(1) EU-TYPE EXAMINATION CERTIFICATE

(2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number

TÜV 19 ATEX 8476 X

Issue: 00

(4) **Equipment:** **Surge Protector type BlitzductorConnect BCO *L2 BD EX 24**

(5) **Manufacturer:** **DEHN SE + Co KG**
(6) **Address:** **Hans-Dehn-Str. 1**
92318 Neumarkt, Germany

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

(8) The TÜV Rheinland Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which 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 atmosphere, given in Annex II to the Directive.
The examination and test results are recorded in the confidential report 557 / Ex 8476.00 / 19.

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018 **EN 60079-11: 2012**

(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 EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

(12) The marking of the equipment shall include the following:

II (1)2 G Ex ia [ia Ga] IIC T6 Gb
II 2 G Ex ib IIC T6 Gb
II (1) D [Ex ia Da] IIIC

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz Cologne, 17.04.2020

Dipl.-Ing. Christian Mehrhoff

Notified body • TÜV Rheinland Industrie Service GmbH • Am Grauen Stein • 0035

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This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
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(13) Annex

(14) # EU Type Examination Certificate

TÜV 19 ATEX 8476 X Issue: 00

(15) Description of equipment

15.1 Equipment and type:

Surge protector type BlitzductorConnect BCO *L2 BD EX 24
The asterisks in the type designation will be replaced by letters and indicate the respective type of the construction of the equipment.
Type **BCO CL2 BD EX 24** is a compact version
Type **BCO ML2 BD EX 24** is a modular version with module type **BCO MOD ML2 BD EX 24**

15.2 Description / Details of Change

The surge protector is a universal lightning and surge arrester.
The differential voltage is limited by a gas-arrester (90 V) and a TVS diode (36 V). The common mode voltage to earth is limited by two gas-arresters (600 V).
The intrinsically safe variants type BCO * L2 BD EX 24 can be installed inside areas with gas that require category 2 equipment.
The intrinsically safe output circuits of this equipment may be connected to areas with gas or dust that require category 1 equipment. In this case, it shall be noted, that the electrical output values of the equipment correspond to their input values and the output circuits of the upstream equipment correspond to category 1.
If the intrinsically safe output circuit of BlitzductorConnect equipment is routed to areas with dust, the intrinsically safe circuit must correspond to groups IIB (or IIC). If the apparatus to be connected, is not protected by an enclosure of at least IP5X, the maximum input power of this apparatus shall be limited to 0.75 W (Ta = 40 °C) or 0.65 W (Ta = 70 °C) or 0.55 W (Ta = 100 °C) and the continuous short-circuit current shall be limited to 250 mA (see below under 1.); this intrinsically safe apparatus shall be marked T135 °C.

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Technical Data

Electrical Data:

1 Intrinsically safe input circuit
terminals No. 1 – 2

Maximum input votage Ui	30 V
Maximum input current Ii	500 mA
Maximum input energy Pi	5,32 W
Maximum internal inductance Li	0 µH
Maximum internal capacitance Ci	0 nF

When used inside areas with dust without enclosure of at least IP5X, depending on each

Ambient temperature Ta	40/70/100 °C
Maximum input power Pi	750/650/550 mW
Maximum input power Ii	250 mA

2 Intrinsically safe output circuit (protected)
terminals No. 1‘ – 2‘

The maximum values of the output circuit are identical to those that are connected to the input circuit according to 1.

3 The functional earth connection via the DIN rail is not a connection facility according to IEC 60079-0.

This equipment meets the requirements of a FISCO field device with the following maximum values:
Ui = 17,5 V; Ii = 380 mV; Pi = 5,32 W; Ci = 0 nF; Li = 0 µH

Environmental data
-40 °C ≤ Ta ≤ +80 °C for the temperature class T4
-40 °C ≤ Ta ≤ +75 °C for the temperature class T5
-40 °C ≤ Ta ≤ +50 °C for the temperature class T6

(16) Test-Report No. 557/Ex8476.00/19

(17) Special Conditions for safe use

1. When used in areas that require Group IIC or Group III equipment, the risk of electrostatic charges shall be minimized – see operating instructions.

2. The insulation between the intrinsically safe circuit and the parts which may be earthed (here the functional earth connection via the DIN rail) is not capable to withstand a test with 500 V AC RMS, because of the surge arresters used for the overvoltage protection and connected between the intrinsically safe circuit and earth connection.

3. The environmental data must be taken into account – see (15) Technical data.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz Cologne, 2020-04-17

Dipl.-Ing. Christian Mehrhoff

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