



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

PTB 03 ATEX 1164



(4) Equipment: Explosion-proof spotlight, type d 4000/...

(5) Manufacturer: Adolf Schuch GmbH

(6) Address: Mainzer Straße 172, 67547 Worms, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC 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 confidential report PTB Ex 03-13115.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014:1997 + A1 + A2

EN 50018:2000 + A1

EN 50019:2000

EN 50281-1-1:1998

(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 the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the 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.

(12) The marking of the equipment shall include the following:



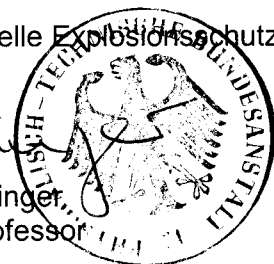
II 2 G/D EEx de IIC T4, T3 or T2 / IP67 T... °C

Zertifizierungsstelle Explosionschutz

Braunschweig, October 06, 2003

By order:

Dr.-Ing. H. Wehinger
Direktor und Professor



(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 1164

(15) Description of equipment

The explosion-proof spotlight of type d 4000/... is designed to type of protection "d" and may optionally accommodate a tungsten-halogen lamp or a discharge lamp. The spotlight consists of the enclosure with moulded terminal compartment, designed to type of protection "e", as well as the glass frame with single-pane safety glass cover, and the reflector.

Admissible ambient temperatures: -20 °C to +40 °C / +55 °C

Electrical data and temperature classes:

Type name	Rated voltage	Max. ambient temperature	Temperature class	Max. surface temperature
d 4000/300 QT	120 V	55 °C	T3	180 °C
d 4000/500 QT	220 V, 230 V	40 °C	T3	200 °C
d 4000/500 QT	120 V, 220 V, 230 V	55 °C	T2	225 °C
d 4000/1000 QT	120 V, 220 V, 230 V	40 °C	T2	270 °C
d 4000/250	220 V, 230 V, 240 V	40 °C	T4	140 °C
d 4000/250	220 V, 230 V, 240 V	55 °C	T3	155 °C
d 4000/250 HI	220 V, 230 V, 240 V	40 °C	T4	140 °C
d 4000/250 HI	220 V, 230 V, 240 V, 255 V	55 °C	T3	155 °C
d 4000/400 HI	220 V, 230 V, 240 V	55 °C	T3	200 °C
d 4000/250 HS	220 V, 230 V, 240 V	40 °C	T4	140 °C
d 4000/250 HS	220 V, 230 V, 240 V, 255 V	55 °C	T3	155 °C
d 4000/400 HS	220 V, 230 V, 240 V	55 °C	T3	200 °C
d 4000/600 HS	220 V, 230 V, 240 V	40 °C	T3	200 °C

Type key:

Letter "d"

type of protection "d", in conjunction with protection provided by enclosure

1st, 2nd, 3rd and 4th numeral

type series

5th, 6th, 7th and 8th numeral

lamp rating

Additional letters

lamp type: QT

tungsten-halogen lamp

-

high-pressure mercury vapour lamp

HI

metal-halide lamp

HS

high-pressure sodium-vapour lamp

The detailed description, technical data and the required documents are laid down in the test documents that are attached to the test report.

(16) Test report PTB Ex 03-13115

(17) Special conditions for safe use

None

Additional notes for safe operation:

The enclosure shall be provided with either of the following warnings: "Wait 10 minutes after disconnecting the unit before opening it!" or "Do not open within the potentially explosive area!". The user shall be informed of these conditions accordingly, e.g. with a note included in the operating instruction.

The spotlight shall be provided with the following warning: "Do not open when alive!". The user shall be informed of these conditions accordingly, e.g. with a note included in the operating instructions.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

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