



#### **EU-TYPE EXAMINATION CERTIFICATE** 1

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: Sira 11ATEX2121X Issue:

210-3311 AirChek 3000 Air Sampling Pump 4 Equipment:

5 Applicant: **SKC Limited** 

Address: 6 11 Sunrise Park

**Higher Shaftesbury Road** 

Blandford Forum Dorset DT11 8ST

UK

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of 8 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 14.2.

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

EN IEC 60079-0:2018 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 identified in the schedule to this certificate.
- This EU-Type Examination Certificate relates only to the design and construction of the specified 11 equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:

I M1 Ex ia I Ma

 $Ta = 0^{\circ}C \le Ta \le +40^{\circ}C$ 

II 1G

Ex ia IIC T4 Ga  $Ta = 0^{\circ}C \le Ta \le +40^{\circ}C$ 

II 1D

Ex ia IIIC T120°C Da  $Ta = 0^{\circ}C \le Ta \le +40^{\circ}C$ 

Michelle Halliwell Sianed:

Title: **Director of Operations** 

Project Number 80125202

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#### **SCHEDULE**

#### **EU-TYPE EXAMINATION CERTIFICATE**

Sira 11ATEX2121X Issue 6

#### 13 DESCRIPTION OF EQUIPMENT

The 210-3311 AirChek 3000 Air Sampling Pump is a portable device designed to pump air at a constant flow rate. When used in conjunction with a suitable air sampling device and collection substrate, it is used to determine the amount of particulate and/or gaseous contaminants in a given volume of air. The equipment comprises a removable, rechargeable, encapsulated battery pack, a battery operated, motor driven, pump mechanism and an electronic circuit to control the rotational speed of the motor to maintain a constant air flow rate. The electronic circuit also provides a low battery shutdown function, detection of blockage of the airflow and control and monitoring of the duration of the sampling period. This circuit also provides a serial data interface port providing connection to a computer in the safe area for programming of the pump air flow rate and sample period duration, and retrieval of logged sample performance data. The motor, pump mechanism and electronic circuit are housed in a plastic enclosure and may use different filter covers/pump inlet arrangements to suit the application.

#### Variation 1 - This variation introduced the following changes:

- The introduction of Special Condition for Safe Use 15.6 relating to the Liquid Crystal Display.
- ii. Corrections and modifications of the circuit capacitance were approved.

#### Variation 2 - This variation introduced the following changes:

- i. The value of safety resistor R39 was reduced from a minimum of 71R to 37R.
- ii. A non-safety resistor was introduced in series with the pump.

#### **Variation 3** - This variation introduced the following change:

i. The introduction of alternative TPE plastic materials that are used for the product case overmould.

#### Variation 4 - This variation introduced the following change:

 To introduce an alternative epoxy resin, Robnor Resins PX804C-1, for the encapsulation of the battery pack.

### Variation 5 - This variation introduced the following changes:

- Following appropriate assessment to demonstrate compliance with the latest technical knowledge, EN 60079-0:2006, EN 60079-11:2007, EN 60079-26:2006, EN 50303:2000 and EN 61241-11:2006 were replaced by EN IEC 60079-0:2018 and EN 60079-11:2012.
- ii. Recognise minor drawing modifications.

### 14 DESCRIPTIVE DOCUMENTS

## 14.1 Drawings

Refer to Certificate Annexe.

#### 14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	05 May 2011	R21244A/00	The release of the prime certificate.
1	13 June 2012	R27899A/00	The introduction of Variation 1.
2	7 June 2013	R29351A/00	The introduction of Variation 2.
3	25 June 2014	R70005202A	The introduction of Variation 3.

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#### **SCHEDULE**

#### FU-TYPE EXAMINATION CERTIFICATE

Sira 11ATEX2121X Issue 6

Issue	Date	Report number	Comment
4	15 October 2019	1868	<ul> <li>This Issue covers the following changes:</li> <li>Transfer of certificate Sira 11ATEX2121X from Sira Certification Service to CSA Group Netherlands B.V.</li> <li>EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</li> </ul>
5	11 November 2020	R80055750A	The introduction of Variation 4.
6	14 July 2022	R80125201A	The introduction of Variation 5.

