



# 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 08.0004

Issue No: 5

**Certificate history:**

Issue No. 5 (2018-03-26)

Issue No. 4 (2014-01-15)

Issue No. 3 (2012-03-12)

Issue No. 2 (2008-11-24)

Issue No. 1 (2008-05-20)

Issue No. 0 (2008-04-29)

Status: **Current**

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Date of Issue: **2018-03-26**

Applicant: **ROSE Systemtechnik GmbH**  
Erbeweg 13  
32457 Porta Westfalica  
Germany

Equipment: **Connection and Junction Box and Control Box, type 06.XX XX XX and 16.XX XX XX**

Optional accessory:

Type of Protection: **Different**

Marking:

Ex db eb ia [ia] mb IIC T4, T5, T6 Gb

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 Section "Explosion Protection in Energy Technology"

Signature:  
(for printed version)

Date:

27.03.18

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





# IECEX Certificate of Conformity

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Date of Issue: 2018-03-26 Page 2 of 4  
Manufacturer: ROSE Systemtechnik GmbH  
Erbeweg 13  
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 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 : 2017</b> Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-1 : 2014-06</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-11 : 2011</b> Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-18 : 2014</b> Edition:4.0	Explosive atmospheres – Part 18: Equipment protection by encapsulation "m"
<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/ExTR08.0008/03](#)

Quality Assessment Report:

[DE/EPs/QAR17.0003/02](#)



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## Schedule

### EQUIPMENT:

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

#### Description of equipment

The power distribution, switch and control gear assembly, type 06.XX XX XX and 16.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 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**



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

Update of the state of standards IEC 60079-0:2018 (Ed. 7), IEC 60079-7:2015 (Ed. 5), IEC 60079-11:2011(Ed.6); IEC 60079-18:2015 (Ed.2); IEC 60079-31:2013 (Ed. 2)

**Annex:**

[COCA\\_080004-05.pdf](#)

[Annex\\_Manufacturing\\_Locations\\_080004-05.pdf](#)



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

**Electrical Apparatus:** Power distribution, switch and control gear assembly  
Type 06. XX XX XX and 16.XX XX XX

**Description**

The power distribution, switch and control gear assembly, type 06. XX XX XX and 16.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 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  
-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  
-50 °C to +85 °C with window out of PC  
-20 °C to +85 °C with window out of glass

**Degree of protection:** IP66

Technical data	Ex Polyester Enclosure	Polyester Ex Okta Box	Polyester Ex PF Enclosure	Polyester Ex Mini Polyglas	Polyester Ex Polyglas	Polyester Ex Combi Box
Rated voltage [V]:	Up to 1500	Up to 750	Up to 1500	Up to 1500	Up to 1500	Up to 1500
Rated current [A]:	Max. to 400	Max. to 400	Max. to 400	Max. to 400	Max. to 400	Max. to 400
Conductor size [mm <sup>2</sup> ]:	Max. 300	Max. 50	Max. 300	Max. 300	Max. 300	Max. 300
Protective cross section [mm <sup>2</sup> ]:	Max. 150	Max. 25	Max. 150	Max. 150	Max. 150	Max. 150



### Nomenclature

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

- 1: Type, material Polyester
- 2: Length
- 3: Width
- 4: Depth

### Enclosure standard and max. Power Dissipation of **Ex Polyester Enclosure**:

- Type reference:
- Empty enclosure  
26.XX XX XX Ex Polyester standard
  - Increased Safety  
06.XX XX XX Ex Polyester standard
  - Intrinsic Safety / mixed assembled  
16.XX XX XX Ex Polyester standard

No.	Product Type	Height [mm]	Width [mm]	Depth [mm]	Max. Power Dissipation [W] (dT 40 °K)
1	XX.08 08 06	75	80	56	5
2	XX.08 08 08	75	80	75	7
3	XX.08 11 06	75	110	56	6
4	XX.08 11 08	75	110	75	8
5	XX.08 16 06	75	160	56	9
6	XX.08 16 08	75	160	75	11
7	XX.08 19 06	75	190	56	10
8	XX.08 19 08	75	190	75	12
9	XX.08 23 06	75	230	56	12
10	XX.08 23 08	75	230	75	14
11	XX.12 12 09	120	122	91	13
12	XX.12 22 09	120	220	91	20
13	XX.16 16 09	160	160	91	19
14	XX.16 26 09	160	260	91	26
15	XX.16 36 09	160	360	91	34
16	XX.16 56 09	160	560	91	49
17	XX.25 26 12	250	255	121	41
18	XX.25 26 16	250	255	161	50



No.	Product Type	Height [mm]	Width [mm]	Depth [mm]	Max. Power Dissipation [W] (dT 40 °K)
19	XX.25 40 12	250	400	121	57
20	XX.25 40 16	250	400	161	68
21	XX.25 60 12	250	600	121	78
22	XX.36 36 09	360	360	91	58
23	XX.41 40 12	405	400	121	78
24	XX.41 40 20	405	400	201	107

Enclosure standard and max. Power Dissipation of **Polyester Ex Okta Box Enclosure:**

