



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

[2] for non-electrical products of equipment-groups I and II,
equipment-categories M2 and 2 plus products of equipment-category 3

[3] Type examination certificate number **IBExU16ATEXB006** | Issue 1

[4] Product: **LED-Light Fitting and LED Emergency Light Fitting**
Type: nD866...L... and nD867...L...

[5] Manufacturer: Adolf Schuch GmbH, Lichttechnische Spezialfabrik

[6] Address: Mainzer Straße 172
67547 Worms
GERMANY

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] IBExU Institut für Sicherheitstechnik GmbH certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in the confidential test report IB-19-3-0181.

[9] Compliance with the essential health and safety requirements has been assured by compliance with: EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-5:2015, EN IEC 60079-7:2015/A1:2018, EN 60079-11:2012 and EN 60079-31:2014 except in respect of those requirements listed at item [18] of the schedule.

[10] If the sign "X" or "U" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.

[11] This type examination certificate relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured or supplied.

[12] The marking of the product shall include the following depending on the components used:

Type nD 866...L...

II 3G Ex ec IIC T4 Gc

II 3G Ex ec q IIC T4 Gc

II 3G Ex db ec IIC T4 Gc

II 3G Ex ec ib mb IIC T4 Gc

II 3D Ex tc IIIC T80 °C Dc

-30 °C ≤ T_{amb} ≤ +65 °C (maximum values)

IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg

Type nD 867...L...

⊕ II 3G Ex ec IIC T4 Gc

⊕ II 3G Ex db ec IIC T4 Gc

⊕ II 3D Ex tc IIIC T80 °C Dc

$-30\text{ °C} \leq T_{\text{amb}} \leq +55\text{ °C}$ (maximum values)

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- Stamp -

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

Freiberg, 2020-12-18

[13] **Schedule**

[14] **Certificate number IBExU16ATEXB006 | Issue 1**

[15] **Description of product**

The LED-Light Fitting type nD866...L... and LED Emergency Light Fitting type nD867...L... are used to illuminate factory and depot sites in areas with potentially gas and dust explosive requiring equipment of category 3G or 3D. The luminaire consists of a polyester enclosure with fasteners made of stainless steel, a reflector with assembled LED boards, LED control gear and terminals, as well as a light-transmitting cover made of polycarbonate.

LED Emergency Light Fitting type nD867...L... provides an emergency light function. It uses an alternate LED control gear and a rechargeable and changeable battery pack in difference to type nD866. The battery pack is either in the housing or in a separate battery housing which is assembled to the side of the luminaire. Service and fault conditions are indicated by means of coloured LED which is inside the luminaire.

The output current for supplying the LED modules may be set by means of DALI interface.

Both types may be equipped with coloured LED.

Technical data:

- Rated voltage:
 - nD866: 220 ... 240 V AC (50...60 Hz) or
176 ... 275 V DC
 - nD867: 220 ... 240 V AC (50...60 Hz)
- Input power: maximum 54 W (nD866)
maximum 41 W (nD867)
- Battery: NiCd 6 V / 4 Ah
NiCd 6 V / 1,6 Ah
- Through-wiring / looping: up to 12 x $\geq 2.5 \text{ mm}^2$ (max. 4 x 16 A)
- Ambient temperature: -30 °C...+65 °C

These values are maximum values. The actual values are determined by the built-in components. The manufacturer specified the rated values in the context of these limiting values and ensures compliance with the maximum surface temperature of the equipment and the permissible operating temperature of the components. Through-wiring, selection of cable and cable glands may be restricted in some types of the luminaire.

The corresponding rated values / restrictions are indicated in manufacturer's documents, on the individual marking plates and in the manufacturer's instructions which are part of the test report.

Variations compared to type examination certificate:

- A LED Emergency Light Fitting type nD867...L... has been added.
- A new housing has been added.
- The luminaires may be manufactured of alternate plastic materials.
- The use of new components has been assessed.
- The luminaire complies with the requirements of the current standards. Thus the marking has been changed.

[16] **Test report**

The test results are recorded in the confidential test report IB-19-3-0181 of 2020-12-18.

The test documents are part of the test report and they are listed there.

Summary of the test results

The LED-Light Fitting type nD866...L... and LED Emergency Light Fitting type nD867...L... further fulfil the requirements of explosion protection for electrical equipment of Equipment Group II, Category 3G in type of protection increased safety "e" in combination with powder filling "q" or flameproof enclosure "d" or intrinsic safety "i" or encapsulation "m" for Explosion Group IIC and temperature class T4, as well as Category 3D in type of protection dust ignition protection by enclosure "t" for Explosion Group IIIC and a maximum surface temperature of 80 °C.

Safety instructions

The plastic housing has to be protected against intense electrostatic charging processes. Cleaning is permitted only with a damp cloth.

[17] **Specific conditions of use**
None

[18] **Essential health and safety requirements**
In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:
None

[19] **Drawings and Documents**
The documents are listed in the test report.

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Freiberg, 2020-12-18