



1 **TYPE EXAMINATION CERTIFICATE**

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

3 Type Examination Certificate Number: Sira 03ATEX9174

4 Equipment: VB, MR and #MS11 Centrifugal Fans

5 Applicant: Air Control Industries Limited

6 Address: Silver Street
Chard
Somerset
TA20 2AE
UK

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 2 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 94/9/EC of 23 March 1994.

The examination and test results are recorded in confidential report number R53A10033A.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN 13463-1:2001

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 TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

12 The marking of the equipment shall include the following:



II 2GD T# (The temperature class of the equipment is determined by the temperature class of the associated motor)

Project Number 53A10033
Date 21 May 2003
C. Index: 18

M D Shearman
Certification Manager

This certificate and its schedules may only be reproduced in its entirety and without any change

Sira Certification Service

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SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER:

Sira 03ATEX9174

13 DESCRIPTION OF EQUIPMENT

The VB, MR and #MS11 Centrifugal Fans are designed to provide air ventilation at flow rates up to 6000 m³/h. They comprise a centrifugal fan that is mounted on the shaft of a suitably ATEX certified motor and enclosed by a housing that is bolted to the motor. The centrifugal impellers are manufactured from aluminium, stainless steel or galvanised steel and are mounted on a hub that fits to the motor shaft. The fan housings are manufactured from stainless steel or cast aluminium and may have flat air inlet plates or spun air inlet guides that may be fitted with polyurethane foam, retained by mesh, for filtration purposes. The equipment is designed to have suitable clearances between rotating and stationary parts but brass rubbing rings are included as a precaution against incendive sparking in the event of the fan striking the housing. Non-return valves can also be fitted if required; these consist of brass flapper plates that swivel in a stainless steel housing.

The #MS11 type may have two centrifugal impellers; these are mounted on a shaft adaptor and, with this option, the fan casing includes additional air guides to maximise efficiency.

The exterior of the fan is Category 2GD. The interior of the fan is Category 2G and Category 3D (This categorisation has been established through assessment of the equipment against the draft standard for the Design of Fans Working in Potentially Explosive Atmospheres TC305/WG 2/SG 1 WI Doc N86-2: 2002-09). The temperature class of the equipment is determined by the temperature class of the associated motor.

14 DESCRIPTIVE DOCUMENTS

14.1	Drawing No.	Rev.	Sheet	Date	Title
	SK03/1242	1 of 6	4	30 Apr 03	General arrangement
	SK03/1242	2 of 6	4	30 Apr 03	General arrangement – dimensions
	SK03/1242	3 of 6	4	30 Apr 03	VB fan details
	SK03/1242	4 of 6	4	30 Apr 03	2MS11 fan details
	SK03/1242	5 of 6	4	30 Apr 03	Valve layout
	SK03/1242	6 of 6	5	21 May 03	Label

14.2 Report No. R53A10033A

15 SPECIAL CONDITIONS FOR SAFE USE

None

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. R53A10033A.

17 CONDITIONS OF CERTIFICATION

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

Holders of Type Examination Certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

17.3 The fans shall be marked with the temperature class that is appropriate to its associated motor.

21 May 2003

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