



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 CSA 25.0024X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2025-06-05		
Applicant:	METTLER-TOLEDO GmbH Process Analytics Im Hackacker 15 Urdorf 8902 Switzerland		
Equipment:	EasyClean 500X		
Optional accessory:			
Type of Protection:	Intrinsic Safety "ia" & Non-electrical "h"		
Marking:	Ex ia [ia Ga] h IIC T4 Gb Ex ia [ia Da] h IIIC T95°C Db Tamb = +2°C to +55 °C IP65 (only for control unit and media connection)		

Approved for issue on behalf of the IECEx
Certification Body:

Dave Magee

Position:

Senior Director of Operations

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.
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Certificate issued by:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada





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Manufacturer: **METTLER-TOLEDO GmbH**
Process Analytics
Im Hackacker 15
Urdorf 8902
Switzerland

Manufacturing
locations: **METTLER-TOLEDO GmbH**
Process Analytics
Im Hackacker 15
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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

[ISO 80079-36:2016](#) Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic methods and requirements
Edition: 1.0

[ISO 80079-37:2016](#) Explosive atmospheres - Part 37: Non-electrical equipment for explosive atmospheres - Non electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"
Edition: 1.0

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 Report:

[CA/CSA/ExTR25.0025/00](#)

Quality Assessment Report:

[CH/SEV/QAR12.0004/10](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Control unit for the Intrac Housing Type EasyClean 500X is designed primarily for managing Intrac housings. The system components following Ex "h" protection type include dosing pump and air adjustor. The other parts of the system is Ex "ia" protection type. It operates under the control of the transmitter, as well as a Distributed Control System (DCS). The system comprises a control unit with integrated control electronics (one PCB board in the control unit), along with the necessary pneumatic and hydraulic circuits to facilitate the operation of the Intrac housing. Additionally, it includes an external media adapter capable of supporting up to three dosing pumps (each dosing pump with one PCB board), which are used for buffer and cleaning solutions. The system is also equipped with proximity switches for service and measurement, ensuring efficient and precise operation.

The EasyClean 500X system consists of three essential subsystems: the control unit, media connections and dosing pumps, as well as an optional subsystem: the high-temperature rinsing box, the two systems are respectively supplied with water at 65°C and 90°C. The media connections and dosing pumps are available in three options.

The control unit consists of 316L stainless steel housing (back cover and front cover), with one PCB installed inside. On the front cover, there are three LED lights to indicate the status of the control unit. On the bottom of the housing, there is a water inlet with the inner diameter of G1/4" and the out diameter of 3/4", a through hole with a diameter of 32.5mm to connect the media connector, air filter connect the control unit by a 36mm through hole and the control unit equipment with a wire terminal via seven M12X1.5 and three M20X1.5 cable entry. There are fifty terminals are designed for external connection.

The media connection is available in 2.1m, 5m or 10m length. It consists of an internal diameter of 32 mm corrugated media connection with a stainless coil and plastic. The connections for media adapter and retractable housing are of a plug-in design. They are screw fixed. Each fluid is fed to the retractable housing through a dedicated tube in the media connection.

The media adapter has 3 ports for the connection of Dosing pumps and Dosing pumps are available in 1 unit, 2 units, or 3 units, the media adapter and Dosing pumps consist of plastic and each dosing pump with one PCB board. These ports are designed for the connection of Dosing pumps that distribute cleaning agent(s) and/or buffer solutions.

The product has been tested in accordance with the test of enclosure and media connection section of IEC 60079-0:2017 and meets the requirements of IP65.

Refer to certificate Annexe for entity parameters and Conditions of Manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Install only as per installation instruction.
2. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
3. All cable entry holes shall be fitted with either certified cable glands or blanking elements with degree of protection IP65 in compliance with the test of enclosure section of IEC60079-0.
4. Resistance to impact was tested corresponding to the low risk of mechanical danger. The equipment has to be protected against strong impacts.
5. For the equipment types with transmitter and retractable housing it must be ensured that a degree of ingress protection of IP65 is provided at the connection to the EasyClean 500X when used as an EPL Gb/Db equipment. After removing the transmitter or retractable housing on the EasyClean 500X, the opening must be closed with a suitable plug so that the degree of ingress protection of IP65 is sufficiently maintained.
6. End user shall pay attention to the running speed of the pump, installation angle and suitable location in order to avoid excessive vibration.
7. The medium or water temperature shall less than 90°C.

Annex:

[IECEx CSA 25.0024X Iss 0 Annexe.pdf](#)

Annexe to: IECEx CSA 25.0024X Issue 0

Applicant: METTLER-TOLEDO GmbH

Apparatus: EasyClean 500X



EQUIPMENT (continued)

The entity parameters are listed in Table:

Terminal No.	Function	Entity parameters				
TB1_25, TB1_24	External power supply Input	U _i =30V	I _i =100mA	P _i =0.8W	L _i =0mH	C _i =14.45nF
TB1_23, 22, 21, 20	RS485	U _o =5.88V U _i =5.88V	I _o =18mA I _i =20mA	P _o =40.1mW P _i =40.1mW	L _o =100mH L _i =0mH	C _o =30uF C _i =220nF
TB1_31, 32, 33, 34, 35	DCS outputs	U _i =30V	I _i =100mA	P _i =0.8W	L _i =0mH	C _i =12nF
TB1_36, 37, 38, 39, 40 M/S TB1_41,42	DCS inputs	U _i =30V	I _i =100mA	P _i =0.8W	L _i =0mH	C _i =12nF

Conditions of Manufacture

The Manufacturer shall comply with the following:

1. The product incorporates previously certified Ex components listed as below. It is therefore the responsibility of Mettler-Toledo to continue monitor the status of the certifications associated with these devices. Mettler-Toledo shall inform CSA of any modifications to the device that may impinge upon the explosion safety design of the product.

Item	Manufacturers and Model Number		IECEx Certificate
Digital isolators	Texas Instrument, Inc	ISO7041FDBQR	IECEx CSA 19.0040U Issue 0

Item	Manufacturers and Model Number		IECEx Certificate
Piezo valve	ASCO Numatics GmbH	Piezo valve 630	IECEx IBE 13.0011X Issue 3

Item	Manufacturers and Model Number		IECEx Certificate
Cylindrical inductive proximity sensors	Pepperl+Fuchs SE	NCB2-12GM35-N0	IECEx PTB 11.0037X Issue 4

Date: 05 June 2025

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