



(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 2025

(4) Equipment: Telephone, type ExResistTel IP2

(5) Manufacturer: FHF Funke + Huster Fernsig GmbH

(6) Address: Gewerbeallee 15-19, 45478 Mülheim a.d. Ruhr, 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 12-20363.

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

EN 60079-0:2009

EN 60079-7:2007

EN 60079-11:2012

EN 60079-18:2009

EN 60079-31:2009

(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 e [ib] mb IIC T4 Gb

II 2 D Ex tb [ib] IIIC T135 °C Db

Zertifizierungssektor Explosionsschutz

Braunschweig, January 24, 2013

On behalf of PTB:


Dr.-Ing. U. Johannsmeyer
Direktor und Professor



(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2025

(15) Description of equipment

The telephone, type ExResistTel IP2 is used for voice transmission via Ethernet according to the VoIP mode (IEEE802.3). It is applied as stationary equipment in potentially explosive gas or dust atmospheres. The intended operating position of the telephone is vertically suspended on a wall.

The permissible range of the ambient temperature is -40 °C up to +60 °C.

Electrical data

Supply, DC
(terminals 16 & 17)

non-intrinsically safe
 $U_n = 19.2 \dots 52.8 \text{ VDC}$
safety-related maximum voltage:
 $U_m = 53 \text{ VDC}$

Supply, PoE
(terminals 11, 12, 14 & 15)

non-intrinsically safe
 $U_n = 24 \dots 48 \text{ VDC}$
safety-related maximum voltage:
 $U_m = 57 \text{ VDC}$

LAN
(terminals 8, 9, 10 & 13)

non-intrinsically safe
 $U_n = \pm 2,5 \text{ V}$ (signal 10 BASE-TX) or
 $U_n = \pm 1 \text{ V}$ (signal 100 BASE-TX)
safety-related maximum voltage:
 $U_m = \pm 7 \text{ V}$ (signal)
 $U_m = 57 \text{ V DC}$ (offset)

LAN cable shield

for terminals refer to operating instructions manual

Relay 1 and 2
(terminals 18 & 19 or
21 & 23)

non-intrinsically safe
 $U_n = \text{up to } 250 \text{ VAC or up to } 230 \text{ VDC}$
 $I_{\max} = \text{up to } 5 \text{ A}$
for permissible maximum values refer to operating instructions
manual)
safety-related maximum voltage:
 $U_m = 250 \text{ V}$

Optional headset
(terminals 1, 2, 3 & 4)

type of protection Intrinsic Safety Ex ib IIC,
only for connection to passive circuits

Maximum values:

$$U_o = 16.4 \text{ V}$$

$$I_o = 220 \text{ mA}$$

$$P_o = 450 \text{ mW}$$

the maximum permissible external capacitance C_o is 424 nF,

the maximum permissible external L/R-ratio is 78 $\mu\text{H}/\Omega$

the circuit is electrically connected to ground

The equipment is infallibly connected to the local equipotential bonding system.

(16) Test report PTB Ex 12-20363

(17) Special conditions for safe use

none

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungssektor Explosionschutz
On behalf of PTB:


Dr.-Ing. U. Johannsmeyer
Direktor und Professor



Braunschweig, January 24, 2013



(1) **EU-TYPE-EXAMINATION CERTIFICATE**
(Translation)

(2) Equipment or Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

PTB 12 ATEX 2025

Issue: 01

(4) Product: Telephone, type ExResistTel IP2

(5) Manufacturer: FHF Funke + Huster Fernsig GmbH

(6) Address: Gewerbeallee 15-19, 45478 Mülheim a.d. Ruhr, Germany

(7) This product and any acceptable variation thereto is 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 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products 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 16-26095.

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

EN 60079-0:2012 + A11:2013

EN 60079-7:2007

EN 60079-11:2012

EN 60079-18:2015

EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



II 2 G Ex e [ib] mb IIC T4 Gb

II 2 D Ex tb [ib] IIIC T135 °C Db

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, July 28, 2016

On behalf of PTB:


Dr.-Ing. F. Liesch
Regierungsdirektor



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EU-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.

(13)

SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 12 ATEX 2025, Issue: 01**

(15) Description of Product

The telephone, type ExResistTel IP2 is used for voice transmission via Ethernet according to the VoIP mode (IEEE802.3). It is applied as stationary equipment in potentially explosive gas or dust atmospheres. The intended operating position of the telephone is vertically suspended on a wall.

The permissible range of the ambient temperature is -40 °C up to +60 °C.

Electrical data

Supply, DC
(terminals 16 & 17)

non-intrinsically safe
 $U_n = 19.2 \dots 52.8 \text{ VDC}$
safety-related maximum voltage:
 $U_m = 53 \text{ VDC}$

Supply, PoE
(terminals 11, 12, 14 & 15)

non-intrinsically safe
 $U_n = 24 \dots 48 \text{ VDC}$
safety-related maximum voltage:
 $U_m = 57 \text{ VDC}$

LAN
(terminals 8, 9, 10 & 13)

non-intrinsically safe
 $U_n = \pm 2.5 \text{ V}$ (signal 10 BASE-TX) or
 $U_n = \pm 1 \text{ V}$ (signal 100 BASE-TX)
safety-related maximum voltage:
 $U_m = \pm 7 \text{ V}$ (signal)
 $U_m = 57 \text{ V DC}$ (offset)

LAN cable shield

for terminals refer to operating instructions manual

Relay 1 and 2
(terminals 18 & 19 or
21 & 23)

non-intrinsically safe
 $U_n = \text{up to } 250 \text{ VAC or up to } 230 \text{ VDC}$
 $I_{\max} = \text{up to } 5 \text{ A}$
for permissible maximum values refer to operating instructions
manual)
safety-related maximum voltage:
 $U_m = 250 \text{ V}$

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SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 12 ATEX 2025, Issue: 01

Optional headset
(terminals 1, 2, 3 & 4)

type of protection Intrinsic Safety Ex ib IIC,
only for connection to passive circuits

Maximum values:

$$U_o = 16.4 \text{ V}$$

$$I_o = 220 \text{ mA}$$

$$P_o = 450 \text{ mW}$$

the maximum permissible external capacitance C_o is 424 nF,

the maximum permissible external L/R-ratio is 78 $\mu\text{H}/\Omega$

the circuit is electrically connected to ground

The equipment is infallibly connected to the local equipotential bonding system.

Modifications with respect to previous issues

The silicone foam, type GRADE-SIL manufactured by MVQ Silicones GmbH and Silex Limited may be used as speaker gasket.

The telephone may be manufactured alternatively without display or without individual buttons. In these cases the respective areas in the metal cover plate will not be punched.

Instead of the heavy-gauge cable used for the handset also a helix / spiral cable may be used in combination with a cable gland of type ESKE/1-S-L-eRDE 20.

(16) Test Report PTB Ex 16-26095

(17) Specific conditions of use


(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

According to Article 41 of Directive 2014/34/EU, EC-type examination certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (April 20, 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-type examination certificates and new issues of such certificates may continue to hold the original certificate number issued before April 20, 2016.

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, July 28, 2016


Dr.-Ing. F. Lienesch
Regierungsdirektor



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