IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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Certificate No.:	**IECEx SIR 09.0061X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 10	Issue 9 (2023-02-02) Issue 8 (2022-02-18) Issue 7 (2020-02-12) Issue 6 (2019-06-27) Issue 5 (2015-09-29) Issue 4 (2015-08-14) Issue 3 (2014-08-08) Issue 2 (2013-02-20) Issue 1 (2012-05-31) Issue 0 (2009-08-28)
Date of Issue:	2024-09-05		
Applicant:	**Westlock Controls Corp** 280 N. Midland Avenue Saddle Brook New Jersey 07663 **United States of America**		
Equipment:	**D230, D240, D250 Rotary valve Position Control Transmitter Hart Enabled. D241, D251 Rotary Valve Position Transmitters Hart Enabled 3300 (5004/5044) Series and 8300 (XXXX) Series Position Monitors 3600 (711/722/7304/7344) Series and 8600 (811/822/7345) Series Control Monitors.**		
Optional accessory:			
Type of Protection:	**Intrinsic Safety "ia" and Dust Protection by Enclosure "tb"**		
Marking:	Ex ia II* T* G* Ex tb III C T_5 135°C Db IP6X Tamb: -*°C to +*°C * This information can change dependent on the construction, see Annexe, Conditions of Manufacture		

Approved for issue on behalf of the IECEx Certification Body: **Michelle Halliwell**

Position: **Director Operations, UK & Industrial Europe**

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom

IECEx Certificate of Conformity

Manufacturer:
Westlock Controls Corp
280 N. Midland Avenue
Saddle Brook
New Jersey 07663
United States of America

Manufacturing locations:
Westlock Controls Corp
280 N. Midland Avenue
Saddle Brook
New Jersey 07663
United States of America

Crane Fluid & Gas Systems (Suzhou) Co., Ltd.
No. 1, Runsheng Road
SIP
Suzhou
Jiangsu 215126
China

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

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/SIR/ExTR09.0077/00
GB/SIR/ExTR09.0078/00
GB/SIR/ExTR09.0082/00
GB/SIR/ExTR09.0088/00
GB/SIR/ExTR12.0118/00
GB/SIR/ExTR13.0039/00
GB/SIR/ExTR14.0189/00
GB/SIR/ExTR15.0217/00
GB/SIR/ExTR15.0248/00
GB/SIR/ExTR19.0176/00
GB/SIR/ExTR20.0025/00
GB/SIR/ExTR22.0013/00
GB/SIR/ExTR23.0030/00
GB/SIR/ExTR24.0103/00

Quality Assessment Reports:

GB/FME/QAR22.0001/01
US/FMG/QAR08.0002/13

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

The 3300 (5004/5044), 3600 (711/722/7304/7344), 8300 (XXXX) and 8600 (811/822/7345) Series Valve Monitors are constructed from a 2-part aluminium, stainless steel or Grilamid TR 90 UV materials depending on the option/part number type selected. The enclosure contains a number of different types of proximity switches/sensors, simple mechanical type switches, solenoid valves or optional DS Transmitter depending on the build/model option selected. A terminal strip(s) is internally mounted to facilitate the electrical wiring between the internal electrical parts and the external cables. External electrical connections are made to the screw type terminals with access for the cables being provided by a number of cable glands arranged on the bottom part of the enclosure. In addition to the foregoing, internal, electrical parts, the 3600 and 8600 Series are fitted with a number of external, pneumatic parts operated by the internal solenoids/valves.

Some versions have a single metallic shaft that emerges from the top and the bottom faces of the enclosure, a polycarbonate or Grilamid beacon may optionally be fitted to this shaft that on top of the enclosure. This visual indicator provides symbols or words that indicate the 'open' or 'closed' position or direction of flow; the state of the valve is further visibly enhanced by the use of different background colours for the words or symbols.

Models D230, D240, D250, D241, D251 Series Transmitters: Are constructed from two part aluminum, stainless steel or Grilamid TR 90 UV materials depending on the option/part number type selected. A number of different types of proximity switches/sensors, simple mechanical type switches and solenoid valves offered as options.

