

# CERTIFICATE OF CONFORMITY



- HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
- Certificate No:** FM20CA0069X
- Equipment:** AC10 Series  
**(Type Reference and Name)** Solenoid Coil
- Name of Listing Company:** Burkert Werke GmbH & Co Kg
- Address of Listing Company:** Christian-Burkert-Strasse 13-17  
Ingelfingen D74653  
Germany
- The examination and test results are recorded in confidential report number:  

PR455799 dated 16<sup>th</sup> March 2021
- 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. 0.5:R2016, CSA-C22.2 No. 25:R2014,  
CSA-C22.2 No. 30:R2012, CAN/CSA-C22.2 No. 60079-0:2019, CAN/CSA-C22.2 No. 60079-18:2018,  
CAN/CSA-C22.2 No. 60079-31:2015, CAN/CSA-C22.2 No. 61010-1:2012
- 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.
- 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.
- Equipment Ratings:**  

Explosionproof for Class I, Division 1, Groups A, B, C and D; Dust-ignitionproof for Class II,III, Division 1, Groups E, F and G; Flameproof for Ex mb IIC T4/\*T6 Gb, Ex mb IIIC T130C Db, \*T80C Db hazardous locations, with an ambient temperature rating of -40°C to +50°C or -40°C to +40°C.

**Certificate issued by:**

  
\_\_\_\_\_  
J.E. Marquedant  
VP, Manager - Electrical Systems

10 June 2021  
\_\_\_\_\_  
Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://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  
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# SCHEDULE



Canadian Certificate Of Conformity No: FM20CA0069X

11. The marking of the equipment shall include:

Class I Division 1, Groups A, B, C, D; T4 Ta = -40°C to +50°C, \*T6 Ta = -40°C to +40°C

Class II,III, Division 1, Groups E, F, G, T4 Ta = -40°C to +50°C, \*T6 Ta = -40°C to +40°C

Ex mb IIC T4 Gb Ta = -40°C to +50°C, \*T6 Gb Ta = -40°C to +40°C

Ex mb IIIC T130C Db Ta = -40°C to +50°C, \*T80C Db Ta = -40°C to 40°C

12. **Description of Equipment:**

**General** - The solenoid coil Type AC10 is an electromagnetic actuator for valves to control gaseous or liquid media. The valve function results from the connection of the solenoid coil with a fluid housing, whereby coil and fluid housing are connected by a locknut. The coil is therefore a push-over coil. The magnetic core serves as actuating element. When the coil is energized, the magnetic core gets attracted to the operating position. A spring returns the magnetic core to the safety position when the coil is de-energized. Due to the operation principle, the solenoid coil type AC10 is counted as a plunger coil. The solenoid coil is separated from the fluid by the armature guide tube.

**Construction** - The solenoid coil housing is composed of epoxy resin. The power supply is connected via a cable. The cable is permanently integrated in the solenoid coil. All metallic components are grounded via the protective conductor in the cable

**Ratings** - The Type AC10 Solenoid Coils operate at 12 and 24 VDC, and 24, 120 and 240 VAC, 10 Watts nominal power. The solenoids are rated for use in an ambient temperature range of -40°C to +50°C, -40°C to +40°C.

**40UA, 29UA, 24UA, 25UA\*, 34UC, 44UB, 29UA\*, 24UA and 22UC ab Type AC10 Solenoid Coils**

a= Supply voltage- 12 VDC, 24 VDC, 24 VAC, 120 VAC, 240 VAC

b= Coil Frequency (Hz)= DC or 50-60

13. **Specific Conditions of Use:**

1. Refer to the manufacturer's instructions to reduce the potential of an electrostatic charging hazard on the equipment enclosure.
2. Solenoid leads must be terminated in a suitable junction box.
3. Model code options 24UA\*, 25UA\* and 29UA\* are suitable for T4 Ta = -40°C to +50°C or \*T6 Ta = -40°C to +40°C

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.

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Member of the FM Global Group

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## 16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
16 <sup>th</sup> March 2021	Original Issue.
10 <sup>th</sup> June 2021	<u>Supplement 1:</u> Report Reference: - RR228156 dated 10 <sup>th</sup> June 2021. Description of the Change: Addition of Solenoid Coil Model 24UA, Revised "Specific Conditions of Use", and minor non safety related drawing changes.

ABD 1000484843 EN Version: B Status: RL (released | freigegeben) printed: 21.06.2024

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