

[1] **EU-TYPE EXAMINATION CERTIFICATE - TRANSLATION**



[2] Equipment and protective systems intended for use
in potentially explosive atmospheres, directive 2014/34/EU

[3] EU-Type Examination Certificate Number **IBExU22ATEX1083 X** | Issue 0

[4] Equipment: **Control and Signal Devices**
Type: AB1-[D/E/K/M/N/P/W]3-*****

[5] Manufacturer: Exepd GmbH

[6] Address: i_Park Tauberfranken 23
97922 Lauda-Königshofen
GERMANY

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

[8] IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, 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 the Directive.

The examination and test results are recorded in the confidential test report IB-22-3-0009.

[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 IEC 60079-7:2015/A1:2018 EN 60079-31:2014
Except in respect of those requirements listed at item [18] of the schedule.

[10] If the sign "X" 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 EU-type examination certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

II 2G Ex db eb IIC T6 Gb
 II 2D Ex tb IIIC T85 °C Db
T_a -20 °C ... +60 °C

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By order

Dr.-Ing. P. Cimalla



(Notified Body number 0637)

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

Freiberg, 2023-07-17

[13]

Schedule

[14]

Certificate Number IBExU22ATEX1083 X | Issue 0

[15] **Description of product**

The Control and Signal Devices type AB1-[D/E/K/M/N/P/W]3-***** are suitable for use in category II 2G and 2D and are intended for fixed installation. They consist of a flameproof stainless steel sleeve with actuating or indicating elements on the front and are designed with a connecting cable. The Control and Signal Devices can be installed (analogously to an Ex blanking plug) in suitably approved Ex e or Ex t enclosures of category II 2G and 2D.

Rated values and technical data

- Ambient temperature range: max. -20 °C up to +60 °C
- Maximum service temperature: +80 °C
- Connecting thread: M22x1.5 / M30x1.5

Signalling lamp type AB1-M3-*****

- Nominal voltage: 24 V DC
- Current consumption: max. 15 mA

Push button type AB1-D3-*****

- Nominal voltage: 24 V DC / 230 V AC
- Nominal current: max. 1 A

Mushroom pushbutton M22 type AB1-N3-*****

- Nominal voltage: 24 V DC / 230 V AC
- Nominal current: max. 1 A

Mushroom pushbutton M30 type AB1-E3-*****

- Nominal voltage: 24 V DC / 230 V AC
- Nominal current: max. 1 A

Selector switch/Potentiometer type AB1-P/W3-*****

- Nominal voltage: 24 V DC (115 V AC)
- Nominal current: max. 150 mA
- Nominal power (Potentiometer): max. 1 W

Key switch type AB1-K3-*****

- Nominal voltage: 24 V DC (115 V AC)
- Nominal current: max. 150 mA

[16] **Test report**

The test results are recorded in the confidential test report IB-22-3-0009 of 2023-07-12.
The test documents are part of the test report and they are listed there.

Summary of the test results

The Control and Signal Devices type AB1-[D/E/K/M/N/P/W]3-***** fulfil the requirements of explosion protection for equipment of Group II, Category 2G, type of protection flameproof enclosure "db" and increased safety "eb" and Category 2D, type of protection dust ignition protection by enclosure "tb".

[17] **Special conditions for use**

- The Control and Signal Devices can be installed in enclosures of types of protection "eb" and "tb". At this, the manufacturer's installation instructions must be observed. The operating temperature at the installation site must not exceed the permissible ambient temperature of the control and signalling unit (-20 °C to +60 °C). The service temperature at the respective installation seal must not exceed +80 °C.
- The metal enclosure of the Control and Signal Devices must be included in the equipotential bonding system in accordance with EN 60079-14, e.g. by suitable installation or by using earthing straps.

[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:

- not applicable -

[19] Drawings and documents

The documents are listed in the test report.

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Freiberg, 2023-07-14