Refer to the Annexe for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The user/installer shall install these products taking into account any restrictions or special conditions for safe use that are applicable to the previously certified devices that are used in them.
2. The various devices (switches, sensors and transmitters) shall be treated as separate intrinsically safe circuits.
3. WARNING: POTENTIAL ELECTROSTATIC CHARGING HAZARD- Refer to the instructions on how to clean the equipment safely and prevent static charge build-up on the Grilamid enclosure or beacon (when fitted).
4. When the enclosure is manufactured from aluminium ignition sources due to impact and friction sparks may occur. This shall be considered when the monitor is being installed, particularly in locations that specifically require EPL Ga equipment.
5. For all types of enclosures the maximum dust layer shall be no greater than 5 mm (T5 135°C)

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, Issue 9, recognises the following changes; refer to the certificate annex to view a comprehensive history:

1. Update drawing SW-10000-LXX rev. B to rev. G and drawing SW-10108-LXX rev. B to rev. C.

Annex:

IECExSIR 09.0061X Annexe Iss 10_1.pdf

Proximity switches/sensors: these are Ex approved devices certified under the following certificates:

IECEx PTB 11.0021X	IECEx PTB 11.0037X	IECEx PTB 11.0091X
IECEX PTB 11.0092X	IECEx KEM 06.0036X	

Solenoid valves: These are Ex approved devices certified under the following certificates that may be fitted to the 3600 and 8600 control monitors.

IECEx IBE 13.0011X	IECEx CML 17.0030X

Mechanical switches:

The simple mechanical switch types are either MAGNUM XT90 Proximity Switch (Reed Switches SPDT) or SPST) or V3 Micro Mechanical Switches (SPDT or SPST), or Magnum switches (SW-110403UK, SW-071403UK, SW-020805UK, SW-040701UK and SW-030901UK).

Foundation Fieldbus Network Module: FPAC2 IECEx FMG14.0014X

Optional DS Position Transmitter:

These devices may be fitted to all Valve Monitors.

Conditions of Manufacture

1. Routine dielectric strength testing required at 500 V r.m.s. per clause 10.3 of IEC 60079-11. The voltage shall be increased steadily to the specified value in a period of not less than 10 s and then maintained for at least 60 s. The applied voltage shall remain constant during the test. The current flowing during the test shall not exceed 5 mA r.m.s. at any time. The test shall be conducted between the equipment enclosure and the connections for all fitted apparatus.
2. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform CSA of any modifications of the devices that may impinge upon the explosion safety design of their products.
3. The manufacturer shall take all reasonable steps to ensure that the user/installer complies with the special conditions for certification associated with these products, in addition, the manufacturer shall provide the user/installer with an appropriate copy of the certificate for each certified device that is fitted in the device.
4. The manufacturer shall mark their products taking into account the following restrictions:
    - The gas group shall be either IIB or IIC dependent on the specification of the devices that are fitted.
    - The temperature class is dependent on the specification of the devices that are fitted.
    - The EPL shall be either Ga or Gb dependent on the specification of the devices that are fitted and enclosure material/size.
    - The lower ambient temperature is dependent on the specification of the devices that are fitted; in addition, the manufacturer shall not mark their products with a lower ambient temperature that is below the following limits:

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Limit	Gasket & O-Ring material	Enclosure material	Devices allowed to be fitted
-40°C	Any	LG1 plastic, LG2 plastic, aluminium or stainless steel	Any
-50°C	Buna-N, Fluorosilicone or EPDM	Aluminium or stainless steel	Certificate IECEx PTB 11.0092X sensor models SJ3,5-SN, NJ10-30GK-SN, NJ4-12GK-SN
-60°C	Silicone	Aluminium or stainless steel	

- The maximum ambient temperature is dependent on devices that are fitted and is limited to +55°C for LG1 plastic enclosures and +60°C for metal or LG2 enclosures.

Full Certificate Change History

Issue 1 – this Issue introduced the following change:

1. The introduction of a new re-designed LG2 enclosure for dust protection Group IIIC 'Ex tb' was approved a Condition of Certification was introduced as a result of this change.

Issue 2 – this Issue introduced the following change:

1. Inclusion of the North American Model numbers corresponding to the European Model numbers as shown in the following table:

European model number	North American model number	Type
3300	5004 / 5044	Position
3600	711 / 722	Control
8300	XXXX	Position
8600	811	Control

NOTE: The 8300 currently does not have a North American equivalent series number, the XXXX is for future use if required.

