


# CERTIFICATE OF CONFORMITY



- HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS**
- Certificate No:** FM20CA0049
- Equipment:** Type 8681  
**(Type Reference and Name)** Valve Control Head
- 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:  
  
3047226 dated 3<sup>rd</sup> March, 2013
- 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. 0-10:2011, CSA-C22.2 No. 213:2015, CAN/CSA-C22.2 No. 61010-1:2015, ANSI/IEC 60529:2004,
- 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:**  
  
Nonincendive for Class I, Division 2, Groups A, B, C and D hazardous locations, IP64 with an ambient temperature rating of +5°C to +55°C.

**Certificate issued by:**

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

28 September 2020  
\_\_\_\_\_  
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



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11. The marking of the equipment shall include:

Class I Division 2, Groups A, B, C, D; T4 Ta = +5°C to +55°C; IP64

12. **Description of Equipment:**

**General** - The Control Head Type 8681 is used for actuating pneumatically operated process valves. For process valve actuation, the control head can be equipped with up to three solenoid valves. For the acquisition and feedback of the process valve switching positions to a higher-level controller, the control head has been equipped with a contactless position measuring system, which works with three discrete, adjustable feedback signals.

**Construction** - The Control Head Type 8681 consists of a non-metallic electronics housing consisting of a three main parts. The enclosure is provided with cable glands .

**Ratings** - The Control Head Type 8681 operate 110-130 Vac or 11-31.6 Vdc. The transmitters are rated for use in an ambient temperature range of +5°C to +55°C.

Rated voltage and maximum rated current, the electronic connection has the following values:

Um = 110 – 130 VAC 50/60 Hz; Im = 85 mA @ 120 VAC; For 120 VAC Variant  
Um = 12 – 28 VDC; Im = 300 mA @ 21.6 VDC; For 24 VDC Variant  
Um = 19.2 – 31.6 VDC; Im = 200 mA @ 29.5 VDC; For AS Interface Bus Variant  
Um = 11 – 25 VDC; Im = 200 mA @ 24VDC; For DeviceNet Variant  
Um = 18 – 30 VDC; Im = 200 mA @ 24VDC; For I/O-Link Variant  
Um = 11 – 25 VDC; Im = 200 mA @ 24VDC; For bUS/CANopen Variant

**Type 8681 a/bcdef; Control Head**

*a = VSP (Supply voltage); "24 VDC 0.3A", or "120 V AC 85mA"*  
*b = KOMM (Communication); "AS-I 0.2A", "DevNet 0.2A", "bUS/CANopen", "IO-Link A 0.2A" or "IO-Link B 0.2A"*  
*c = AART; not safety relevant*  
*d = EAN (Electrical connection); SK or SR*  
*e = VAR (Variable part); PR02*  
*f = Pressure; not safety relevant*

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.

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## 16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
3 <sup>rd</sup> March, 2013	Original Issue.
28 <sup>th</sup> September 2020	<u>Supplement 1:</u> Report Reference: – RR224422 dated 28 <sup>th</sup> September 2020. Description of the Change: Additional communication options have been added to the model variants. Updated standard editions and Certificate format.

ABD 1000202319 EN Version: B Status: RL (released | freigegeben) printed: 14.08.2024

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