Type reference: Empty enclosure  
26.88 XX XX Ex Okta Box  
Increased Safety  
06.88 XX XX Ex Okta Box  
Intrinsic Safety / mixed assembled  
16.88 XX XX Ex Okta Box

No.	Product Type	Height [mm]	Width [mm]	Depth [mm]	Max. Power Dissipation [W] (dT 40 °K)
1	XX.XX 01 00	81	81	75	7
2	XX.XX 02 00	121	121	75	12
3	XX.XX 03 00	161	161	93	19
4	XX.XX 04 00	200	200	125	31

Enclosure standard and max. Power Dissipation of **Polyester Ex PF Enclosure:**

Type reference: Empty enclosure  
26.14 XX XX Ex PF Enclosure  
Increased Safety  
06.14 XX XX Ex PF Enclosure  
Intrinsic Safety / mixed assembled  
16.14 XX XX Ex PF Enclosure

No.	Product Type	Height [mm]	Width [mm]	Depth [mm]	Max. Power Dissipation [W] (dT 40 °K)
1	XX.XX 01 00	170	270	136	36
2	XX.XX 02 00	270	270	136	49
3	XX.XX 03 00	270	541	136	81

Enclosure standard and max. Power Dissipation of **Polyester Ex Mini Polyglas and Ex Polyglas Enclosure:**

Type reference:            Empty enclosure  
                                   26.XX XX XX Ex Mini Polyglas  
                                   Increased Safety  
                                   06.XX XX XX Ex Mini Polyglas  
                                   Intrinsic Safety / mixed assembled  
                                   16.XX XX XX Ex Mini Polyglas

No.	Product Type	Height [mm]	Width [mm]	Depth [mm]	Max. Power Dissipation [W] (dT 40 °K)
1	XX.12 20 00	120	200	100	19
2	XX.16 26 00	160	260	100	26
3	XX.16 34 00	160	340	100	33
4	XX.20 15 00	200	150	100	23
5	XX.20 20 00	200	200	168	39
6	XX.20 30 00	200	300	168	51
7	XX.30 40 00	405	305	202	88
8	XX.40 60 00	605	405	252	163

Enclosure standard and max. Power Dissipation of **Ex Polyester Combi Box:**

Type reference:            Empty enclosure  
                                   26.01 XX XX Ex Combi Box  
                                   Increased Safety  
                                   06.01 XX XX Ex Combi Box  
                                   Intrinsic Safety / mixed assembled  
                                   16.01 XX XX Ex Combi Box





No.	Product Type	Height [mm]	Width [mm]	Depth [mm]	Max. Power Dissipation [W] (dT 40 °K)
1	XX.XX 22 15	177	177	145	28
2	XX.XX 24 15	360	177	145	45
3	XX.XX 44 15	360	360	145	70

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.

#### 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 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.

For repair of separately certified components, the IECEx Examination for these components must be observed.

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 and clearances between intrinsically safe circuits and non-intrinsically safe circuits required according to EN 60079-14 are complied with.

When more than one intrinsically safe circuit is used, the rules for interconnection are to be observed.

Degree of protection IP66 will be safeguarded only when sealing and cable entry fittings are properly fitted. The manufacturer's instructions must be followed.

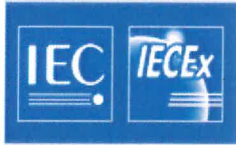
Installation of the components in the electrical apparatus shall be made such that the local temperatures will be within the operating temperature range.



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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.

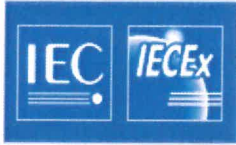


Applicant: ROSE Systemtechnik GmbH  
Erbeweg 13-15  
32457 Porta Westfalica  
Germany

Electrical Apparatus: Power distribution, switch and control gear assembly type  
06.XX XX XX and 16.XX XX XX

**List of Manufacturing Locations:**

1. Rose Systemtechnik GmbH  
Erbeweg 13-15  
32457 Porta Westfalica  
Germany
2. Phoenix Mecano (India) Private Limited  
Plant - I & II, Pirangut Industrial Area, Post Ghotawade, Plot 288/389  
Village Bhare, Taluka Mulshi, Dist Pune – 412 115  
India
3. Phoenix Mecano (India) Private Limited  
Plant - III, GatNo 408, 410 & 412  
Village Urse, Taluka Maval, Talegaon Urse Road, Dist Pune - 410 506  
India
4. Phoenix Mecano S.E. Asia Pte. Ltd.  
35 Ubi Ave 3#04-01, Colorscan Building  
Singapore 408863  
Singapore
5. Phoenix Mecano Kecskemet KFT  
Istvan kiraly krt. 24  
6000 Kesckemet  
Hungary
6. Phoenix Mecano Inc.  
7330 Executive Way  
MD 21704 Frederick  
United States
7. PM Komponenten N. V.  
Karrewegstraat 124  
9800 Deinze  
Belgium



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8. PM Komponenten B. V.  
Havenstraat 100  
7005 AG Doetinchem  
Netherlands
  
  9. Mecano Components Co. Ltd/012  
No. 1001, Jiaqian Road, Nanxiang, Jiading District  
Shanghai P.R.C. 201802  
China