Issue 3 – this Issue introduced the following changes:

1. It was recognised that metal enclosures that are constructed in accordance with note 6 in drawing MS-060801UK, MS-070801UK, MS-070802UK and MS-070803UK E can be marked -50°C. The notes associated with the marking and conditions of certification were amended accordingly.
2. The introduction of Nass Magnet GmbH type 1259 Solenoid Valve (IECEx PTB 08.0023), the description was amended accordingly.
3. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the documents previously listed, IEC 60079-0:2004, IEC 60079-11:2006, IEC 61241-0:2004 and IEC 61241-1:2004, were replaced by, IEC 60079-0:2011 and IEC 60079-11:2011 the markings were updated accordingly.

Issue 4 – this Issue introduced the following changes:

1. The addition of FPAC2 Foundation Fieldbus Valve Position Monitor certified to IECEx FMG 14.0014X.
2. The list of proximity switches/sensors and was amended.
3. The addition of a new terminal strip option.
4. The addition of a range of Magnum switches.

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5. The Condition of Certification relating to certified internal devices was amended to recognise the above changes.

   Solenoid valves:

   These are Ex approved devices certified under the following certificates that may be fitted to the 3600 and 8600 control monitors.
   IECEx PTB 08.0023 IECEx IBE 13.0011X IECEx BAS 05.0040X

   Mechanical switches:

   The simple mechanical switch types are either MAGNUM XT90 Proximity Switch (Reed Switches SPDT) or SPST) or V3 Micro Mechanical Switches (SPDT or SPST), or Magnum switches (SW-110403UK, SW071403UK, SW020805UK, SW040701UK and SW030901UK).

   Foundation Fieldbus Valve Position Monitor:

   FPAC2 Foundation Fieldbus Valve Position Monitor (IECEx FMG14.0014X)

Issue 5 – this Issue introduced the following changes:

1. The equipment using metal enclosures may be used at -60°C when fitted with a silicone gasket and O-ring.
2. The additional manufacturer's name and address was changed from, Westlock Controls Corporation, 280 N Midland Avenue, Saddle Brook, NJ 07662, USA to, Westlock Controls, 280 N. Midland Avenue, Saddle Brook, NJ 07663, USA.
3. A Condition of Manufacture was amended; this is to clarify the construction of the equipment.

Issue 6 – this Issue introduced the following changes:

1. Inclusion of additional model numbers. The description was amended accordingly.
2. Update to IECEx certificate of a Solenoid Valve used in 3600 and 8600 control monitors.
3. Update of Label drawing.
4. Update to Applicant's and Manufacturer's Name and Address.
   The Applicant's name and address was changed from "Westlock Controls Limited, 22 Chapman Way, Tunbridge Wells, Kent TN2 3EF, United Kingdom" to "Westlock Controls Corp, 280 N. Midland Avenue, Saddle Brook, NJ 07663, United States of America".
   The manufacturer's information is the same as applicant.

Issue 7 – this Issue introduced the following changes:

1. Addition an alternative DS Position transmitter model EL40272-XXXY-ZZZ.
2. Addition of the new series D230, D240, D250, D241, D251 HART Position transmitters.
3. Addition of new model 822 Valve Monitor.
4. The description was amended to reflect these changes.

Issue 8

1. The recognition of an alternative manufacturing location Crane Fluid & Gas Systems (Suzhou) Co., Ltd, No.1 RunSheng Road, ShengPu SIP, JiangSu Province, 215126, China.

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Issue 9 – this Issue introduced the following changes:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed.6 and IEC 60079-31:2008 Ed. 1 were replaced by IEC 60079-0/COR1:2020, Ed 7.0 2017-12 and IEC 60079-31, Ed 3.0 2022-01. The documentation was updated accordingly to recognise the new standards.
2. Removal of the following approved devices from the report, the description was amended accordingly:
    - CS Transmitter / RS Transmitter
    - Proximity switch / sensor covered under IECEx BVS 06.0003
    - Solenoid valve covered under IECEx PTB 08.0023”
3. Inclusion of detail drawings SW-10115-XXX and SW-10297-XXX for V3 MECHANICAL SPDT & SPST switch which is already assessed under assessment report R52L17470A.

Issue 10 – this Issue introduced the following changes:

1. Update drawing SW-10000-LXX rev. B to rev. G and drawing SW-10108-LXX rev. B to rev. C.

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