1151 Boston-Providence Turnpike P.O. Box 9102 Norwood, MA 02062 USA T: **781 762 4300** F: 781 762 9375 www.fmglobal.com

# **CERTIFICATE OF COMPLIANCE**

## HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

Ex-LED 8. Flashlight Lite.

IS / I / 1 / ABCD / T4 Ta = 50°C I / 0 / AEx ia / IIC / T4 Ta = 50°C

### **Equipment Ratings:**

Intrinsically safe for Class I, Division 1, Groups A, B, C, and D hazardous (classified) locations and intrinsically safe for Class I, Zone 0, Group IIC hazardous (classified) locations

Approved for:

ECOM Rolf Nied GmbH Industriestraße 2, D-97959 Assamstadt Germany

An FM 610 Fal Affiliate

# Factory Mutual Research

This certifies that the equipment described has been found to comply with the following Factory Mutual Research Approval Standards and other documents:

Class 3600

1998

Class 3610

1999

Original Approval Job Identification: 3010859

Approval Granted: May 20, 2002

Subsequent Revision Reports / Date Approval Amended

Factory Mutual Research Corporation

Nicholas P. Ludlam

Technical Team Manager

Approvals Division

May 30, 2002

An FM Global Affiliate

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## **EC TYPE-EXAMINATION CERTIFICATE**

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



## TÜV 01 ATEX 1692

(4) Equipment or

Protective System:

Explosion proofed torch type Lite-Ex LED 8

(5) Manufacturer:

**ECOM Rolf Nied GmbH** 

(6) Address:

(1)

Industriestraße 2 D-97959 Assamstadt

- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate.
- (8) 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° 01 PX 06410.

(9) Compliance with the Basic 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 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.
- (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. TÜV CERT-Zertifizierungsstelle Am TÜV 1 D-30519 Hannover

Head of the Certification Body



Hannover, 2001-03-22

## SCHEDULE



## (14) EC-TYPE EXAMINATION CERTIFICATE N° TÜV 01 ATEX 1692

(15) Description of equipment or protective system

The explosion proofed torch type Lite-Ex LED 8 may be used in explosion hazardous areas that require apparatus of the category 2 resp. 3.

The maximum permissible ambient temperature is 50°C.

#### Electrical data

Supply circuit (internal battery)

3 pcs. button cells LR 44 according to IEC, U = 4,5 V; 125 mAh

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.

Lighting element

Gallium Nitride LED type NSPW500BS

company: Nichia Corporation

It is not allowed to open the torch in the hazardous explosive area (information plate).

- (16) Test documents are listed in the test report No. 01 Px 06410.
- (17) Special condition for safe use

none

(18) Basic Health and Safety Requirements

no additional ones