



## EU Type Examination Certificate CML 19ATEX2328 Issue 1

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Casella VAPex Personal Air Sampling Pump**
- 3 Manufacturer **Casella (Ideal Industries Ltd)**
- 4 Address **Regent House, Wolseley  
Road, Kempston, Bedford  
MK42 7JY,  
United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 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 the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:  
  
EN IEC 60079-0:2018                      EN 60079-11:2012
- 10 The equipment shall be marked with the following:  
  
 II 1G  
  
Ex ia IIC T4 Ga  
  
Ta = -20°C to +45°C



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## 11 Description

The Casella VAPex Pump is a personal air sampling pump typically used to take samples of gases or vapours. It is a body-worn, battery-powered self-contained device housed within a polycarbonate anti-static enclosure. The pump is designed to provide a stable and controlled flow rate of 20 to 500 ml/min such that a known volume of gas is passed through a sorbent tube. Gases and vapour samples are collected on a sorbent tube and are subjected to mass or chemical analysis in a laboratory in order to establish a worker's exposure to potentially hazardous gases. Such sampling pumps are typically worn on the user's belt and are connected to the sorbent tube via a short length of tube.

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

1. VAPex Pump Five Way Charger
2. VAPex Pump Single Way Charger

The chargers must be supplied from a SELV source with  $U_m = 63V$

These chargers shall have an output not exceeding:

$U_m = 6.95V$

$I_{max} = 850mA$

The equipment may be connected via the USB port, to other external equipment in the safe area only. The external equipment shall have an output not exceeding:

$U_m = 5.9V$

$I_{max} = 85mA$

## Variation 1

To permit the use of Samsung INR18650-25R cells in place of the Samsung ICR18650-26F cells, within the battery pack.

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	14 Aug 2019	R12106A/00	Issue of Prime Certificate
1	27-02-2020	R13095A/00	Introduction of Variation 1

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.

## 14 Specific Conditions of Use (Special Conditions)

None.

## Certificate Annex

**Certificate Number** CML 19ATEX2328  
**Equipment** Casella VAPex Personal Air Sampling Pump  
**Manufacturer** Casella (Ideal Industries Ltd)



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
03-214000D/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Case Body G/A
03-214044C/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Battery Case Body G/A
93-214013B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Battery Pack – Schematic
05-214015B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Battery Pack PCB – Parts List
05-214015B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Battery Pack PCB – Component Layout
02-214014C/IS-02	1 of 1	2	14 Aug 2019	VAPEX/IS Battery Pack PCB – Profile & Drilling
93-214007D/IS-01	1 to 2	1	14 Aug 2019	VAPEX/IS Main Board – Schematic
05-214009C/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Main Board PCB – Component Layout
05-214009C/IS-01	1 to 2	1	14 Aug 2019	VAPEX/IS Main Board PCB – Parts List
02-214008C/IS-02	1 of 1	2	14 Aug 2019	VAPEX/IS Main Board PCB – Profile & Drilling
93-214010B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Display Board – Schematic
05-214012B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Display Board PCB – Component Layout
05-214012B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS Display Board PCB – Parts List
02-214011B/IS-02	1 of 1	2	14 Aug 2019	VAPEX/IS Display Board PCB – Profile & Drilling
93-214021C/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 1-Way Charging Unit – Circuit Diagram
04-214020B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 1-Way Charging Unit GA
05-214023B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 1-Way Charging Unit PCB – Component Layout
05-214023B/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 1-Way Charging Unit PCB – Parts List
02-214022B/IS-02	1 of 1	2	14 Aug 2019	VAPEX/IS 1-Way Charging Unit PCB – Profile & Drilling
93-214025C/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 5-Way Charging Unit – Circuit Diagram
04-214024C/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 5-Way Charging Unit GA
05-214027C/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 5-Way Charging Unit PCB – PCB Layout

## Certificate Annex

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Drawing No	Sheets	Rev	Approved date	Title
05-214027C/IS-01	1 of 1	1	14 Aug 2019	VAPEX/IS 5-Way Charging Unit PCB – Parts List
02-214026C/IS-02	1 of 1	2	14 Aug 2019	VAPEX/IS 5-Way Charging Unit PCB – Profile & Drilling
13-214053A/IS (CMLEX)-01	1 of 1	1	14 Aug 2019	Certification Label
13-214054A/IS (CMLEX)-01	1 of 1	1	14 Aug 2019	Certification Label

### Issue 1

Drawing No.	Sheets	Rev	Approved date	Title
03-214044C/IS-02	1 of 1	2	27-02-2020	VAPEX/IS Battery Pack G/A