# IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

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

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



[3] EU-type examination certificate number IBExU13ATEX1115 | Issue 1

[4] Product: Explosion-proof metal switch

Type: Si2-U2Z AK ExD and Si2-U2Z AW ExD

[5] Manufacturer: Bernstein AG

[6] Address: Hans-Bernstein-Str. 1

32457 Porta Westfalica

**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, 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-16-3-211.

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

  EN 60079-0:2012+A11:2013 and 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 2D Ex th IIIC T80 °C Db

-20 °C ≤ T<sub>a</sub> ≤ +60 °C

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing. [FH] Henker

1. Kense



- Seal -(Notified Body number 0637) Tel: +49 (0) 37 31 / 38 05 0 Fax: +49 (0) 37 31 / 38 05 10

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

Freiberg, 2017-01-30

# IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

[13]

### Certificate number IBExU13ATEX1115 | Issue 1

Schedule

### [15] Description of product

[14]

The product mentioned in [4] serves as safety switch for machines operated in explosive dust atmospheres. The electrical connection of the circuits is carried out with terminals inside a grey cast iron housing.

#### **Technical data**

Ambient temperature range

-20 °C up to +60 °C

Max. surface temperature

80 °C

#### Electrical parameter

Nominal voltage

U<sub>e</sub> 240 V AC

Nominal current

e 3 A

Thermal constant current

I<sub>the</sub> 10 A

Degree of protection accord. to EN 60529

**IP65** 

# Variations compared to further certificate:

Current standards; adress of manufacturer

#### [16] Test report

The test results are recorded in the confidential test report IB-16-3-211 of 2017-01-30.

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

### Summary of the test results

The metal switches fulfil the requirements on a dust explosion-proof equipment of equipment group II, category 2D with a surface temperature of 80 °C.

## [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, 2017-01-30