- 15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)
- 15.1 Use only with Replaceable Battery Pack SKC LTD P21030. Do not disconnect battery pack from the pump in hazardous locations.
- 15.2 The battery pack shall only be fitted in a clean environment.
- 15.3 Do not charge battery or connect to Datatrac PC Interface port in hazardous locations.
- 15.4 The maximum input voltage, Um, at the Datatrac PC Interface port of the 210-3311 AirChek 3000 Air Sampling Pump is 6 V. The safe area apparatus that is to be connected to the Datatrac PC Interface port shall be a Safety Extra Low Voltage (SELV) or Protective Extra Low Voltage (PELV) circuit.
- 15.5 The equipment shall not be subjected to intense sunlight for long periods.
- The window associated with the Liquid Crystal Display could possibly store an electrostatic charge if rubbed. Therefore, the user shall implement precautions to prevent the build-up of electrostatic charge. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.
- 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

- 17 CONDITIONS OF MANUFACTURE
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

# **Certificate Annexe**

Certificate Number: Sira 11ATEX2121X







### Issue 0

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
SKC-IS-0060	1 of 1	1	28 Apr 11	Block diagram
SKC-IS-0039	1 of 1	2	28 Apr 11	Battery Pack PCB Assembly
SKC-IS-0040	1 of 1	2	28 Apr 11	Battery Pack Schematic
SKC-IS-0041	1 of 1	2	28 Apr 11	Battery Pack PCB Layout
SKC-IS-0042	1 of 1	2	28 Apr 11	Battery Pack PCB Parts List
SKC-IS-0043	1 of 1	3	28 Apr 11	Interface PCB Assembly
SKC-IS-0044	1 of 1	1	28 Apr 11	Interface Circuit Schematic
SKC-IS-0045	1 of 1	3	28 Apr 11	Interface PCB Layout
SKC-IS-0046	1 of 1	2	28 Apr 11	Interface PCB Parts List
SKC-IS-0047	1 of 1	1	28 Apr 11	Keypad PCB Assembly
SKC-IS-0048	1 of 1	1	28 Apr 11	Keypad Circuit Schematic
SKC-IS-0049	1 of 1	2	28 Apr 11	Keypad PCB Layout
SKC-IS-0050	1 of 1	1	28 Apr 11	Keypad PCB Parts List
SKC-IS-0051	1 of 1	1	28 Apr 11	Main PCB Assembly
SKC-IS-0052	1 & 2	2	28 Apr 11	Main Circuit Schematic
SKC-IS-0053	1 of 1	2	28 Apr 11	Main PCB Layout
SKC-IS-0054	1 of 1	2	28 Apr 11	Pump Run PCB Layout
SKC-IS-0055	1 to 3	1	28 Apr 11	Main PCB Parts List
SKC-IS-0056	1 of 1	2	28 Apr 11	Pump Motor Specification
SKC-IS-0057	1 of 1	1	28 Apr 11	Battery Pack Assembly
SKC-IS-0058	1 & 2	1	28 Apr 11	210-3311 AirChek 3000 Pump Assembly
SKC-IS-0059	1 of 1	1	28 Apr 11	Certification Labels
SKC-IS-0061	1 of 1	1	28 Apr 11	Sensor details

### Issue 1

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
SKC-IS-0055	1 to 3	2	24 May 12	Main PCB Parts List

### Issue 2

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
SKC-IS-0055	1 to 3	3	17 May 13	Main PCB Parts List
SKC-IS-0056	1 of 1	4	17 May 13	Pump Motor Specification

### Issue 3

Drawing no.	Sheets	Rev.	Date (Sira stamp)	Title
SKC-IS-0057	1 of 1	2	17 Jun 14	Battery Pack Assembly Aircheck 3000 Pump
SKC-IS-0058	1 of 1	3	17 Jun 14	210-3311 Airchek 3000 Pump Assembly

### Issue 4 – No new drawings were introduced.

### Issue 5

Drawing	Sheets	Rev.	Date (Stamp)	Title
SKC-IS-0057	1 of 1	3	23 Oct 20	Battery Pack Assembly AirChek 3000 Pump

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# **Certificate Annexe**

Certificate Number: Sira 11ATEX2121X



Applicant: SKC Limited



### Issue 6

Drawing	Sheets	Rev.	Date (Stamp)	Title
SKC-IS-0042	1 of 1	3	20-Jun-22	Battery pack PCB BOM
SKC-IS-0046	1 of 1	3	20-Jun-22	Interface PCB BOM
SKC-IS-0055	1 to 2	5	20-Jun-22	Main PCB BOM
SKC-IS-0059	1 of 1	2	13-Jul-22	Label drawing