

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3007**

Current Issue: 2

Date of Issue: 2024-08-15

Applicant: **Casella Holdings Limited**
Regent House
Wolseley Road
Kempston, Bedfordshire MK42 7JY
United Kingdom

Equipment: APEX2 Personal Air Sampling Pump

Type of Explosion Protection: Intrinsic Safety "ia"

Explosion Protection Marking: Ex ia I Ma
Ex ia IIC T4 Ga
Ex ia IIIC T135°C Da
Ta = -20°C to +45°C

*This certificate is granted subject to the requirements as set out in
Joint Accreditation System of Australia and New Zealand Publications
ANZEx System Rules 2020 & ANZEx Certified Equipment Scheme Rules 2021*

Signed for and on behalf of issuing body



Name & Position

Debbie Wouters, Acting Quality & Certification Manager

This certificate is not transferable and remains the property of the issuing body.

The status of this certificate can be confirmed through the database located at www.anzex.com.au

Certificate issued by:

TestSafe Australia
919 Londonderry Road, Londonderry NSW 2753 Australia

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: ANZEx 17.3007	Current Issue: 2	Date of Issue: 2024-08-15
---------------------------------------	-------------------------	----------------------------------

Manufacturer : Casella Holdings Limited
Regent House
Wolseley Road
Kempston, Bedfordshire MK42 7JY
United Kingdom

Manufacturing Location(s): Casella Holdings Limited
Regent House
Wolseley Road
Kempston, Bedfordshire MK42 7JY
United Kingdom

STANDARDS:

The equipment 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: 2017** Explosive atmospheres - Part 0: Equipment – General requirements
- IEC 60079-11: 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”

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

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3007**

Current Issue: 2

Date of Issue: 2024-08-15

Schedule

Equipment Description:

The APEX2 Personal Air Sampling Pump is used to take samples of airborne materials or toxic contaminants. It is a portable device usually carried on a human body (attached to clothes). It is a battery operated self-contained device housed within an 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.

The equipment may only be charged in the safe area with either:

1. APEX2/IS 5L Pump Five way Charger
2. APEX2/IS 5L Pump Single Way Charger

Electrical Ratings/Parameters

The charger must be supplied from a SELV source with $U_m = 63\text{ V}$

These chargers have an output of:

$U_m = 14.5\text{ V}$

$I_{max} = 850\text{ mA}$

When connected to a USB in the safe area:

$U_m = 5.9\text{ V}$

$I_{max} = 85\text{ mA}$

Specific Conditions of Use:

None.

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3007**

Current Issue: 2

Date of Issue: 2024-08-15

Manufacturer's Documents/Drawings associated with this issue:

Document/Drawing Number	Pages / Sheets	Document/Drawing Title	Revision	Date
04-209140D/IS	1	* APEX2/I.S – Case Body G/A	05	2024-04-22
03-209147C/IS	1	APEX2/IS - Battery Pack S/A	02	2017-04-03
93-209148C/IS	1	APEX2/IS 5L Pump Battery Pack PCB CCT Diagram	06	2017-05-23
05-209150B/IS	1	APEX2/IS 5L Pump Battery Pack PCB S/A Parts List	06	2017-05-23
02-209149B/IS	1	APEX2/IS 5L Pump Battery Pack PCB Profile & Drilled	03	2017-05-23
05-209150B/IS	1	APEX2/IS 5L Pump Battery Pack PCB S/A (Layout)	06	2017-05-23
93-209141D/IS	2	* APEX2/IS 5L Pump Circuit Diagram (Main PCB Schematic)	08	2023-09-18
05-209143C/IS	1	* APEX2/IS 5L Pump Main PCB S/A (Layout)	10	2023-09-15
05-209143C/IS	2	* APEX2/IS 5L Pump Main PCB S/A (Main PCB Parts List)	10	2023-09-15
02-209142C/IS	1	APEX2/IS 5L Pump Main PCB Profile & Drilled	08	2022-05-25
93-209144C/IS	1	* APEX2/IS 5L Pump Display PCB CCT Diagram	06	2023-09-19
02-209145B/IS	1	* APEX2/IS 5L Pump Display PCB Profile & Drilled	05	2023-10-24
05-209146B/IS	1	* APEX2/IS 5L Pump Display PCB S/A (Layout)	08	2023-09-19
05-209146B/IS	1	* APEX2/IS 5L Pump Display PCB S/A (Parts List)	08	2023-09-19
04-209152B/IS	1	APEX2/IS – 1- Way Charging Unit G/A	02	2017-08-17
93-209153B/IS	1	APEX2/IS 5L Pump Single Charging Unit Circuit Diagram	03	2017-08-16
05-209155B/IS	1	APEX2/IS 5L Pump Single Charging Unit PCB S/A (Parts List)	02	2017-08-15
02-209154B/IS	1	APEX2/IS 5L Pump Single Charging Unit PCB Prof & Drill	01	2016-05-25
05-209155B/IS	1	APEX2/IS 5L Pump Single Charging Unit PCB S/A (Layout)	02	2017-08-16
04-209156C/IS	1	APEX2/IS – 5-Way Charging Unit G/A	02	2017-08-17
93-209157B/IS	1	APEX2/IS 5L Pump Five Way Charging Unit Circuit Diagram	03	2017-08-16
05-209159C/IS	1	APEX2/IS 5L Pump Five Way Charging Unit PCB S/A (Parts List)	02	2017-08-16

