



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 PTB 06.0028 Issue No: 2 Certificate history:
Status: **Current** Issue No. 2 (2017-10-23)
Date of Issue: **2017-10-23** Page 1 of 4 Issue No. 1 (2012-01-26)
Applicant: **R. STAHL Schaltgeräte GmbH** Issue No. 0 (2006-04-04)
Am Bahnhof 30
74638 Waldenburg
Germany
Equipment: **Breather type 8162/1-**-***
Optional accessory:
Type of Protection: **Increased Safety "eb", Protection by enclosures "tb"**
Marking:
Ex eb IIC Gb
Ex tb III C Db

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

Dr.-Ing. Detlev Markus

Position:

Head of Department "Explosion Protection in Energy Technology"

*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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100
38116 Braunschweig
Germany





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Manufacturer: **R. STAHL Schaltgeräte GmbH**
Am Bahnhof 30
74638 Waldenburg
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 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7 : 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

*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/PTB/ExTR06.0033/01](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/12](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description of equipment

The breather type 8162/1-**-* is used as a ventilation, pressure compensation and drain opening for enclosures of type of protection Increased Safety "eb" and Protection by Enclosure "tb".

For further technical information and notes for installation and operation see annex.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

- 1) Change of the ambient temperature range
- 2) Update to latest standards
- 3) Marking revised acc. to latest standards

Annex:

[COCA060028-02.pdf](#)



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

Electrical Apparatus: Breather type 8162/1-**-*

Description of equipment

The breather type 8162/1-**-* is used as a ventilation, pressure compensation and drain opening for enclosures of type of protection Increased Safety "eb" and Protection by Enclosure "tb".

Nomenclature

8162	/	*	-	**	-	*
a	/	b	-	c	-	d

- a) Product Type / Series
- b) Design
1 = metric thread
- c) Thread type
25 = M25 x 1.5 mm
- d) Colour
1 = green

Ambient temperature

$-40\text{ °C} \leq T_{\text{amb}} \leq +70\text{ °C}$

Ingress protection according to IEC 60529

IP65 - Vertical installation from below / downwards

IP64 - Installation in any direction

Dimensions

Diameter 32.50 mm
Length 37 mm



Mounting

Wall thickness shall be: ≥ 1 mm to ≤ 5 mm.

Breather gland can be secured by standard lock nut or fastened into female thread with at least three threads engaged.

Torque of the standard lock nut: 4 Nm

Notes for installation and operation

1. The breathing gland of type 8162/1-**-* shall be installed in an enclosure that meets the requirements of an approved type of protection in accordance with IEC 60079-0, section 1.
2. The degree of protection according to IEC 60529 will only be safeguarded if the unit is properly installed in the electrical equipment.

This information must accompany each device in an adequate form.