Operating Instructions

KBDi-USB Keyboards

Version KBDi-USB-TB50-*
Version KBDi-USB-M-*
Version KBDi-USB-P-*
Version KBDi-USB-J-*
Version KBDi-USB-*-HSG-xx7-*
Version KBDi-USB-*-HSG-xx8-*

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Disclaimer

Publisher and copyright holder:

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Any warranty claims are limited to the right to demand amendments. Liability for any damage that might result from the contents of these instructions or all other documentation is limited to clear cases of premeditation.

We reserve the right to change our products and their specifications at any time, provided it is in the interest of technical progress. The information in the current manual (online or on CD / DVD / USB stick) or in the operating instructions included in the delivery applies.

Trademarks
The terms and names used in this document are registered trademarks and / or products of the companies in question.

Specific markings

The markings in these operating instructions refer to specific features that must be noted.

In detail, these are:

DANGER	This sign alerts users to hazards that will result in death or serious injury if ignored !
WARNING	This sign alerts users to hazards that may result in death or serious injury if ignored !
CAUTION	This sign alerts users to hazards that may damage machinery or equipment or result in injury if ignored !
ATTENTION	Information highlighted by this symbol indicates measures for the prevention of damage to machinery or equipment !
NOTICE	Information highlighted by this symbol indicates important information of which particular note should be taken !
DOCUMENTATION	Information highlighted by this symbol refers to a different chapter or section in this manual or other documentation or a web-page !

Warnings

	Caution ! In ambient temperatures exceeding +45 °C the surface of the devices may heat up. Caution when touching !

Table of contents

1 Preface

These Operating Instructions contain all aspects relevant to explosion protection for the KBDi-USB-* keyboards devices. They also contain information on the connection and installation (etc.) of these devices.

NOTICE	All data relevant to explosion protection from the EC-type examination certificate were copied into these operating instructions.
	For the correct operation of all associated components please note, in addition to these operating instructions, all other operating instructions enclosed in this delivery as well as the operating instructions of the additional equipment to be connected !

DOCUMENTATION	Please note that all certificates of the KBDi-USB-* keyboards can be found in a separate document (CE_ET-xx7). You can find this document in the internet at www.r-stahl.com or request it from R. STAHL HMI Systems GmbH.

2 Keyboard function

The type KBDi-USB-* keyboards are used to enter data, commands etc. on PCs and similar devices in hazardous areas. In particular, they were designed for connection to HMI devices of the device platform MANTA ET-/MT-xx7 and SHARK ET-/MT-xx8.

The type KBDi-USB-* keyboards are explosion-protected equipment for installation in hazardous areas of zones 0 and 20. The devices may be connected to intrinsically safe USB interfaces. Power supply and data communication takes place via the USB interface. The keyboards are connected with a fixed cable.
Various keyboard versions are available that differ in their layout (German, US English, French, etc.) and in their design (PC keyboard with mouse, trackball, touchpad or with joystick).
The touchpad uses resistive technology and can therefore be operated with a touch pen or with gloved fingers.
The keyboards can be mounted and operated inside an keyboard enclosure type HSG, a front panel or a desktop enclosure.

3 Type allocation certificate

Since the beginning of 2013, the T-series devices have been allocated new type names according to the following pattern:
To avoid having to re-write certifications, the names in the certificates remain the same, but the devices receive new names.
In the interest of a clear link between device type and certificate, both device names are listed on the type plate from 01.04.2013 onwards.

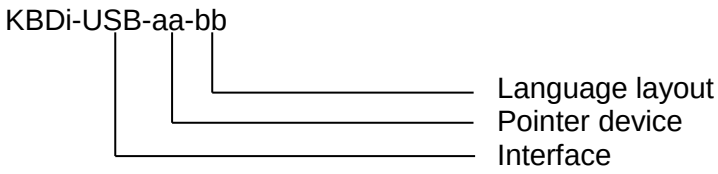
3.1 Type marking

Old (certificate)	New
T-Ex*-KB-TB*	KBDi-USB-TB50*
T-Ex*-KB-M*	KBDi-USB-M*
T-Ex*-KB-P*	KBDi-USB-P*
T-Ex*-KB-J*	KBDi-USB-J*

* = alphanumeric or symbolic characters without relevance to explosion protection.

4 Type code

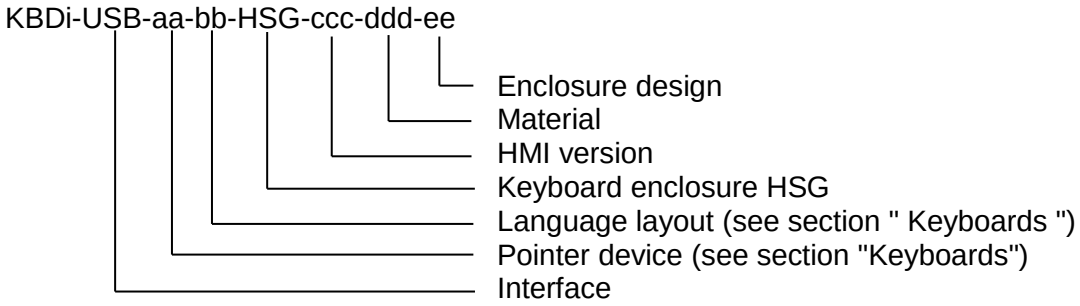
4.1 Keyboards



Product type:

Product key structure	Description
	Version
KBDi-USB-**TB50**-bb	Keyboard with integrated trackball
KBDi-USB-**TB50-VA**-bb	Keyboard with integrated stainless steel trackball
KBDi-USB-**M**-bb	Keyboard with integrated mouse
KBDi-USB-**P**-bb	Keyboard with integrated touch pad
KBDi-USB-**J**-bb	Keyboard with integrated joystick
KBDi-USB-aa-**DE**	Lanugage: German (QWERTZ)
KBDi-USB-aa-**US**	Language: American (QWERTY)
KBDi-USB-aa-**FR**	Language: French (AZERTY)
KBDi-USB-aa-**FR-BE**	Language: French, Belgian version (AZERTY)
KBDi-USB-aa-**CH**	Language: German, Swiss layout
KBDi-USB-aa-**ES**	Language: Spanish

4.2 Keyboards in HSG enclosure



Product type:

Product key structure	Description
	Version
KBDi-USB-aa-bb-HSG-**xx7**-ddd-ee	Keyboard in keyboard enclosure for MANTA xx7 devices
KBDi-USB-aa-bb-HSG-**xx8**-ddd-ee	Keyboard in keyboard enclosure for SHARK xx8 devices
KBDi-USB-aa-bb-HSG-ccc-**V2A**-ee	Enclosure material stainless steel V2A SS304
KBDi-USB-aa-bb-HSG-ccc-**V4A**-ee	Enclosure material stainless steel V4A SS316L *
KBDi-USB-aa-bb-HSG-ccc-ddd-**T**	Enclosure design for mounting in CFR, FR, BD enclosure
KBDi-USB-aa-bb-HSG-ccc-ddd-**W**	Enclosure design for wall mounting
KBDi-USB-aa-bb-HSG-ccc-ddd-**DESK**	Enclosure design keyboard desktop enclosure
KBDi-USB-aa-bb-HSG-ccc-ddd-**YM**	Enclosure design for yoke-mounting for SHARK xx8 devices

