



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **Sira 02ATEX2135** Issue: **4**

4 Equipment: **Sidekick 224-51TX, Sidekick 224-52TX, Sidekick 224-51MTX and Sidekick 224-52MTX Air Sampling Pumps**

5 Applicant: **SKC Limited**

6 Address: **Unit 11
Sunrise Park
Higher Shaftsbury 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.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, 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 50014:1997 plus amendments A1 and A2 EN 50020:1994

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified 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:



II 2G
EEx ia IIC T4

Project Number 22817

C Ellaby
Certification Officer

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SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The air sampling pump provides a mechanism by which an amount of pollutant can be determined for a given volume of air. The equipment comprises a battery-operated motor with pump and filter attachment, a detachable encapsulated Ni-Cad battery pack (containing current-limiting components and a charging socket) and an encapsulated electronic circuit. The circuitry is mounted within a plastic enclosure. The equipment uses the pump to draw air through the filter mechanism, the pump rotation being calibrated to provide a controlled flow rate. The duration of the sample period is also monitored.

The charging socket is the only external connection, but charging is not permitted in the hazardous area.

Variation 1 - This variation introduced the following changes:

- i. The use of GP GP200SCK, 2.0 Ah nominal, nickel cadmium (NiCd) batteries was recognised as replacements for the original, Energiser Ultramas, 1.8 Ah nominal, NiCd cells, this is a retrospective modification and applies to all NiCd Battery Packs.
- ii. The introduction of new versions of the Sidekick 224-51TX and Sidekick 224-52TX Air Sampling Pumps, these are designated the Sidekick 224-51MTX and Sidekick 224-52MTX respectively.
- iii. The nickel cadmium (NiCd) batteries used in Battery Pack Part Number P78011TX may be replaced by nickel metal-hydride (NiMH) ones. The new battery packs are designated as either Part Number P78011MTX or Part Number P78051MTX. The P78011MTX Battery Pack can be used in all versions of the Sidekick 224-51TX and Sidekick 224-52TX Air Sampling Pumps and the P78051MTX Battery Pack can be used in all versions of the Sidekick 224-51MTX and Sidekick 224-52MTX Air Sampling Pumps.
- iv. The introduction of Robnor Resin RX/HX700K in place of the original PX/HX700K.
- v. The pump assembly drawings were re-drawn.
- vi. The label drawings were rationalised in line with the above changes.

Variation 2 - This variation introduced the following change:

- i. To permit the use of an alternative Main PCB Assembly for the Sidekick 224-52TX and Sidekick 224-52MTX Air Sampling Pumps.

Variation 3 - This variation introduced the following change:

- i. The use of an alternative, plastic case material (Staroy NH-1000T) was recognised.

Variation 4 - This variation introduced the following change:

- i. The use of Robnor PX804C as an alternative encapsulation material was endorsed.



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14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report No.	Comment
0	14 August 2002	R52A7997A	The release of the prime certificate.
1	30 June 2004	52V12067	Re-issued to amend the product description
2	8 January 2009	R52A16924B	This Issue covers the following changes: <ul style="list-style-type: none">All previously issued certification was rationalised into a single certificate, Issue 2, Issues 0 and 1 referenced above are only intended to reflect the history of the previous certification and have not been issued as documents in this format.The introduction of Variation 1.
3	7 April 2009	R52A17311B	The introduction of Variation 2.
4	18 August 2009	R52A19582A	The introduction of Variation 3.
5	24 February 2011	R22817A/00	The introduction of Variation 4.

15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None

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 CERTIFICATION

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 Faulhaber micromotors covered by SKC drawing Sira-13, shall have the dc resistance of their winding checked before assembly into the pump stack. The dc resistance of the winding shall be in excess of 5 Ω .

17.4 The battery pack charging circuit shall not be supplied from, nor contain, a source of potential greater than 250 Vac.

