



Translation

**EC TYPE-EXAMINATION CERTIFICATE**

- (1) Equipment or Protective System intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (2) EC-Type Examination Certificate Number



**TÜV 98 ATEX 1318 X**

- (3) Equipment or Protective System: Data Logger Type Log-Ex 1000
- (4) Manufacturer: ECOM Rolf Nied GmbH
- (5) Address: Industriestraße 2  
D-97959 Assamstadt

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

(7) The TÜV Hannover/Sachsen-Anhalt e.V., TÜV Certification Body 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 Basic 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° 98/PX04880

(8) Compliance with the Basic Health and Safety Requirements has been assured by compliance with:

**DIN EN 50 014: 1997**

**DIN EN 50 020: 1994**

(9) If the sign "X" is placed after the certification number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(10) 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.

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

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

Hannover, 30.07.1998



  
Head of the  
Certification Body



(13)

## SCHEDULE

(14) **EC-TYPE EXAMINATION CERTIFICATE N° TÜV 98 ATEX 1318 X**

(15) Description of equipment or protective system

The data logger type Log-Ex 1000 is used for measuring and storage of voltage-, current- and temperature values in explosion-hazardous areas.

### Electrical data

Supply:  
(internal battery)  $U = 5,4 \text{ V}$ ; 580 mAh  
4 ea. nickel-hydride cells type VH 600 F6, Messrs. VARTA

Current-, voltage or temperature measuring inlet resp. in type of ignition protection intrinsic safety EEx Ia IIC  
max. values  $U_o = 6 \text{ V}$   
 $I_o = 8,4 \text{ mA}$   
characteristic line: linear

or

for the connection at a certified intrinsically safe circuit  
max. values:  $U_i = 30 \text{ V}$   
 $I_i = 300 \text{ mA}$   
max. admissible external capacitance 66 nF  
max. admissible external inductance 0,2 mH

RS 232 Interface  $U_m = 250 \text{ V}$   
use only outside the explosion-hazardous area

(16) Test documents are listed in the test report No.: 98/PX04880.

(17) Special conditions

1. Charging of the cells must only be effected outside the explosion-hazardous area at the charging station type LG 40.
2. Battery change must only be effected by the manufacturer.
3. The connection of the RS 232 interface must only be carried out outside the explosion-hazardous area. After such a use the device must only be brought into the explosion-hazardous area after a retention time of 30 minutes.

(18) Basic Health and Safety Requirements

no additional ones