Certificates

KBDi-DS102W-xxx Keyboard

STAHL

THE STRONGEST LINK.

Certificates version: **01.00.00**
Issue: **17.05.2021**

Disclaimer

Publisher and copyright holder:

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1 Preface

NOTICE	This document contains all valid certificates for the KBDi-DS102W-xxx Keyboards. All technical details contained in the EC type examination certificate are also part of the associated operating instructions. All certificates are also available on r-stahl.com, on the CD / DVD / USB stick included in the delivery or a copy can also be ordered from R. STAHL HMI Systems GmbH.

2 ATEX EC type examination certificate

Translation

(1) EC-Type Examination Certificate

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

(3) No. of EC-Type Examination Certificate: **BVS 13 ATEX E 031 X**

(4) Equipment: **Keyboard type KBDi-DS102W-xxx***

(5) Manufacturer: **R. STAHL HMI Systems GmbH**

(6) Address: **Im Gewerbegebiet Pesch 14, 50767 Köln, Germany**

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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 the test and assessment report BVS PP 13.2062 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 60079-0:2012 **General requirements**
EN 60079-1:2011 **Intrinsic safety „i"**

(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 appendix to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to 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 ia IIC T4 Gb

DEKRA EXAM GmbH
Bochum, dated 20th march 2013

Signed: Simanski
Certification body

Signed: Dr. Eickhoff
Special services unit

DEKRA EXAM GmbH Dinnendahlstrasse 9 44809 Bochum Phone +49.234.3696-105 Fax +49.234.3696-110 zs-exam@dekra.com

(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 13 ATEX E 031 X

(15) 15.1 Subject and type

Keyboard type KBDi-DS102W-xxx*
The keyboard is available in the following variants:
KBDi-DS102W-USB*
KBDi-DS102W-PS2*
In the complete denomination, the asterisk is replaced by alphanumeric or symbolic characters without relevance for explosion protection.

15.2 Description

The Keyboard type KBDi-DS102W-xxx* is an intrinsically safe apparatus for connection to intrinsically safe interfaces. It is supplied via a permanently connected cable with max. 1,8 m length.

15.3 Parameters

4.1 Intrinsically safe power supply and data input in level of protection „Ex ia IIC"
Wires (1,2,3)-4

Max. input voltage	Ui	DC	5.9	V
Max. input current	Ii		2.7	A
Max. internal capacitance	Ci		20	µF
Max. internal inductance	Li		0.9	µH

The maximum internal capacitance and inductance respect a length of 1,8 m for the permanently connected cable.

Max. output voltage	Uo	5.9	V)[1]
Max. output current	Io	2.7	A)[2]

)[1] Uo identical with Ui
)[2] Io identical with Ii

4.2 Ambient temperature range	Ta	-20 °C ...	+50 °C

(16) Test and assessment report

BVS PP 13.2062 EG as of 20th march 2013

(17) Special conditions for safe use

The intrinsically safe circuits are connected to earth; along the intrinsically safe circuits potential equalization must exist.

The keyboard has a conductive coating to prevent electrostatic charging/discharging hazards. If the conductive coating is damaged, the keyboard has to be removed from the hazardous area.

The enclosure of the keyboard has to be earthed to prevent electrostatic charging/discharging hazards.

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We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 20th march 2013
BVS-Le/Ma A 20121286

Certification body

Special services unit

DEKRA EXAM GmbH Dinnendahlstrasse 9 44809 Bochum Phone +49.234.3696-105 Fax +49.234.3696-110 zs-exam@dekra.com

3 IECEx certificate

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BVS 13.0040X	issue No.:0	Certificate history:
Status:	Current		
Date of Issue:	2013-03-26	Page 1 of 3	

Applicant: **R. STAHL HMI Systems GmbH**
Im Gewerbegebiet Pesch 14
50767 Köln
Germany

Electrical Apparatus: **Keyboard Type KBDi-DS102W-xxx***
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i"**

Marking: Ex ia IIC T4 Gb

Approved for issue on behalf of the IECEx Certification Body: H.-CH. Simanski

Position: Head of Certification Body

Signature: (for printed version)

Date: 26/3/2013

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
DEKRA EXAM GmbH

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 13.0040X

Date of Issue: **2013-03-26** Issue No.: **0**

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Manufacturer: **R. STAHL HMI Systems GmbH**
Im Gewerbegebiet Pesch 14
50767 Köln
Germany

Additional Manufacturing location (s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:
The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0
IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition: 6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:
DE/BVS/ExTR13.0041/00

Quality Assessment Report:

DE/BVS/QAR06.0007/06

IECEx Certificate of Conformity

Certificate No.: IECEx BVS 13.0040X

Date of Issue: **2013-03-26** Issue No.: **0**

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

Subject and Type
Keyboard type KBDi-DS102W-xxx*
The keyboard is available in the following variants:
KBDi-DS102W-USB*
KBDi-DS102W-PS2*
In the complete denomination, the asterisk is replaced by alphanumeric or symbolic characters without relevance for explosion protection.

Description
The Keyboard type KBDi-DS102W-xxx* is an intrinsically safe apparatus for connection to intrinsically safe interfaces. It is supplied via a permanently connected cable with max. 1,8 m length.

Parameters

1 Intrinsically safe power supply and data input in level of protection "Ex ia"
Wires (1,2,3)-4

Max. input voltage	U_i DC	5.9 V
Max. input current	I_i 2.7	A
Max. internal capacitance	C_i	20 µF
Max. internal inductance	L_i	0.9 µH

The maximum internal capacitance and inductance respect a length of 1,8 m for the permanently connected cable.

Max. output voltage	U_o	5.9 V)[1]
Max. output current	I_o	2.7 A)[2]

)[1] U_o identical with U_i
)[2] I_o identical with I_i

2 Ambient temperature range	Ta -20 °C ... +50 °C	

CONDITIONS OF CERTIFICATION: YES as shown below:

The intrinsically safe circuits are connected to earth; along the intrinsically safe circuits potential equalization must exist.

The keyboard has a conductive coating to prevent electrostatic charging/discharging hazards. If the conductive coating is damaged, the keyboard has to be removed from the hazardous area.

The enclosure of the keyboard has to be earthed to prevent electrostatic charging/discharging hazards.

4 Release notes

The chapter entitled "Release Notes" contains all the changes made in every version of the certificates.

Version 01.00.00

- Taking over the certificates from the operating instructions into this document
- Formal changes

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