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: ANZEx 17.3007	Current Issue: 2	Date of Issue: 2024-08-15
---------------------------------------	------------------	---------------------------

Document/Drawing Number	Pages / Sheets	Document/Drawing Title	Revision	Date
02-209158C/IS	1	APEX2/IS 5L Pump Five Way Charging Unit PCB Prof & Drill	01	2016-05-27
05-209159C/IS	1	APEX2/IS 5L Pump Five Way Charging Unit PCB S/A (Layout)	02	2017-08-16
09-209065B/IS	1	APEX2/IS - Main PCB Potting Frame	01	2016-09-05
09-209151B/IS	1	APEX2/IS - Display PCB Potting Box	01	2016-09-05
13-209161A/IS (ANZEx)	1	APEX2/IS – Information/SN Label (ANZEx)	01	2017-09-07
PS16/IS	1	Apex2 Pump Intrinsically Safe Versions (IS Information Sheet)	03	-
02-209192B/IS	1	APEX2/IS 5L Pump Battery Pack PCB Profile & Drilled (Prismatic Cells)	01	2022-05-12
03-209182C/IS	1	APEX2/IS - Battery Pack S/A (Prismatic Cells)	01	2021-12-07
05-209193B/IS	1	APEX2/IS 5L Pump battery pack PCB S/A (Prismatic cells)	01	2022-05-12
05-209193B/IS	1	APEX2/IS 5L Pump Battery Pack PCB S/A (Prismatic cells) (Parts List)	01	2022-05-12
09-209180B/IS	1	APEX2/IS – Main PCB Potting Frame	01	2022-06-28
93-209191C/IS	1	APEX2/IS 5L Pump Battery pack PCB CCT Diagram (Prismatic cells)	01	2022-05-12

*Note: An * is included before the title of documents that are new or revised.*

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3007**

Current Issue: 2

Date of Issue: 2024-08-15

Register of Issues and Variations

includes the current issue

Issue 0 dated 2017-10-11

Standards relevant for this issue:

IEC 60079-0: 2011 Explosive atmospheres - Part 0: Equipment – General requirements

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

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: GB/CML/ExTR 16.0085/00, GB/CML/ExTR 17.0158/00, CML

QAR No. & Issuing CB: GB/SIR/QAR 10.0002/06, Sira.

File Reference: 2017/005784

Issue 1 dated 2023-04-26

Variations included in this Issue

1. Changed company name from Casella (Ideal Industries Ltd) to Casella Holdings Limited.
2. Updated the standard.
3. Change to connector type
4. Alternative CTI for all PCB's
5. Change to ICs to incorporate alternatives
6. Change to transistors to allow for alternatives
7. Changes to component references in the BoM
8. Introduction of Barometric pressure sensor
9. Changes to battery pack PCB
10. Introduction of Prismatic cell.
11. Additional safety components added.
12. Change to the component marking of non-safety-related components

Standards relevant for this issue:

IEC 60079-0: 2017 Explosive atmospheres - Part 0: Equipment – General requirements

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

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: GB/CML/ExTR21.0247/00, GB/CML/ExTR22.0058/00, GB/CML/ExTR22.0135/00

QAR No. & Issuing CB: GB/SIR/QAR 10.0002/12, Sira

File Reference: 2022/017687

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: **ANZEx 17.3007**

Current Issue: 2

Date of Issue: 2024-08-15

Issue 2 dated as "Date of Issue above"Variations included in this Issue

1. The original BLE module is now obsolete and has been changed to a new part.
2. An additional alternative conformal coating material.
3. An additional alternative material for the rubber boot.
4. In drawings 05-209143C/IS the following non safety components designs have changed.
 - (1) R103 and R122 pad change from size 0603 to 0402. R122 is not a safety component.
 - (2) Capacitors C105 and C119 are removed and C229 added.

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: GB/CML/ExTR22.0242/00, GB/CML/ExTR24.0104/00: CML
 QAR No. & Issuing CB: GB/SIR/QAR 10.0002/13, Sira
 File Reference: 2024/011022