



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

Certificate No.: IECEx ITS 15.0041X Issue No: 2 Certificate history:
Status: **Current** Page 1 of 5 Issue No. 2 (2017-04-13)
Date of Issue: **2017-04-13** Issue No. 1 (2016-05-10)
Applicant: **Rose Systemtechnik GmbH** Issue No. 0 (2015-12-08)
Erbeweg 13 – 15
32457 Porta Westfalica
Germany
Equipment: **Power Distribution, Switchgear and Control Assembly - EJB series**
Optional accessory:
Type of Protection: **Ex db and Ex tb**
Marking:
IECEX ITS 15.0041X
Ex db IIB+H₂ * [1] Gb -20°C ≤ Ta ≤ +[3] See Schedule
Ex tb III C [2] Db -20°C ≤ Ta ≤ +[3] IP66

*Approved for issue on behalf of the IECEx
Certification Body:*

V K Varma

Position:

Certification Officer

*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:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom





IECEx Certificate of Conformity

Certificate No: IECEx ITS 15.0041X Issue No: 2
Date of Issue: 2017-04-13 Page 2 of 5
Manufacturer: **Rose Systemtechnik GmbH**
Erbeweg 13 – 15
32457 Porta Westfalica
Germany

Additional Manufacturing location(s):

Phoenix Mecano (India) Pvt. Ltd.

Plant - I & II:

Pirangut Industrial Area, Post Ghotawade, Plot 388/389, Village Bhare, Taluka Mulshi, distt. Pune - 412 115 India
India

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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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:

[GB/ITS/ExTR15.0034/00](#)

Quality Assessment Report:

[DE/TUR/QAR14.0004/01](#)

[DE/TUR/QAR09.0009/06](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The apparatus consists of a range of Six Power Distribution, Switchgear and Control Assembly referred to as the EJB Series.

The configuration shall be in accordance with the manufacturer work instruction entitled 'Work Instruction for Configuration of Products from EJB Series Enclosures'

See Annex A for the full product description

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Only suitably rated and certified cable glands, blanking elements, thread adapter to be used referring to the equipment marking.
2. Only suitably rated and certified bushings shall be selected referring to the equipment marking. When connecting to other certified enclosures a minimum distance of 40mm to be maintained from the flange joint.
3. Each entry shall have no more than one thread adapter. A blanking element shall not be used with thread adapter.
4. Enclosures are to be installed in vertical position only.
5. No modifications must be made to the flame paths without consultation of the drawings listed on the ExTR.
6. Use cables suitable for operating temperature referring to marking as per recommendation of IEC 60079-14.



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

Details of Certificate changes Issue 01:

- 1) Change of Certificate Holder from Phoenix Mecano (India) Pvt. Ltd. to Rose Systemtechnik GmbH.
- 2) Changes in the marking label which do not affect the level of Protection of the equipment.

Details of Certificate changes Issue 02

- 1) Re-designation of the Flameproof Control Station Enclosures - EJB Series as Power Distribution, Switchgear and Control Assembly - EJB series
- 2) Re -assessment of the Flameproof Control Station Enclosures for the additional models of EJB 06, EJB 09 and EJB 10 in EJB Series to the ambient temperatures +40°C, +50°C and +60°C for T6, T5 and T4 temperature class



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Additional information:

See Annex A

Annex:

[Annex A to IECEx ITS 15.0041X EJB Series Issue 02.pdf](#)



Annex - IECEx Certificate of Conformity

Annex to certificate : IECEx ITS15. 0041X Issue No.:2
Applicant : ROSE Systemtechnik GmbH
Equipment : Power Distribution, Switchgear and Control Assembly - EJB series

The apparatus is a series of six enclosures for Power Distribution and Control Assembly - EJB Series (EJB 01, EJB 02, EJB 03, EJB 06, EJB 09 & EJB 10). The material of construction of enclosure assembly is EN AC-AISi12 (a) (EN AC 44200) for EJB 01, EJB 02, EJB 03 and EN AC-AISi7Mg (EN AC 42000) heat treated for EJB 06, EJB 09, EJB 10 Al alloy as per EN 1706 or equivalent Al alloy having same or more proof stress, alternate suitable material of SS 304 or 316L or Cast Iron. The enclosure is provided with flange bolted lid. Silicone grease Anabond 662 or equivalent has been provided in flange joint to achieve ingress protection of IP66 in accordance with IEC 60529. "O" ring of silicon may be provided between base & lid as an option for ingress protection of IP66 in accordance with IEC 60529. However in case of Ex tb enclosures Ingress protection IP66 with silicone grease is not allowed and silicone "O" ring to achieve the same will be provided by default.

