

# 1. **EC Type test certificate**

2. Devices and protection systems for designated use in potentially-explosive areas – Directive 94/9/EC

3. EC Type test certificate number

**TÜV 03 ATEX 2120**

4. Device: Continuity tester Type Ex-DT 12

5. Manufacturer: ecom instruments GmbH

6. Address: Industriestrasse 2  
D-97959 Assamstadt

7. The construction of this device and the various permissible designs are specified in the Annex to this Type test certificate.

8. TÜV NORD CERT GmbH & Co KG, TÜV CERT Certification Agency, certifies as nominated agency no. 0032 in accordance with Article 9 of the Council Directive of the European Community of 23 March 1994 (94/9/EC) that the fundamental health and safety requirements for the design and construction of devices and protection systems for designed use in potentially explosive areas as defined in Annex II to the Directive are satisfied.

The results of the test are set out in confidential test report no. 03 YEX 550548.

9. The fundamental health and safety requirements are satisfied through conformity with

**EN 50014:1997**

**EN 50020:2002**

10. An "X" after the certificate number refers to special conditions for safe application of the device in the Annex to this Certificate.

11. This EC Type test certificate relates only to the design and testing of the specified device in accordance with Directive 94/9/EC. Further requirements of this Directive apply for the manufacture and marketing of this device. These requirements are not covered by this Certificate.

12. The marking for this device must include the following details:

 **II 2 G EEx ia IIC T4**

# ANNEX

14. **EC Type test certificate no. TÜV 03 ATEX 2120**

15. Description of the device  
Continuity tester Type Ex-DT 12 is designed to test the continuity of electrical connections.

The maximum permitted ambient temperature is 50°C.

Electrical data

Supply 2 x micro-batteries  
(Internal battery) U = 3 V

Only batteries successfully type-tested in accordance with Section 10.9 of EN 50020:2002 are permitted. The manufacturer and types are indicated in the Operating Instructions. Batteries must be changed outside of the potentially-explosive area (Information plate)

Measuring circuit Intrinsically safe ignition protection to Eex ia IIC  
(Cable and probe tip) Max. ratings:  $U_0 = 3.3 \text{ V}$   
 $I_0 = 5 \text{ mA}$

Characteristic curve: linear  
Max. permitted external capacity 1000  $\mu\text{F}$   
Max. permitted external inductivity 1 H

or for measuring non-intrinsically safe circuits outside  
the potentially-explosive area  
 $U_m = 420 \text{ V}$

After being used on non-intrinsically safe circuits, the continuity tester must be checked to ensure correct functioning (shorting of the measuring circuit) followed by a dwell time of 5 minutes before the continuity tester can be brought into potentially explosive areas.

16. Test documents are listed in Test Report no. 03 YEX 550548,

17. Special conditions

None

18. Fundamental health and safety requirements.

No additional requirements.