

CERTIFICATE

(1) EC-Type Examination

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **DEKRA 11ATEX0178 X** Issue Number: **2**

(4) Equipment: **Isolating Spark Gap, type EXFS 100, type EXFS 100 KU and type EXFS 100 KU SN....**

(5) Manufacturer: **DEHN + SÖHNE GmbH + Co. KG**

(6) Address: **Hans-Dehn-Strasse 1, D-92318 Neumarkt, Germany.**

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., notified body number 0344 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 confidential test report no. NL/KEM/ExTR09.0052/xx.

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

EN 60079-0 : 2009

EN 60079-1 : 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 according 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 2G Ex d IIC T6 Gb
II 2D Ex tb IIC T80 °C Db IP 66/67

This certificate is issued on 19 December 2013 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

DEKRA Certification B.V.


R. Schuller
Certification Manager

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Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate DEKRA 11ATEX0178 X**

Issue No. 2

(15) **Description**

Isolating Spark Gap, type EXFS 100, type EXFS 100 KU and type EXFS 100 KU SN.... (special lengths) provides galvanic isolation between parts of electrical installations. In case of an increasing potential difference e.g. caused by a lightning strike, the isolation will be abolished by ignition of the spark gap and the building of a low-resistance connection.

Ambient temperature range:

for type EXFS 100: -20 °C...+60 °C,

for types EXFS 100 KU and EXFS 100 KU SN....: -40 °C...+60 °C.

Electrical data

Rated power frequency withstand voltage (50 Hz) U = 250 Vac

Impuls spark over voltage (1.2/50 µs) U = 1250 V

Lightning impuls current (10/350 µs) I = 100 kA

Note:

The electrical data is not in the scope of ATEX certification

Installation instructions

The instructions provided with the equipment shall be followed in detail to assure safe operation.

(16) **Test Report**

NL/KEM/ExTR09.0052/xx.

(17) **Special conditions for safe use**

For ambient temperature range, see (15).

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. NL/KEM/ExTR09.0052/xx.