

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
2. **Certificate No:** FM22CA0056
3. **Equipment:** Unical 9000-X and Uniclean 900-X Automated Measurement, Cleaning and Calibration Control System
(Type Reference and Name)
4. **Name of Listing Company:** Knick Elektronische Messgeräte GmbH & Co. KG
5. **Address of Listing Company:** Beuckestrasse 22
Berlin D-14163
Germany
6. The examination and test results are recorded in confidential report number:
PR463748 dated 8th December 2022
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:
CSA-C22.2 No. 60079-0:2019, CAN/CSA-C22.2 No. 60079-11:2014, CAN/CSA C22.2 No. 213:2017
CAN/CSA-C22.2 No. 61010-1:2012, CSA-C22.2 No. 94-M91:1991, CSA-C22.2 No. 60529:2016
8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

8 December 2022

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com



SCHEDULE



Canadian Certificate Of Conformity No: FM22CA0056

9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

10. Equipment Ratings:

Intrinsically Safe for Class I, II, III Division 1, Groups A, B, C, D, E, F, and G, T4 in accordance with drawing 207.011-066; Type 4X, IP65; Ta = -20°C to +50°C
Intrinsically Safe for Class I, Zone 1, Ex ia [ia Ga] IIC T4 Gb with Intrinsically Safe connections to Zone 0 in accordance with drawing 207.011-066; Type 4X, IP65; Ta = -20°C to +50°C
Intrinsically Safe for Zone 21, Ex ia [ia Da] IIIC T130°C Db with Intrinsically Safe connections to Zone 20, in accordance with drawing 207.011-066; Type 4X, IP65; Ta = -20°C to +50°C
Nonincendive for Class I, II, III, Division 2, Groups A, B, C, D, F and G in accordance with drawing 207.011-066; Type 4X, IP65; Ta = -20°C to +50°C; NIFW

11. The marking of the equipment shall include:

Class I, II, III Division 1, Groups A, B, C, D, E, F and G; T4 Ta = -20°C to +50°C; Type 4X, IP65

Class I, II, III, Division 2, Groups A, B, C, D, F and G, T4 Ta = -20°C to +50°C; Type 4X, IP65

Ex ia IIC [ia Ga] T4 Gb; Ta = -20°C to +50°C, Type 4X, IP65

Ex ia [ia Da] IIIC T130°C Db; Ta = -20°C to +50°C, Type 4X, IP65

12. **Description of Equipment:**

General – The Unical 9000-X is an automated measurement, cleaning and calibration control system which consists of the following:

- enclosure with integrated control electronics and the corresponding pneumatic/hydraulic connections,
- Media Connection for operating the retractable probe,
- external Media Adapter for up to three metering pumps with reservoirs for buffer and cleaning solutions and
- external Service Switch for service and measurement

The Uniclean 900-X is identical to the Unical 9000-X but with simplified software and pneumatics, without an external service switch and with only one metering pump and reservoir.

The Unical 9000-X and Uniclean 900-X utilize the same electrical data and ambient temperature range.

Construction - The stainless-steel enclosure is either electro polished or coated with plastic. The front cover is connected to the cabinet by four screws. A flat gasket is located between cover and cabinet.

The control electronics are arranged on one pcb together with the electrical terminals. The electronics is encapsulated and connected to the equipotential bonding. The pneumatic and hydraulic connections consist of intrinsically safe piezo valves, pressure gauges, pressure regulators, filters, pressure switches, and the required tubing. The cable glands for the intrinsically safe circuits, the equipotential bonding connection, the air filter, and the media connections for water and air, for example, are located at the bottom side of the enclosure.

Ratings –

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

SCHEDULE



Canadian Certificate Of Conformity No: FM22CA0056

The Unical 9000-X and Unclean 900-X are rated for use in an ambient temperature range of -20°C to +50°C.

Electrical Ratings –

See control drawing – 207.001-066 for Electrical Ratings

Unical 9000-Xabcdefghij 00 klm Control System

- a = Housing: C, S
- b = Media connection: 1, 2, 3, 4, 5, 6, 7, A, B, C, D, E, F, G
- c = Media interface: 0, 1
- d = Media adapter: 0, 1, A
- e = Equipment for Port I: 0, 2
- f = Equipment for Port II: 0, 2
- g = Equipment for Port III: 0, 2, B
- h = Supplementary air purging kit: C, N
- i = Supplementary ext. valve kit: E, N,
- j = Protective cabinet: 0, 1, 2, 3, 4
- k,l,m = for additional accessories such as material certificates.
possible values 0 ... 9 omitted if not requested

Unclean 900-Xabcdefgh 00 ijk Control System

- a = Housing: C, S
- b = Media connection: 1, 2, 3, 4, 5, 6, 7, C, D, F, G
- c = Media interface: 0, 1
- d = Media adapter: 0, 1, A
- e = Equipment for Port: 0, 2, B
- f = Supplementary air purging kit: C, N
- g = Supplementary ext. valve kit: E, N,
- h = Protective cabinet: 0, 1, 2, 3, 4
- l,j,k = for additional accessories such as material certificates.
possible values 0 ... 9 omitted if not requested.

13. Specific Conditions of Use:

None

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals Canadian Certification Scheme.

15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

SCHEDULE



Canadian Certificate Of Conformity No: FM22CA0056

Details of the supplements to this certificate are described below:

Date	Description
8 th December 2022	Original Issue.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com