1 EC-TYPE EXAMINATION CERTIFICATE

2 **Equipment or Protective systems intended for use in Potentially Explosive Atmospheres - Directive 94/9/EC**

3 EC-Type Examination Certificate No: **FM09ATEX0030X**

4 Equipment or protective system: (Type Reference and Name) **T595XP Current-to-Pressure Transducer**

5 Name of Applicant: **ControlAir Inc.**

6 Address of Applicant: **8 Columbia Drive**
Amherst, NH 03031
USA

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Ltd, notified body number 1725 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 confidential report number 3035877EC dated 16 April 2009

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents: EN 60079-0:2006, EN 60079-11: 2007 and EN 60529:1991 + A1:2000

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, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:

II 1 G Ex ia IIC T* Ta = -55°C to +85°C; IP65

Andrew Was
Certification Manager, FM Approvals Ltd.

Issue date: 17th April 2009

FM Approvals
Member of the FM Global Group

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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SCHEDULE

FM Approvals
Member of the FM Global Group

to EC-Type Examination Certificate No. FM09ATEX0030X

13 **Description of Equipment or Protective System:**

The T595XP is an electro-mechanical current to pressure converter. The unit operates on a 4 to 20 mA current loop. The ambient operating temperature range of the T595 is dependent on the Energy Limitation Parameters as specified below.

The housing is constructed of epoxy-painted A380/A383 Aluminium Alloy. The housing is available with a threaded blank cover. The enclosure contains one M20 x 1.5 wiring entry. The housing is provided with internal grounding connection. An o-ring is provided between the cover and base for environmental protection. Two sintered flame arrestors are press-fit into the base of the housing.

T595XP-AabK. I/P Converter.
II 1 G Ex ia IIC T* Ta = -55°C to +85°C

a = Output Pressure Range: C, D, or E
b = Connection: M, N, or P

Energy Limitation Parameters

*Temperature class	Ta	Ii	Ui	Pi
T4	85°C	60 mA	38.8V	2.328W
T4	85°C	100 mA	30V	3.0W
T4	80°C	120 mA	28V	3.36W
T4	70°C	150 mA	25.5V	3.825W
T5	70°C	60 mA	38.8V	2.328W
T5	55°C	100 mA	30V	3W
T5	45°C	120 mA	28V	3.36W
T5	85°C	23 mA	6.75V	0.155W
T6	60°C	50 mA	42.5V	2.125W
T6	55°C	60 mA	38.8V	2.328W

14 **Special Conditions for Safe Use:**

1) The I/P converter enclosure contains aluminium and is considered to constitute a potential risk of ignition by impact or friction and must be taken into account during installation.
2) The User shall permanently mark the protection type chosen. Once the type of protection has been marked it shall not be changed.

15 **Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

16 **Test and Assessment Procedure and Conditions:**

This EC-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting

documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Ltd's ATEX Certification Scheme.

17 **Approved Drawings**

Drawing No:	Revision	Title / Description
429-990-060 sh. 1 & 2	03/26/09	XP Certification Drawing T595XP Transducer
441-622-099	04/07/09	Type 595XP Installation, Operation and Maintenance Instructions
431-990-055	12/16/08	Interconnection Diagram T595XP Transducer
436-799-061	09/04/07	Circuit Board T590 Transducer
CTA-P00820	14/01/07	Assembly T590 Transducer