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
Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx PTB 07.0027U**

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Certificate history:
Issue 4 (2017-08-02)
Issue 3 (2016-03-01)
Issue 2 (2013-05-31)
Issue 1 (2010-05-19)
Issue 0 (2007-06-04)

Status: **Current**

Issue No: 5

Date of Issue: 2025-06-23

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

Ex Component: Empty Enclosure type 8265/**-****

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Flameproof enclosure “db”, Increased Safety “eb” , Protection by enclosure “tb”**

Marking: Ex db IIC Gb resp. Ex db eb IIC Gb

Ex tb III C Db

Approved for issue on behalf of the IECEx Certification Body: **Dr.-Ing. Stefan Essmann**

Position: **Head of Department "Explosion Protection in Energy Technology"**

Signature:
(for printed version)

Date:
(for printed version)

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:

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

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

IECEx Certificate of Conformity

Certificate No.: **IECEx PTB 07.0027U**

Date of issue: 2025-06-23 Issue No: 5

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

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 component 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 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

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 component listed has successfully met the examination and test requirements as recorded in:

Test Report:

DE/PTB/ExTR10.0031/04

Quality Assessment Report:

DE/BVS/QAR10.0002/20

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Ex Component(s) covered by this certificate is described below:

Description of equipment

The empty enclosures type 8265/**-****, made of aluminium with threaded joint and gaskets, is intended to be used in for the mounting of electrical apparatus such as switching-, control-, regulating-, measuring- and indicating devices. They can be optionally equipped with a window in different sizes. The empty enclosures are suitable for explosion-protected control systems for use in hazardous areas of zones 1, 2 and in areas with combustible dust of zones 21 and 22.

The empty enclosures in the main type of protection Flameproof enclosures “db” and Protection of enclosure “tb” is also possible through and to mount an enclosure with type of protection Increased safety “eb”.

For more information see Annex.

SCHEDULE OF LIMITATIONS:

Outer coating (Polyester) maximum 200 µm.

The empty enclosure with a coating must not be used in areas affected by charge-producing process, mechanical friction and separation processes, electron (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust. This information has to be included into all of this certificate based IECEx-certificates as “Schedule of Limitations”. This information shall be added in the Instructions.

Service Temperature
See Annex.

Installation of components requires assessment by an ExCB.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1) Standard update to latest IEC standards
2) Addition of sealing frames to connect Ex d and Ex e enclosures
3) O-rings materials for the cover
4) Min. wall thickness and maximum number of drillings
5) D0143 to seal the joint between glass window D0107 and aluminium enclosure-cover

Annex:

COCA070027U-05.pdf

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

Equipment: Empty enclosure type 8265/**-****

Description:

The empty enclosures type 8265/**-****, made of aluminium with threaded joint and gaskets, is intended to be used in for the mounting of electrical apparatus such as switching-, control-, regulating-, measuring- and indicating devices. They can be optionally equipped with a window in different sizes. The empty enclosures are suitable for explosion-protected control systems for use in hazardous areas of zones 1, 2 and in areas with combustible dust of zones 21 and 22.
The empty enclosures in the main type of protection Flameproof enclosures “db” and Protection of enclosure “tb” is also possible through and to mount an enclosure with type of protection Increased safety “eb”.

Nomenclature:

8265	/	*	*	-	*	*	*	*
1)	/	2)	3)	-	4)	5)	6)	7)

1) Type / Series

2) Design
0 = Flameproof Enclosure
6 = Triple Certified Enclosure

3) Dimensions (Length x Width x Height)
0 = Combination
1 = 125 x 125 x 132
2 = 155 x 155 x 132
3 = 195 x 195 x 172
4 = 236 x 236 x 227
5 = 285 x 285 x 230
6 = 335 x 335 x 281

4) Type of Construction
0 = without entries
1 = direct entries
2 = with Ex eb connection 8146
4 = with Ex eb connection 8150

5) Built-in Components*)
0 = without components
1 = with mounting plate
2 = with mounting rail

6) Cover
0 = without inspection window (closed)
1 = with inspection window installed with fixing plates
2 = n/a for IECEx/ATEX
3 = with inspection window installed with fixing ring

7) Additional variations filled in, if required not affecting certification

*) not Ex relevant

Technical data:

Dimensions empty enclosure:

Type	Width	Length	Height	Free internal Volume	Surface
	[mm]	[mm]	[mm]	appr. [dm³]	appr. [m³]
8265/*1-**	125	125	132	0.97	9.7
8265/*2-**	155	155	132	1.67	13.0
8265/*3-**	195	195	172	3.90	21.0
8265/*4-**	236	236	227	8.10	32.6
8265/*5-**	285	285	230	11.46	42.5
8265/*6-**	335	335	281	20.88	60.1

Window sizes:

Type	Window size	Dimensions of windows, (diameter x thickness) mm	Cut-out dimension in Cover, (diameter) mm
8265/*1-**	1	90 x 12	≤68
8265/*2-** [1)]	2	90 x 16	≤68
8265/*2-**	3	130 x 15	≤105
8265/*3-**	4	168 x 19	≤141
8265/*4-**	5	220 x 19	≤188
8265/*5-**	5	220 x 19	≤186
8265/*6-**	5	220 x 19	≤186

[1)] Quartz glass window D0144 can only be used with a protective grating as shown in the drawing 8265 0 000 005 0.

