



# 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](http://www.iecex.com)

Certificate No.:	<b>IECEX TRC 13.0010X</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 4	Issue 3 (2020-04-02)
Date of Issue:	2024-03-20		Issue 2 (2015-03-20)
Applicant:	<b>Val Controls A/S</b> Sallingsundvej 5 Esbjerg N 6715 Denmark		Issue 1 (2014-03-28)
Equipment:	<b>Valve Controller, IVC24 Intelligent Valve Controller, IHP24 Intelligent Hydraulic Positioner &amp; IDC24-F Intelligent Diagnostic Controller</b>		Issue 0 (2013-07-31)
Optional accessory:			
Type of Protection:	<b>Flameproof enclosure "d", Intrinsic safety "i", Dust ignition protection by enclosure "t"</b>		
Marking:	Ex db [ia] IIC T6 Gb Tamb = -* °C to +60 °C Ex db [ia] IIC T4 Gb Tamb = -* °C to +85 °C Ex tb IIIC T85°C Db Tamb = -* °C to +60 °C Ex tb IIIC T135°C Db Tamb = -* °C to +85 °C *See Special Condition for Manufacturing No.3 in Annex.		

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](http://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

Certificate No.: **IECEX TRC 13.0010X**

Page 2 of 4

Date of issue: 2024-03-20

Issue No: 4

Manufacturer: **Val Controls A/S**  
Sallingsundvej 5  
Esbjerg N 6715  
Denmark

Manufacturing locations:

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 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

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/ExTR13.0004/00](#)  
[GB/TRC/ExTR13.0012/01](#)

[GB/TRC/ExTR13.0004/01](#)

[GB/TRC/ExTR13.0012/00](#)

Quality Assessment Report:

[GB/EXV/QAR17.0016/05](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX TRC 13.0010X**

Page 3 of 4

Date of issue: 2024-03-20

Issue No: 4

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The IVC24/IHP24/IDC24-F Valve Controllers are designed to provide high accuracy feedback of valve position, with comprehensive diagnostics, for use with plant control systems and can be used in hazardous gas or dust atmospheres. The equipment is mounted to a valve via a mounting plate and mounting kit. A shaft on the bottom of is physically linked to the valve and passes into the flameproof IP6X enclosure. This shaft can be linked internally to a variety of internal components - micro switches, position transmitters, reed switches, proximity sensors etc depending on the end user requirements. This shaft can also be equipped to provide a physical 'open/closed' type of visual indication. The proximity and position sensors are approved intrinsically safe components that can be fitted within the enclosure therefore with regard to gas atmospheres these are associated equipment.

There are many options available for the internal components that can be fitted but the enclosure is the same for all models. Two faces contain the entry ports into the enclosure and can be supplied as M20, M25, ½ or ¾ NPT threaded entries.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

1. The equipment shall not be subjected to a build up of dust and is to be cleaned regularly to prevent a build up of dust forming on the enclosure.
2. The intrinsically safe components shall be supplied by an IECEx approved barrier.



# IECEX Certificate of Conformity

Certificate No.: **IECEX TRC 13.0010X**

Page 4 of 4

Date of issue: 2024-03-20

Issue No: 4

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

Change of address of applicant and update of standards to state of the art.

**Annex:**

[Annex to CoC IECEx TRC 13.0010X Issue 4.pdf](#)



**Annex to IECEx Certificate of Conformity**

**IECEx TRC 13.0010X issue No.:4**

<b>Routine Tests</b>
1. None.

<b>Special conditions for manufacture</b>
<ol style="list-style-type: none"> <li>The input parameters markings for the intrinsically safe components shall be determined from their respective certificate numbers depending upon whether they are required for ATEX.</li> <li>Care should be taken to ensure that the minimum and maximum temperature information on the intrinsically safe components used within the IVC24/IHP24 valve controller is observed and satisfies the Tamb parameters and the T-class for the IVC24/IHP24 units.          Note that minimum ambient markings will depend on approved intrinsically safe components, if fitted, as will the parameters. Units will be marked accordingly at the point of manufacture in line with their individual intrinsically safe equipment approvals. However minimum permitted ambient in all cases is 40 °C.</li> </ol>

