

Testing and Certifying Body

ZELM EX

- (1) **EC-Type-Examination Certificate** , (translation)
- (2) Devices and protection systems for proper designated use in potentially explosive areas – Directive 94/9/EC
- (3) EC-Type-Examination Certificate Number

ZELM 03 ATEX 0137

- (4) Device: Laser Pointer Ex-Point 02
- (5) Manufacturer: ecom instruments GmbH
- (6) Address: D-97959 Assamstadt
- (7) The design of this device and its various approved models are specified in the annex of this type-examination certificate.
- (8) The Testing and Certifying Body ZELM EX, as the named body number 0820 in accordance with Article 9 of the Directive of the Council of the European Communities dated March 23, 1994 (94/9/EC), certifies that this device or protective system has been found to comply with the basic health and safety requirements for the design and construction of devices and protective systems intended for use in potentially explosive areas in accordance with Annex II of the Directive.

The test results are recorded in the confidential test report no. ZELM Ex 0140317179.

- (9) Compliance with the basic health and safety requirements has been ensured through agreement with:

EN 50 014: 1997+A1+A2 prEN 61241-0: 2002
EN 50 020:1994 31H/143/CD (IEC 61241-11): 2002

- (10) If the mark "X" appears after the certification number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.
- (11) The EC-type-examination certificate refers only to the design, examination and tests of the specified device or protective system in accordance with Directive 94/9/EC. Further requirements of this Directive may apply to the manufacturing process and delivery of this device or protective system. These are not covered by this certificate.
- (12) The marking of the device must include the following:

 **II 2 G EEx ia IIC T4**
 **II 2 D Ex iaD 21 T 96°C**

Certifying Body ZELM EX

(signed)

Harald Zelm (graduate engineer)

Braunschweig, April 17, 2003

(official stamp)

Testing and Certifying Body

ZELM EX

Annex

- (13)
- (14) EC-Type-Examination Certificate ZELM 03 ATEX 0137
- (15) Description of the device

The laser pointer Type EX-Point 02 is a handheld portable device for use within potentially explosive areas of categories 2 G and/or 2 D. The equipment consists of a multiple-part brass case, the laser diode with control and a button. It is equipped with two alkaline batteries of type LR03 for power supply. These may only be changed outside the Ex-area.

Electrical data

Power supply from two built-in batteries LR03 EEX ia IIC
The internal electric circuit is intrinsically safe.

Permissible ambient temperature -10°C to +40°C
Maximum surface temperature +96°C

Note:

The operating manual must be followed.
Opening the case in a potentially explosive area is not permitted.

- (16) Test report no.
ZELM EX 0140317179
- (17) Special conditions
not applicable
- (18) Basic safety and health requirements
Basically fulfilled by standards. For use in accordance with Category 2 D, the non-dust-proof case was accepted because an equivalent level of safety has been achieved through the type of ignition protection "intrinsically safe" in connection with its characteristic as a battery operated handheld device.

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Braunschweig, April 17, 2003

(signed)

(official stamp)

Harald Zelm (graduate engineer)

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EC type examination certificates without signature and official stamp are invalid. Distribution of this EC-type-examination certificate is only permitted if no alterations are made to it. Excerpts or changes require the approval of the Testing and Certifying Body ZELM Ex.