



T R A N S L A T I O N

(1) **EC TYPE EXAMINATION CERTIFICATE**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 94/9/EC**

(3) EC Type Examination Certificate Number

PTB 01 ATEX 2174

(4) Equipment: Model 6111-1 i/p Converter

(5) Manufacturer: SAMSON AG Mess- und Regeltechnik

(6) Address: Weismüllerstr. 3, 60314 Frankfurt am Main, Germany

(7) The equipment and any acceptable variations thereof are specified in the schedule to this certificate.

(8) The Physikalisch-Technische Bundesanstalt, notified body number 0102 according to Article 9 of the Council 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 and protective systems intended for use in potentially explosive atmospheres specified in Annex II to the Directive.

The examination and test results are recorded in confidential report.

PTB Ex 01-21297

(9) The essential health and safety requirements are satisfied by compliance with

EN 50021: 1997 + A1 + A2 EN 50020: 1994

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use as specified in the schedule to this certificate.

(11) According to the Directive 94/9/EC, this EC Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the Manufacture and supply of this equipment.

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Extracts or changes shall require the prior approval of the Physikalisch-Technische Bundesanstalt.



(12) The marking of the equipment shall include the following:



Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 26 November 2001

(Signature)

(Seal)

Dr. Ing. U. Johannsmeyer
Regierungsdirketor

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(13) **S c h e d u l e**

(14) **EC TYPE EXAMINATION CERTIFICATE No. PTB 01 ATEX 2174**

(15) **Description of Equipment**

The model 6111-1.. i/p-Converter is composed of an i/p module and a downstream pneumatic converter and serves for converting a load-independent current of 1 to 5 mA or (0)4 to 20 mA respectively into a standard pressure signal of 0.2 to 1 bar or 0.4 to 2 bar respectively.

The Model 6111-1.. i/p Converter is a passive two-terminal network which may be connected to any certified intrinsically safe circuit, provided the permissible maximum values of U_i , I_i and P_i are not exceeded.

The correlation between temperature classification, permissible ambient temperature ranges and maximum short-circuit currents is shown in the table below:

Temperature class	Permissible ambient temperature range	Maximum short-circuit current
T6	-45 °C ... 60 °C	85 mA or
T5	-45 °C ... 70 °C	100 mA or
T4	-45 °C ... 80 °C	120 mA

Electrical data

Signal circuit (terminals 11/12) Type of protection. Intrinsic safety EEx ia IIC
only for connection to a certified intrinsically safe circuit

Maximum values $U_i = 28 \text{ V}$
 $I_i = 100 \text{ mA or } 85 \text{ mA}$
 $P_i = 0,7 \text{ W}$

or
 $U_i = 25 \text{ V}$
 $I_i = 120 \text{ mA}$
 $P_i = 0,7 \text{ W}$

$C_i = \text{negligible, } L_i = \text{negligible}$

(16) Test report **PTB Ex 01-21297**

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

None

(18) **Special health and safety requirements**

In compliance with the standards specified above.

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 26 November 2001

(Signature) (seal)

Dr. Ing. U. Johannsmeyer
Regierungsdirektor

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