<b>Table of entity parameters</b>															
<table border="1"> <thead> <tr> <th colspan="3">Table of entity parameters</th> </tr> <tr> <th>Parameter</th> <th>Proximity sensor</th> <th>Transmitter</th> </tr> </thead> <tbody> <tr> <td>Ui</td> <td rowspan="4">Replication of parameters listed on fitted approved Sensor certificate.</td> <td rowspan="4">Replication of parameters listed on fitted approved Transmitter certificate.</td> </tr> <tr> <td>Ii</td> </tr> <tr> <td>Pi</td> </tr> <tr> <td>Ci</td> </tr> <tr> <td>Li</td> <td></td> <td></td> </tr> </tbody> </table>	Table of entity parameters			Parameter	Proximity sensor	Transmitter	Ui	Replication of parameters listed on fitted approved Sensor certificate.	Replication of parameters listed on fitted approved Transmitter certificate.	Ii	Pi	Ci	Li		
Table of entity parameters															
Parameter	Proximity sensor	Transmitter													
Ui	Replication of parameters listed on fitted approved Sensor certificate.	Replication of parameters listed on fitted approved Transmitter certificate.													
Ii															
Pi															
Ci															
Li															

Part number nomenclature 1 refer to Drawing A190281-VAL

<b>Feature code</b>	<b>Nomenclature</b>
0	Product name IVC24/IDC/IHP24
-	
1	Type F
2	Communication 1 0 - No Additional Comms 1 - HART Control Loop 2 - HART Transmitter Loop 3 - Modbus RTU 4 - Foundation Fieldbus 5 - Wireless HART
3	Communication 2 0 - None 1 - Bluetooth
4	Power Supply 3 - ESD Controller (SIL) 4 - ESD Controller (SIL) + extra 24 VDC Supply
5	Limit Switch 0 - Base Model only. No additional Switches/Sensors  1 - (2) SPDT Mechanical Switch Up to 10 A @ 125/250 VAC Up to 0.5 A @ 125 VDC Not recommended for i.s. Circuits  2 - (2) SPDT Reed Switch Max Current 3 A. Max Power 100 W/VA Suitable for I.S. Circuits - See I.S. Parameters on Unit  3 - (2) V3 Style Proximity Sensor Op Voltages 10 to 60 VDC 10 to 250 VAC Op current        2 to 400 mA Some sensors Suitable for I.S. Circuits - See I.S. Parameters on Unit
6	Enclosure S - 316SS Cover & Housing L - 316L SS Cover & Housing
7	Conduit Entries 1 - (6) M20 x 1.5
8	Indicator 1 - RED CLOSED/ GREEN OPEN 0 - No Visual Indicator
9	Ex I - Exd ib Feature designator No. I.S. Components A - Exd ib Feature designator ATEX only



**Annex to IECEx Certificate of Conformity**

**IECEx TRC 13.0010X issue No.:4**

B - Exd ib Feature designator ATEX and IECEx
--

Example IVC24-F0031S

<b>Manufacturer's Documents</b>
---------------------------------

Title:	Drawing No.:	Rev. Level:	Date:
External Earthing Clamp	A100353	*	2008-09-22
Master Model Description	A190281-EX-VAL	*	2014-03-10
Intrinsically Safe Information	A190292-VAL	E	2014-03-10
Housing	C100190-VAL	*	2014-03-10
Cover	C110150-VAL	*	2014-03-10
General Layout	J100411-VAL	*	2014-03-10
Shaft Assembly	J100418-VAL	*	2014-03-10
Flamepath Gaps in Assembly	J100419	B	2013-02-28
Volume Calculation for Assembly	J100420-VAL	*	2014-03-10
Termination Spacing	J100421-VAL	*	2014-03-10
Exd Requirements	J100422-VAL	*	2012-03-10
Typical Assembly – w/ 2 x V3 Mech	J100432-VAL	*	2014-03-10
Installation, Operating & Maintenance - IVC24 – IECEx/ATEX Unit	IVC-IOM-002	*	2024-02-08
Title Plate IECEx / ATEX Unit	A160190-VAL	B	2024-02-08
IVC/IDC/IHP24 Identification Format	A190281-VAL	B	2015-02-18