

1 EU-TYPE EXAMINATION CERTIFICATE



2 **Equipment or Protective systems intended for use in Potentially
Explosive Atmospheres - Directive 2014/34/EU**

3 **EU-Type Examination Certificate No:** FM17ATEX0038X

4 **Equipment or protective system:
(Type Reference and Name)** HV-CEP Series and HW-CEP Series, Platform Scale

5 **Name of Applicant:** A&D Company, Limited

6 **Address of Applicant:** 1-243, Asahi, Kitamoto-shi, Saitama-Ken
364-8585 Japan

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Ltd, notified body number 1725 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

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

3060570 dated 12th January 2018

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN 60079-0:2012 + A11:2013, EN 60079-11:2012

10 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.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:

II 1 G Ex ia IIB T4 Ga Ta = -25°C to +40°C.



Mick Gower
Certification Manager, FM Approvals Ltd.

Issue date: 30th January 2018

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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to EU-Type Examination Certificate No. FM17ATEX0038X

13 Description of Equipment or Protective System:

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.

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.

14 Specific Conditions of Use:

1. 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.
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.

15 Essential Health and Safety Requirements:

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

16 Test and Assessment Procedure and Conditions:

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

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17 **Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body.

18 **Certificate History**

Details of the supplements to this certificate are described below:

Date	Description
30 th January 2018	Original Issue.

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Blueprint Report

A&D Company Limited (151048)

Class No 3610

Original Project I.D. 3060570

Certificate I.D. FM17ATEX0038X

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>	<u>Electronic Drawing</u>
1WMPD4003607	2018.01.26	Instruction Manual Digital Platform Scale	3060570	Yes (pdf)
HVWCEP1001_00	00	System configuration	3060570	Yes (pdf)
HVWCEP1002_01	01	Outline of safety features	3060570	Yes (pdf)
HVWCEP1003_01	01	Outline drawing (1)	3060570	Yes (pdf)
HVWCEP1004_01	01	Outline Drawing (2)	3060570	Yes (pdf)
HVWCEP1005_01	01	Outline Drawing (3)	3060570	Yes (pdf)
HVWCEP1006_01	01	Outline Drawing (4)	3060570	Yes (pdf)
HVWCEP1007_00	00	Outline Drawing (5)	3060570	Yes (pdf)
HVWCEP1008_02	02	Detailed diagram of the structure of the load cell (1)	3060570	Yes (pdf)
HVWCEP1009_02	02	Detailed diagram of the structure of the load cell (2)	3060570	Yes (pdf)
HVWCEP1010_02	02	Detailed diagram of the structure of the load cell (3)	3060570	Yes (pdf)
HVWCEP1011_00	00	Detailed diagram of the structure of the strain gauge	3060570	Yes (pdf)
HVWCEP1012_01	01	Detailed diagram of the PCB (1)	3060570	Yes (pdf)
HVWCEP1013_00	00	Detailed diagram of the PCB (2)	3060570	Yes (pdf)
HVWCEP1014_00	00	Parts layout diagram (1)	3060570	Yes (pdf)
HVWCEP1015_00	00	Parts layout diagram (2)	3060570	Yes (pdf)
HVWCEP1016_01	01	Assembly drawing (1)	3060570	Yes (pdf)
HVWCEP1017_01	01	Assembly drawing (2)	3060570	Yes (pdf)
HVWCEP1018_01	01	Assembly drawing (3)	3060570	Yes (pdf)
HVWCEP1019_01	01	Assembly drawing (4)	3060570	Yes (pdf)
HVWCEP1020_01	01	Assembly drawing (5)	3060570	Yes (pdf)
HVWCEP1021_01	01	Assembly drawing (6)	3060570	Yes (pdf)
HVWCEP1022_01	01	Circuit diagram	3060570	Yes (pdf)
HVWCEP1023_01	01	Parts list for the circuit (1)	3060570	Yes (pdf)
HVWCEP1024_00	00	Parts list for the circuit (2)	3060570	Yes (pdf)
HVWCEP1025_02	02	Parts list for the circuit (3)	3060570	Yes (pdf)
HVWCEP1026_01	01	Parts list for the circuit (4)	3060570	Yes (pdf)
HVWCEP1027_01	01	Details of safety parts	3060570	Yes (pdf)
HVWCEP1028_07	07	Hazardous location label drawing	3060570	Yes (pdf)
HVWCEP1029_00	00	Details of the internal wiring	3060570	Yes (pdf)
Statement of Compliance	2nd October, 2017	Statement of Compliance with Applicable European Directives	3060570	Yes (pdf)