



# 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 14.0037 Issue No: 0 Certificate history:  
Issue No. 0 (2017-08-08)

Status: Current Page 1 of 3

Date of Issue: 2017-08-08

Applicant: ROSE Systemtechnik GmbH  
Erbeweg 13 - 15  
32457 Porta Westfalica  
Germany

Equipment: Power distribution, switch and control gear assembly type 91. XX XX XX and 46 .XX XX  
XX

Optional accessory:

Type of Protection: different

Marking:  
Ex eb db mb ia [ia Ga] nA nC [op is] IIC T6, T5, T4 Gc  
Ex tb IIIC T85 °C, T100 °C, T135 °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)

  
10.08.17

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](#).

Certificate issued by:

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



Physikalisch-Technische Bundesanstalt  
Braunschweig und Berlin



# IECEX Certificate of Conformity

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Manufacturer: ROSE Systemtechnik GmbH  
Erbeweg 13 - 15  
32457 Porta Westfalica  
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<br>Edition:6.0    | Explosive atmospheres - Part 0: General requirements                                                      |
| IEC 60079-1 : 2014-06<br>Edition:7.0 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"                         |
| IEC 60079-11 : 2011<br>Edition:6.0   | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"                             |
| IEC 60079-15 : 2010<br>Edition:4     | Explosive atmospheres - Part 15: Equipment protection by type of protection "n"                           |
| IEC 60079-18 : 2014<br>Edition:4.0   | Explosive atmospheres - Part 18: Equipment protection by encapsulation "m"                                |
| IEC 60079-28 : 2015<br>Edition:2     | Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation |
| IEC 60079-7 : 2015<br>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/ExTR14.0044/00

Quality Assessment Report:

DE/EPS/QAR17.0003/02



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Page 3 of 3

## Schedule

### EQUIPMENT:

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

The power distribution, switch and control gear assembly, type 91. XX XX XX and 46. XX XX XX, consists of a polyester enclosure designed to Increased Safety "e" or Protection by Enclosure "tb" type of protection, which can be provided with flanges, if necessary. It is used to accommodate field bus distributors and terminals, and can be provided with actuator elements and pilot lamps, if necessary.

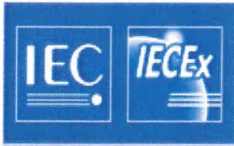
'Ex' cable glands are used for connection.

All installed and attached components are tested and certified with a separate examination certificate.

**SPECIFIC CONDITIONS OF USE: NO**

### Annex:

[COCA140037-00.pdf](#)



Applicant: ROSE Systemtechnik GmbH  
Erbeweg 13-15  
32457 Porta Westfalica  
Germany

Electrical Apparatus: Power distribution, switch and control gear assembly type  
91. XX XX XX and 46. XX XX XX

**Description**

The power distribution, switch and control gear assembly, type 91.XX XX XX, and 46. XX XX XX consists of a polyester enclosure designed to Increased Safety "e" or Protection by Enclosure "tb" type of protection, which can be provided with flanges, if necessary. It is used to accommodate field bus distributors and terminals, and can be provided with actuator elements and pilot lamps, if necessary. Ex-cable glands are used for connection. All installed and attached components are tested and certified with a separate examination certificate.

Technical data:

Ambient temperature:

- 55 °C to +90 °C: with gasket out of silicon and HF
- 40 °C to +90 °C: with gasket out of HF
- 40 °C to +90 °C with PU-foam
- 20 °C to +85 °C with gasket out of CR or PU
- 50 °C to +85 °C with window out of PC
- 20 °C to +90 °C with window out of glass

Degree of protection: IP66

|                          |                          |
|--------------------------|--------------------------|
| Technical data           |                          |
| Rated voltage:           | Up to 1500 V             |
| Rated current:           | Max. to 400 A            |
| Conductor size:          | Max. 300 mm <sup>2</sup> |
| Protective cross section | Max. 120 mm <sup>2</sup> |

Thread stud of the earth bolt compl. .... M6x60, M8x50, M10x60, M12x80



#### Enclosure Polyester Cabinets 3G

| No. | Enclosure Type | Height [mm] | Width [mm] | Depth [mm] |
|-----|----------------|-------------|------------|------------|
| 1.  | 91.20 20 00    | 200         | 200        | 168        |
| 2.  | 91.20 30 00    | 200         | 300        | 168        |
| 3.  | 91.30 40 00    | 405         | 305        | 202        |
| 4.  | 91.40 60 00    | 605         | 405        | 252        |

#### Enclosure Polyester CombiBox 3G

| No. | Enclosure Type | Height [mm] | Width [mm] | Depth [mm] |
|-----|----------------|-------------|------------|------------|
| 1.  | 91.01 22 15    | 177         | 177        | 145        |
| 2.  | 91.01 24 15    | 360         | 177        | 145        |
| 3.  | 91.01 44 15    | 360         | 360        | 145        |

#### Max. Power Dissipation of Polyester Enclosures

| Enclosure Type | Max. Power Dissipation [Watt] | Enclosure Type | Max. Power Dissipation [Watt] |
|----------------|-------------------------------|----------------|-------------------------------|
| 26.08 08 06    | 3.1                           | 26.25 40 16    | 42.4                          |
| 26.08 08 08    | 3.8                           | 26.25 60 12    | 51.3                          |
| 26.08 11 06    | 3.9                           | 26.36 36 09    | 40.1                          |
| 26.08 11 08    | 4.7                           | 26.41 40 12    | 53.7                          |
| 26.08 16 06    | 5.2                           | 26.41 40 20    | 68.1                          |
| 26.08 16 08    | 6.1                           | 26.88 01 00    | 4.0                           |
| 26.08 19 06    | 5.9                           | 26.88 02 00    | 6.9                           |
| 26.08 19 08    | 7.0                           | 26.88 03 00    | 11.8                          |
| 26.08 23 06    | 7.0                           | 26.88 04 00    | 19.1                          |
| 26.08 23 08    | 8.2                           | 26.20 20 00    | 22.9                          |
| 26.12 12 09    | 7.8                           | 26.20 30 00    | 30.2                          |
| 26.12 22 09    | 11.9                          | 26.30 40 00    | 55.9                          |
| 26.16 16 09    | 11.6                          | 26.40 60 00    | 103.8                         |
| 26.16 26 09    | 16.5                          | 26.14 01 00    | 22.1                          |
| 26.16 36 09    | 21.4                          | 26.14 03 00    | 30.8                          |
| 26.16 56 09    | 31.2                          | 26.14 03 00    | 52.4                          |
| 26.25 26 12    | 26.2                          | 26.01 22 15    | 17.7                          |
| 26.25 26 16    | 30.7                          | 26.01 24 15    | 30.7                          |
| 26.25 40 12    | 36.8                          | 26.01 44 15    | 48.9                          |

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.

#### Nomenclature

|    |    |    |    |
|----|----|----|----|
| 91 | ** | ** | ** |
| 1  | 2  | 3  | 4  |

- 1: Type, material polyester
- 2: Length or product line (see above)
- 3: Width or number depending on product line
- 4: Depth or number depending on product line

#### Additional Advices

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 condi-



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.