



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 TRC 12.0007U Issue No: 2 Certificate history:
Status: **Current** Page 1 of 4 [Issue No. 2 \(2015-06-18\)](#)
Date of Issue: **2015-06-18** [Issue No. 1 \(2012-08-06\)](#)
[Issue No. 0 \(2012-07-04\)](#)
Applicant: **JCE (Europe) Ltd.,**
East Way,
Lee Mill Industrial Estate,
Ivybridge,
Devon,
PL21 9LL
United Kingdom
Electrical Apparatus: **Flameproof Enclosures, EJB Series Component Enclosures**
Optional accessory:
Type of Protection: **Flameproof**
Marking: Ex d IIB Gb Ex d IIB+H2 Gb Ex tb IIIC Db
See table in Annex for details of ambient temperature ranges.

Approved for issue on behalf of the IECEx
Certification Body:

Stephen Winsor

Position:

Certification Manager

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](#).

Certificate issued by:

TRaC Global Ltd.
Unit 1 Pendle Place
Skelmersdale
West Lancashire
WN8 9PN
United Kingdom





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Manufacturer: **JCE (Europe) Ltd**
East Way,
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PL21 9LL
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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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition:1	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/TRC/ExTR12.0007/02](#)

[GB/TRC/ExTR12.0007/00](#)

[GB/TRC/ExTR12.0007/01](#)

Quality Assessment Report:

[GB/SIR/QAR10.0001/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The EJB Series enclosures are component certified flameproof enclosures designed for use with a variety of internal equipment. They consist of a rectangular body and a lid which is secured by socket cap screws. On certain versions the lid may incorporate a hinge. The enclosures are manufactured from LM25 aluminium alloy which may be painted or power coated. The lid can be provided with a square or circular window of various sizes as detailed in the schedule below. The circular windows which may be fitted are identical to the lids fitted to the GUB1 (60mm dia.) and GUB3 (86mm dia.) enclosures. Holes for cable entries in the size range M20 to M90 and 1/2" to 3" NPT may be drilled in the enclosure in the areas defined in the Installation, Operation and Maintenance manual. For further information see Annex.

CONDITIONS OF CERTIFICATION: NO



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

Issue 1

Enhancement of gas groups.

Issue 2

Inclusion of cover variants.

Annex:

[Annex to CoC IECEx TRC 12.0007U is 2.pdf](#)



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Skelmersdale,
West Lancashire, WN8 9PN,
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Annex to IECEx Certificate of Conformity

IECEx TRC 12.0007U issue No.:2

Gas and Dust Groups and Temperature Ranges:			
The enclosures were evaluated for use with the following gas / dust groups and temperature ranges:			
Model Designation	Gas Group	Dust Group	Ambient Temperature Range
EJB10, EJB15, EJBS1	IIB+H ₂	IIIC	-40°C to +60°C
EJB2, EJBS2, EJB3, EJB4, EJB5, EJB60	IIB or IIB+H ₂	IIIC	-20°C to +40°C -20°C to +60°C.



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Model designations:

	Plain Cover		Ø60 Window		Ø86 Window		75 x 75 Window		125 x 60 Window		220 x 80 Window		247 x 199 Window		299 x 199 Window	
	Full Ht	Red'd Ht	Full Ht	Red'd Ht	Full Ht	Red'd Ht	Full Ht	Red'd Ht	Full Ht	Red'd Ht	Full Ht	Red'd Ht	Full Ht	Red'd Ht	Full Ht	Red'd Ht
EJB2 SERIES	EJB2															
EJB3 SERIES	EJB3A	EJB3RA	EJBH3A	EJBH3RA	EJBH31A	EJBH31RA	EJBWH3A	EJBWH3RA								
EJB4 SERIES	EJB4A	EJB4RA	EJBH4A	EJBH4RA					EJBWV4A	EJBWV4RA	EJBWH4A	EJBWH4RA	EJBWM4A	EJBWM4RA	EJBWL4A	EJBWL4RA
EJB5 SERIES	EJB5A	EJB5RA	EJBH5A	EJBH5RA					EJBWV5A	EJBWV5RA						
EJBS1 SERIES	EJBS1		EJBSH1													
EJBS2 SERIES	EJBS2		EJBSH2													
EJB10 SERIES	EJB10															
EJB15 SERIES	EJB15															
EJB60 SERIES	EJB60										EJBW60					

The EJB4 enclosures are now to include the following additional windowed cover variant designations for the EJB series size 4 enclosures only.

EJBWM4 - Flat cover with window.

EJBWL4 - Flat cover with window



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“Schedule of Limitations” for Ex Components
1. No holes, whether blind or clear may be drilled in the Ex component enclosure other than those permitted by JCE drawing number A3C-3000 Sheet 9 and detailed in the Installation, Operation and Maintenance manual.
2. All blind holes shall have at least one thread remaining when screws are fully tightened without washers.
3. Rotating electrical machines or other devices which create turbulence shall not be incorporated.
4. Oil-filled circuit breakers and contactors shall not be used.
5. The limiting temperature for the window cement material is +100°C.
6. The content of the Ex component enclosure may be placed in any arrangement providing that an area of at least 20% (IIB applications) or 40% (IIB+H ₂ applications) of each cross-sectional area remains free to permit unimpeded gas flow and unrestricted development of an explosion. Separate relief areas may be aggregated provided that each area has a minimum dimension in any direction of 12.5mm.
7. Yield strength of screws shall be 700N/mm ² minimum. All cover screws shall be tightened to the minimum torque listed for the relevant torque listed for the enclosure version.
8. Only suitably IECEx or ATEX certified cable glands and blanking elements (as appropriate to the equipment application) shall be used.
9. When evaluating the component enclosure as equipment, the requirements of EN/IEC 60079-1 Annex D.4 must be applied.
10. Painted or powder coated versions may present an electrostatic hazard. These units should only be cleaned with a damp or anti-static cloth.
11. Flamepath lengths are in excess of that required by EN/IEC 60079-1. No modification or refurbishment to flamepaths shall be made without reference to the manufacturer.
12. Minimum distance between flanged joints and any obstructions shall be in accordance with EN/IEC 60079-1 Table 8 (30mm for gas group IIB, 40mm for gas group IIB+H ₂).
13. As part of the routine maintenance schedule, the condition of the window cement shall be periodically inspected for any degradation or discolouration of the cement that may compromise the explosion protection.



"Routine tests"	
1. The manufacturer shall perform a 1.5x routine pressure test in accordance with EN/IEC60079-1 Clause 16.1 at the following pressures. There shall be no permanent deformation or damage which would affect the type of protection, and the flameproof joints shall in no place have been permanently enlarged.	
EJBS1	14.7 Bar
EJB2/S2	12.3 Bar
EJB3/4	11.1 Bar
EJB5	9.0 Bar (IIB)
EJB5	12.2 Bar (IIB+H ₂)
EJB10/15	14.3 Bar
EJB60	10.5 Bar



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IECEx TRC 12.0007u issue No.:2

Manufacturer's Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Certification Drawings – EJB Series Enclosures to Exd IIB & Exd IIB + H ₂ (20 pages)	A3C-3000	3	2013-07-24
Installation, Operation and Maintenance Manual	*	2	2012-07
Datasheet – Adhesive	10-1096G-01	*	2008-11-21
* no information provided			