

# 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: **FM06ATEX0018X**  
4 Equipment or protective system: **T950X-AabK I/P Converter**  
(Type Reference and Name)  
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 3028313EC dated 23<sup>rd</sup> May 2007

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 60079-1:2004

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 2 G Ex d IIB + H<sub>2</sub> T6 Ta = -20 °C to +70 °C

**Andrew Was**  
**General Manager, FM Approvals Ltd.**

Issue date: 23<sup>rd</sup> May 2007



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

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# SCHEDULE

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## 13 Description of Equipment or Protective System:

The T950X is an electro-mechanical current to pressure converter. The unit's electronics operate on a 30 volt 4 to 20 mA current loop. The circuitry for the T950X is contained on two multi-layer printed circuit boards that are mounted inside an aluminum flameproof enclosure.

The ambient operating temperature range of the T950 is -40°C to +70°C

### *T950X-AabK I/P Converter*

a = Output Pressure: C, D, E

b = Options: A, B, T

## 14 Special Conditions for Safe Use:

Using the box provided on the nameplate, the User shall permanently mark the protection type chosen for the specific installation. 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:	Rev	Date (mm/dd/yy)	Title / Description
416-729-038	9	09/20/06	HOUSING, machined T-950XP I/P Transducer
416-729-039	4	11/09/05	HOUSING, CAST T-950XP I/P Transducer
416-764-115	5	12/19/05	BODY, CAST T900 Transducer
416-779-002	8	9/20/06	Actuator MANIFOLD, MACHINED T950XP
416-779-003	6	11/09/05	Actuator MANIFOLD, Cast T950XP
420-990-051	-	02/17/06	ATEX ASSEMBLY DRAWING
426-714-013	3	11/03/05	COVER, CAST T950XP Transducer
431-990-025	4	02/05/07	CONTROL DRAWING, T950 Intrinsically Safe
432-729-040	3	08/05/03	HOUSING, PAINTED T950-XP Explosion-proof
432-764-116	2	01/09/03	Body, Machined, Output FED T900 Transducer

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Drawing No:	Rev	Date (mm/dd/yy)	Title / Description
436-701-001	2	07/10/02	Ball
436-714-012	5	10/26/06	COVER, MACHINED T-950XP Transducer
436-714-015	3	4/13/00	Cover, Plastic T950-XP Transducer
436-732-517	-	09/14/06	ATEX LABEL, BLANK
436-736-002	1	03/05/88	Pintle, Supply
436-743-033	3	07/10/02	RETAINER, Molded T900 Transducer
436-764-163	5	12/19/06	BODY, MACH GENERIC T900 Transducer
436-780-005	3	03/12/98	NOZZLE, MACHINED, T-950XP Explosion-proof
438-502-096	-	12/21/06	ATEX Housing Assembly T950XP Transducer
438-520-001	3	03/22/04	MANIFOLD ASSEMBLY T950XP Transducer
438-532-156	-	12/21/06	ATEX Sub-Assy 4-20mA 3-15psi T950XP
438-549-002	-	01/22/07	ATEX CONDUIT SEAL ASS'Y
438-729-093	-	12/21/06	HOUSING, ATEX MACHINING
441-622-037	-	3/13/06	Type 950XP Instructions
442-714-014	1	03/28/01	COVER, PAINTED T950-XP Explosion-proof
442-722-031	-	01/19/07	ATEX CONDUIT FITTING
442-732-982	-	02/16/06	ATEX LABEL, ETCHED
442-737-066	3	06/01/06	Piston, Finished T900 Transducer
442-737-067	2	06/01/06	Piston, Finished T900 Transducer
442-739-019	1	11/14/99	PIPE PLUG, COATED 1/4 NPT REG.'s
442-739-021	1	03/03/04	Plug, Bottom, Finished T900 Transducer
442-748-147	1	05/02/06	Screw, Orifice, Plated T950 Transducer
442-748-148	-	12/14/00	Screw, Orifice, Drilled T950 Transducer
442-754-040	1	03/14/01	Spacer, Painted T900 Transducer
442-754-058	2	01/23/07	SPACER, CHROMATED T900 Transducer
442-764-117	1	03/07/01	BODY, PAINTED, T900 Transducer
442-764-209	2	06/20/05	BODY, CHROMATED T900 Transducer
445-744-015	-	12/30/04	RETAINING RING, #2, T950XP
445-745-002	2	06/13/06	Grooved Stud, Label T950XP Transducer
445-748-098	1	05/02/06	SCREW, BOTTOM PLUG T900 Transducer
445-748-100	1	05/02/06	SCREW, BUILD T900 Transducer
445-748-112	1	05/02/06	SCREW, T900 Transducer
445-748-116	1	05/02/06	SCREW, COVER, 500X Transducer - NEMA 4X
445-748-122	1	05/02/06	SCREW, MANIFOLD T-950XP Explosion-proof
445-748-217	1	05/02/06	SCREW, 3-48 x 1/4, T950
445-748-230	-	12/21/06	ATEX COVER LOCK SETSCREW
445-749-034	-	11/19/96	O-RING, T900 Transducer
445-749-035	-	11/19/96	O-RING, T900 Transducer
445-749-037	-	03/12/97	O-RING, T900 Transducer
445-749-039	-	04/13/98	O-RING, NOZZLE T-950XP Explosion-proof