NOTICE

* For SHARK xx8 devices only enclosure material stainless steel V4A SS316L

5 Technical Data

Function / Equipment	**KBDi-USB-* / KBDi-USB-*HSG-***	
Power supply	via USB interface	
MTBF	typically 50,000 h at 20°C	
Interfaces	1x USB for keyboard (Ex ia) 1x USB for mouse, touch pad, trackball, joystick (Ex ia)	
Keyboard foil	Polyester	
Cable type	standard USB, open cable end	
Cable lengths	usually 1.8 m	
Cable length for keyboard with touchpad	max 2.0 m	
Keyboard	Panel mount module	
Keyboard material	Steel / aluminium	
Keyboard dimensions [mm] (W x H x D)	581 x 186 x 50	
Keyboard weight [kg]	3.0	
Keyboard protection type		
Front	IP65 according to DIN EN 60529	
Front with trackball module	statically IP65, dynamically IP54	
Back	IP20 according to IEC / EN 60079-0	IP65 when mounted inside enclosure HSG
Keyboard enclosure	Type HSG	
Dimensions keyboard enclosure [mm] (B x H x T)	720 x 270 x 78	
Keyboard enclosure weight [kg]	5	
Operating temperature range		
Operation	-30 °C … +60 °C	
Storage temperature range	-30 °C … +70 °C	
Relative humidity	10 to 90% at +40 °C, non-condensing	

6 Conformity to standards

The KBDi-USB-* keyboards comply with the following standards and directives:

Standard **2. Supplement** **ATEX directive 2014/34/EU**	**Classification**
EN 60079-0 : 2009	General requirements
EN 60079-11 : 2007	Intrinsic safety "i"
The product corresponds to requirements from:	
EN 60079-0 : 2012 + A11 : 2013	General requirements
EN 60079-11 : 2012	Intrinsic safety "i"
Electromagnetic compatibility	
EMV directive	
2014/30/EU	**Classification**
EN 61000-6-2 : 2005	Interference resistance
EN 61000-6-4 : 2007 + A1 : 2011	Interference emission
Low voltage directive	
Directive 2014/35/EU	
EN 61010-1 : 2001+	General requirements
EN 62368-1 : 2016 IEC 62368-1 : 2014	Audio / video, information and communication technology equipment - Safety requirements
RoHS directive	
2011/65/EU	**Classification**
EN IEC 63000 : 2018	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

6.1 CEC / NEC / CSA

Standard	Classification
CAN/CSA-C22.2 No. 0-10 August 2011	General requirements Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements (Third Edition)
CAN/CSA-C22.2 No. 60079-0 : 11 (December 2011)	Explosive atmospheres – Part 0: Equipment General requirements
CAN/CSA-C22.2 No. 60079-11 : 11 (December 2011)	Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”
CAN/CSA-C22.2 No. 60529:05 (Reaffirmed 2010)	Degrees of protection provided by enclosures (IP Code)
ANSI/UL 61010-1 (2012)	Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements (Third Edition)
ANSI/UL 60079-0 (sixth edition July 2013)	Explosive atmospheres – Part 0: Equipment – General requirements
ANSI/UL 60079-11 (sixth edition March 2014)	Explosive atmospheres – Part 11: Equipment protection by intrinsic safety “i”
ANSI/IEC 60529-2004	Degrees of protection provided by enclosures (IP code)

7 Certificates

The KBDi-USB-* keyboards are certified for installation in the following areas:

Synonym	Scope	Certificate number	Valid until	Comment
CE / ATEX	Europe	BVS 11 ATEX E 102 X	unlimited	
IECEx	Global	IECEx BVS 11.0075X	unlimited	
EAC	Russia	TC RU C-DE.HA91.B.00166/20	11.08.2025	
NEC	USA	CSA 70011698	unlimited	
CEC	Canada			see notice CEC
KCC	Korea		unlimited	Device restriction see notice KCC
KCS		12-GA4BO-0617X	unlimited	
CCC	China	2021312309000501	08.06.2026	
CNEX		CNEx21.1939X	16.06.2026	

NOTICE	Note certificates: The approval of the KBDi-USB-* keyboards are contained in the approvals / certificates of the ET-xx7 HMI devices.

DOCUMENTATION	You can access all IECEx certificates on the official website of the IEC under their certificate number. https://www.iecex-certs.com/#/home.

NOTICE	Note CEC: The HMIs are certified according to Ex e q [ia] IIC T4 Gb. According to the CEC Part 1 each device with these protection types may be operated in Class I, Division 2 areas. For more details on this, please refer to the CEC.

NOTICE	Note KCC: In order to be able to operate these HMI devices in Korea, each device type additionally requires a KCC certificate. Actually the following devices has such a certificate: T-Ex-22 (ET-x67), T-Ex-22-DVI3 (ET-667-DVI3), T-Ex-24T (ET-x77 with touch screen (membrane))
	The importer have to use exception documents which are applied in Korea rule for Korea. A corresponding example document, the so-called "Customer confirmation letter", is included in the CE_ET-xx7 certificate compilation of the devices.

8 Marking

Manufacturer	R. STAHL HMI Systems GmbH	
Type code	KBDi-USB-TB50* / KBDi-USB-M* / KBDi-USB-P* / KBDi-USB-J*	
CE classification:	CE 0158	
Testing authority and certificate number:	BVS 11 ATEX E 102 X	
Ex classification:		
ATEX	Ex	II 1 G Ex ia IIC T4 Ga II 1 D Ex ia IIIB T110°C Da
IECEx		Ex ia IIC T4 Ga Ex ia IIIB T110°C Da
NEC / CEC		Ex ia IIC T4 Ga Ex ia IIIB T110°C Da Class I, Zone 0 AEx ia IIC T4 Ga Zone 20 AEx ia IIIB T110°C Da
EAC		0Ex ia IIC T4 Ga X Ex ia IIIB T110°C Da
CCC / CNEX		Ex ia IIC T4 Gb Ex iaD 21 T135°C

9 Permitted maximum values

U_i	=	5.5	VDC	U_o	=	5.5	VDC
I_i	=	1	A	I_o	=	I_i	
P_i	=	650	mW	P_o	=	P_i	
C_i	=	20	µF	C_o	=	30	µF
L_i	=	negligible		L_o	=	5	µH

For the joystick module, the following values apply:

C_i	=	40	µF	C_o	=	10	µF

10 Safety information

NOTICE	This chapter is a summary of the key safety measures. The summary is supplementary to existing rules which staff also have to study.
	The safety of persons and equipment in hazardous areas depends on compliance with all relevant safety regulations. Thus, the installation and maintenance staff carry a particular responsibility, requiring precise knowledge of the applicable regulations and conditions.

CAUTION	The notes listed below in section 10.1 must be heeded to avoid injury and damage to equipment !

10.1 General Safety Information

- All relevant accident prevention regulations and the rules for electric installations have to be observed during installation, maintenace and operations. All persons involved in installation, commission, maintenance and repairs of this device and its accessories must be qualified accordingly and must have familiarised themselves with this manual and any associated documentation.
- In case of non-compliance or contravention of the above explosion-protection is no longer guaranteed and all warranty claims shall be null and void.
- National safety and accident prevention rules apply.
- Use the device for its intended purpose only.
- No changes to the device are permitted. The enclosure may only be opened by R. STAHL HMI Systems GmbH.

10.2 Cautionary note

ATTENTION	This is an EN 55022 Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

10.3 Installation safety information

- The national assembly and installation rules and the generally accepted technical rules must be observed. The device and its accessories must be connected and operated according to applicable standards, directives and installation guidelines. Only qualified personnel or personnel that has been instructed accordingly are allowed to install the device.
- Only appropriate tools must be used for the installation.
- The keyboards must be earthed via the bolt at the back of the device.
- We recommend you use screened cables with the keyboards. Routing of the cable may reduce performance.
- Before operating the keyboard you must ensure that it has been installed according to regulations and that its cables are undamaged.

10.4 Safety information for operation

- Operate the keyboard only if it is clean and undamaged. If the keyboard is in any way damaged, do not touch it to avoid injury. In the case of any damage that may compromise ingress protection (e.g. cracks, holes or broken components) the keyboard must be taken out of commission immediately. Before the device is recommissioned the damaged components must be replaced.
- If you want to use the device in category 1D/2D/3D or EPL Da/Db/Dc, dust deposits of a thickness exceeding 5 mm must be removed and you have to ensure that no high-energy loading mechanisms at the operating surface of the keyboard (e.g. pneumatic particle transport) occur during operation. The keyboard may not be used in environments where propagating brush discharges may occur.
- In case of non-compliance or contravention of the above explosion-protection is no longer guaranteed and all warranty claims shall be null and void.