Cable/conduit entries are provided for the accommodation of suitable cable/conduit entry devices.

Type No	Dimensions (mm)			Max Rated Current (A)	Max Conductor Size (mm ²)
	W	H	D		
EJB 01	170	220	152	76	16
EJB 02	220	270	158	125	35
EJB 03	270	320	166	232	95
EJB 06	440	490	250	415	240
EJB 09	580	780	440	935	630
EJB 10	680	980	485	1055	1000

Permissible entries from each side		EJB 01	EJB 02	EJB 03	EJB 06	EJB 09	EJB 10
M20 or ½" NPT	Short Side	04	06	08	21	54	66
	Long Side	06	08	10	24	84	108
M25 or ¾" NPT	Short Side	02	04	06	17	33	54
	Long Side	04	05	08	20	54	90
M32 or 1" NPT	Short Side	01	03	04	11	28	36
	Long Side	02	04	05	12	43	60
M40 or 1 ¼" NPT	Short Side	-	02	03	08	18	28
	Long Side	-	03	03	10	28	44
M50 or 1 ½" NPT	Short Side	-	-	02	04	12	18
	Long Side	-	-	03	05	21	28
M63 or 2" NPT	Short Side	-	-	-	03	11	15
	Long Side	-	-	-	04	17	24
M75 or 2 ½" NPT	Short Side	-	-	-	03	06	09
	Long Side	-	-	-	03	09	15
M90 or 3" or 3 ½" NPT	Short Side	-	-	-	-	05	07
	Long Side	-	-	-	-	08	12
M100 or 4" NPT	Short Side	-	-	-	-	05	06
	Long Side	-	-	-	-	07	10

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Annex to certificate : IECEx ITS15. 0041X Issue No.:2
Applicant : ROSE Systemtechnik GmbH
Equipment : Power Distribution, Switchgear and Control Assembly - EJB series

These enclosures can be used for mounting electrical/ electronic components (e.g. PB, Indicating lamp, Switch, MCB, MPCB, MCCB, Contactors, transformers, relays, transducers, isolators, barriers, power supply, PCB etc.) and or terminals of size and combination as required. The rating of components and terminals will generally be up to 1.1 KV AC/DC subject to max permissible watt dissipation as shown hereunder. However, declared voltage rating is nominal and items having higher voltage rating as required may be populated inside enclosure subject to required creepage and clearance and within permitted watt dissipation.

Lid may be populated with separately certified control components (combination of various types of PB actuators, rotary actuator for Switch, MCB, MPCB & MCCB etc, LED indicating lamp etc.) in required number & combination in permissible numbers as shown hereunder. LID may also be populated with display window for indicating or control instruments with display in required number & size within permissible limit as shown.

TYPE No.	Max Number of control components	Display Window (mm)								
		44 x 44	68 x 68	92 x 92	140 x 140	186 x 186	234 x 234	280 x 280	328 x 376	376 x 376
EJB 01	04	01	-	-	-	-	-	-	-	-
EJB 02	09	04	01	01	-	-	-	-	-	-
EJB 03	16	09	04	01	01	-	-	-	-	-
EJB 06	49	25	09	04	01	01	01	-	-	-
EJB 09	88	56	20	12	04	02	01	01	01	-
EJB 10	150	90	36	20	09	04	02	01	01	01

Empty enclosures can be sold to other manufacturers to be configured as product under their equipment certificate.

