

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** FM16US0146X

3. **Equipment:** Jerguson Vertical Magnetic
(Type Reference and Name) Level Switch

4. **Name of Listing Company:** The Clark – Reliance Corp.

5. **Address of Listing Company:** 16633 Foltz Parkway,
Strongsville, Ohio 44149-5597 USA

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

3058469 dated 31 May 2016

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

**FM Class 3600: 2011, FM Class 3615: 2006, FM Class 3616: 2011, FM Class 3810:2005,
ANSI/ISA 60079-0: 2009, ANSI/ISA 60079-1: 2009, ANSI/ISA 60079-26: 2011, ANSI/NEMA 250: 1991,
ANSI/IEC 60529: 2004**

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.

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:

Explosionproof for Class I, Division 1, Groups B, C and D, T* Ta = -50°C to +60°C; Dust-Ignitionproof for Class II/III, Division 1, Groups E, F and G, T* Ta = -50°C to +60°C; Flameproof for Class I, Zone 0**/1, AEx d IIC T* Ta = -50°C to +60°C; Type 4, IP66

Certificate issued by:

J.E. Marquedant
Manager, Electrical Systems

7 June 2016

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

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SCHEDULE



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11. The marking of the equipment shall include:

Class I Division 1, Groups B, C, D; T* Ta = -50°C to +60°C; Type 4X, IP66/67 (* See T-Code Table)

Class II, Division 1, Groups E, F, G, Class III, Division 1; T* Ta = -50°C to +60°C;

Class I, Zone 0**/1, AEx d IIC T* Ta = -50°C to +60°C, Type 4, IP66

12. **Description of Equipment:**

The Jerguson Vertical Magnetic Level Switches are used for industrial and process control. The switches consist of a float attached to a sheathed permanent magnet which rises and falls with changing liquid levels. The magnet is located within a pressure tube which, in turn, is located within the equipment enclosure. The switch mechanisms are located within the equipment enclosure adjacent to the pressure tube. Switching is achieved with a three-magnet system. Vertical movement of the float magnet in the pressure tube actuates the secondary (switch) magnet as well as a tertiary (latching) magnet which keeps the secondary magnet latched. This allows for the float magnet to continue on and actuate other switch mechanisms at other levels. The switch mechanisms, once actuated, cannot reset until the float magnet comes back down and actuates the individual mechanisms again. Units intended for hazardous locations consist of a threaded cover and base while units for ordinary locations consist of a cover and base secured with a bolt in the top cover. All versions contain one threaded entry available in metric and NPT sizes for the hazardous location versions and NPT, metric and other customer-specific sizes for the ordinary location versions.

The Jerguson Vertical Magnetic Level Switches are intended for use in an ambient temperature of -50°C to +60°C. The pressure tube is rated for process pressures up to 1480 psi (102 bar) at process temperatures from -50°C up to +400°C.

abcdefghi. Jerguson Vertical Magnetic Level Switch.

a = Vertical level control: J or Blank.

b = Chamber Design Style: D, B, X, H.

c = Process flange material: A to Z (one character)

d = Float/displacer size: (Float Size) 1F -11F; (Displacer Size) 1D – 8D.

e = Enclosure Size/ Material/ Conduit/ FM Certified: SA7F, SI7F or RA7F.

f = Number of Switch Mechanisms: 1 to 4.

g = Switch Mechanism Type: D4 or D8; P4 or P8; X4 or X8; H4 or X8; E4 or E8.

h = Orientation, Size, and Type of Process Connection: xxx (Up to three Numeric Characters)..

i = Customer Options Not Affecting Certification or Within Scope of Approval: .(Up to 26 alphanumeric characters).

13. **Specific Conditions of Use:**

1. * The equipment temperature code is determined by process temperature according to the table below. T3 is not applicable to Class II, Group G. T2 and T1 are not applicable to Class II, Groups E, F and G.

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Temperature Code	Process Temperature	Exclusions
T6	-50°C to +80°C	
T5	-50°C to +95°C	
T4	-50°C to +130°C	
T3	-50°C to +195°C	Not for Class II, Group G
T2	-50°C to +295°C	Not for Class II, Groups E, F and G
T1	-50°C to +400°C	Not for Class II, Groups E, F and G

2. ** The equipment can be installed in the boundary wall between an area of Class I, Zone 0 and the less hazardous area, Class I, Zone 1. In this configuration, the process connection is installed in Class I, Zone 0, while the enclosure is installed in Class I, Zone 1

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
7 th June 2016	Original Issue.

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