



[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 **IBExU19ATEX1142 X** | Issue 1

[4] Equipment: **Electric Motor**
Type: dKD..280..-./.

[5] Manufacturer: **BEN Buchele Electric Motorenwerke GmbH**

[6] Address: **Poppenreuther Straße 49a**
90419 Nürnberg
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-21-3-0002.

[9] Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-1:2014**

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:

Ex II 2G Ex db IIB or IIC T4 or T3 Gb

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By order

Dipl.-Ing. (FH) Henker



(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, 2021-07-29

[13] **Schedule**

[14] **Certificate Number IBExU19ATEX1142 X | Issue 1**

[15] **Description of product**

The flameproof Electric Motor type dKD..280..-./ is a three-phase squirrel-cage rotor motor in surface-cooled grey cast iron design. It can optionally be equipped with a brake and additional with an encoder.

The Electric motor is equipped with temperature limiters (PTC). The connection is made via the flameproof terminal box.

Rated values and technical data

- Rated voltage: max. 690 V
- Rated power: max. 200 kW
- Mode of operation: S1, S2, S3
- Cooling method according to EN 60034-6: IC410, IC411, IC418
- Ambient temperature range: -35 °C up to +50 °C standard
-50 °C up to +60 °C special version
- Property class fastening screws: min. 8.8 according to ISO 4762

The accurate electrical data are specified in the Continuation Sheets to this certificate.

Variation compared to issue 0 of this certificate:

The Electric Motor can also be designed with self-fan in cooling method IC411.

[16] **Test report**

The test results are recorded in the confidential test report IB-21-3-0002 of 2021-07-26. The test documents are part of the test report and they are listed there.

Summary of the test results

The Electric Motor type dKD..280..-./ fulfils the requirements of explosion protection for equipment of Group II, Category 2G, type of protection flameproof enclosure "db".

Safety instructions

- To comply with the temperature class T4 or T3 the motors must be protected by a device for the direct temperature control. This consists of PTC thermistors built into the winding and an appropriate release device according to EN 1127-1.
- The instructions and the electrical data contained in the Continuation Sheets to the EU-Type Examination Certificate have to be observed for the single motor types.

[17] **Special conditions for use**

- Repairs of the flameproof joints must be made in compliance with the constructive specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 2 and 3 of EN 60079-1.
- The Electric Motor can be used also in an extended ambient temperature range. This is specified in the respective continuation sheet and on the type plate.
- The inspection openings located in the brake cover must be closed during use in explosive atmospheres according to the operating instructions.
- Unused openings for cable entries have to be permanently closed with suitable screw plugs confirmed for explosion protection according to EN 60079-1, Annex C.
- At ambient temperatures below -40 °C it is mandatory to use the standstill heater when the motor is not in operation.

[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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