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 CML 23.0024X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2023-11-28)
Date of Issue:	2024-12-11		
Applicant:	**Hubbell Limited t/a Hawke International** Ashton Road Bredbury Park Industrial Estate Bredbury Stockport SK6 2QN **United Kingdom**		
Equipment:	**Instrum-Ex Range of In-line and Bulkhead Plug & Socket Connectors**		
Optional accessory:			
Type of Protection:	**Flameproof Ex "db", Increased Safety Ex "eb" and Dust Protection Ex "tb"**		
Marking:	Ex db eb IIC T6 Gb Ex tb IIIC T80°C Db Ta= -40°C to +60°C		

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

Position: **Assistant Certification Manager**

Signature: (for printed version)



Date: (for printed version) 11 Dec 2024

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:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom

IECEx Certificate of Conformity

Manufacturer: **Hubbell Limited t/a Hawke International**
Ashton Road
Bredbury Park Industrial Estate
Bredbury
Stockport SK6 2QN
United Kingdom

Manufacturing locations: **Hubbell Limited t/a Hawke International**
Ashton Road
Bredbury Park Industrial Estate
Bredbury
Stockport SK6 2QN
United Kingdom

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

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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/CML/ExTR23.0025/00 GB/CML/ExTR24.0241/00

Quality Assessment Report:

GB/SGS/QAR24.0002/00

IECEx Certificate of Conformity

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

The “InstrumEx” Range of Connectors may be manufactured in brass, steel, stainless steel or bronze, and each comprise a cylindrical body...

Refer to Certificate Annex for full description and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:
Refer to Certificate Annex for Specific Conditions of Use.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1
This issue introduces the following change:

1. To recognise a change to the applicant's and manufacturer's name and address.

Annex:

Certificate Annex IECEx CML 23.0024X, Iss 1_1.pdf

Annexe to:	**IECEx CML 23.0024X Issue 1**
Apparatus:	**Instrum-Ex Range of In-line and Bulkhead Plug & Socket Connectors**
Applicant:	**Hubbell Limited t/a Hawke International**

Description

The “InstrumEx” Range of Connectors may be manufactured in brass, nickel platted brass or stainless steel, and each comprise a cylindrical body which may take the form of a Type CP (Connector Plug) In-line Connector, a Type CR (Connector Receptacle) In-line Connector or a Type BR Bulkhead Receptacle Connector.

This connector is designed in such a way that the plug and sockets can be disengaged in an explosive atmosphere whilst energised.

CP and CR Connectors consist of the components listed below. All components are common other than the shells which are provided with opposing engaging threads - male (CP) and female (CR). Both CR and CP configurations may be fitted with pin or socket style contacts.

- Cap
- Engaging nut*
- Snap ring*
- Shell
- Deluge boot
- Insert Assembly
- Clamping ring and spigot
- Middle nut
- Backnut Clamp and Seal
- Backnut
- External Clamp (optional)

*These parts are specific to the CP version of the InstrumEx.

The Bulkhead BR is to be mounted on enclosure wall to receive a CP Connector and is comprising of following components:

- Cap
- Shell
- O Ring seal
- Continuity Spring Clip
- Insert Assembly
- Skid Washer
- Flameproof Seal
- Compressor Assembly

Retainer The CP and CR Connector rear component, which normally provide cable armour termination and environmental seal; may be replaced with an alternative shell with a threaded entry hole to accept a cable gland. The male and female parts are joined with a threaded locking ring which is fixed to the male half. When separated the connection chambers are fitted with caps in order to maintain the ingress protection, which are secured in the same manner.

The cylindrical body houses a 4-, 8- or 9-way electrical plug and socket arrangement which may be keyed into a range of orientations. The plug and socket assemblies are supported from the rear by cable entry arrangements and optional external mechanical clamp.

The table below defines the electrical ratings of the certified variations:

TRADE SIZE	RATING
4 Way	250 V a.c. 10A/ 60 V d.c 2.5A
8 Way	60 V a.c 1A/ 60 V d.c 0.5A
9 Way	250 V a.c. 10A/ 60 V d.c 2.5A

Conditions of Manufacture

None.

Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

i. The connector part containing the pin connections shall not be energized once separated.
ii. In a hazardous are environments, the product should be secured with protective caps at all times to maintain IP (ingress Protection) ratings and the relevant Ex protection concepts.
iii. The bulkhead connector is not to be fitted to enclosures/equipment where the interface temperature may exceed 80°C.
iv. When used in dust environments the cable entry, or bulkhead mounting, shall be sealed in accordance with the installation code of practice to ensure that a minimum ingress protection of level IP6X is maintained.
v. The flameproof joints shall not be repaired.
vi. The cable shall be effectively clamped to prevent pulling and twisting (does not apply when fitted with rear clamping device or Hawke Gland Mounted Clamp (GMC).

Components used which are covered by Ex Certificates issued to older editions of Standards

None.