# (1) TYPE-EXAMINATION CERTIFICATE



- (2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - Directive 94/9/EC
- (3) Type-Examination Certificate Number

# **TÜV 16 ATEX 7831 X**

(4) Equipment: Segment Coupler, KFD2-BR-1.PA.1500\*

(5) Manufacturer: PepperI+Fuchs GmbH

(6) Address: Lilienthalstraße 200, 68307 Mannheim

Germany

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland Notified Body for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies 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 atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report 557 / Ex 7831.00 / 16.

(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 60079-0: 2012+A11:2013

FprEN 60079-7: 2015

except the requirements, which are listed under item (18).

- (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 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 3 G Ex ec IIC T4 Gc

TÜV Rheinland ExNB for explosion protected equipment

Cologne, 2016-02-10

Dipl.-Ing. Klauspeter Graffi

This Type-Examination Certificate without signature and stamp shall not be valid.

This Type-Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the TÜV Rheinland Notified Body of TÜV Rheinland Industrie Service GmbH, Am Grauen Stein 51105 Köln

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(13)

Annex to

# Type Examination Certificate TÜV 16 ATEX 7831 X

## (15) <u>Description of equipment</u>

## 15.1 Equipment and type:

Segment Coupler, KFD2-BR-1.PA.1500\*

## 15.2 Description

General product information

The Segment Coupler is an interface between the PROFIBUS DP and the PROFIBUS PA. A galvanic insulation is provided between PROFIBUS DP and PROFIBUS PA. Since the Segment Coupler works transparently, PROFIBUS PA stations are treated by the control system like PROFIBUS DP stations. The Segment Coupler receives the PROFIBUS DP resp. PROFIBUS PA telegram, converts it simultaneously and transmits it on the PROFIBUS PA resp. PROFIBUS DP side. Additionally the Segment Coupler acts as a power supply for the PROFIBUS PA field devices whereby the PROFIBUS PA is galvanically separated from the supply voltage.

## 15.3 Technical Data

Ambient temperature

-40 °C to +60 °C

Usupply

20 V...30 V dc

Max. output current lout

400 mA

Output voltage Uout

24 V ... 26 V





#### (16)Test-Report No.

557/Ex7831.00/16

Parts of the device, which already fulfil the requirements for the category, were not approved and assessed by TÜV Rheinland Industrie Service.

The applicability and assembly of mechanical and electrical parts and components were assessed and approved by TÜV Rheinland Industrie Service with respect to the requirements of explosion protection.

#### (17)Special Conditions for safe use

- 1. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1
- 2. The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with IEC 60079-0.
- 3. Connection or disconnection of any energized circuits is only permitted in the absence of a potentially explosive atmosphere.

#### (18)**Basic Safety and Health Requirements**

Covered by afore mentioned standard

TÜV Rheinland ExNB für explosion protected equipment

Cologne, 2016-02-10