



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx CML 16.0068

Issue No: 1

Certificate history:

Issue No. 1 (2017-09-21)

Issue No. 0 (2016-11-23)

Status: **Current**

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Date of Issue: **2017-09-21**

Applicant: **Casella (Ideal Industries Ltd)**
Regent House, Wolseley Road, Kempston, Bedford MK42 7JY
United Kingdom

Equipment: **APEX2 Personal Air Sampling Pump**

Optional accessory:

Type of Protection: **Intrinsic safety**

Marking:

Ex ia I Ma
Ex ia IIC T4 Ga
Ex ia IIIC T135°C Da

(-20°C ≤ Ta ≤ +45°C) or (Ta = -20°C to +45°C)

*Approved for issue on behalf of the IECEx
Certification Body:*

H M Amos MIET

Position:

Technical Manager

*Signature:
(for printed version)*

Date:

September 21, 2017

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Certification Management Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





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Manufacturer: **Casella (Ideal Industries Ltd)**
Regent House, Wolseley Road, Kempston, Bedford MK42 7JY
United Kingdom

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/CML/ExTR16.0085/00](#) [GB/CML/ExTR17.0158/00](#)

Quality Assessment Report:

[GB/SIR/QAR10.0002/06](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The product description has changed as detailed below.

The Casella APEX2 Personal Air Sampling Pump is a personal air sampling pump typically used to take samples of airborne materials or toxic contaminants. It is a bodily worn, battery-powered self-contained device housed within a PC anti-static enclosure. The pump is designed to provide a stable controlled flow rate of approximately 0.5 to 5 litre/min such that a known volume of air is passed through a passive sampling head and filter medium.

Airborne materials are collected onto a filter substrate and are subjected to mass or chemical analysis in a laboratory in order to establish a worker's exposure to potentially hazardous materials. Sampling pumps are typically worn on the user's belt and are connected to the sampling head via a short length of tube.

SPECIFIC CONDITIONS OF USE: NO



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EQUIPMENT (continued):

The equipment may only be recharged in the safe area using either:

1. APEX2/IS 5L Pump Five Way Charger
2. APEX2/IS 5L Pump Single Way Charger The chargers must be supplied from a SELV source with $U_m = 63V$

These chargers have an output of:

$U_m = 14.5V$ $I_{max} = 850mA$

When connected to a USB in the safe area:

$U_m = 5.9V$

$I_{max} = 85mA$



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1

1. The inclusion within the product description that the battery chargers must have an SELV source with a $U_m = 63V$.
2. To permit the use of an optional protective boot.
3. To permit the use of additional filling holes in the battery pack.
4. To re-assess the circuit voltage from 5.355V to 6.0V (including circuit capacitance).
5. To confirm circuit changes related to the motor circuit by means of spark testing.
6. To re-assess the rating of safety components from 7.4V to 14.5V.
7. To permit the battery pack Fuse F1 to be moved.
8. To permit the rating of the battery pack resistors R4, R7 and R231 to be altered.
9. To permit D1, D2, D3, D9, D10, D11 to be replaced by PMEG3015EJ diodes