

1

CONFORMITÉ EUROPÉENNE

EU - TYPE EXAMINATION CERTIFICATE

2 **Product or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU – Annex III**

3 EU - Type Examination Certificate No.: **TRAC13ATEX0029X (incorporating variations V1 to V4)**

4 Product: **Intelligent Valve Controller – IVC24; Intelligent Diagnostic Controller – IDC24-F; Intelligent Hydraulic Positioner – IHP24**

5 Manufacturer: **Val Controls A/S**

6 Address: **Sallingsundvej 5, DK-6715 Esbjerg N, Denmark**

7 This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Element Materials Technology, Notified Body number 2812, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential reports **TRA-011757-33-00A, TRA-011757-33-02A and TRA-063333-33-00A.**

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:


**EN IEC 60079-0:2018 EN 60079-1:2014 EN 60079-11:2012
EN 60079-31:2014**

Except in respect of those requirements listed at section 18 of the schedule.

10 If the sign “X” is placed after the certificate number, it indicates that the product is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of this product shall include the following:

 **II 2 G D 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 Conditions for Manufacture No 3.

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the Element Materials Technology Ex Certification Scheme.

S.P. Winsor

S P Winsor, Certification Manager

Issue date: 2024-03-21 (issue 2)

Page 1 of 7

CSF355-NL 5.0

13 SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

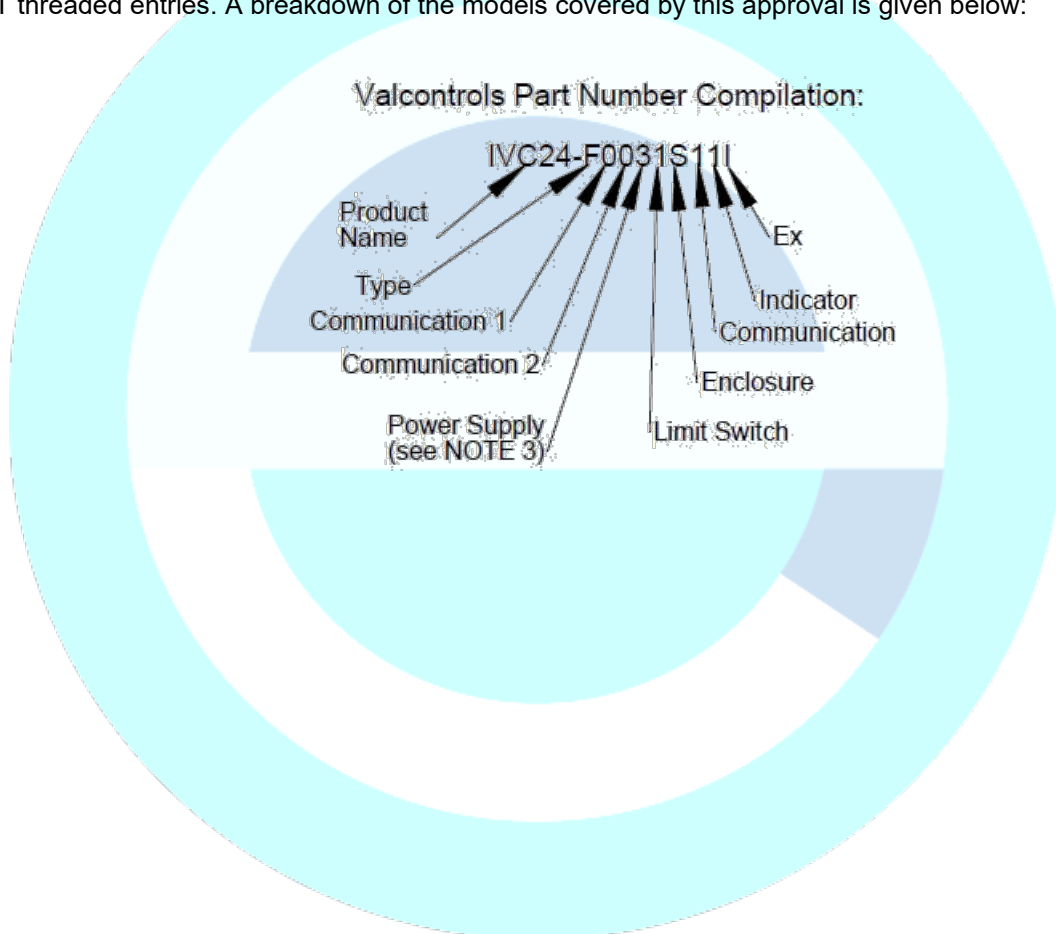
14 CERTIFICATE NUMBER TRAC13ATEX0029X (incorporating variations V1 to V4)

15 Description of Product

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, 1/2 or 3/4 NPT threaded entries. A breakdown of the models covered by this approval is given below:



SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER TRAC13ATEX0029X (incorporating variations V1 to V4)

Part number nomenclature 1 refer to Drawing A190281-VAL

Feature code	Nomenclature Product Name, Type, Comm 1, Comm 2, Power, Limit switch, Enclosure, Conduit entries, Indicator, Ex.
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 B - Exd ib Feature designator ATEX and IECEx

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER TRAC13ATEX0029X (incorporating variations V1 to V4)

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.

The temperature class, operating ambient temperature and intrinsic safety entity parameters U_m , U_i , I_i , P_i , C_i , L_i , U_o , I_o , P_o , L_o , C_o are fully described in Drawing A190354-VAL.

16 Test Report No. (as added for this issue of the certificate): TRA-063333-33-00A.

17 Specific Conditions of Use

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 ATEX/IECEx-approved barrier.



