TÜV CERT

Translation

EC TYPE-EXAMINATION CERTIFICATE
(1)

(2) Equipment or protective system intended for use in potentially explosive atmospheres - **Directive 94/9/EC**

(3) EC-Type Examination Certificate Number

⟨Ex⟩

TÜV 01 ATEX 1658 X

(4) Equipment: Explosionproof multimeter type EX-DM 1000

(5) Manufacturer: ECOM Rolf Nied GmbH

(6) Address: D-97959 Assamstadt, Industriestraße 2

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

(8) The TÜV Hannover/Sachsen-Anhalt e.V., TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system 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 report N° 01 PX 18300.

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

    EN 50 014: 1997   **EN 50 020: 1994**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 construction of the specified equipment or protective system according to Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and placing on the market of this equipment or protective system.

(12) The marking of the equipment or protective system must include the following:

    ⟨Ex⟩   II 2 G   EEx ia IIC T4

TÜV Hannover/Sachsen-Anhalt e.V.   Hanover, 2001-05-28
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Kroll

**Head of the
Certification Body**

TÜV NORD

This certificate may only be reproduced without any change, schedule included.
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S C H E D U L E

(14) EC-TYPE EXAMINATION CERTIFICATE N° TÜV 01 ATEX 1658 X

(15) Description of equipment

The explosionproof multimeter type EX-DM 1000 is used for measurements at intrinsically safe and not intrinsically safe circuits.

The maximum permissible ambient temperature is +50°C.

Electrical data

Supply (internal battery)	1 pc block battery according to IEC 6LR 61 $U = 9$ V

Only batteries successfully type-examined according to Section 10.9 of the EN 50020:1994 are permissible. The manufacturers and the types have to be indicated in the operating instructions. It is only allowed to replace the battery outside of the hazardous area (information plate).

Measurements at intrinsically safe circuits

Measuring inputs   in type of protection "Intrinsic Safety" EEx ia IIC
for the measurement at intrinsically safe circuits
Maximum values: $U_i = 65$ V
                $I_i = 5$ A

Maximum output values at the voltage measuring input
            $U_o = 10,4$ V
            $I_o = 4,1$ mA
The effective internal capacitance and inductance are negligibly small.

Maximum output values at the current measuring inputs
            $U_o = 2,8$ V
            $I_o = 195$ mA
The effective internal capacitance and inductance are negligibly small.

Measurements at non intrinsically safe circuits

Measuring inputs   Maximum values: $U_i = 1000$ V
                                     $I_i = 10$ A

(16) Test documents are listed in the test report No.: 01 PX 18300.

(17) Special conditions for safe use

After every measurement at non intrinsically safe circuits a delay time of at least three minutes has to be observed before the multimeter may be brought into the hazardous explosive area again.

The replacement of the battery and the opening of the multimeter is only allowed outside of the hazardous explosive area.

Inside of the hazardous explosive areas the multimeter may be used with the special holster bag only.

(18) Essential Health and Safety Requirements

no additional ones