IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx TUR 15.0027**

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Certificate history:

Issue 2 (2018-03-23)
Issue 1 (2018-01-10)
Issue 0 (2015-10-29)

Status: **Current**

Issue No: 3

Date of Issue: 2021-12-21

Applicant: **R.STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany

Equipment: **Ex ecControl Panel, 7145/5*-****-****-****-***

Optional accessory:

Type of Protection: **ec**

Marking: Ex ec * IIC, IIB, IIA T6, T5, T4, T3 Gc

* see marking

Approved for issue on behalf of the IECEx Certification Body: **Christian Mehrhoff**

Position: **Assigned certifier**

Signature:
(for printed version)

Date:

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 www.iecex.com or use of this QR Code.

Certificate issued by:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany

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Manufacturer: **R.STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
Germany

Additional manufacturing locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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

IEC 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

IEC 60079-18:2017 Explosive atmospheres - Part 18: Protection by encapsulation "m"
Edition:4.1

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

IEC 60079-5:2015 Explosive atmospheres –Part 5: Equipment protection by powder filling “q”
Edition:4.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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/TUR/ExTR15.0030/03

Quality Assessment Report:

DE/BVS/QAR10.0002/17

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

General product information:

The Ex ec Control Panel type 7145/5*-****-****-****-* is an electrical equipment for use in hazardous areas of zone 2. The Ex ec Control Panel consists of separately certified enclosures made of steel, stainless steel or moulded materials and of separately certified switching, control and measurement devices as well as terminals for intrinsically safe and non-intrinsically safe circuits and if needed they can be fitted with actuator attachments, indicator lights and lens.

The enclosures area for intrinsically safe circuits is identified, e.g. with a light blue color.

The connection is via ex-protected cable and gland entries.

Several enclosures can be combined; if necessary, they can be provided with flanges.

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Standard update to IEC 60079-0 Ed. 7.0.
- Transfer of Ex nA to Ex ec, including marking change.
- The maximum rated voltage was decreased to 1000V.

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Additional information:
Notes for manufacturing and operation

Equipment of intrinsic Safety “i” type of protection has to be installed so that the clearance and creepage distances between intrinsically safe and non-intrinsically safe circuits, which are specified in IEC 60079-14, are maintained.

If the clearance requirements specified in IEC 60079-11 are not complied with, terminals and wiring of Increased Safety “e” quality standard must also be used for intrinsically safe circuits.

When connecting more than one intrinsically safe circuit, the rules and regulations for interconnection must be observed.

Annex:

DE-IECEx_TUR_15.0027_03_Attachment_1.pdf

Attachment to Certificate IECEx TUR 15.0027 issue 03

Device: **Ex ec Control Panel**
Type: **7145/5*-****-****-****-***

Manufacturer: **R. STAHL Schaltgeräte GmbH**

Address: **Am Bahnhof 30**
74638 Waldenburg, Germany

Subject and type

Ex ec Control Panel 7145/5*-****-****-****-*

Type 7145 / 5 * - *** - *** - *** - *

Series	
Assembly	Ex ec Control Panel = 5
Material	Steel = 1 Stainless Steel 1.4404 = 2 Moulded material = 3 Stainless Steel 1.4301 = 4
Width	Combination = 0000 100 mm = 0100 to 3500 mm = 3500
High	Combination= 0000 100 mm = 0100 to 2200 mm = 2200
Depth	Combination = 0000 60 mm = 0060 to 1000 mm = 1000
Further details without reference to explosion protection,	to be filled when needed

Electrical Data:

The Electrical Data results from the components used in individual cases.

Rated voltage: max. 1000 V
Rated current: max. 630 A
Rated cross-section: max. 300 mm^2

Ambient temperature: -60 °C ≤ ta ≤ +65 °C

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilization category, etc. .

The composition of the protection marking depends on the equipment that is actually used.

The ambient temperature is determined by the temperature that is accepted for the used enclosure and installed components.

Mechanical Data:

The components which are listed in document No. 7145 0 000 010 0 can be used to build-up the Ex ec Control Panel 7145/5.
The components are separately certified and have at least EPL “Gc”.

Marking code:

Ex ec * IIC, IIB, IIA T6, T5, T4, T3 Gc

* Optional and additional marking, depending on the equipment used:

db	=	for separately certified equipment with “db”
dc	=	for separately certified equipment with “dc”
eb	=	for separately certified equipment with “eb”
ec	=	for separately certified equipment with “ec”
q	=	for separately certified equipment with “q”
ma	=	for separately certified equipment with “ma”
mb	=	for separately certified equipment with “mb”
mc	=	for separately certified equipment with “mc”
ia	=	for separately certified equipment with “ia”
[ia Ga]	=	for separately certified equipment with “[ia Ga]”
ib	=	for separately certified equipment with “ib”
[ib Gb]	=	for separately certified equipment with “[ib Gb]”
ic	=	for separately certified equipment with “ic”
[ic Gc]	=	for separately certified equipment with “[ic Gc]”
nC	=	for separately certified equipment with “nC”
[op is]	=	for separately certified equipment with “[op is]”
[op pr]	=	for separately certified equipment with “[op pr]”
[op sh]	=	for separately certified equipment with “[op sh]”