EC-Type Examination Certificate

(1) **EC-Type Examination Certificate**

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

(3) EC Type Examination Certificate Number

   EPS 12 ATEX 1 473 X

(4) Equipment: Intrinsically Safe Speaker Microphone, type Ex-TRA 800 Aurelis

(5) Manufacturer: ecom instruments GmbH

(6) Address: Industriestraße 2, 97959 Assamstadt, Germany

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

(8) Bureau Veritas Consumer Product Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 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 of the Directive. The examination and test results are recorded in the confidential report 12TH0191.

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

   EN 60079-0:2012   **EN 60079-11:2012**

(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 and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

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

   ⟨Ex⟩ II 2G Ex ib IIC T4 Gb

   ⟨Ex⟩ II 2D Ex ib IIIC T130°C Db

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(13)   **S c h e d u l e**

(14)   **EC Type Examination Certificate EPS 12 ATEX 1 473 x**

(15)   Description of equipment:

The speaker microphone of type Ex-TRA 800 Aurelis is an accessory for the Digital TETRA Radio
THR9 Ex manufactured by ecom which is approved under EC-type examination certificate no.
EPS 10 ATEX 1 235 X. The speaker microphone is supplied by the Digital TETRA Radio. It is
housed in a plastic enclosure and is connected to the Digital TETRA Radio by means of a multi-
core supply and signal cable. The basic unit is manufactured in various versions. In addition to an
internal loudspeaker and microphone external headsets of various manufacturers that are partly
separately certified or that are specifically approved for connection to the speaker microphone can
be connected to the Ex-TRA 800 Aurelis.

Electrical data:

Intrinsic safe output circuit of Ex-TRA 800 for the supply of headsets with the following maximum
values:

Thermal: $U_{o\_HD} = 3.8$ V
                      $I_{o\_HD} = 0.116$ A
                      $P_{o\_HD} = 0.110$ W

Spark ignition: $U_{o\_HD\_F} = 4.2$ V

The following associated headsets may be connected:

Ex-TRA PTT-EH
Ex-TRA PTT-E
Ex-TRA NB
Ex-TRA VT
Ex-TRA FTS
Ex-TRA FT
Ex-TRA ComCom

Invisio H-M3, manufactured by Invisio, approved under TÜV 10 ATEX 384297 X with the following
types:

H-M3-2-R1110X-E1X
H-M3-2-L1110X-E1X
H-M3-2-R1110X-E2X
H-M3-2-L1110X-E2X

(16) Test report: 12TH0191

(17) Special conditions for safe use:

Ambient temperature range: -20°C ≤ Ta ≤ +55°C

(18) Essential health and safety requirements:

Compliance with the standards mentioned above.

Certification department of explosion protection   Türkheim, October 22, 2012

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