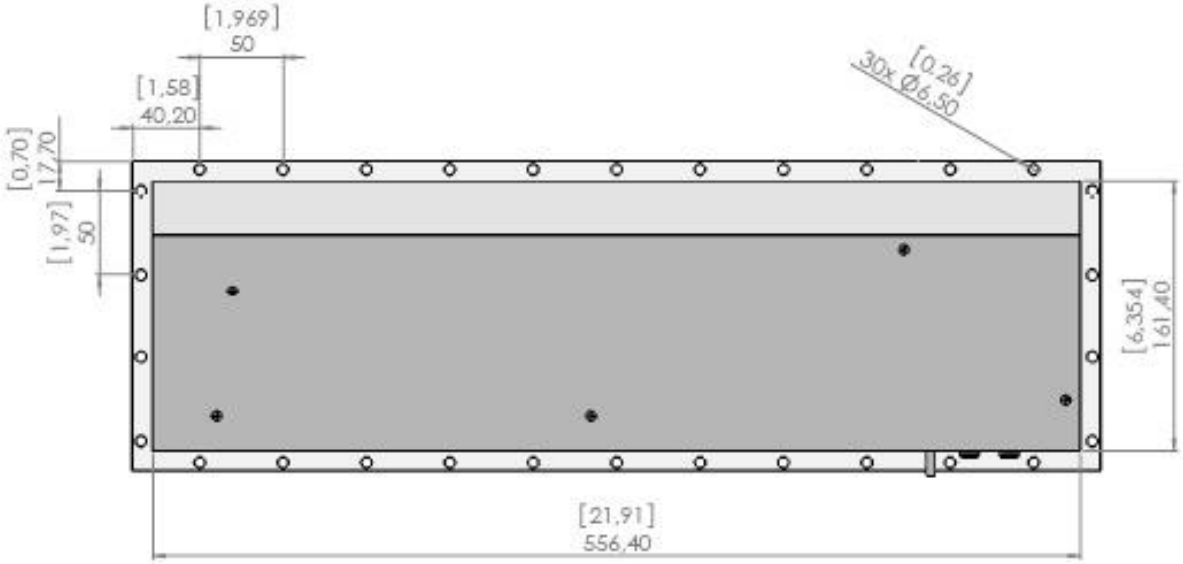
10.5 Special conditions

Equipotential bonding must be established for the external intrinsically safe circuits of the accessories to be connected, e.g. display, keyboard or pointer device.

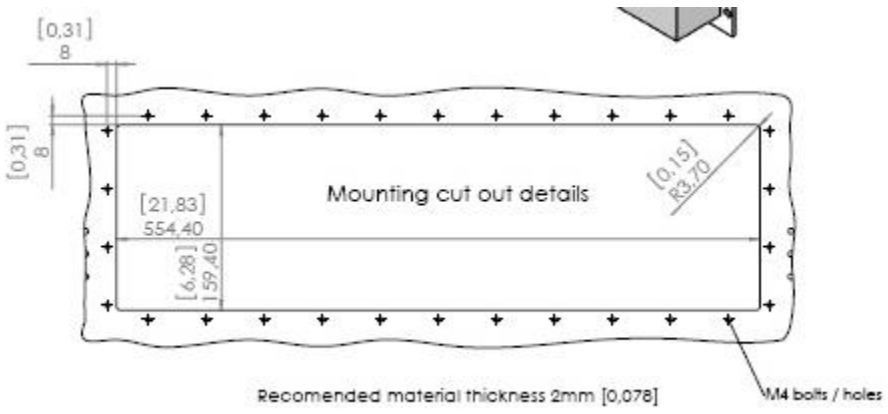
11 Mechanical dimensions

11.1 Keyboard

Dimensions in mm, [inch]



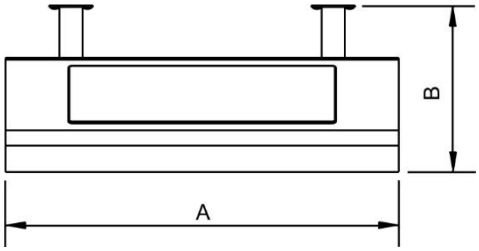
11.1.1 Cut-out

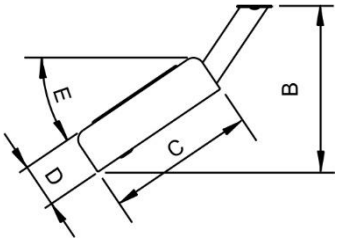


11.2 Keyboard in HSG enclosure

Dimensions in mm.

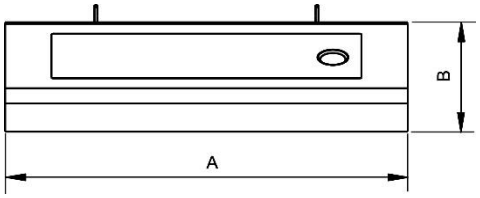
11.2.1 Version for CFR, FR, BD

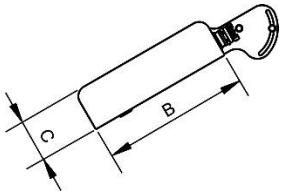




A	B	C	D	E
720	304	270	78	34°

11.2.2 Version for SHARK yoke-mount





A	B	C
720	270	78

NOTICE	The keyboard version for SHARK Yoke-mount has an external zinc-plated brass cable gland M25. Type HSK-M-Ex-M25x1.5 Clamping range 14 - 18 mm
	It is allowed to use any other Ex certified cable gland, which fulfill the technical requirements.

12 Connections

NOTICE	The standard cable length of the keyboards is approx. 1.8 m.
	Due to the internally installed touchpad controller, the maximum possible cable length of the keyboard with touchpad KBDi-USB-P-xx is 2.0 m !

Keyboard X72:

Cable	Colour	Signal name	Definition
1	Red	+ UB	Power supply +UB
2	White	D-	Data cable D-
3	Green	D+	Data cable D+
4	Black	GND	Power supply GND

Trackball X73, mouse X94, touchpad X95, joystick X96:

Cable	Colour	Signal name	Definition
1	Red	+ UB	Power supply +UB
2	White	D-	Data cable D-
3	Green	D+	Data cable D+
4	Black	GND	Power supply GND

13 Maintenance, overhaul

NOTICE	Associated equipment is subject to maintenance, service and testing according to guidelines 1999/92/EC, IEC/EN 60079-14, -17, -19 and BetrSichVer (Betriebssicherheitsverordnung - Ordinance on Industrial Safety and Health) !

Because the transmission of the keyboards remains reliable and stable over long periods of time, regular adjustments are not required.

System maintenance should focus on the following:

a. Housing damage
b. Front membrane damage
c. All cables and lines are properly connected and undamaged

CAUTION	If the device in its factory state is damaged or altered in any way, decommission it immediately and contact the R. STAHL HMI Systems GmbH !

14 Troubleshooting

NOTICE	Devices operated in hazardous areas must not be modified. Repairs may only be carried out by qualified, authorized staff specially trained for this purpose.
	Repairs may only be carried out by specially trained staff who are familiar with all basic conditions of the applicable user regulations and – if requested – have been authorized by the manufacturer.

14.1 Repairs / hazardous substances

An error description must be enclosed with any units returned to R. STAHL HMI Systems GmbH for repairs.

Remove all material residues. Please pay particular attention to the seal grooves and slits where material residues may be lodged. We have to ask you not to return a unit if you are unable to completely remove any hazardous substances. We shall bill you for any costs arising from insufficiently cleaned keyboards, such as disposal or damage to persons (chemical burns, etc.).

15 Disposal / Restricted substances

Disposal of old electric and electronic devices, packaging and used parts is subject to regulations valid in whichever country the device has been installed.
For countries under the jurisdiction of the EU the corresponding WEEE directive applies.

