e ib [ib] IIC</b>	T4	-20°C up to +55°C

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## 1. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2002 X

Series DXE with intrinsically safe interface and additional amplifier (25 DVX 02) and with connected listen/talk system	<b>Ex d e ib [ib] IIC</b>	T4	-20°C up to +55°C
Series DX 005/T6 without additional amplifier (25 DVX 02)	<b>Ex d e ib IIC</b>	T6	-20°C up to +40°C

The ambient temperature range of the separately approved listen/talk-systems can have a restrictive effect on the permissible ambient temperature range of the voice station of type series DXE 0.5.

### Electrical data

Supply voltage, max. [La(+), Lb(-) and V+, V-]	72 V (DC) safety-related maximum voltage 90 V
Floating relay contacts [NO, NO Opt, COM, NC]	direct voltage, $I < 1 \text{ A}$ , $P < 30 \text{ W}$ safety-related maximum voltage 90 V
Additional speaker output [L100, L0]	100 V, 25 W, 300-3400 Hz only for connection to a passive loudspeaker
Listen / talk-system or switch unit [Flange socket, plug connector]	type of protection Intrinsic Safety Ex ib IIC, Maximum values: $U_o = 8.34 \text{ V}$ $I_o = 1.12 \text{ A}$ $P_o = 600 \text{ mW}$ $L_i$ negligibly low $C_i$ negligibly low  <b>or</b> for connection to the listen / talk-system according to TÜV 11 ATEX 079072 or TÜV 03 ATEX 2124

### Applied standards

EN 60079-0:2009      EN 60079-1:2007      EN 60079-7:2007      EN 60079-11:2007

Test report:      PTB Ex 12-22229

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## 1. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2002 X

### Special conditions for safe use

The installation housing of the voice station consists of an electrostatically non-conductive material. A warning note on the type label points to the risk of electrostatic discharge.

The voice station shall only be installed in locations where flowing atmospheres (e.g. caused by artificial ventilation) do not need to be reckoned with, i.e. charge generating processes shall be prevented.

The equipment shall only be cleaned by appropriate measures, e.g. using a damp cloth.

When cable glands made of metal are used for the installation housing, these shall be included in the equipotential bonding system according to the operating instructions manual.

The permissible ambient temperature range of the voice station of type series DXE 0.5 can be restricted by the use of a separately approved listen/talk-system. The respective ambient temperature range of the separately approved listen/talk-system shall be observed.

Zertifizierungssektor Explosionsschutz  
On behalf of PTB:

Braunschweig, September 10, 2012

  
Dr.-Ing. U. Johannsmeyer  
Direktor und Professor



# EU - DECLARATION OF CONFORMITY

The electrical equipment

## Digital weatherproof Ex Intercom Stations

2 DX 005, 4 DX 005, 6 DX 005, 0 DX 015, 2 DX 015, 4 DX 015  
2 DXE 005, 4 DXE 005, 6 DXE 005, 0 DXE 015, 2 DXE 015, 4 DXE 015  
2 DX 005/T6, 4 DX 005/T6, 6 DX 005/T6

Equipment category  II 2G  
Ex d e ib IIC T4 Gb / Ex d e ib [ib] IIC T4 Gb / Ex d e ib IIC T6 Gb

has been designed, constructed and manufactured in sole responsibility by

**INDUSTRONIC®**  
**Industrie-Electronic GmbH & Co. KG**  
**Carl-Jacob-Kolb-Weg 1**  
**97877 Wertheim / Germany**

in compliance with the EU directives

- 2014/30/EU** - Electromagnetic compatibility (EMC)
- 2014/34/EU** - Regulations for equipment and protective systems intended for use in potentially explosive atmosphere

applying the following harmonised standards:

Electrical apparatus for explosive gas atmospheres

**EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-7:2007, EN60079-11:2012**

Electromagnetic compatibility for industrial environments

**EN61000-6-2:2005, EN61000-6-4:2007 + A1:2011**

Safety of information technology equipment

**EN60950-1:2013**

The EC type examination certificate

**PTB 12 ATEX 2002 X**

was issued by the following notified body:

**Physikalisch-Technische Bundesanstalt (PTB)**  
**Bundesallee 100**  
**38116 Braunschweig / Germany**  
**Notified body No. 0102**

The technical documentation is available with the manufacturer. Please, pay attention to the Notes on Safety. This declaration certifies the compliance with the mentioned guidelines. It is no assertion of other qualities.

Wertheim, November 2017



Wolfgang Stallmeyer  
President

Doc. No. DEC-301-465-000 • Rev. 5 • EN • 13.11.2017