

[1] **EC-TYPE EXAMINATION CERTIFICATE**

according to Directive 94/9/EC, Annex III

(Translation)



[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres, **Directive 94/9/EC**

[3] EC-Type Examination Certificate Number: **IBExU12ATEX1066**

[4] Equipment: **Portable lamp**  
Type SHL 200-Ex

[5] Manufacturer: ecom instruments GmbH

[6] Address: Industriestrasse 2  
97959 Assamstadt  
GERMANY

[7] The design of the equipment mentioned in [4] and any acceptable variations thereto are specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that the equipment mentioned in [4] has been found to comply with the essential health and safety requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.  
The test results are recorded in the test report IB-12-3-087 of 11 June 2012.

[9] Compliance with the essential health and safety requirements has been assured by compliance with EN 60079-0:2009, EN 60079-11:2007 and EN 60079-31:2009.

[10] If the sign „X“ is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in [17] in the schedule to this EC-Type Examination Certificate.

[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned in [4] shall include the following:

II 2G Ex ib IIC T4 Gb

II 2D Ex tb IIC T75°C Db

-20 °C ≤ T<sub>a</sub> ≤ +50 °C

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Authorised for certifications  
-Explosion protection-

Freiberg, 11 June 2012

By order

  
(Dipl.-Ing. Willamowski)

**Schedule**



Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

[13]

**Schedule**

[14]

**to the EC-Type Examination Certificate IBExU12ATEX1066**

[15]

**Description of the equipment**

The portable lamp is an explosion-protected electrical apparatus for use in areas of zones 1 and 21. It consists of a turnable head with LED illuminant and the bottom part with electronics and lead acid battery. Charging is carried out outside the explosive area.

**Technical data**

Ambient temperature range:	-20 °C up to +50 °C
Degree of protection of the enclosure:	IP 66 according to EN 60529
Battery:	lead acid battery 6 V max. 4.5 Ah
Charging voltage:	10 - 30 V DC U <sub>m</sub> 50 V

[16]

**Test report**

The proof of the explosion protection is explained in detail in the test report IB-12-3-087. The test documents are part of the test report and are listed there.

Summary of the test results:

The Portable lamp type SHL 200-Ex meets the requirements of the explosion protection for electrical apparatus of Group II, Category 2G in type of protection increased safety and Category 2D in type of protection protection by enclosure.

[17]

**Special conditions for safe use**

none

[18]

**Essential Health and Safety Requirements**

Confirmed by compliance with standards (see [9]). The limit value of the optical power according to EN 60079-28:2007 is kept. A marking in accordance with this standard is not carried out.

By order

Freiberg, 11 June 2012

  
(Dipl.-Ing. Willamowski)