The devices are classified according to the table below:

Directive	WEEE II directive 2012/19/EU
Valid	from 2018-08-15
Category	SG4 Large equipment >50 cm

R. STAHL HMI Systems GmbH meets the requirements of directive 2012/19/EU (WEEE) and is registered under the number DE 15180083.

We shall take back our devices according to our General Terms and Conditions.

15.1 Declaration of substances and restricted substances

The present declaration is based on the procedure described in the international standard and directives as listed in the table below:

- IEC 62474 : 2018 (DIN EN IEC 62474 : 2019-09)
- (EG) Nr. 1907/2006 (REACH)
- Directive 2011/65/EU (RoHS)
- Resolution MEPC.269(68) "International Maritime Organization" (IMO); particularly "2015 Guidelines for the Development of the Inventory of the Hazardous Materials" (IHM)

15.1.1 Declarable substance groups

Component	Designation	Mass (g)	Declarable Substance Groups and Substances (IEC 62474 database)	CAS Nr.	Mass %	Exemption (acc. to directive)
-	-	-	No SVHC material existing	-	-	-

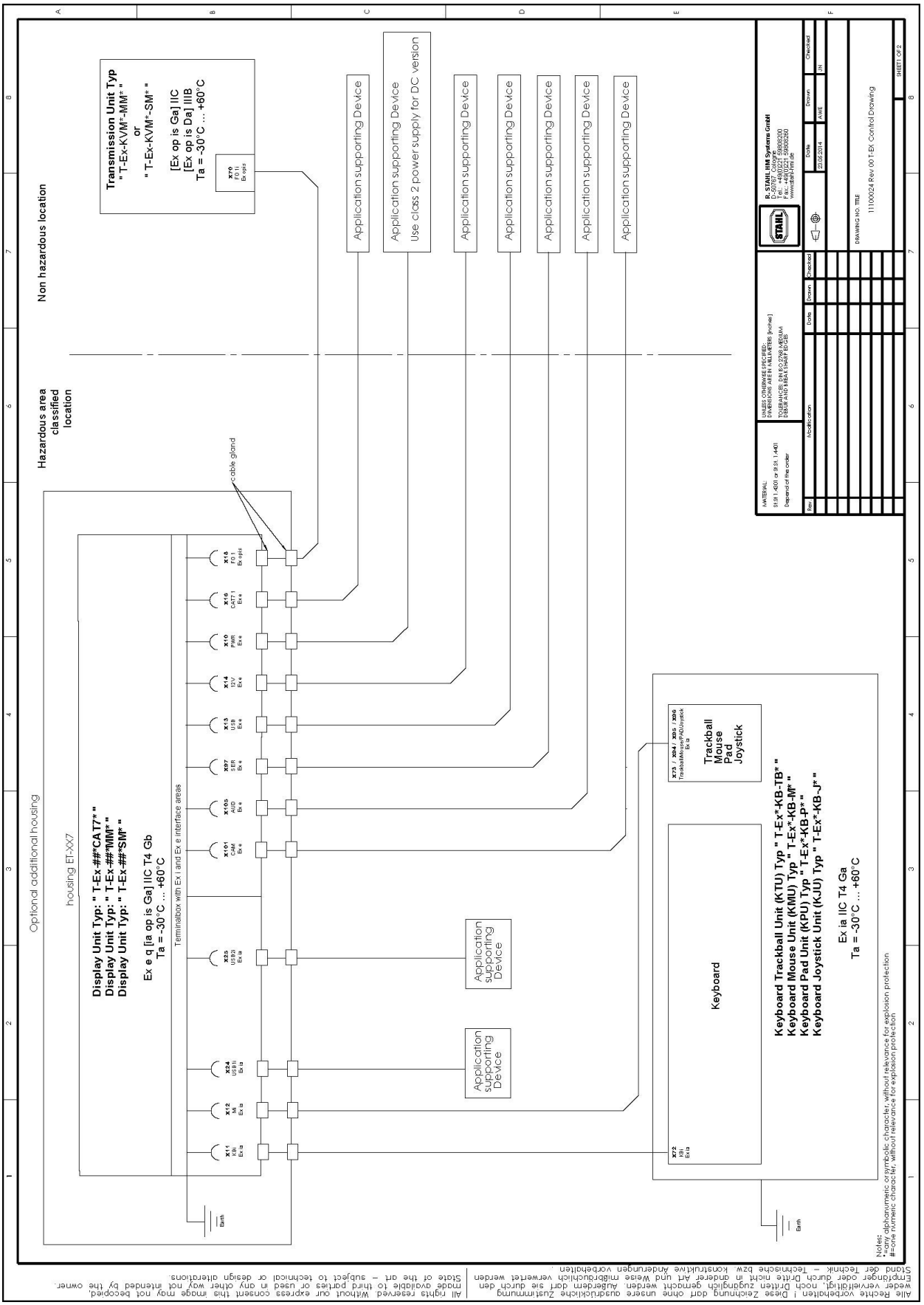
15.1.2 RoHS directive 2011/65/EC

The devices meet the requirements of RoHS Directive 2011/65/EU.

15.1.3 IMO Resolution MEPC.269(68)

The devices meet the requirements of the MEPC.269(68) Resolution of the "International Maritime Organization" (IMO), in particular the "2015 Guidelines for the Development of the Inventory of the Hazardous Materials" (IHM).

16 Control Drawing CEC / NEC / CSA



Security Advices

1. No revision to drawing prior to certification body.
2. The Associated Apparatus must be approved by a NRTL.
3. Manufacturer's installation drawing must be followed when installing associated apparatus.
4. Interconnection of equipment apparatus type of protection „I.S." with associated apparatus is allowed when the following is true:

I.S. Equipment Associated Apparatus
Vmax > Uo
Imax > Io
Pi > Po
Ci + Ccable < Co
Li + Lcable < Lo

WARNING:
- Substitution of components may impair Safety.
- To prevent ignition of flammable or combustible atmospheres disconnect power and wait a minimuum of 7min. before servicing.

The ET-xx7 operator interfaces and connected devices must be integrated in the same system of potential equalization.
As an alternative to this, only devices hat are isolated from earth potential may be connected.

All circuits must be wired as specified in the Canadian Electric Code for installation within Canada.

Calculation of cable length

1.) Determination of maximum possible capacitance of cable:

Cmax = Co - Ci (associated Apparatus)

Determination of maximum possible inductance of cable:

Lmax = Lo - Li (associated Apparatus)

2.) Determination of maximum possible cable length by

capacitance and inductance of cable:

length C = Cmax
Ccable (*1)
length L = Lmax
Lcable (*1)

3.) Determination of maximum length of cable:
length C or lenght L, whatever is less.

(*1) when cable parameters are unknown, the following values may be used:

Cable = 60 pF/ft. (200 pF/m)
Lcable = 0.2 µH/ft. (0.66 µH/m)

MATERIAL:
3131.1-4301 or 3131.1-4401
Depend of the order

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN MILLIMETERS [inches]
TOLERANCES: FOR FC 0.2 [0.1] ANGULAR
DEBUR AND BREAK SHARP EDGES

Rev	Modification	Date	Drawn	Checked

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www.stahl-hmi.de

		Date	Drawn	Checked
		28.05.2014	AWE	JN

DRAWING NO. TITLE
11100024 Rev.00 TEX Control Drawing

SHEET 2 OF 2

17 Declarations of conformity

17.1 EU

EU-Konformitätserklärung
EU Declaration of Conformity
Déclaration de Conformité UE

STAHL

R. STAHL HMI Systems GmbH • Adolf-Grimme-Allee 8 • 50829 Köln, Germany
erklärt in alleiniger Verantwortung, *declares in its sole responsibility, déclare sous sa seule responsabilité,*

dass das Produkt: *that the product:* *que le produit:*	Bedien- und Beobachtungsgeräte *Operating and Monitoring Devices* *Consoles de commande et de visualisation*
Typ(en), *type(s), type(s):*	**Display Unit T-EX-##*-R2 or ET-##7*** **Keyboard Trackb. Unit T-EX*-KB-TB* or KBDi-USB-TB50*** **Keyboard Mouse Unit T-EX*-KB-M* or KBDi-USB-M*** **Keyboard Pad Unit T-EX*-KB-P* or KBDi-USB-P*** **Keyboard Joystick Unit T-EX*-KB-J* or KBDi-USB-J*** **Transmission Unit T-EX-KVM*-* or KVM-*** *=any alphanumeric or symbolic character, without relevance for explosion protection #=one numeric character, without relevance for explosion protection

mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.
is in conformity with the requirements of the following directives and standards.
est conforme aux exigences des directives et des normes suivantes.

