# **CERTIFICATE OF CONFORMITY**



- 1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS
- 2. Certificate No:

4.

5.

3. Equipment: (Type Reference and Name)

Name of Listing Company:

Address of Listing Company:

FM16US0355

Instrument Housing with Transmitters Series "SB" Instrument Housing, 2-Wire Transmitters

Moore Industries-International, Inc.

16650 Schoenbirn Street North Hills, California 91343 USA

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

3016812 dated 14th May 2003

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 3810:2005, 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 A, B, C and D; Dust-ignitionproof for Class II, Division 1, Groups E, F and G; Class III hazardous (classified) locations, indoors and outdoors (Type 4X, IP66) with an ambient temperature rating of -25°C to +85°C.

Certificate issued by:

2. Marquestin

J.<sup>4</sup>E. Marquedant Manager, Electrical Systems

19 October 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 T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: <u>information@fmapprovals.com</u> <u>www.fmapprovals.com</u>

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11. The marking of the equipment shall include:

Class I Division 1, Groups A, B, C, D; T6 Ta = 60°C; T5 = +85°C; Type 4X, IP66

Class II, Division 1, Groups E, F, G, Class III, Division 1; T6 Ta = 60°C; T5 = +85°C; Type 4X, IP66

#### 12. Description of Equipment:

**General** – The Series "SB" Instrument Housing enclosures may be a standalone empty enclosure or supplied with a variety of Two-Wire Transmitters (hockey puck) listed in the modle code options. The Two-Wire Transmitters are used in a wide variety of applications, such as, converting thermocouple, resistance, millivolt or varying frequencies input signals to a standard 4-10 mA or 10-50mA current output or Liquid Crystal Display.

**Construction** - The Series "SB" Instrument Housing screw on cover is available either unpainted or painted with a salt water resistant high solids polyurethane. The screw on cover is also available with an optional window and is sealed to the body by an o-ring. The glass insert in the optional window cover assembly is sealed to the body of the cover with an o-ring, a retaining ring to mechanically hold the glass in place, and then the remaining voids between the inserts and the body of the cover are injected with an RTV627 Silicone Rubber Compound. The housing wall has two holes tapped for either ½ inch NPT, ¾ inch NPT or M20 x 1.5 conduit entry. The enclosure has a diameter of 4 inches with an overall height of 4.7 inches.

**Ratings** - The Two-Wire Transmitters oprate at 42V DC, 110mA current, 3 Watts. The transmitters are rated for use in an ambient temperature range of -40°C to +85°C. Sensor Probes are not part of this certification.

## Model/Input/output/Power/-Options [SB2abc]. Two-Wire Transmitters.

ACX/0-150 V ac. 0-5 A/4-50 mA/12-42 dc/-EM, EZ, RF, SURG [SB2abc] ALX/4-50 mA/H1, L1, L2/6.3 VLP (4-20 mA), 7.0 VLP (10-50 mA)/-AD, LVDC, MR, SURG [SB2abc] DSX/4-20 mA/(-1999)-1999/1.0 VLP/-DZ, RO, S, SURG [SB2abc] DVX/4-50 mA/(-1999)-1999/2.5 VLP/-DZ, RF, RO, SURG [SB2abc] EPFDX/A-X/4-50 mA/12-42 dc/-CC, RF, S10, S30, S100, SURG [SB2abc] FDY/F1, F2, P1, P2/4-20 mA/12-42 dc/-ISA, ISC, ISCN, ISE, ISF, NE, SURG [SB2abc] ITX/4-50 mA/(A4-A1), A-J/6.3-7 VLP/-CD"X", FR, LV, RF, S, SURG [SB2abc] MVX/5-1280MVFS, 0-50 mA, (-10)-150 V/4-50 mA/12-42 dc/-AT, DD, EZ, LSA, RF, RIB, SAA, UD, SURG [SB2abc] PSD/4-20MA/PRG/2.3VLP/-ISA, ISC, ISCN, ISE, ISF, NE, SURG [SB2abc]. PTX/A, B, C/4-50 mA/12-42 dc/-ISB, ISC, ISF, RF, RO, SURG [SB2abc] RBX/(2-3)W, 0-1 K/4-50 mA/12-42 dc/-DT, EZ, ISB, ISC, ISF, LNP, RF, RO, SAA, SURG [SB2abc] RIY/R0-R15/4-20 mA/12-42 dc/-DD, ISA, ISC, ISCN, ISE, ISF, ND, NE, SURG [SB2abc] SCX/4-50 mA/4-50 mA/12-42 dc/-DD, ISA, ISC, ISCN, ISE, ISF, ND, NE, SURG [SB2abc] SDY/PRG, 0-10 V, 0-50 mA/4-20 mA/10-42 dc, 1-ISA, ISC, ISCN, ISE, ISF, NE, SURG [SB2abc] SFY/F1, F2, P1, P2/4-20 mA/12-42 dc, SURG [BHabcd] SLD/4-20 mA/PRG/ 2.3vlp, SURG [BHabcd] STZ/TPRG, J, K, E, T, R, S, N, B, C, MV, R1-R14, RO, POT/4-20mA/12-30DC, 12-42DC/TROP, VTB, VTD, FMEDA, SURG [SB2abc] TDY/PRG/4-20 mA/10-42 dc, 1-ISA, ISC, ISCN, ISE, ISF, NE, SURG [SB2abc] TDZ/PRG/4-20MA/10-42DC/-ISA, ISC, ISCN, ISE, NE, SURG [SB2abc]. **TDZ3**/TPRG, J, K, E, T, R, S, N, B, C, MV, R1-R14, RO, POT/4-20mA/12-30DC, 12-42DC/TROP, VTB, VTD, FMEDA, SURG [SB2abc] THZ3/TPRG, J, K, E, T, R, S, N, B, C, MV, R1-R14, RO, POT/4-20mA/12-30DC, 12-42DC/VTB, VTD,

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# US Certificate Of Conformity No: FM16US0355

FMEDA, SURG **[SB2abc] TIY**/E1-3, J1-2, K1-2, N1-2, R1, S1, T1-2, MV1-3/4-20 mA/12-42 dc/-DD, DDX, ISA, ISC, ISCN, ISE, ISF, ND, NE, NL, SP1-2, STC, SURG **[SB2abc]** 

- a = Type of Conduit Entry Threads M (Metric), N (1/2" NPT) or T (3/4" NPT).
- b = Type of Cover G (Glass) or S (Solid).
- c = Optional 2" Stainless Steel Pipe-Mount Hardware Kit P.

#### Series SB2abc. Instrument Housing.

- a = Type of Conduit Entry Threads M (Metric), N (1/2" NPT) or T (3/4" NPT).
- b = Cover Type G (glass) or S(solid).
- c = Optional 2" Stainless Steel Pipe-Mount Hardware Kit P.

#### 13. Specific Conditions of Use:

None

## 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
14 <sup>th</sup> May 2003	Original Issue.
19 <sup>th</sup> October 2016	Supplement 4: Report Reference: – RR206697 dated 19 <sup>th</sup> October 2016 Description of the Change: Minor revisions to documentation, added SLD, SFY and Surge Suppressor to product offering. Converted to new Certificate format.

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