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Certificate Annexe

Certificate Number: Sira 02ATEX2135
Equipment: Sidekick 224-51TX and Sidekick 224-52TX
Air Sampling Pumps
Applicant: SKC Limited



Issues 0 and 1

Drawing	Sheet	Rev.	Date	Title
Sira 2	1 of 1	4	05 Mar 02	Rechargeable 224-51TX & 52TX Battery Pack Sub-Assembly
Sira 5	1 of 1	2	03 Jun 02	Schematic 224-52TX Sub Assembly
Sira 13	1 of 1	2	03 Oct 01	Micro Motor for Airchek & Universal Pumps
Sira 17	1 of 1	3	24 Jun 02	Labels for Sidekick Pumps 224-51TX & 224-52TX
0202C012	1 of 1	2	03 Jul 93	Airchek 50 Circuit Diagram
0202P012	1 of 1	2	03 Jul 93	Airchek 50 pcb Layout
Sira 6	1 of 1	2	03 Oct 01	Sub Assembly Schematic
AC 50	1 to 2	1	18 Sep 96	Certification Parts List
0204C037	1 of 1	Iss 7 Rev 3	13 May 94	Airchek-52 Certification Circuit Diagram
AC52UKPL	1 to 2	7	10 Jun 94	Certification Parts List
SKC 7952	1 of 1	4	03 Oct 01	Airchek 52TX Certification PCB Layout

Issue 2

Drawing	Sheet	Rev.	Date (Sira stamp)	Title
Sira-2	1 of 1	5	24 Nov 08	NiCd Battery Pack Assembly – Aircheck 51/52 & Sidekick Series Pumps
Sira 5	1 of 1	3	24 Nov 08	Pump Assembly Aircheck 52 & Sidekick 52 Series Pump
Sira 6	1 of 1	3	24 Nov 08	Pump Assembly Aircheck 51 & Sidekick 51 Series Pump
Sira 17	1 of 1	4	24 Nov 08	Labels for Sidekick Approved Pumps
SKC-IS-0001	1 of 1	1	24 Nov 08	NiMH Battery Pack Assembly – Aircheck 51/52 & Sidekick Series Pumps
SKC-IS-0004	1 of 1	1	24 Nov 08	Main PCB Assembly Aircheck 52 & Sidekick 52 Series Pumps
SKC-IS-0005	1 of 1	1	24 Nov 08	Main PCB Assembly Aircheck 51 & Sidekick 51 Series Pumps

Issue 3

Drawing	Sheet	Rev.	Date (Sira stamp)	Title
SKC-IS-0008	1 of 1	1	17 Mar 09	Circuit Schematic – Main PCB Assembly 224-52 Series Pumps
SKC-IS-0009	1 of 1	1	17 Mar 09	PCB Layout - Main PCB Assembly 224-52 Series Pumps
SKC-IS-0010	1 to 2	1	17 Mar 09	Parts List - Main PCB Assembly 224-52 Series Pumps
SKC-IS-0011	1 of 1	1	17 Mar 09	Main PCB Assembly 224-52 Series Pumps

Issue 4

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
SKC-IS-0001	1 of 1	2	10 Aug 09	NiMH Bat Pack Assy – Airchek 51/52 & Sidekick Series Pumps
Sira-2	1 of 1	6	10 Aug 09	NiCd Bat Pack Assy – Aircheck 51/52 & Sidekick Series Pumps
Sira-5	1 of 1	4	10 Aug 09	Pump Assy – Aircheck 52 & Sidekick 52 Series Pumps
Sira-6	1 of 1	4	10 Aug 09	Pump Assy – Aircheck 51 & Sidekick 51 Series Pumps

Issue 5

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
SKC-IS-0001	1 of 1	4	17 Jan 11	Sidekick Series Pumps
SKC-IS-0005	1 of 1	3	17 Jan 11	Main PCB Assembly 224-51 Series Pumps
SKC-IS-0006	1 of 1	3	17 Jan 11	Main PCB Assembly Universal 44EX-TX-MTX Pumps
SKC-IS-0011	1 of 1	3	17 Jan 11	Main PCB Assembly 224-52 Series Pumps – 7952 Iss 6

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Sira Certification Service

Rake Lane, Eccleston, Chester, CH4 9JN, England

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: info@siracertification.com
Web: www.siracertification.com