

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM17US0317X
3. **Equipment:** EK-AEP Series Compact Balance
(Type Reference and Name)
4. **Name of Listing Company:** A&D Company, Limited
5. **Address of Listing Company:** 1-243, Asahi, Kitamoto-shi, Saitama
Japan
6. The examination and test results are recorded in confidential report number:

3063013 dated 16th February 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, ANSI/ISA-60079-28:2013
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, temperature class T3C; AEx ia op is for Class I, Zone 0, Group IIB hazardous (classified) locations, indoors and outdoors, temperature class T3 for $-25^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$.

Certificate issued by:



J.E. Marquedant
Manager, Electrical Systems

16 February 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

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SCHEDULE



US Certificate Of Conformity No: FM17US0317X

11. The marking of the equipment shall include:

Class I, Division 1, Groups C and D, T3C for $-25^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$.
AEx ia op is for Class I, Zone 0, Group IIB, T3 for $-25^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$.

12. **Description of Equipment:**

General – The EK-AEP electronic weighing balances are benchtop battery-powered weigh-scales. The model code variations account for the differences in the load cell spring material and parameters such as resolution and range.
Each model contains a load cell, an LCD, two PCBs, four internal AA 1.5-volt alkaline batteries, and a current-limiting resistor in the battery box.

Construction – The enclosures are constructed of plastic with a stainless steel weighing tray and plate.

Ratings – 6.6V maximum, 0.24A maximum.

EK-aAEP Series. Compact Balance.

a = Maximum capacity: 300 = 300 g;
3000 = 3000 g;
12K = 12 kg.

13. **Specific Condition of Use:**

A portion of the enclosure is non-conducting and, under certain extreme conditions, may generate an ignition-capable 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 build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done only with a damp cloth.

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
16 th February 2018	Original Issue.

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