



# 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](http://www.iecex.com)

Certificate No.: IECEx PTB 07.0027U

Issue No: 4

Certificate history:

Issue No. 4 (2017-08-02)

Issue No. 3 (2016-03-01)

Issue No. 2 (2013-05-31)

Issue No. 1 (2010-05-19)

Issue No. 0 (2007-06-04)

Status: **Current**

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Date of Issue: **2017-08-02**

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

Equipment: **Ex d Enclosure type 8265/\*\*-\*\*\***

*Optional accessory:*

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. Detlev Markus

*Position:*

Head of Working Group "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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2014-06</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
<b>IEC 60079-7 : 2015</b> Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*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/ExTR10.0031/03](#)

Quality Assessment Report:

[DE/BVS/QAR10.0002/09](#)



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## Schedule

### EQUIPMENT:

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

**SPECIFIC CONDITIONS OF USE: NO**



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

Increase of the ambient and service temperature up to 100 °C for all enclosures from 8265/04 up to 8265/06, for all other sizes 130 °C; for all sizes of the enclosure without window.

**Annex:**

[COCA070027U-04.pdf](#)



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

Electrical Apparatus: Ex d Enclosure type 8265/\*\*-\*\*\*

### Description of equipment

The enclosure 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 dusts 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".

### Technical details

Dimensions empty enclosure:

type	Width [mm]	Length [mm]	Height [mm]	Free internal volume ca. [dm <sup>3</sup> ]
8265/*1-**	125	125	132	0,97
8265/*2-**	155	155	132	1,67
8265/*3-**	195	195	172	3,9
8265/*4-**	236	236	227	8,1
8265/*5-**	285	285	230	11,46
8265/*6-**	335	335	281	20,88

Used windows:

Enclosure type	window number	diameter [mm]	thickness [mm]
8265/*1-**	<u>1</u>	<u>90</u>	<u>12</u>
8265/*2-**	<u>2</u>	<u>90</u>	<u>16</u>
8265/*2-**(1)	<u>3</u>	<u>130</u>	<u>15</u>
8265/*3-**	<u>4</u>	<u>168</u>	<u>19</u>
8265/*4-**	<u>5</u>	<u>220</u>	<u>19</u>
8265/*5-**	<u>6</u>	<u>220</u>	<u>19</u>
8265/*6-**	<u>7</u>	<u>220</u>	<u>19</u>

1) Quartz glass, just allowed together with guard as shown in drawing 8265 0 000 005 0

### Ambient Temperature

Enclosure Size	Ambient Temperature	Cover Gasket	Window
8265/01 8265/02	$-50\text{ °C} \leq T_a \leq +60\text{ °C}$	Yes Material D0073	Yes Window D0107 with Cement D0104 or D0143
8265/03 8265/04 8265/05 8265/06	$-60\text{ °C} \leq T_a \leq +60\text{ °C}$	Yes Material D0084	
8265/01 8265/02 8265/03	$-60\text{ °C} \leq T_a \leq +130\text{ °C}$	No Gasket for $T_{amb} > 60\text{ °C}$	No Window for $T_{amb} > 60\text{ °C}$
8265/04 8265/05 8265/06	$-60\text{ °C} \leq T_a \leq +100\text{ °C}$	No Gasket for $T_{amb} > 60\text{ °C}$	No Window for $T_{amb} > 60\text{ °C}$
8265/02	$-60\text{ °C} \leq T_a \leq +130\text{ °C}$	No Gasket for $T_{amb} > 60\text{ °C}$	Yes Window D0144 with Guard and Cement D0143

### Degree of Protection

IP66 with gasket D0084 and/or cement D0104 and/or D0143

IP65 with gasket D0073 and/or cement D0104 and/or D0143

IP6X without gasket, with cement D0143 at  $T_{amb} > 60\text{ °C}$ , type 8265/02, with window D0144 and guard only

### Maximum number of threaded holes

The maximum number of opening, their maximum size, and their position are defined in drawings 8265 0 000 003, and 8265 0 000 004.



## Nomenklature

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

- 1) Type/Series
- 2) Design  
0 = Flameproof Enclosure  
6 = Triple Certified Enclosure (IECEX / ATEX / cULus)
- 3) Dimension  
(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) ..6) Additional variations filled in, if required not affecting certification  
Design 8265/6 is different to 8265/0 in the material used to cement the window.  
Material D0143 is used with type 8265/0 and material D0083 is used with type 8265/6.

## Additional information

meet the requirements in EN 60079-1, and for which a separate test certificate has been issued.

Openings that are not used must be closed in compliance with the specifications in EN 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.

The installation of electrical components is subject to re-assessment by a notified testing laboratory.

## Maximum number of openings

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



### Routine test

For IEC 60079-1 routine test, the static overpressure values in the table below shall be applied.

Version with solid cover:

Ex d enclosure size	Reference pressure	IIC at -20°C	IIC at -60°C
8265/*1	895 kPa	Routine test not required	Routine test not required
8265/*2	895 kPa		
8265/*3	871 kPa		
8265/*4	953 kPa		
8265/*5	953 kPa		Routine test required with 2300 kPa for 10s
8265/*6	946 kPa		

Version with cover with window:

Ex d enclosure size	Reference pressure	IIC at -20°C	IIC at -60°C
8265/*1	895 kPa	Routine test not required	Routine test not required
8265/*2	895 kPa		
8265/*3	871 kPa		
8265/*4	953 kPa		
8265/*5	953 kPa		Routine test required with 2300 kPa for 10s
8265/*6	946 kPa		