Attention is drawn to the operating and installation instructions which may contain useful information in relation to conditions of use.

18 Essential Health and Safety Requirements (Directive Annex II)

Element Materials Technology has conducted a gap analysis between the standards applied within the reports listed under section 8 and the latest versions of the corresponding harmonised standards (as listed in section 9). This analysis has confirmed continued compliance with the Essential Health and Safety Requirements. The analysis is detailed in report: TRA-063333-33-00A.

In addition to the Essential Health and Safety Requirements covered by the standards listed at item 9, all other requirements are demonstrated in the relevant reports.

19 Drawings and Documents

The list of controlled technical documentation is given in Appendix A to this schedule.

20 Routine Tests

None.

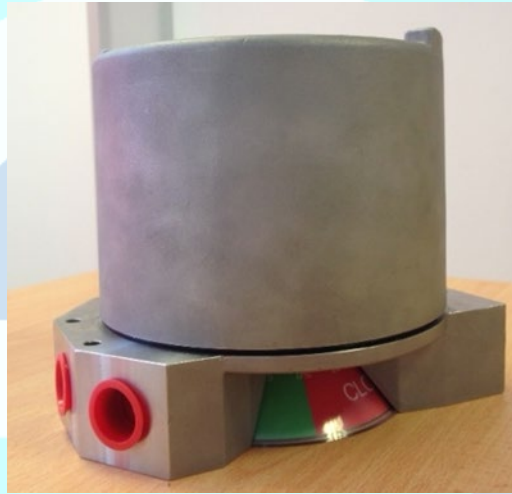
SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER TRAC13ATEX0029X (incorporating variations V1 to V4)

21 Specific Conditions for Manufacture

1. 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.
2. 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.
3. 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.

22 Photographs



23 Details of Markings

IP6 Valve Controller
IEC CERTIFICATE NO: IECEx TRC 13.0010X
ATEX CERTIFICATE NO: TRAC13ATEX0029X



Model:	Serial:
--------	---------


Exdb [ia] IIC T6 Tamb = - °C to +60°C Gb & Ex tb IIIC T85°C Db IP6X
Exdb [ia] IIC T4 Tamb = - °C to +85°C Gb & Ex tb IIIC T135°C Db IP6X

INTRINSICALLY SAFE COMPONENTS (connect to safe area via Certified Barrier):


INTRINSICALLY SAFE INFORMATION:			
U _i	V	L _i	μH
I _i	mA	C _i	nF
P _i	W		


YEAR OF MANUFACTURE

⊕  

 CONSULT INSTRUCTIONS PRIOR TO INSTALLATION, OPERATION or MAINTENANCE

WARNING: FOR T_{amb} +85°C, CABLE GLANDS OR CONDUCTORS IN CONDUIT ENTRIES SHALL BE RATED +100°C (MIN)
WARNING: DO NOT OPEN WHEN ENERGISED OR WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

 Warning: Electrostatic Hazard - See Instructions


VAL CONTROLS
Intelligent Valve Control
6715 Esbjerg, Denmark
www.valcontrols.com

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE

CERTIFICATE NUMBER TRAC13ATEX0029X (incorporating variations V1 to V4)

24 Certificate History

Original certificate	2013-07-31	First issue.
Variation V1	2014-03-26	Update to scheduled drawings list.
Variation V2	2015-03-20	Addition of model Intelligent Diagnostic Controller – IDC24-F This certificate was originally issued by Notified Body number 0891 under Directive 2014/34/EU. The technical file has been transferred to Element Notified Body number 2812 without further assessment or evaluation.
Variation V3	2023-08-10	
Variation V4	2024-03-20	Change of address and update to Standards EN IEC 60079-0:2018, EN 60079-7:2014, EN 60079-31:2014
Variation V4 issue 2	2024-03-21	Correction to Feature Code / Nomenclature table on p3. No other change.

This certificate is a consolidated certificate and reflects the latest status of the certification, including all variations and amendments.

25 Notes to CE marking

In respect of CE Marking, Element Materials Technology accepts no responsibility for the compliance of the product against all applicable Directives in all applications.

26 Notes to this certificate

Element Materials Technology certification reference: ERO041508P10 (GU-VALQ-0006).

Throughout this certificate, the date format yyyy-mm-dd (year-month-day) is used.

Notified Body number 2812 is the designation for Element Materials Technology Rotterdam BV.

In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variation certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20 April 2016.

27 Conditions for the validity of this certificate

This certificate remains valid for so long as:

- (i) The equipment listed in section 4 is manufactured in accordance with the documents listed in Appendix A of this certificate.
- (ii) The standards listed in section 9 of this certificate continue to satisfy the Essential Health and Safety Requirements of Annex II of Directive 2014/34/EU and the generally acknowledged state of the art (e.g. as determined by the publishers of those standards).

SCHEDULE TO EU - TYPE EXAMINATION CERTIFICATE**CERTIFICATE NUMBER TRAC13ATEX0029X (incorporating variations V1 to V4)****APPENDIX A - TECHNICAL DOCUMENTS**

Title:	Drawing No.:	Rev. Level:	Date:
External Earthing Clamp	A100353	-	2008-09-22
Master Model Description IVC/IDC/IHP24 Identification Format	A190281-VAL	C	2020-10-22
Intrinsically Safe Information	A190394-VAL	E	2022-08-09
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 (11 pages)	IVC-IOM-004	-	2024-02-08
Title Plate IECEX / ATEX Unit	A160190-VAL	B	2024-02-08

Note: The symbol “ - ” indicates that this information was not available.