

- (1) **EC-Type Examination Certificate**
- (2) Equipment and Protected Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) **TÜV 00 ATEX 1597 X**

- (4) Machine: Explosion protected temperature measuring device type Ex-MX2
- (5) Manufacturer: ECOM Rolf Nied GmbH
- (6) Address: D-97959 Assamstadt, Industriestraße 2
- (7) The design of this equipment and its various approved embodiments are defined in the attachment to this type examination certificate.
- (8) The TÜV Hannover/Sachsen-Anhalt e.V, TÜV CERT certification body, notified body no. 0032 in accordance with Article 9 of the EC Council Directive dated March 23, 1994 (94/9/EC), certifies that this equipment has been found to conform with the essential health and safety requirements for the design and construction of equipment and protected systems for proper intended use in potentially explosive areas in accordance with Appendix II of the directive. The results of the test are documented in the confidential test report no. 00 PX 16900.
- (9) The essential health and safety requirements are met by virtue of conformity with

EN 50 014:1997

EN 50 020:1994

- (10) If the certification number is followed by an "X", then this indicates that special conditions exist for the safe operation of the equipment. These special conditions are contained in the attachment to this certificate.
- (11) This EC Type Examination Certificate refers only to the design and construction of the specified device according to the Directive 94/9/EC. Further requirements contained in this directive apply for the manufacture and marketing of this device.
- (12) The equipment must be labelled with the following information:

 **II 2 G EEx ia IIC T4**

TÜV Hannover/Sachsen-Anhalt e.V.
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Hannover, 9/07/2000

The Director

This EC-type examination certificate may only be circulated without alteration.
Extracts or modifications require the permission of TÜV Hannover/Sachsen-Anhalt e.V.

APPENDIX

(13)

(14) **EC-type-examination certificate no.: TÜV 00 ATEX 1597 X**

(15) Description of the equipment

The explosion protected temperature measuring device type Ex-MX2 may be used within Category 2 or 3 potentially explosive areas (Zone 1 or 2).

The maximum permissible ambient temperature is 50 °C,

Electrical specifications

Power supply 2 alkaline manganese (Mignon) batteries according to IEC LR6/AA or R6/AA

(internal battery) U = 3 V

Only batteries successfully type-approved according to paragraph 10.9 of EN 50020:1994 are permitted. The manufacturers and types are listed in the operating instructions.

(16) Test documents are listed in Test Report No. 00 PX 16900.

(17) Special conditions

The battery must only be changed outside potentially explosive areas.

In potentially explosive areas, the temperature measuring device may only be operated in its leather pouch.

(18) Essential health and safety requirements
no additional requirements

**I. SUPPLEMENT
to the
EC Type Examination Certificate No. TÜV 00 ATEX 1597 X**

of the company: ECOM Rolf Nied GmbH
 Industriestraße 2
 D-97959 Assamstadt

The Ex-MX2 explosion-protected temperature measuring device may in future be manufactured in accordance with the documents listed in the Test Report.

The modifications concern the internal structure.

The electrical data, special conditions and all other details apply unchanged for this supplement.

16) Test documents are listed in Test Report No. 01 PX 01310.

(17) Special conditions
unchanged

(18) Essential health and safety requirements
no additional requirements

TÜV Hannover/Sachsen-Anhalt e.V.
TÜV CERT-Zertifizierungsstelle Am TÜV 1 D-30519
Hannover

Hannover, 19/01/01

The Director

2. SUPPLEMENT
to the
EC Type Examination Certificate No. TÜV 00 ATEX 1597 X

of the company: ecom instruments GmbH
Industriestraße 2
D-97959 Assamstadt

The Ex-MX2 explosion-protected temperature measuring device may in future be manufactured and operated in accordance with the documents listed in the test report.

The electrical data, special conditions and all other details apply unchanged for this supplement.

(16) Test documents are listed in Test Report No. 01 YEX 126578.

(17) Special conditions

The following also apply for measuring temperatures within Category 1 (Zone 0):

The Ex-MX2 temperature measuring device itself must not be brought into the Category 1 (Zone 0) area.

The device's carrying strap and leather pouch must be attached to the operator's belt or to a belt loop so that the device still maintains a safety distance of > 50 cm to the Category 1 (Zone 0) boundary area when it hangs freely on the carrying sling. Only carrying slings of the manufacturer may be used.

(18) Essential health and safety requirements

no additional requirements

TÜV Hannover/Sachsen-Anhalt e.V.
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Hannover, 25/07/01

The Director

3. SUPPLEMENT
to the
EC Type Examination Certificate No. TÜV 00 ATEX 1597 X

of the company: ecom instruments GmbH
Industriestraße 2
D-97959 Assamstadt

The Ex-MX2 explosion-protected temperature measuring device may in future be manufactured and operated in accordance with the documents listed in the test report.

The modifications concern the internal structure.

The electrical data and all other details apply unchanged for this supplement.

(16) Test documents are listed in Test Report No. 03 YEX 551036.

(17) Special conditions

The battery must only be changed outside potentially explosive areas.

In potentially explosive areas, the temperature measuring device may only be operated in its leather pouch.

The following also apply for measuring temperatures within Zone 0:

The Ex-MX2 temperature measuring device itself must not be brought into Zone 0.

The device's carrying strap and leather pouch must be attached to the operator's belt or to a belt loop so that the device still maintains a safety distance of > 50 cm to the boundary area of Zone 0 when it hangs freely on the carrying sling. Only carrying slings of the manufacturer may be used.

(18) Essential health and safety requirements

no additional requirements

TÜV NORD CERT GmbH & Co. KG
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Hannover, 01/03/04

The Director

4th ADDITION
t o
the EC-type examination certificate No. TÜV 00 ATEX 1597 X

Device: Explosion-resistant temperature measuring device type Ex-MX*

Manufacturer: ecom instruments GmbH

Address: Industriestraße 2
97959 Assamstadt

The explosion-resistant temperature measuring device type Ex-MX2 has been upgraded to type Ex-MX4 BT that is equipped with an integrated Bluetooth interface.

The max transmission power of the Bluetooth interface is restricted securely.

The electrical data, special conditions and all other details apply unchanged for this addition.

Test documents are listed in Test Report No. 05 YEX 551642

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Hanover, 03.05.05

The Director