

Prüf- und Zertifizierungsstelle (Test and Certification Body)

ZELM Ex

- (1) **EC type-examination certificate**
- (2) Devices and safety equipment for intended use in potentially explosive areas – **Directive 94/9/EC**
- (3) Number of the EC type-examination certificate

ZELM 06 ATEX 0313X

- (4) Device: **Type 300 SHL 300x hand lamp**
- (5) Manufacturer: **ecom instruments GmbH**
- (6) Address: **D-97959 Assamstadt**
- (7) The design of this device and the various approved types is defined in the attachments to this EC type-examination certificate.
- (8) The ZELM Ex Test and Certification Body, as the body appointed with No. 0820, in accordance with Article 9 of the directive of the Council of the European Community dated 23 March 1994 (94/9/EC), certifies that fundamental safety and health requirements are fulfilled for the concept and construction of devices and protective systems intended for use in potentially explosive areas in accordance with Attachment II of the directive.
The results of the test have been documented in Confidential Report No. ZELM Ex 0370512489.
- (9) The fundamental safety and health requirements are fulfilled through compliance with

EN 60 079-0 : 2004
prEN 61241-0 : 2005

EN 50 020: 2002
EN 61 241-1 : 2004

EN 60 079-26 : 2004

- (10) An "X" after the certificate number refers to special conditions for using the device safely as set out in the attachment to this certificate.
- (11) This EC type-examination certificate refers only to the design, inspection and tests for the specified device or protective system in compliance with Directive 94/9/EC. Additional requirements set out in this directive may apply to the manufacturing procedure and the delivery of this device or protective equipment. These are not covered by this certificate.
- (12) The designation of this device must contain the following information:

Ex II 1 G Ex ia IIC T4
II 1 D Ex tD A20 IP65 T 108°C

Certification Body ZELM Ex

Braunschweig, 13.11.2006

((Signature, stamp: Test and Certification Body ZELM Ex))
Dipl.-Ing. Harald Zelm

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EC type-examination certificates without signature and without stamp are not valid. This EC type-examination certificate may only be distributed without change. Excerpts or changes must be approved by the Test and Certification Body ZELM Ex.

Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex * Siekgraben 56 * D-38124 Braunschweig, Germany

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(13) **ATTACHMENT**

(14) EC type-examination certificate **ZELM 06 ATEX 0313X**

(15) Description of the device

The Type 300 SHL 300x hand lamp serves as a handheld portable resource for use in potentially explosive areas requiring Category 1G or 1D.

The device's plastic housing is electro-statically conducting or hazardous electrostatic charges are prevented through its shape and surface area limits. Light-emitting diodes are used as the source of light. The power is supplied by a fitted rechargeable battery block.

Electric data

Power supply

By the fitted supplied rechargeable battery

The internal power circuit is intrinsically safe.

The maximum permissible ambient temperature is -20°C to $+50^{\circ}\text{C}$.

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(17) Special conditions

1. The operating instructions must be observed.
2. It is not permitted to open the housing in potentially explosive areas.
3. The hand lamp may only be charged outside potentially explosive areas and with the provided chargers. The fitted rechargeable battery block must be inspected at the latest after two years and then in accordance with the manufacturer's instructions set out in the operating manual. The entire rechargeable battery block must be replaced if changes or defects are discovered during maintenance. The fitted rechargeable battery block may not be replaced in potentially explosive areas and must only be replaced by the manufacturer's qualified engineers or people who the manufacturer has trained accordingly.
4. A regular visual inspection and function test must be carried out to maintain the external condition of the hand lamp. The lamp must be removed from potentially explosive areas in the event of visible damage or when the rechargeable battery is empty.
5. Damaged seals may only be replaced in accordance with the instructions in the operating manual.
6. Deposits of dust on the housing, particularly under the swivelling lamp head, must be removed.

(18) Fundamental safety and health requirements

Fulfilled through standards.

Certification Body ZELM Ex

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