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 TRC 13.0018X**

Page 1 of 6

Certificate history:
Issue 2 (2019-02-13)
Issue 1 (2017-10-30)
Issue 0 (2014-02-12)

Status: **Current**

Issue No: 3

Date of Issue: 2026-03-05

Applicant: **JCE (Europe) Ltd.,**
East Way
Lee Mill Ind. Estate
Ivybridge
Devon
PL21 9LL
United Kingdom

Equipment: **Flameproof Enclosures, EMH29 Series Models EMH29, EMH29E, EMH29SS, EMH29ESS, EMH29P, EMH29PE, EMH29PSS, EMH29PESS, EMH29F, EMH29FSS**

Optional accessory:

Type of Protection: **Flameproof, Enclosure, Optical Radiation**

Marking: Ex db IIC T5 / T6 Gb

Ex db op is IIC T5 / T6 Gb

Ex tb IIIC T95 °C / T80 °C Db

Ex tb op is IIIC T95 °C / T80 °C Db

Tamb. -20 °C or -40 °C to +40 °C or +60 °C.

Maximum power input 30 W.

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

Position: **Certification Manager**

Signature:
(for printed version)

Date:
(for printed version)

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:

Element Materials Technology
Unit 1 Pendle Place
Skelmersdale
West Lancashire

IECEx Certificate of Conformity

Manufacturer: **JCE (Europe) Ltd.,**
East Way
Lee Mill Ind. Estate
Ivybridge
Devon
PL21 9LL
United Kingdom

Manufacturing locations: **JCE (Europe) Ltd.,**
East Way
Lee Mill Ind. Estate
Ivybridge
Devon
PL21 9LL
United Kingdom

JCE Group (UK) Ltd.,
Blackburn Business Park
Aberdeen
AB21 0PS

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 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
Edition:3.0

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 Reports:

GB/TRC/ExTR13.0019/00 GB/TRC/ExTR13.0019/01 GB/TRC/ExTR13.0019/02

Quality Assessment Reports:

GB/ITS/QAR11.0014/07 GB/SIR/QAR10.0001/10

IECEx Certificate of Conformity

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

The EMH29 equipment is a flameproof enclosure, designed to be fitted with a variety of internal equipment as detailed in the scheduled drawings.
The equipment model designations are detailed in Table 1. The EMH29 comprises a lower threaded body section base casting and an upper threaded cast cover with a windowed aperture. A threaded body extension is available that increases the volume of the enclosure through insertion between the lower base and the upper cover to accommodate a range of equipment.
The lower body section and extension are fabricated from either LM25 Aluminium or Stainless steel. The upper windowed covers and guards can also be made from LM25 Aluminium or Stainless steel.
In addition the aluminium body and cover may be coated.
The enclosure cover is available with either an 80mm or 86mm diameter aperture forming a cemented viewing window that can be provided with three glazing options comprising plain soda lime glass, Patol® glass, or Spectrosyl glass. The Patol® and Spectrosyl glass additionally includes a mechanical cover with viewing apertures provided for observation purposes when equipment such as cameras are fitted within the enclosure. Alternatively, guards may be employed where IR receivers are fitted.
The base casting can be supplied with either 1 x M25 or a 1 x 3/4" NPT entry located in the top face and either 2 x M20 entries or 2 X ½" NPT entries located in the bottom face positioned at 45mm centres. The guard for the Patol is supplied with a ¼ BSP parallel thread for connection of the air curtain supply, this connection is not critical to the protection concept.
The enclosure cover and base are secured with stainless steel locking screws to the body extension. The enclosure base is also supplied with an M4 stainless steel internal earth and a separate external M6 stainless steel earth stud as standard.
No additional entries are permitted into the enclosure other than those already permitted by the enclosure manufacturer.
The equipment was evaluated for use with gas group IIC, and dust group IIIC.
The Spectrosyl glass variant is only permitted for use in non op-is applications.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Where painted or powder coated, the enclosure could present an electrostatic hazard. Clean only with a damp or anti-static cloth.
2. Flamepaths shall not be repaired by the end user.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1 - Enclosures fitted with IR-LEDs are marked 'op is'

Issue 2 - Administrative change only

Issue 3 - Standards updated to latest editions, addition of models EMH29F and EMH29FSS, Specific Conditions of Use reworded.

