



Translation

EC-Type Examination Certificate

- (1) **- Directive 94/9/EC -**
Equipment and protective systems intended for use
in potentially explosive atmospheres
- (2) **BVS 07 ATEX E 164 X**
- (3) **Equipment: Fluorescent Hand and Machine Lamps type HL/ML . . d**
- (4) **Manufacturer: thuba EHB AG**
- (5) **Address: 4015 Basel, Switzerland**
- (6) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.
- (7) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential 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 test and assessment report BVS PP 08.2009 EG.
- (8) The Essential Health and Safety Requirements are assured by compliance with:
EN 60079-0:2006 General requirements
EN 60079-1:2004 Flameproof enclosure
EN 61241-0:2006 General requirements
EN 61241-1:2004 Protection by enclosures
- (9) 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 the appendix to this certificate.
- (10) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance with Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate
- (11) The marking of the equipment shall include the following:

**II 2G Ex d IIC T5****II 2D Ex tD A21 IP68 T95°C****DEKRA EXAM GmbH**

Bochum, dated 21.01.2008

Signed: Dr. Jockers

Signed: Dr. Eickhoff

Certification body

Special services unit

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This certificate may only be reproduced in its entirety and without change

DEKRA EXAM GmbH Dinnendahlstrasse 9 44809 Bochum Germany Phone +49 234/3696-105 Fax +49 234/3696-110 E-mail zs-exam@dekra.com



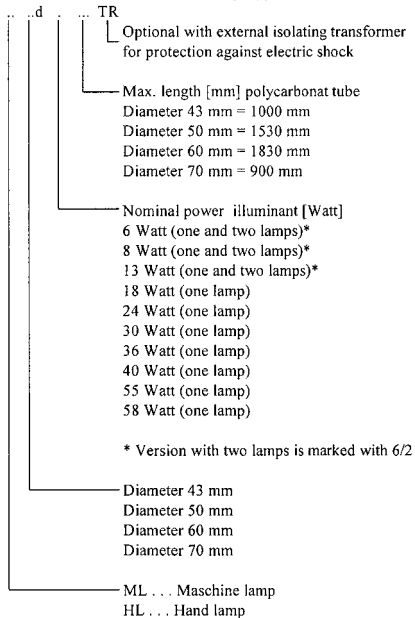
(13) Appendix to

(14) **EC-Type Examination Certificate**

BVS 07 ATEX E 164 X

(15) 15.1 Subject and type

Fluorescent Hand and Machine Lamps type HL/ML . . . d



15.2 Description

The Fluorescent hand and machine lamps type ML . . . d are designed in type of protection Flameproof enclosure (category 2G). The casing consists of a light-transmitting tube of polycarbonate (Makrolon 1143) with end caps made of aluminium, stainless steel or titan. The machine lamps fulfil also the requirements of the type of protection by enclosure (category 2D).

15.3 Parameters

Electrical parameters

Nominal voltage

max. AC 250 V

Power

max. 58 W

(16) Test and assessment report

BVS PP 08.2009 EG as of 21.01.2008

(17) Special conditions for safe use

Widths of the flameproof joints of this enclosure are partly bigger and the gaps are partly smaller as required by table 2 of EN 60079-1:2004. For repairing the joints the dimensions of the documentation of the manufacturer shall be regarded.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 21.01.2008
BVS-Schm/Wit/Mi A 20070308

DEKRA EXAM GmbH

Certification body

Special services unit