Richtlinie(n) / *Directive(s) / Directive(s)*		Norm(en) / *Standard(s) / Norme(s)*	
2014/34/EU *2014/34/EU* *2014/34/UE*	**ATEX-Richtlinie** *ATEX Directive* *Directive ATEX*	EN 60079-0:2009 EN 60079-5:2007 EN 60079-7:2007 EN 60079-11:2007 EN 60079-26:2007 EN 60079-28:2004 EN 60079-31:2009 EN 61241-11:2006	Das Produkt entspricht Anforderungen aus: *Product corresponds to requirements from:* *Produit correspond aux exigences:* EN 60079-0:2012/A11:2013 EN IEC 60079-0:2018 EN 60079-5:2015 EN 60079-7:2015 EN IEC 60079-7:2015 + A1:2018 EN 60079-11:2012 EN 60079-26:2015 EN 60079-28:2015 EN 60079-31:2014

Kennzeichnung, *marking, marquage:*

Display Unit T-EX-##*-R2 or ET-##7*:
II 2(1) G Ex eb q [ia op is Ga] IIC T4 Gb
II 2(1) D Ex tb IIIC [ia op is Da] T110°C Db
Keyboard Trackb. Unit T-EX*-KB-TB* or KBDi-USB-TB50*, Keyboard Mouse Unit T-EX*-KB-M* or KBDi-USB-M*, Keyboard Pad Unit T-EX*-KB-P* or KBDi-USB-P*, Keyboard Joystick Unit T-EX*-KB-J* or KBDi-USB-J*:
II 2 G Ex ia IIC T4 Gb
II 2 D Ex ia IIIB T110°C Db
Transmission Unit T-EX-KVM*-* or KVM-*:
II (1) G [Ex op is Ga] IIC
II (1) D [Ex op is Da] IIIB

CE 0158

EU-Baumusterprüfbescheinigung: *EU Type Examination Certificate:* *Attestation d'examen UE de type:*	**BVS 11 ATEX E 102 X** (DEKRA EXAM GmbH, Dinnendahlstraße 9, 44809 Bochum, Germany, NB0158)
Produktnormen nach Niederspannungsrichtlinie: *Product standards according to Low Voltage Directive:* *Normes des produit pour la Directive Basse Tension:*	EN 61010-1:2001 + Corrigendum / Errata DIN EN 62368-1:2016, IEC 62368-1:2014 (Second Edition)

20155070056 Konformitätserklärung T-Ex.docx Template_ EGEU_Konf_20150720.docx, Page 1 / 2

EU-Konformitätserklärung
EU Declaration of Conformity
Déclaration de Conformité UE

2014/30/EU *2014/30/EU* *2014/30/UE*	**EMV-Richtlinie** *EMC Directive* *Directive CEM*	EN 61000-6-2:2005 EN 61000-6-4:2007 + A1:2011
2011/65/EU *2011/65/EU* *2011/65/UE*	**RoHS-Richtlinie:** *RoHS Directive:* *Directive RoHS:*	EN IEC 63000:2018

Für spezifische Merkmale und Bedingungen siehe Betriebsanleitung.
For specific characteristics and conditions see operating instructions.
Pour les caractéristiques et conditions spécifiques, voir le mode d'emploi.

Köln, 2020-12-10 i.V. Joachim Düren i.V. A. Jung

Ort und Datum
Place and date
Lieu et date

J. Düren
Technical Director

A. Jung
Ex Representative

20155070056 Konformitätserklärung T-Ex.docx

Template_ EGEU_Konf_20150720.docx, Page **2 / 2**

17.2 RCM

Supplier's declaration of conformity

Australian Government | acma Australian Communications and Media Authority

As required by the following Notices:

- *Radiocommunications (Compliance Labelling - Devices) Notice 2014* made under section 182 of the *Radiocommunications Act 1992*;
- *Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017* made under section 182 of the *Radiocommunications Act 1992*
- *Radiocommunications (Compliance Labelling – Electromagnetic Radiation) Notice 2014* made under section 182 of the *Radiocommunications Act 1992* and
- *Telecommunications (Labelling Notice for Customer Equipment and Customer Cabling) Instrument 2015* made under section 407 of the *Telecommunications Act 1997*.

Instructions for completion

- ***Do not return this form to the ACMA.*** This completed form must be retained by the supplier as part of the documentation required for the compliance records and must be made available for inspection by the ACMA when requested.

Supplier's details (manufacturer, importer or authorised agent)

Company Name (OR INDIVIDUAL)

R. STAHL Australia Pty Ltd
TRADING AS R. STAHL HMI Systems GmbH

ACN/ARBN

ABN 81150955838

OR

New Zealand IRDN

Street Address (AUSTRALIAN or NEW ZEALAND)

848 Old Princes Highway
Sutherland, NSW
POSTCODE 2232
Phone: +61 2 4254 4777

Product details and date of manufacture

Product description – brand name, type, current model, lot, batch or serial number (if available), software/firmware version (if applicable)

Operating and Monitoring Devices Display Unit T-EX-##*-CAT7*; Display Unit T-EX-##*-MM*; Display Unit T-EX-##*-SM*; *=any alphanumeric or symbolic character; #=one numeric character
Operating and Monitoring Devices Display Unit MT-##7*-CAT7*; Display Unit MT-##7*-MM*; Display Unit MT-##7*-SM*; *=any alphanumeric or symbolic character; #=one numeric character
Keyboard Keyboard Trackball Unit T-EX*-KB-TB*; Keyboard Mouse Unit T-EX*-KB-M*; Keyboard Pad Unit T-EX*-KB-P*; Keyboard Joystick Unit T-EX*-KB-J*; *=any alphanumeric or symbolic character
Transmission Unit Transmission Unit T-EX-KVM*-CAT7*; Transmission Unit T-EX-KVM*-MM*; Transmission Unit T-EX-KVM*-SM*; *=any alphanumeric or

20184270020 RCM DOC xx7.doc Page 1 of 2 January 2018

symbolic character

Compliance – applicable standards and other supporting documents

Evidence of compliance with applicable standards may be demonstrated by test reports, endorsed/accredited test reports, certification/competent body statements.

Having had regard to these documents, I am satisfied the above mentioned product complies with the requirements of the relevant ACMA Standards made under the *Radiocommunications Act 1992* and the *Telecommunications Act 1997.*

List the details of the documents the above statement was made, including the standard title, number and, if applicable, number of the test report/endorsed test report or certification/competent body statement

EN 61000-6-4:2007; EN 61000-6-4:2007 + A1:2011

Declaration

I hereby declare that:

1. I am authorised to make this declaration on behalf of the Company mentioned above,
2. the contents of this form are true and correct, and
3. the product mentioned above complies with the applicable above mentioned standards and all products supplied under this declaration will be identical to the product identified above.

Note: Under section 137.1 of the *Criminal Code Act 1995*, it is an offence to knowingly provide false or misleading information to a Commonwealth entity.
Penalty: 12 months imprisonment

SIGNATURE OF SUPPLIER OR AGENT	Managing Director POSITION IN ORGANISATION
John Zagame PRINT NAME	2018-10-15 DATE

The *Privacy Act 1988* (Cth) (the Privacy Act) imposes obligations on the ACMA in relation to the collection, security, quality, access, use and disclosure of personal information. These obligations are detailed in the Australian Privacy Principles.

