

(1) EC-TYPE EXAMINATION CERTIFICATE


- (2) Equipment or protective system intended for use in potentially explosive atmospheres - Directive 94/9/EC
- (3) EC-Type Examination Certificate Number: **KEMA 03ATEX2564 X**
- (4) Equipment or protective system: **I/P Converter/Transmitter Models IPX² and IPX²-NG.**
- (5) Manufacturer: **Moore Industries-International, Inc.**
- (6) Address: **16650 Schoenborn Street, Sepulveda, CA 91343-6196, USA**
- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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. 2030969.

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

EN 50014 : 1997	EN 50018 : 2000	EN 50020 : 2002
EN 50284 : 1999	EN 50281-1-1 : 1998	

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 according 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 the following:

 II 1 G EEx ia IIC T4 ... T6 or
II 2 GD EEx d IIC T 169 °C IP 56 (air) or IP 66 (-NG)

Arnhem, 19 May 2004
KEMA Quality B.V.



T. Pijker
Certification Manager

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SCHEDULE

to EC-Type Examination Certificate KEMA 03ATEX2564 X

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(15) **Description**

The I/P Converter/Transmitter Models IPX² and IPX²-NG. convert a 4-20 mA current signal input into a proportional pneumatic output to provide control of valves, actuators and other pneumatically-controlled devices. The Model IPX² uses air as its control medium, the Model IPX²-NG. can be used with natural gas as its control medium.

Ambient temperature range -40 °C to +85 °C.

The relation between maximum ambient temperature, temperature class and maximum surface temperature T shall be taken from the tables below:

II 1 G EEx ia IIC version of Models IPX² and IPX²-NG.:

Max. ambient temperature	Temperature class	Max. surface temperature T
55 °C	T6	N/A
70 °C	T5	N/A
85 °C	T4	N/A

II 2 GD EEx d IIC version of Models IPX² and IPX²-NG.:

Max. ambient temperature	Max. surface temperature (II 2 G)	Max. surface temperature T (II 2 D)
85 °C	169 °C	169 °C

Technical data

Power supply (EEx d version): 30 Vdc max, 110 mA max.

Power supply circuit (EEx ia version): (terminals +PS, -PS) in type of explosion protection EEx ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

U_i	=	30	V
I_i	=	110	mA
P_i	=	695	mW
C_i	=	3	nF
L_i	=	1,14	μH

Degree of ingress protection according to EN 60529:

- IP 56 for Model IPX2 (Air) Transmitter
- IP 66 for Model IPX2-NG. (Natural Gas) Transmitter

Installation instructions

The installation instructions as provided by the manufacturer shall be followed in detail in order to assure proper and safe operation of the equipment.

Routine tests

Not required.

(16) **Report**

KEMA No. 2030969.

SCHEDULE

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(17) **Special condition for safe use**

In a hazardous location, the integral cable of a II 2 GD EEx d IIC version shall be terminated in a suitable certified junction box, e.g. in type of explosion protection EEx e or EEx d (in case of explosive gas atmospheres) or certified as II 2 D (in case of explosive dust atmospheres).

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

	<u>Dated</u>
1. Description No. 700-768-00C (2 pages) Component view PC1 (2 sheets)	23.12.2003 -
2. Drawing No. 100-100-65, rev. B	04.2004
163-201-156, rev. A	08.2002
170-460-00, rev. D	10.2002
170-533-00, rev. C	05.2001
170-555-01, rev. C	08.2002
170-561-00, rev. A	10.2001
170-833-00, rev. C	12.2001
170-855-01, rev. C	05.2004
170-861-00, rev. A	04.11.2001
200-251-2041, rev. A	06.2002
200-251-2081, rev. A	12.2003
200-251-2082, rev. A	12.2003
205-247-07, rev. A	08.2000
205-247-08, rev. A	10.2000
205-247-10, rev. A	08.2000
205-247-10, rev. A	05.2004
205-247-11, rev. A	10.2000
205-247-12, rev. A	08.2002
205-289-01, rev. D (2 sheets)	10.2002
205-289-05, rev. D (2 sheets)	10.2002
205-290-00, rev. B (sheets 1, 2, 4 and 5)	05.2002
205-291-01, rev. A	11.2001
205-890-00, rev. B1	05.2004
207-212-00, rev. B (1 sheet)	06.2002
207-222-00, rev. A	06.2002
207-222-01, rev. A	06.2002
504-573-02C (3 sheets)	05.2001
507-507-02D (2 sheets)	30.09.2002
507-510-02C (2 sheets)	30.09.2002
507-511-02A (2 sheets)	02.10.2001
800-811-35, rev. K	11.10.1996
801-996-24, rev. C	06.2003
801-997-24, rev. C	06.2003
SP8L-E-80-2-PC16-4-6	-