



(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 12 ATEX 1030



(4) Equipment: LED - flood light fitting, type d9000/**** XX

(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 test report PTB Ex 12-12164.

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

EN 60079-0:2012, EN 60079-1:2007, EN 60079-7:2007,

EN 60079-28:2007, 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 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 Ex d e op is IIB resp. IIC T6 resp. T4 Gb



II 2 D Ex tb IIC T80 °C resp. T90 °C Db

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, October 19, 2012

Dipl.-Phys. U. Völkel



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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 1030

(15) Description of equipment

The explosion-proof LED-flood light is designed to Flameproof Enclosure "d" type of protection and fitted with LED-printed circuit boards.

The floodlight consists of the enclosure with moulded terminal compartment, as well as the glass frame with single-pane safety glass cover.

Inside the housing is the electronics assembly required for the operation of the LEDs according to circuit board assembly. Special versions with extended features can be applied on customer's request.

On customer's request a protective cage may be installed additionally.

Ambient temperature range

$-50\text{ °C} / -20\text{ °C} \leq T_a \leq +40\text{ °C} / +50\text{ °C} / +60\text{ °C} / +70\text{ °C}$

Electrical ratings:

Rated voltage:	110 V – 277 V (AC) 110 V – 250 V (DC)
Rated frequency:	0 Hz/50 Hz/60 Hz
Rated power:	depending on LED type and current
Degree of protection acc. to DIN EN 60598 and DIN EN 60529:	IP 67

Temperature data

Type of flood light	T _{amb} [°C]	Temperature class	Surface temperature [°C]	Cable min. thermal endurance [°C]	Cable entry min thermal endurance [°C]
d 9000/4201	40	T6	80	70	70
d 9000/4201	40	T4	80	70	70
d 9000/4201	50	T4	80	70	70
d 9000/4201	60	T4	80	70	70
d 9000/4201	70	T4	90	80	80
d 9000/4202	40	T6	80	70	70
d 9000/4202	40	T4	80	70	70
d 9000/4202	50	T4	80	70	70
d 9000/4202	60	T4	80	80	80
d 9000/4203	40	T6	80	70	70
d 9000/4203	40	T4	80	70	70
d 9000/4203	50	T4	80	70	70
d 9000/4204	40	T6	80	70	70
d 9000/4204	40	T4	80	70	70

Nomenclature:

Type: d 9000/**** XX

Character d	main type of protection "d" in connection with protection by enclosure
Digits no.1., 2., 3. and 4	type series
Digits no. 5., 6., 7. and 8.	designation of the PCB characteristics
Additional characters/digits	extension of temperature range, special versions, generations, etc.

(16) Test report PTB Ex12-12164

(17) Special conditions for safe use

None

Notes for manufacturing and operation

The enclosure shall be provided with either of the following warnings: "Wait 1 hour (T4) / 6 hours (T6) after disconnecting the unit before opening!" or "Do not open within potentially explosive area!". The user shall be informed of these conditions accordingly, e.g. with a note included in the operating instruction.

The LED-flood light shall be provided with the following warning: "Do not open when energized!". The user shall be informed of this condition accordingly, e.g. with a note included in the operating instruction.

(18) Essential health and safety requirements

Met by compliance with the afore-mentioned Standards.

Zertifizierungssektor Explosionsschutz

Braunschweig, October 19, 2012

On behalf of PTB:



Dipl.-Phys. U. Völkel