The ACMA may only collect personal information if it is reasonably necessary for, or directly related to, one or more of the ACMA's functions or activities.

The purpose of collecting the personal information in this form is to ensure the supplier is identified in the 'Declaration of conformity'. If this Declaration of Conformity is not completed and the requested information is not provided, a compliance label cannot be applied.

Further information on the Privacy Act and the ACMA's Privacy Policy is available at www.acma.gov.au/privacypolicy. The Privacy Policy contains details about how you may access personal information about you that is held by the ACMA, and seek the correction of such information. It also explains how you may complain about a breach of the Privacy Act and how we will deal with such a complaint.

Should you have any questions in this regard, please contact the ACMA's privacy contact officer on telephone on 1800 226 667 or by email at privacy@acma.gov.au.

17.3 EAC

EURASIAN ECONOMIC UNION
DECLARATION OF CONFORMITY

Applicant: Limited Liability Company «R.Stahl».
The main state registration number is 5087746541493.
Location (address of the legal entity) and the address of the place of business: 129085, Russia, Moscow, Zvezdny Boulevard, building 21, building 1, floor 6, room 1, room 12; phone number: +74956150473, E-mail address: info@stahl.ru.com.

represented by General Director Makhmudov Alexander Dzhamaleddinovich

declares that Keyboard KBD(i)-PS2-***, Keyboard block with trackball type T-Ex * -KB-TB *, Keyboard block with a mouse such as T-Ex * -KB-M *, keyboards with touch panel type T-Ex * -KB-P *, Keyboard block with joystick type T-Ex * -KB-J *, Transmission unit type T-Ex –KVM * -MM *, T-Ex KVM * -SM *

manufacturer: R.STAHL HMI Systems GmbH,
Location (address of the legal entity) and address of the place of business activity: Adolf-Grimme-Allee 8, 50829 Koeln, Germany.
Products manufactured in accordance with the technical documentation R.STAHL HMI Systems GmbH.
HS Code: 8471
Serial release.

meets the requirements
TR EAEU 037/2016 On restriction of the use of certain hazardous substances in electrical and electronic equipment

The declaration of conformity was adopted on the basis of Test Reports № 112-HMI-20 от 25.02.2020 of the Testing Laboratory of the R.STAHL HMI Systems GmbH; operation manuals. Declaration scheme 1d.

Additional Information
Storage conditions of products in accordance with the requirements of GOST 15150-69. The shelf life (service, shelf life) is specified in the operational documentation attached to the product.

The declaration of conformity is valid from the date of registration to 22.03.2025 inclusive.

(Signature) Stamp Makhmudov Alexander Dzhamaleddinovich (full name the Applicant)

Registration number of the declaration of conformity: ЕАЭС N RU Д-DE.PA01.B.27459/20

Date of registration of the declaration of conformity: 23.03.2020

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

Заявитель: Общество с ограниченной ответственностью «Р. ШТАЛЬ».
Основной государственный регистрационный номер: 5087746541493.
Место нахождения (адрес юридического лица) и адрес (адреса) места осуществления деятельности: 129085, Россия, Бульвар звездный, дом 21, строение 1, этаж 6, помещение 1, комната 12; номер телефона: +74956150473, адрес электронной почты: info@stahl.ru.com.

в лице генерального директора Махмудова Александра Джамаледдиновича

заявляет, что Клавиатура типа KBD(i)-PS2-***; Блок клавиатуры с трекболом типа T-Ex*-KB-TB*; Блок клавиатуры с мышью типа T-Ex*-KB-M*; клавиатуры с сенсорной панелью типа T-Ex*-KB-P*; Блок клавиатуры с джойстиком типа T-Ex*-KB-J*; Блок передачи типа T-Ex –KVM*-MM*, T-Ex KVM*-SM*

изготовитель: R.STAHL HMI Systems GmbH,
Место нахождения и адрес места осуществления деятельности по изготовлению продукции: Adolf-Grimme-Allee 8, 50829 Koeln, Германия.
Продукция изготовлена в соответствии с технической документацией изготовителя R.STAHL HMI Systems GmbH.
Код ТН ВЭД ЕАЭС: 8471
Серийный выпуск.

соответствует требованиям
ТР ЕАЭС 037/2016 "Об ограничении применения опасных веществ в изделиях электротехники и радиоэлектроники"

Декларация о соответствии принята на основании Протокола испытаний № 112-HMI-20 от 25.02.2020, испытательной лаборатории R.STAHL HMI Systems GmbH; руководства по эксплуатации. Схема декларирования 1д.

Дополнительная информация
Нормы, обеспечивающие соблюдение требований технического регламента приведены в Приложениях №№ 2, 3 ТР ЕАЭС 037/2016 «Об ограничении применения опасных веществ в изделиях электротехники и радиоэлектроники». Условия хранения конкретного изделия, срок хранения и службы указываются в прилагаемой к продукции товаросопроводительной и эксплуатационной документации.

Декларация о соответствии действительна с даты регистрации по 22.03.2025 включительно.

(подпись) М.П. Махмудов Александр Джамаледдинович (Ф.И.О. заявителя)

Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-DE.PA01.B.27459/20

Дата регистрации декларации о соответствии: 23.03.2020

17.4 CCC

17.4.1 English version

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

No.: 2021312309000501

Applicant	R. STAHL HMI SYSTEMS GmbH
Address	Adolf-Grimme Allee 8, 50829 Koln, Germany
Manufacturer	R. STAHL HMI SYSTEMS GmbH
Address	Adolf-Grimme Allee 8, 50829 Koln, Germany
Production Factory	R. STAHL HMI SYSTEMS GmbH
Production Address	Adolf-Grimme Allee 8, 50829 Koln, Germany
Product	Keyboard and pointing device
Model/Type	KBDi-USB-TB50*, KBDi-USB-M*, KBDi-USB-P*, KBDi-USB-J*
Ex marking	Ex ia IIC T4 Gb, Ex iaD 21 T135°C
Reference Standards	GB3836.1-2010, GB 3836.4-2010, GB12476.1-2013, GB12476.4-2010
Certification mode	Type Test + Initial Factory Inspection + Post-Certification Surveillance

The product(s) is verified and certified according to CNCA-C23-01: 2019 *China Compulsory Certification Implementation Rule on Explosion Protected Electrical Product* and CNEX-C2301-2019 *Guideline of China Compulsory Certification Implementation Rule on Explosion Protected Electrical Product.*

See Annex for the detailed product information (5 pages)

Issued on: 2021-06-09 Valid to: 2026-06-08

The validity of this certificate is maintained through the regular supervision of the issuing authority during the validity period.

Where any discrepancy arises between the English translation and the original Chinese version, the Chinese version shall prevail.

Director:

CNEX CCC

Nanyang Explosion Protected Electrical Apparatus Research Institute Co.,Ltd.

CNAS 中国认可 产品 PRODUCT CNAS C208-P

http://www.ccc-cnex.com ccc.china-ex.com

Add: No. 20, North Zhongjing Road, Nanyang, Henan, P. R. China P.C.: 473008

Tel: 0377-63239734 Email: ccc@cn-ex.com

CN 0000703

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

(Annex)

No.: 2021312309000501

Product information:

1. This certificate covers the following models:

   - KBDi-USB-TB50*, KBDi-USB-M*, KBDi-USB-P*, KBDi-USB-J*

   * = alphanumeric or symbolic characters without relevance to explosion protection.