Power distribution, switchgear and control assembly may be formed consisting of one or more enclosure of this EJB series and other certified enclosures. The electrical connection shall be made by direct entry or by using terminal boxes or control and distribution boxes in type of protection increased safety. These shall be joined together through certified bushing keeping a minimum distance of 40mm from flange joint.

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Equipment : Power Distribution, Switchgear and Control Assembly - EJB series

The marking of the equipment or protective system shall include the following:-

Ex db IIB+H₂ * [1] Gb -20°C ≤ Ta ≤ [3]
Ex tb IIIC [2] Db -20°C ≤ Ta ≤ [3] IP66

Type No.	[1] T CLASS	T6			T5					T4		
	[2] Dust Temp. Marking	T80°C			T95°C					T130°C		
	[3] Max. Ambient Temp.	+40°C	+50°C	+60°C	+40°C	+50°C	+55°C	+60°C	+75°C	+40°C	+50°C	+60°C
EJB 01	Max. Watt Dissipation	60 W	-	36W	-	-	60 W	-	36W	-	-	-
EJB 02		76W	-	42W	-	-	76W	-	42W	-	-	-
EJB 03		87W	-	60W	-	-	87W	-	60W	-	-	-
EJB 06		209W	166W	114W	338W	260W	-	206W	-	584W	514W	436W
EJB 09		467W	319W	236W	728W	555W	-	353W	-	1238W	1145W	956W
EJB 10		726W	568W	400W	1085W	864W	-	712W	-	2038W	1709W	1454W

* Enclosures may be marked IIB or IIB+H₂ as required.

Note : Equipment marking shall be completed by using type of protection e, i, [i], m, q for certified equipment or components used for assembly.

Drawings and Documents:

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
* POWER DISTRIBUTION, SWITCHGEAR AND CONTROL ASSEMBLY - EJB SERIES SHEET 1 of 16	EX.PMI.EJB.201	2	30.07.2016
*POWER DISTRIBUTION, SWITCHGEAR AND CONTROL ASSEMBLY - EJB SERIES SHEET 2 of 16	EX.PMI.EJB.201	2	30.07.2016
*POWER DISTRIBUTION, SWITCHGEAR AND CONTROL ASSEMBLY - EJB SERIES SHEET 3 of 16	EX.PMI.EJB.201	2	30.07.2016

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*EJB 01 LID (MACHINED CASTING) SHEET 4 of 16	EX.PMI.EJB.201	1	27.11.2015
*EJB 01 BASE (MACHINED CASTING) SHEET 5 of 16	EX.PMI.EJB.201	1	27.11.2015
*EJB 02 LID (MACHINED CASTING) SHEET 6 of 16	EX.PMI.EJB.201	1	27.11.2015
*EJB 02 BASE (MACHINED CASTING) SHEET 7 of 16	EX.PMI.EJB.201	1	27.11.2015
*EJB 03 LID (MACHINED CASTING) SHEET 8 of 16	EX.PMI.EJB.201	1	27.11.2015
*EJB 03 BASE (MACHINED CASTING) SHEET 9 of 16	EX.PMI.EJB.201	1	27.11.2015
*POWER DISTRIBUTION, SWITCHGEAR AND CONTROL ASSEMBLY - EJB SERIES SHEET 10 of 16	EX.PMI.EJB.201	0	30.07.2016
*EJB 06 LID (MACHINED CASTING) Sheet 11 of 16	EX.PMI.EJB.201	0	30.07.2016
*EJB 06 BASE (MACHINED CASTING) Sheet 12 of 16	EX.PMI.EJB.201	0	30.07.2016
*EJB 09 LID (MACHINED CASTING) Sheet 13 of 16	EX.PMI.EJB.201	0	30.07.2016
*EJB 09 BASE (MACHINED CASTING) Sheet 14 of 16	EX.PMI.EJB.201	0	30.07.2016
*EJB 10 LID (MACHINED CASTING) Sheet 15 of 16	EX.PMI.EJB.201	0	30.07.2016
*EJB 10 BASE (MACHINED CASTING) Sheet 16 of 16	EX.PMI.EJB.201	0	30.07.2016

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