

(1) **TYPE EXAMINATION CERTIFICATE**

- (2) Equipment intended for use in potentially explosive atmospheres – Directive 94/9/EC
- (3) Type Examination Certificate Number: **KEMA 03ATEX1404 X**
- (4) Equipment: **Coriolis Mass Flow Transmitter, CFT50 Series**
- (5) Manufacturer: **Invensys Systems, Inc.**
- (6) Address: **33 Commercial Street, Foxboro, MA 02035, U.S.A.**
- (7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) KEMA Quality B.V. 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 no. 2031601.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 50021 : 1999**

- (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, examination and tests of the specified equipment and not to the manufacturing process and supply of the equipment.
- (12) The marking of the equipment shall include the following:

 **II 3 G EEx nA [L] IIC T4**

Arnhem, 1 August 2003  
KEMA Quality B.V.



C.G. van Es  
Certification Manager

® This Certificate may only be reproduced in its entirety and without any change

(13)

## SCHEDULE

(14)

to Type Examination Certificate KEMA 03ATEX1404 X

### Description

The Flow Transmitter CFT50 Series is, in combination with a Flow Sensor, used for mass flow measurement.

Part of the apparatus is constructed in type of explosion protection EEx nL, energy limitation. It is intended to be used with certified Flow Sensors, in type of explosion protection EEx nA, non-sparking.

The enclosure of the apparatus provides a degree of ingress protection of at least IP 54 according to EN 60529.

Ambient temperature range -20 °C...+60 °C.

### Electrical data

Signal/Supply circuit ..... Supply voltage: max. 253 Vac  
(terminals 11, 12 and GND) Input current: 0 - 72 mA

Signal circuits..... Supply voltage: max. 60 Vdc.  
(terminals 4, 4.1, 5 and 6) Output current: 0 - 150 mA

Contact Output ..... in type of explosion protection energy limitation EEx nL IIC,  
(terminals 4.2 and 5) only for connection to an energy-limited circuit, with the following maximum values:

$U_i$	=	30	V
$I_i$	=	100	mA
$C_i$	=	0	nF
$L_i$	=	0	$\mu$ H

Sensor circuits..... Only for connection to certified Flow Sensors, which allow combination with this Flow Transmitter.

### Installation instructions

The cable and conduit entries used shall provide a degree of ingress protection of at least IP 54 according to EN 60529.

### Report

KEMA No. 2031601

### Special conditions for safe use

For electrical data see (15).

### Essential Health and Safety Requirements

Covered by the standards listed at (9).

(13)

**SCHEDULE**

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to Type Examination Certificate KEMA 03ATEX1404 X

(19) Test documentation

	<u>dated</u>
Drawing No. 10111LF, rev. 0C (18 sheets)	14.02.2003
10111LG, rev. D (16 sheets)	14.05.2003
10111LH, rev. C (15 sheets)	18.03.2003
10123XM, rev. 0C (6 sheets)	25.05.1995
10137AU, rev. C sheet 10	
10137AU, rev. C sheet 11	30.04.2003
10137AU, rev. C sheet 13 )	
B1089XA, rev. F (5 sheets)	17.07.2003
D0164YD, rev. C	23.04.2003
D0164YL, rev. B	21.10.2002
D0164YM, rev. B	21.10.2002
D0164YS, rev. D	10.04.2003
D0164ZD, rev. B	07.10.2002
D0164ZS, rev. A	20.09.2002
D0164ZY, rev. C	05.12.2002
D0168AA, rev. A	09.09.2002
D0168AB, rev. B	03.10.2002
D0168AH, rev. A	23.10.2002
D0168AK, rev. B	05.12.2002
L0123FU, rev. B (8 sheets)	01.08.2003
L0123FT, rev. D (2 sheets)	29.07.2003