   Type code:

Type	KBDi	USB	aa	bb
		Interface	Pointer device	Language layout

Product type:

Product key structure	Description
KBDi-USB-**TB50**-bb	Keyboard with integrated trackball
KBDi-USB-**TB50-VA**-bb	Keyboard with integrated stainless steel trackball
KBDi-USB-**M**-bb	Keyboard with integrated mouse
KBDi-USB-**P**-bb	Keyboard with integrated touch pad
KBDi-USB-**J**-bb	Keyboard with integrated joystick
KBDi-USB-aa-**DE**	Language: German (QWERTZ)
KBDi-USB-aa-**US**	Language: American (QWERTY)
KBDi-USB-aa-**FR**	Language: French (AZERTY)
KBDi-USB-aa-**FR-BE**	Language: French, Belgian version (AZERTY)
KBDi-USB-aa-**CH**	Language: German, Swiss layout
KBDi-USB-aa-**ES**	Language: Spanish
KBDi-USB-aa-**CN**	Language: Chinese

Issued on: 2021-06-09

Director:

Nanyang Explosion Protected Electrical Apparatus Research Institute Co.,Ltd.

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Tel: 0377-63239734 Email: ccc@cn-ex.com

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

(Annex)

No.: 2021312309000501

Parameters

Electrical data:

Keyboard Trackball Unit type KBDi-USB-TB50*:

Keyboard X72 (Ex ia):	
Voltage U_i	5.5VDC
Current I_i	1A
Power P_i	650mW
Effective internal capacitance C_i	20μF
Effective internal inductance L_i	negligible

Trackball X73 (Ex ia):	
Voltage U_i	5.5VDC
Current I_i	1A
Power P_i	650mW
Effective internal capacitance C_i	20μF
Effective internal inductance L_i	negligible

Keyboard Mouse Unit type KBDi-USB-M*:

Keyboard X72 (Ex ia):	
Voltage U_i	5.5VDC
Current I_i	1A

Issued on: 2021-06-09

Director:

Nanyang Explosion Protected Electrical Apparatus Research Institute Co.,Ltd.

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Tel: 0377-63239734 Email: ccc@cn-ex.com

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

(Annex)

No.: 2021312309000501

Power P_i	650mW
Effective internal capacitance C_i	20μF
Effective internal inductance L_i	negligible

Mouse Interface (X94) Ex ia:	
Voltage U_i	5.5VDC
Current I_i	1A
Power P_i	650mW
Effective internal capacitance C_i	20μF
Effective internal inductance L_i	negligible

Keyboard Pad Unit type KBDi-USB-P*:

Keyboard Interface(X72) Ex ia:	
Voltage U_i	5.5VDC
Current I_i	1A
Power P_i	650mW
Effective internal capacitance C_i	20μF
Effective internal inductance L_i	negligible

Pad Interface (X95) Ex ia:	
Voltage U_i	5.5VDC

Issued on: 2021-06-09

Director:

Nanyang Explosion Protected Electrical Apparatus Research Institute Co.,Ltd.

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Tel: 0377-63239734 Email: ccc@cn-ex.com

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

(Annex)

No.: 2021312309000501

Current I_i	1A
Power P_i	650mW
Effective internal capacitance C_i	20μF
Effective internal inductance L_i	negligible

Keyboard Joystick Unit type KBDi-USB-J*:

Keybord Interface(X72) Ex ia:	
Voltage U_i	5.5VDC
Current I_i	1A
Power P_i	650mW
Effective internal capacitance C_i	20μF
Effective internal inductance L_i	negligible

Joystick Interface (X96) Ex ia:	
Voltage U_i	5.5VDC
Current I_i	1A
Power P_i	650mW
Effective internal capacitance C_i	40μF
Effective internal inductance L_i	negligible

Issued on: 2021-06-09

Director:

Nanyang Explosion Protected Electrical Apparatus Research Institute Co.,Ltd.

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Tel: 0377-63239734
Email: ccc@cn-ex.com

CERTIFICATE FOR CHINA COMPULSORY PRODUCT CERTIFICATION

(Annex)

No.: 2021312309000501

Thermal Data:

Permitted ambient temperature rate: Ta = -30°C ~ +60°C

Temperature class	T4
Max. surface temperature limited to 135 °C	

Degrees of protection : IP20

Ex marking: Ex ia IIC T4 Gb, Ex iaD 21 T135°C

- Producers should organize production in accordance with the technical documents approved by the certification body.

2. Specific conditions of safety use:

- Along the intrinsically safe circuits between Display Unit and Pointing Device potential equalisation must exist.
- The Pointing Device shall not be used in areas where charging mechanism creating propagating brush discharges have to be regarded.
- The intrinsically safe circuit is grounded, and the installation should meet the relevant requirements of GB/T3836.15.
- When used in dust-explosive areas, the device has to be installed in a suitable enclosure to obtain at least IP64 in accordance with GB12476.1.
- See instruction for other information.

3. Certificate related report(s):

- Type test report: CQST2104C045
- Factory inspection report: CN2020Q010071

4. Certificate change information: None.

Issued on: 2021-06-09

Director:

CNEX CCC

Nanyang Explosion Protected Electrical Apparatus Research Institute Co.,Ltd.

CNAS 中国认可 产品 PRODUCT CNAS C208-P

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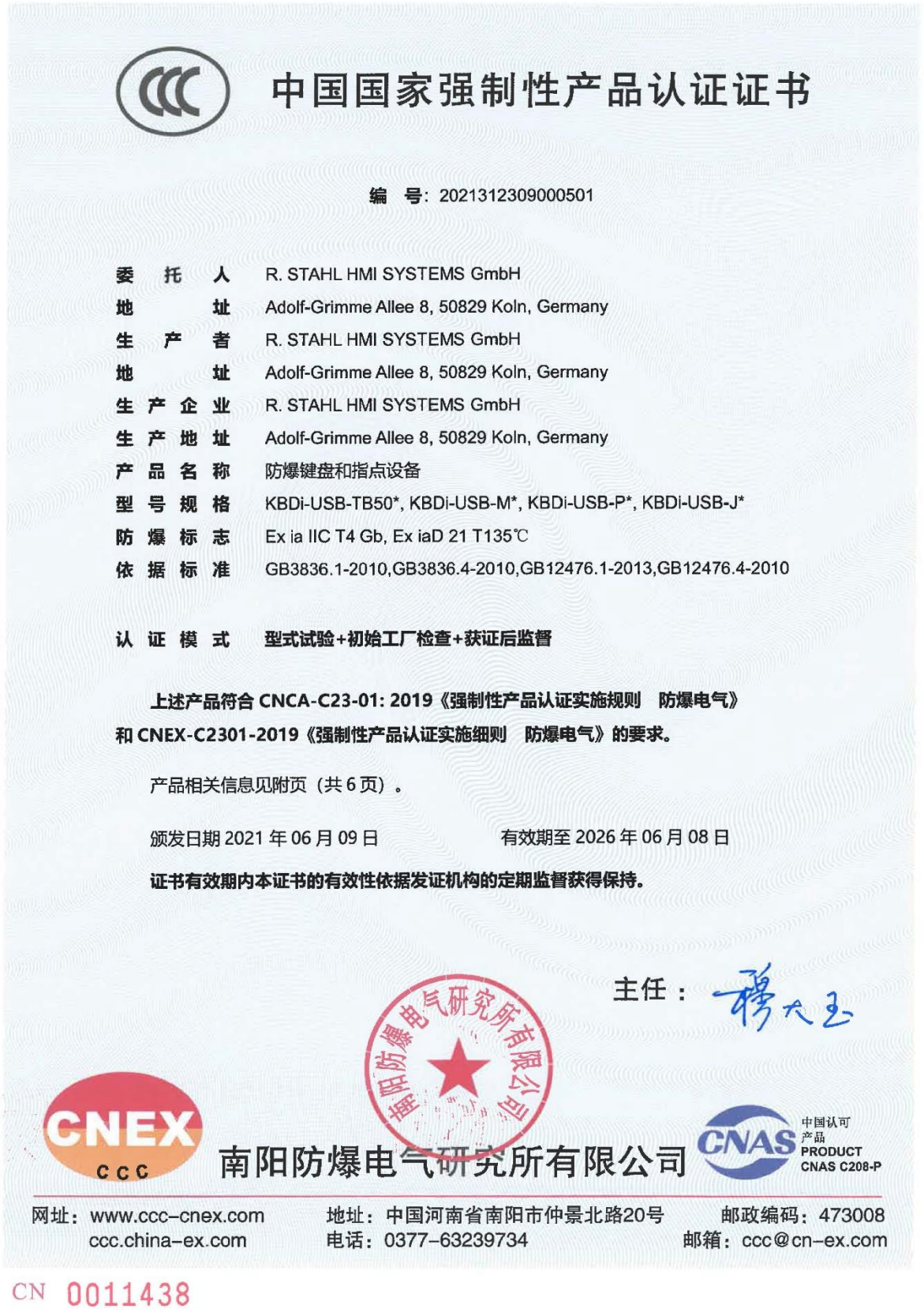
17.4.2 Chinese version



