



## (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

On behalf of PTB:

Braunschweig, January 24, 2013

  
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

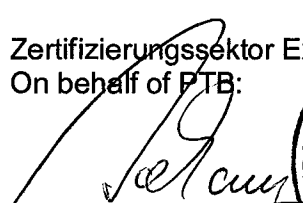
(17) Special conditions for safe use

none

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungssektor Explosionsschutz  
On behalf of PTB:

  
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