IECEx Certificate of Conformity

Additional information:
Table 1 - Model Designation

Model Designation	Assembly & Dimensions	Material	Lid Style
EMH29	Standard enclosure 146mm Diameter x 129mm high	Aluminium LM25	Window
EMH29E	Enclosure fitted with extension 146mm Diameter x 299 mm high	Aluminium LM25	
EMH29SS	Standard enclosure (stainless steel) 146mm Diameter x 129mm high	Stainless steel	
EMH29ESS	Enclosure & extension (stainless steel) 146mm Diameter x 299 mm high	Stainless steel	
EMH29P	Enclosure fitted with Patol Glass & guard. 146mm Diameter x 129mm high	Aluminium LM25	
EMH29PE	Enclosure fitted with extension, Patol glass & guard 146mm Diameter x 299 mm high	Aluminium LM25	
EMH29PSS	Enclosure (stainless steel) fitted with Patol Glass & guard. 146mm Diameter x 129mm high	Stainless steel	
EMH29PESS	Enclosure & extension (stainless steel) fitted with Patol Glass & guard. 146mm Diameter x 299 mm high	Stainless steel	
EMH29F	Enclosure fitted with Spectrosyl Glass & guard. 149mm Diameter x 170mm high	Aluminium LM25	
EMH29FSS	Enclosure (stainless steel) ted with Spectrosyl Glass & guard. 149mm Diameter x 170mm high	Stainless steel	

Code	Description	Power Dissipation (W)	Ambient Temperature			
			Lower		Upper	
EMH29	Standard enclosure.	**30W maximum power dissipation**. (This applies to all equipment model numbers listed)	-40°C	-20°C	+40°C	+60°C
EMH29SS	Standard enclosure (stainless steel)		-40°C	-20°C	+40°C	+60°C
EMH29P	Enclosure fitted with Patol Glass & guard.		-40°C	-20°C	+40°C	+60°C
EMH29PSS	Enclosure (stainless steel) fitted with Patol Glass & guard.		-40°C	-20°C	+40°C	+60°C
EMH29E	Enclosure fitted with extension.		-40°C	-20°C	+40°C	+60°C
EMH29ESS	Enclosure & extension (stainless steel).		-40°C	-20°C	+40°C	+60°C
EMH29PE	Enclosure fitted with extension, Patol glass & guard		-40°C	-20°C	+40°C	+60°C
EMH29PESS	Enclosure & extension (stainless steel) fitted with Patol Glass & guard.		-40°C	-20°C	+40°C	+60°C
EMH29F	Enclosure fitted with spectrosyl glass and gaurd		-	-20°C	+40°C	+60°C
EMH29FSS	Enclosure fitted with spectrosyl glass and guard (stainless steel)		-	-20°C	+40°C	+60°C

IECEx Certificate of Conformity

Table 2 - Thermal Data

Ambient Temperature	Temperature Classification
+40 °C	T6/T80 °C
+60 °C	T5/T95 °C

Routine Tests

1. The manufacturer is exempted from routine pressure testing the soda lime glass and Patol glass glazed windows when used at lower ambient temperature of -20 °C.
2. The manufacturer shall perform a 1.5x routine pressure test in accordance with EN/IEC 60079-1 Clause 16.1 at 16.4 bar for no less than 10 seconds when used at a lower ambient temperature of -40 °C.
3. For Spectrosyl windows, the manufacturer shall perform a 1.5x routine overpressure test in accordance with EN/IEC 60079-1 Clause 16.1 at 12.0 bar for no less than 10 seconds when used at a lower ambient temperature of -20 °C.

Components

Component enclosure IECEx TRC 13.0020U, IEC 60079-0 (Ed.6.0) (2011), IEC 60079-1 (Ed.6) (2007), IEC 60079-31 (Ed.1) (2008). Technical Differences evaluated and found satisfactory – for detail see ExTR.

The list of controlled technical documentation is given in TRA-067135-00-SDL, dated 2026-03-02.