Sealing frames to connect Ex e enclosures:

Enclosure size	Sealing frame			
	Size [mm]	Material	Sealing material	Single or multiple frames
8265/01	68 x 68 x 7	D0012	D0075	multiple (3x)
8265/02	68 x 68 x 7	D0012	D0075	multiple (3x)

Service temperature:

Enclosure Size	Service Temperature	Cover Gasket (O-ring)	Cover with Window, Guard and Sealing frame
8265/01 8265/02 8265/03 8265/04 8265/05 8265/06	-50 °C ≤ Ts ≤ +60 °C	Material D0073	Window material D0107 with adhesive material D0104 or D0143 or cover without window
	-60 °C ≤ Ts ≤ +60 °C	Material D0084 or Material D0326 or D0310 or D0314	
8265/01 8265/02 8265/03 8265/04 8265/05 8265/06	-60 °C ≤ Ts ≤ +100 °C	Material D0326 or D0310 or D0314	No Window
8265/01 8265/02 8265/03	-60 °C ≤ Ts ≤ +130 °C	No Gasket	No Window
8265/02	-60 °C ≤ Ts ≤ +130 °C	No Gasket for Ts > 100 °C	Window material D0144 with Guard and adhesive material D0143
	-60 °C ≤ Ts ≤ +100 °C	Material D0326 or D0310 or D0314	
8265/01 8265/02	-60 °C ≤ Ts ≤ +100 °C	Material D0326 or D0310 or D0314	3x sealing frame D0012 with foam gasket D0075

Degree of Protection according to IEC 60079-0 / -31

Enclosure Parts	**Material**	**IP Rating**
Cover and Enclosure	O-ring D0084 or D0326 or D0310 or D0314	IP66
	O-ring D0073	IP65
Cover with Window D0107	Adhesive D0143 or D0104	IP66
Cover with Window D0144 with guard only for 8265/02	Adhesive D0143	IP64
Sealing Frame to connect Ex d and Ex e enclosure	Gasket D0075	IP64

Enclosure with reduced size doors:
Enclosure can be equipped with reduced door size compared to standard version, without changing the distance between fixing screws, hinges and cam locks. The door frame of the enclosure can be extended up to 150 mm.

Maximum number of threaded holes:
The maximum number of openings, also the position and sizes described in drawing 8265 0 000 003 and 8265 0 000 004.

Notes for manufacturing and operation:

The Ex d enclosure may also be connected with suitable cable glands or conduit systems that meet the requirements in IEC 60079-1, and for which a separate certificate has been issued.

Only the number and dimensions of the openings, bushings, cable entry fittings, connectors and blanking plugs that are specified in the technical drawings and technical documents of the manufacturer are allowed to be installed.

Openings that are not used must be closed in compliance with the specifications in IEC 60079-1.

Painted/coated Ex d enclosures must not be used in areas that are affected by charge-producing processes, mechanical friction and separation processes, electron emission (e.g. near electrostatic coating equipment), and pneumatically conveyed dust.

The window out of D0144 must be protected with mesh guard No. 250879 for type 8265/02, as shown in drawing No. 8265 0 000 005 0.

For Ex d enclosures that are intended for installation in hazardous dust areas (Ex tb IIIC Db), O rings can be used between the enclosure and cover, up to ambient temperatures of the enclosure of +60 °C.

The Ex d enclosure of Flameproof Enclosure „d“ type of protection can be optionally be used with a terminal box of Increased Safety „e“ and Protection by Enclosure „tb“ type of protection, certified with a separate examination certificate.

Installation of electrical components requires a further assessment by an ExCB.

Schedule of Limitations:

Outer coating (Polyester) maximum 200 µm.

The empty enclosure with a coating must not be used in areas affected by charge-producing process, mechanical friction and separation processes, electron (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust. This information has to be included into all of this certificate based IECEx-certificates as “specific conditions of use”. This information has to be included into all of this certificate based IECEx-certificates as “Schedule of Limitations”. This information shall be added in the Instructions.

Service Temperature

Enclosure Size	Service Temperature	Cover Gasket (O-ring)	Cover with Window, Guard and Sealing frame
8265/01 8265/02 8265/03 8265/04 8265/05 8265/06	-50 °C ≤ Ts ≤ +60 °C	Material D0073	Window material D0107 with adhesive material D0104 or D0143 or cover without window
	-60 °C ≤ Ts ≤ +60 °C	Material D0084 or Material D0326 or D0310 or D0314	
8265/01 8265/02 8265/03 8265/04 8265/05 8265/06	-60 °C ≤ Ts ≤ +100 °C	Material D0326 or D0310 or D0314	No Window
8265/01 8265/02 8265/03	-60 °C ≤ Ts ≤ +130 °C	No Gasket	No Window
8265/02	-60 °C ≤ Ts ≤ +130 °C	No Gasket for Ts > 100 °C	Window material D0144 with Guard and adhesive material D0143
	-60 °C ≤ Ts ≤ +100 °C	Material D0326 or D0310 or D0314	
8265/01 8265/02	-60 °C ≤ Ts ≤ +100 °C	Material D0326 or D0310 or D0314	3x sealing frame D0012 with foam gasket D0075

Installation of components requires assessment by an ExCB.