



Member of the FM Global Group

1. HAZARDOUS (CLASSIFIED) LOCATION COMPONENT PER US REQUIREMENTS

2. Certificate No:

FM23US0044U

3. Component: (Type Reference and Name)

Series 8080 Control Switch

4. Name of Listing Company:

R. STAHL Schaltgeräte GmbH

5. Address of Listing Company:

Am Bahnhof 30, D-74638 Waldenburg (Württ.)
Germany

6. The examination and test results are recorded in confidential report number:

PR466187 dated 27 June 2023

7. FM Approvals LLC, certifies that the component described has been found to comply with the following Approval standards and other documents:

FM 3600:2022, ANSI/UL 486E:2019, ANSI/UL 508:2021, ANSI/UL 60079-0:2020, ANSI/UL 60079-1:2020, ANSI/UL 60079-7:2021

- 8. The sign 'U' placed after the certificate number indicates that this certificate must not be mistaken for a certificate for equipment or a protective system. This certificate may only be used as the basis for the certification of equipment or a protective system. This certificate is issued to the manufacturer also intended to be the holder of the equipment certificate which includes this component.
- 9. This certificate relates to the design, examination and testing of the component 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 component as examined, tested and Approved.
- 10. Component Ratings:

Flameproof "d" enclosure with Increased Safety terminals "e"

11. The marking of the component shall include:

CI I, Zn 1, AEx db eb IIC Gb CI I, Div 2, Gps ABCD

Certificate issued by:

J. E. Marquestint

27 June 2023

J.E. Marquedant

Date

VP, Manager - Electrical Systems

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

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SCHEDULE

US Certificate Of Conformity No: FM23US0044U



12. Description of Component:

The Series 8080 explosion-protected contact element for the switching of auxiliary, control and signal circuits. The contact element is an Ex Component which may only be used as a basis of an Ex Equipment certificate for equipment or protective system of Zone 1 or Class I, Division 2.

Model Code:

8080/1-cd. Explosion Protected Control Switch.

c = Contact type; 1, 2, 3, 4, or 5.

d= Additional variants not affecting FM Approval.

13. Schedule of Limitations:

- 1. Contacts rated 250 VAC / 10 A General purpose
- 2. The Series 8080 has an ambient temperature range of -50 °C ≤ Ta ≤ +70 °C.
- 3. The Series 8080 has a service temperature range of -60 $^{\circ}$ C \leq Ts \leq +100 $^{\circ}$ C.
- 4. Field wiring conductors shall be rated not less than 75 °C.
- 5. The flameproof enclosure cannot be repaired.
- 6. The Series 8080 shall be protected from exposure to ultraviolet light.
- 7. For Zone 1 locations, the Series 8080/1 shall be installed in an increased safety "eb" enclosure.
- 8. For Class I, Division 2 locations, the connections to the Series 8080/1 may be made in a general purpose enclosure using standard connection methods. Increased safety "eb" termination methods are permitted, but are not required.
- 9. With a rated voltage greater than 175 VAC, the metal plunger shall not come in contact with electrically conductive parts.
- 10. In a 10 A application, the maximum rise for the determination of temperature class is 27 K with a limiting temperature in the final application of 80 °C for T6, 95 °C for T5, or 105 °C for T4.

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. Schedule Drawings

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

16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description	NU.	U	U	V U	IU
27 June 2023	Original Issue.					

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