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 PTB 07.0060X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 5	Issue 4 (2018-03-23) Issue 3 (2012-02-29) Issue 2 (2010-12-17) Issue 1 (2010-08-04) Issue 0 (2007-11-05)
Date of Issue:	**2021-10-14**		
Applicant:	**ROSE Systemtechnik GmbH** **Erbeweg 13 - 15** **32457 Porta Westfalica** **Germany**		
Equipment:	**Connection and Junction Box and Control Box Type 35.XX XX XX, 36.XX XX XX, R5 XX XX XX, R6 XX XX XX, R7 XX XX XX and R8 XX XX XX**		
Optional accessory:			
Type of Protection:	**Different**		
Marking:	**Ex db eb [ia] mb IIC T6...T4 Gb** **Ex tb IIIC T85 °C...T135 °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: 14.10.2021

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 07.0060X**

Date of Issue: **2021-10-14**

Manufacturer: **ROSE Systemtechnik GmbH**
Erbeweg 13 - 15
32457 Porta Westfalica
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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1:2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11:2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-18:2017 Edition:4.1	Explosive atmospheres - Part 18: Protection by encapsulation "m"
IEC 60079-28:2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31:2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-5:2015 Edition:4.0	Explosive atmospheres –Part 5: Equipment protection by powder filling "q"
IEC 60079-7:2017 Edition:5.1	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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/PTB/ExTR07.0060/05

Quality Assessment Report:

DE/EPS/QAR17.0003/40

IECEx Certificate of Conformity

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

Description of equipment

The Connection and Junction Box and Control Box type 35. XX XX XX, 36. XX XX XX, R5 XX XX XX, R6 XX XX XX, R7 XX XX XX and R8 XX XX XX consists of enclosures out of sheet steel or stainless steel in the type of protection Increased Safety "eb" and Protection by enclosure "tb", which are provided for stationary assembly. They are equipped with terminals for circuits in the type of protection Increased Safety "e" or Intrinsic Safety "ia" or combinations of both. The components for intrinsically safe circuits are marked, e.g. in light blue. Connection is by means of Ex-type cable entries. The empty enclosures as well as all mounted and attached components have been tested and certified under a separate examination certificate.

Technical data, Nomenclature, Notes for manufacturing and operation and Assembly tables see Annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Components attached or installed (terminal compartments, bushings, Ex-type cable glands, connectors) shall be of a technical standard that at least complies with the specifications on the cover sheet, and they shall have a separate examination certificate. The operating conditions specified in the component certificates must definitely be complied with, and the operating instructions must include a note to inform the operating company of this equipment. The method used for assessing the suitability of the used component must be documented in a verifiable manner in compliance with the QM system.
2. For repair of separately certified components, the IECEx Examination for these components must be observed.
3. Equipment of the type of protection intrinsic safety "i" according to IEC 60079-11 is to be installed in such a way that the distances, creepage distances und clearances between intrinsically safe circuits and non-intrinsically safe circuits required according to EN 60079-14 are complied with.
4. When more than one intrinsically safe circuit is used, the rules for interconnection are to be observed.
5. Degree of protection IP66 will be safeguarded only when sealing and cable entry fittings are properly fitted. The manufacturer's instructions must be followed.
6. Installation of the components in the electrical apparatus shall be made such that the local temperatures will be within the operating temperature range.
7. The Connection, Junction and Control Box with a coating must not be used in areas affected by charge-producing processes, mechanical friction and separation processes, electron emission (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. Update to the current standards
2. RMS enclosure (Code 5, 6, 7, 8) added
3. Flange connection frame added
4. Ex component Bus bars added

Annex:

COCA_070060X-05.pdf

Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

Applicant:	ROSE Systemtechnik GmbH Erbeweg 13-15 32457 Porta Westfalica Germany
Electrical Apparatus:	Connection and Junction Box and Control Box Type 35.XX XX XX, 36.XX XX XX, R5 XX XX XX, R6 XX XX XX, R7 XX XX XX and R8 XX XX XX

Description

The Connection and Junction Box and Control Box type 35. XX XX XX, 36. XX XX XX, R5 XX XX XX, R6 XX XX XX, R7 XX XX XX and R8 XX XX XX consists of enclosures out of sheet steel or stainless steel in the type of protection Increased Safety "eb" and Protection by enclosure "tb", which are provided for stationary assembly. They are equipped with terminals for circuits in the type of protection Increased Safety "e" or Intrinsic Safety "ia" or combinations of both. The components for intrinsically safe circuits are marked, e.g. in light blue. Connection is by means of Ex-type cable entries. The empty enclosures as well as all mounted and attached components have been tested and certified under a separate examination certificate.

Technical Data

Ambient temperature:

-60 °C to +90 °C with glass window

-60 °C to +90 °C with silicone gasket

-40 °C to +90 °C with HF Gasket (EMV)

-40 °C to +90 °C with PU foam

-20 °C to +85 °C with CR gasket

-50 °C to +85 °C with PC window

-20 °C to +40 °C with bus bars

Degree of protection: IP66

Rated voltage:	Up to 1500 V
Rated current:	Max. 630 A
Conductor size:	Max. 300 mm²
Protective cross section:	Max. 150 mm²