中国国家强制性产品认证证书

编 号：2021312309000501

委 托 人	R. STAHL HMI SYSTEMS GmbH
地 址	Adolf-Grimme Allee 8, 50829 Koln, Germany
生 产 者	R. STAHL HMI SYSTEMS GmbH
地 址	Adolf-Grimme Allee 8, 50829 Koln, Germany
生 产 企 业	R. STAHL HMI SYSTEMS GmbH
生 产 地 址	Adolf-Grimme Allee 8, 50829 Koln, Germany
产 品 名 称	防爆键盘和指点设备
型 号 规 格	KBDi-USB-TB50*, KBDi-USB-M*, KBDi-USB-P*, KBDi-USB-J*
防 爆 标 志	Ex ia IIC T4 Gb, Ex iaD 21 T135℃
依 据 标 准	GB3836.1-2010,GB3836.4-2010,GB12476.1-2013,GB12476.4-2010
认 证 模 式	型式试验+初始工厂检查+获证后监督

上述产品符合 CNCA-C23-01: 2019《强制性产品认证实施规则 防爆电气》和 CNEX-C2301-2019《强制性产品认证实施细则 防爆电气》的要求。

产品相关信息见附页（共 6 页）。

颁发日期 2021 年 06 月 09 日 有效期至 2026 年 06 月 08 日

证书有效期内本证书的有效性依据发证机构的定期监督获得保持。

主任：

南阳防爆电气研究所有限公司

网址：www.ccc-cnex.com ccc.china-ex.com

地址：中国河南省南阳市仲景北路20号 电话：0377-63239734

邮政编码：473008 邮箱：ccc@cn-ex.com

CN 0011438

中国国家强制性产品认证证书
（附页）

编　号：2021312309000501

第 1 页 共 6 页

产品相关信息：

1、本证书覆盖产品如下：

- KBDi-USB-TB50*, KBDi-USB-M*, KBDi-USB-P*, KBDi-USB-J*

* =任何数字或字母，与防爆无关。

型号命名：

型号	KBDi	USB	aa	bb
		接口	指点设备	语言布局

产品型号：

产品主要结构	描述
KBDi-USB-**TB50**-bb	带集成轨迹球的键盘
KBDi-USB-**TB50-VA**-bb	带有集成不锈钢轨迹球的键盘
KBDi-USB-**M**-bb	带有集成鼠标的键盘
KBDi-USB-**P**-bb	带有集成触摸板的键盘
KBDi-USB-**J**-bb	带有集成操纵杆的键盘
KBDi-USB-aa-**DE**	语言：德语（QWERTZ）
KBDi-USB-aa-**US**	语言：美语（QWERTY）
KBDi-USB-aa-**FR**	语言：法语（AZERTY）
KBDi-USB-aa-**FR-BE**	语言：法语、比利时语（AZERTY）
KBDi-USB-aa-**CH**	语言：德语、瑞士语
KBDi-USB-aa-**ES**	语言：西班牙语

颁发日期 2021 年 06 月 09 日

主任：

南阳防爆电气研究所有限公司

CNEX CCC

CNAS 中国认可 产品 PRODUCT CNAS C208-P

网址：www.ccc-cnex.com ccc.china-ex.com

地址：中国河南省南阳市仲景北路20号

电话：0377-63239734

邮政编码：473008

邮箱：ccc@cn-ex.com

中国国家强制性产品认证证书
（附页）

编　号：2021312309000501

第 2 页 共 6 页

KBDi-USB-aa-**CN**	语言：中文

参数：

电气参数：

键盘轨迹球单元型号 KBDi-USB-TB50 *：

键盘 X72 (Ex ia)：	
电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	20μF
有效内部电感　L_i	可忽略

轨迹球 X73 (Ex ia)：	
电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	20μF
有效内部电感　L_i	可忽略

键盘鼠标单元型号 KBDi-USB-M *：

键盘 X72 (Ex ia)：

颁发日期 2021 年 06 月 09 日

主任：穆大玉

南阳防爆电气研究所有限公司

CNEX CCC

CNAS 中国认可 产品 PRODUCT CNAS C208-P

网址：www.ccc-cnex.com ccc.china-ex.com

地址：中国河南省南阳市仲景北路20号

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中国国家强制性产品认证证书
（附页）

编　号：2021312309000501

电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	20μF
有效内部电感　L_i	可忽略

鼠标接口（X94）Ex ia：	
电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	20μF
有效内部电感　L_i	可忽略

键盘触摸板单元型号 KBDi-USB-P *:

键盘接口（X72）Ex ia：	
电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	20μF
有效内部电感　L_i	可忽略

颁发日期 2021 年 06 月 09 日

主任：

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编　号：2021312309000501

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触摸板接口（X95）Ex ia：	
电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	20μF
有效内部电感　L_i	可忽略

键盘操纵杆单元型号 KBDi-USB-J*:

键盘接口（X72）Ex ia：	
电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	20μF
有效内部电感　L_i	可忽略

操纵杆接口（X96）Ex ia：	
电压　U_i	5.5VDC
电流　I_i	1A
功率　P_i	650mW
有效内部电容　C_i	40μF

颁发日期 2021 年 06 月 09 日

主任：

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有效内部电感　L_i	可忽略

热参数：

允许的环境温度：Ta = -30℃ ~ +60℃

温度组别	T4
最高表面温度限制为 135°C	

防护等级：IP20

防爆标志：Ex ia IIC T4 Gb, Ex iaD 21 T135℃

- 生产者应按照认证机构批准的技术文件组织生产。

2、安全使用条件：

- 人机界面和指点设备之间的本安电路必须等电位连接。
- 在可能产生传播型刷型放电的区域，不得使用指点设备。
- 安装时本安电路接地应符合 GB/T3836.15 相关要求。
- 用于爆炸性粉尘环境，必须将设备安装在最低防护等级为 IP64（GB12476.1）的外壳中。
- 其他见产品使用说明书。

3、证书关联报告：

- 产品型式试验报告：CQST2104C045

颁发日期 2021 年 06 月 09 日

主任：

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- 工厂检查报告：CN2020Q010071

4、证书变更信息：无

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18 Release Notes

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

Version 01.00.08

- Correction of phone and fax no.
- Addition of "SHARK" in section "Keyboard function"
- Addition of "keyboard enclosure type HSG" in section "Keyboard function"
- Addition of "Technical Data" with "enclosure options"
- Addition of section "Keyboards in HSG enclosure"
- Addition of "Cable length for keyboard with touchpad " in section "Technical Data"
- Addition of "Notice" in section "Connections"
- Addition of versions KBDi-USB-*-HSG-* at cover
- Correction of certification designation KGS for Korea -> into KCS
- "Valid until" column added to "Certificates" table
- Data of values for the certifications for "Valid to" added
- New IECEx link
- Note for Korea added to "Customer confirmation letter"
- Formal changes

Version 01.00.09

- Removal of previous release notes
- Addition of "Notice according to cable gland" in section "Keyboard in enclosure for version SHARK"

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