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445-749-040	-	03/16/98	O-RING, COVER, T950XP
445-749-048	-	02/27/02	O-RING, T900 & T950XP
445-762-051	1	05/18/06	Lockwasher T950XP Transducer
445-762-087	-	10/10/05	GROUND CUP WASHER
445-773-019	-	03/01/05	ATEX M20 CONDUIT ADAPTER
445-901-003	-	08/04/98	Terminal Block, 2-Pole T950-XP I/P Transducer
446-539-002	1	10/21/99	Terminal Block Assembly T950-XP Transducer
446-700-076	2	04/26/02	DIAPHRAGM, CONTROL, T900 Transducer
446-700-077	2	04/26/02	DIAPHRAGM, PROTECTOR, T900 Transducer
446-714-016	-	04/23/01	Cover, Vent T950XP Transducer
446-724-012	-	11/18/96	GASKET, BOTTOM T900 Transducer
446-724-015	2	10/19/99	GASKET, MANIFOLD T-950XP Explosion-proof
446-737-060	-	11/18/96	Piston, Machined T900 Transducer
446-737-061	-	11/18/96	Piston, Machined T900 Transducer
446-739-002	1	06/05/06	Plug, HEX Socket Pressure T-100 REG
446-741-002	-	07/21/97	PROTECTOR STICKER, T900 Transducer
446-747-004	2	09/14/95	SCREEN, 500X Transducer
446-748-146	1	01/03/01	SCREW, MACHINED, T950XP
446-750-002	1	08/08/91	Seat, Supply T-100 REG.
446-750-003		04/01/88	SEAT, EXHAUST T-100
446-750-010	1	06/27/05	SEAT, EXHAUST T -100
446-754-039	1	07/12/04	SPACER, MACHINED T900 Transducer
446-755-006		05/13/88	Spring, Supply T-100 REG.
446-755-087		01/06/98	Spring, Start-up T900 Transducer
446-762-003	1	07/01/88	WASHER, SERRATED T-100 REG.
446-762-049		11/20/96	WASHER, WEIGHT T900 Transducer
446-765-008	3	07/10/02	INSERT, ACTUATOR, T900 Transducer
446-777-005	2	09/09/04	FLAME ARREST, 1/4 DIA.T950
446-777-006	2	09/09/04	FLAME ARREST, 3/8 DIA.T950
446-778-006		08/18/97	DUCKBILL Check Valve T500X - NEMA 4X
446-799-009	1	10/20/99	Circuit Board T950-XP Transducer
446-799-013	3	06/01/04	Circuit Board, IS, IP-15 T900 Transducer
446-799-028	SMT3	09/21/04	Valve Controller T900 Board 3 Top Side Assy
446-901-015	3	01/18/05	QuickPack Actuator, IS T900 Transducer
448-503-024	-	12/19/00	ORIFICE SCREW ASSY T950XP Transducer
448-504-045	2	06/24/05	Diaphragm Assembly T900 Transducer
448-504-046	1	01/24/03	DIA. PROTECTOR ASSY, T900 Transducer
448-505-086	2	02/07/01	Body Assembly T900 Transducer
448-512-001	-	12/30/04	COVER ASSY, T950XP
448-537-005	0	11/05/98	NOZZLE ASSY, T950XP

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Drawing No:	Rev	Date (mm/dd/yy)	Title / Description
910-0013-000-B2-BPSI	-	04/15/04	I/P EP Board 2 Option 15 PSI Model T900
910-013-000-B2-SCH	3	04/14/04	Schematic Valve Controller Board 2
910-013-000-B3-SCH	1	04/09/01	Schematic Valve Controller Board 3
911-013-000-B2-Mach	4.1	04/14/04	Valve Controller T900 Board 2 Machining Drawing
911-013-000-B3-Mach	1.1	04/09/21	Valve Controller T900 Board 3 Machining Drawing
911-013-00-B3-BIP	-	09/09/04	I/P Board 3
ELM021100	A	-	ELM Series Terminal Block Board Mount (Page 2 of 3)

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