Nomenclature

XX.	**	**	**
1	2	3	4

1: Type
2: Length
3: Width
4: Depth

Max. Enclosure size

Product Type	max. Height [mm]	max. Width [mm]	max. Depth [mm]
Empty enclosure 34.XX XX XX Ex Stainless Steel Standard Increased Safety 35.XX XX XX Ex Stainless Steel Standard Intrinsic Safety / mixed assembled 36.XX XX XX Ex Stainless Steel Standard	1200	2000	500
Empty enclosure 34.00 XX XX Ex Stainless Steel Cabinets Increased Safety 35.00 XX XX Ex Stainless Steel Cabinets Intrinsic Safety / mixed assembled 36.00 XX XX Ex Stainless Steel Cabinets	1200	2000	500
Empty enclosure 34.XX XX XX Ex Stainless Steel Flange 1. Generation 34.03 XX XX Ex Stainless Steel Flange 2. Generation Increased Safety 35.00 XX XX Ex Stainless Steel Flange 1. Generation 35.03 XX XX Ex Stainless Steel Flange 2. Generation Intrinsic Safety / mixed assembled 36.00 XX XX Ex Stainless Steel Flange 1. Generation 36.03 XX XX Ex Stainless Steel Flange 2. Generation	1200	2000	500
Empty enclosure 34.04 XX XX ProtEx electropolished 34.05 XX XX ProtEx electropolished / Return Flange 34.06 XX XX ProtEx polished 34.07 XX XX ProtEx polished / Return Flange Increased Safety 35.04 XX XX ProtEx electropolished 35.05 XX XX ProtEx electropolished / Return Flange 34.06 XX XX ProtEx polished 34.07 XX XX ProtEx polished / Return Flange Intrinsic Safety / mixed assembled 36.04 XX XX ProtEx electropolished 36.05 XX XX ProtEx electropolished / Return Flange 36.06 XX XX ProtEx polished 36.07 XX XX ProtEx polished / Return Flange	980	740	205

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100, 38116 Braunschweig, Germany
Postfach 33 45, 38023 Braunschweig, Germany
Telephone +49 531 592-0, Telefax +49 531 592-3605

Product Type	max. Height [mm]	max. Width [mm]	max. Depth [mm]
Empty enclosure 34.08 XX XX Captive Clamp Increased Safety 35.08 XX XX Captive Clamp Intrinsic Safety / mixed assembled 36.08 XX XX Captive Clamp	450	620	230
Empty enclosure 34.XX XX XX Ex Stainless Steel Special Size Increased Safety 35.XX XX XX Ex Stainless Steel Special Size Intrinsic Safety / mixed assembled 36.XX XX XX Ex Stainless Steel Special Size	1400	1100	400
RMS enclosure (Code 5, 6, 7, 8) Increased Safety R5 XX XX XX Special Size R6 XX XX XX Special Size Intrinsic Safety / mixed assembled R7 XX XX XX Special Size R8 XX XX XX Special Size	600	600	260

Note: The maximum heat dissipation capacity depends on the individual enclosure size.

The rated values are maximum values, the actual electrical values depend on the electrical equipment incorporated. Within the scope of these maximum permissible values and with due regard to the standards, the manufacturer specifies the final rated values dependent on the system conditions, mode of operation, utilization category, etc. The characteristic values of the intrinsically safe circuits are to be given by the manufacturer on his own responsibility. Further technical details have been specified in the test documents.

The composition of the symbol specifying the type of protection depends on the types of protection of the components used.

The maximum permissible ambient temperature range of the terminal housing can be limited by the maximum permissible ambient temperature ranges of the separately certified equipment.

Notes for manufacturing and operation

Each device needs to be evaluated concerning the max. allowed temperature limit according to the relevant temperature class and concerning the limiting temperature of the materials. This evaluation needs to be done within the engineering process and must be complemented by an additional temperature measurement in any case doubt. The admissible ambient temperature ranges of the build-in components may not be exceeded at the place of installation.

Physikalisch-Technische Bundesanstalt (PTB)
Bundesallee 100, 38116 Braunschweig, Germany
Postfach 33 45, 38023 Braunschweig, Germany
Telephone +49 531 592-0, Telefax +49 531 592-3605

IECEx Test Report Summary

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

ExTR Ref. No.:	**DE/PTB/ExTR07.0060/05**	Page 1 of 1
ExTR Free Ref. No.:	**PEx1201900096**	Status:Issued
Details of change:	- Update to the current standards - RMS enclosure (Code 5, 6, 7, 8) added - Flange connection frame added - Ex component Bus bars added	Date of issue:2021-10-14
List of Standards Covered:	**IEC 60079-0:2017 Edition:7.0, IEC 60079-1:2014-06 Edition:7.0, IEC 60079-11:2011 Edition:6.0, IEC 60079-18:2017 Edition:4.1, IEC 60079-28:2015 Edition:2, IEC 60079-31:2013 Edition:2, IEC 60079-5:2015 Edition:4.0, IEC 60079-7:2017 Edition:5.1**	
Issuing ExTL:	**PTB - Physikalisch-Technische Bundesanstalt (PTB)**	
Endorsing ExCB:	**PTB - Physikalisch-Technische Bundesanstalt (PTB)**	
Manufacturer:	**ROSE Systemtechnik GmbH** **Erbeweg 13 - 15** **32457 Porta Westfalica**	
Location of Manufacturer:	**Germany**	
Ex Protection:	**Increased Safety "e"** **Protection by Enclosures "tb"**	
Ratings:	**See certificate**	
Equipment:	**Connection and Junction Box and Control Box**	
Model Reference:	**Type 35.XX XX XX, 36.XX XX XX, R5 XX XX XX, R6 XX XX XX, R7 XX XX XX and R8 XX XX XX**	

Related IECEx Certificates:

IECEx PTB 07.0060X Issue 5

Comments: