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:

FM17US0171X

HV-CEP Series, HW-CEP Series, Platform Scale

A&D Company, Limited

1-243, Asahi, Kitamoto-shi, Saitama Japan

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

3060570 dated 12 January 2018

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 3610:2015, FM Class 3810:2017, ANSI/ISA 60079-0:2013, ANSI/ISA 60079-11:2014

- 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:

Intrinsically Safe for Class I, Division 1, Groups C and D; AEx ia for Class I, Zone 0, Group IIB hazardous (classified) locations, with an ambient temperature rating of T4 for $-25^{\circ}C \le Ta \le +40^{\circ}C$.

Certificate issued by:

Marguerch

J.Æ. Marquedant Manager, Electrical Systems

12 January 2018 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>

F 347 (Mar 16)

Page 1 of 3





US Certificate Of Conformity No: FM17US0171X

11. The marking of the equipment shall include:

Class I, Division 1, Groups C and D, T4 for $-25^{\circ}C \le Ta \le +40^{\circ}C$; AEx ia for Class I, Zone 0, Group IIB, T4 for $-25^{\circ}C \le Ta \le +40^{\circ}C$.

12. Description of Equipment:

General – The HV/HW-CEP series are battery-powered platform scales. Each model contains a single PCB, load cell, display, four internal 1.5V alkaline batteries, and a current-limiting protective resistor. Model variants have different specifications for parameters such as load cell spring material, resolution and range, which are reflected in the maximum weighing capacity.

Construction – The enclosures are constructed of stainless steel and plastic, with the base being over 50% aluminum. The enclosures are of three different sizes (Small, Medium, and Large), based on the weighing capacity.

Approvals

Ratings – 6.6V maximum, 0.24A maximum.

HV-aKCEP Series. Platform Scale.

a = Maximum capacity: 15K = 15 kg; 60K = 60 kg; 200K = 220 kg.

HW-aKCEP Series. Platform Scale. a = Maximum capacity: 10K = 10 kg; 60K = 60 kg; 100K = 100 kg; 200K = 220 kg.

13. Specific Conditions of Use:

- A portion of the enclosure is non-conducting and, under certain extreme conditions, may generate an ignitioncapable level of electrostatic charges. The user shall ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a buildup of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.
- 2. The enclosure contains aluminum and is considered a potential risk of ignition by impact or friction. Care must be taken during installation to prevent impact or friction.

14. Test and Assessment Procedure and Conditions:

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

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>

F 347 (Mar 16)





US Certificate Of Conformity No: FM17US0171X

15. Schedule Drawings

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

16. Certificate History

Certificate History
Details of the supplements to this certificate are described below:

| Date | Description | M | 2 | uio |
|-------------------------------|-----------------|---|---|-----|
| 12 th January 2018 | Original Issue. | | | |

MApprovals

HAPprovals

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: information@fmapprovals.com www.fmapprovals.com