



TRANSLATION

(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 02 ATEX 2078

- (4) Equipment: Model 4763-1.. I/P Positioner
- (5) Manufacturer: SAMSON AG, Mess- und Regeltechnik
- (6) Address: Weismüllerstr. 3, D-60314 Frankfurt, Germany
- (7) This equipment and any acceptable variations thereof are specified in the schedule to this certificate.
- (8) The Physikalisch-Technische Bundesanstalt, notified body number 0102 in accordance with 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 as specified in Annex II to the Directive.

The examination and test results are recorded in confidential report PTB-Ex 02-22054.

- (9) The Essential Health and Safety Requirements are satisfied by compliance with

EN 50014: 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 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 the equipment.

The results laid down in this test report refer exclusively to the test object and the technical documentation submitted. Test reports without signature and seal are invalid. This test report may be reproduced unaltered only. Extracts or amendments 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, 19. July 2002

(Signature)

(Seal)

Dr. Ing. U. Johannsmeyer
Regierungsdirektor

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(13)

Schedule

(14)

EC Type Examination Certificate Number PTB 02 ATEX 2078

(15) **Description of Equipment**

The Model 4763-1.. I/P Positioner is intended for attachment to pneumatic control valves. It serves for converting control signals of (0) 4...20 mA or 1...5 mA from a controlling system into a pneumatic actuating pressure of 6 bar max. For auxiliary power non-combustible media are used.

The i/p converter circuit 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 device is intended for use inside and outside of hazardous locations.

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

Version 4763-1...1. with Model 6109 I/P Module

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

Version 4763-1...2. with Model 6112 I/P Module

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
T4	-45 °C ... 80 °C	120 mA

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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 V
 I_i = 110 mA or 85 mA
 P_i = 0.7 W
or

U_i = 25 V
 I_i = 120 mA
 P_i = 0.7 W
 C_i = negligible
 L_i = negligible

(16) **Test Report PTB Ex 02-22054**

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

None

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

In compliance with the standards specified above.

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 19. July 2002

(Signature) (seal)

Dr. Ing. U. Johannsmeyer
Regierungsdirektor

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1. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 2078

(Translation)

Equipment: i/p-positioner, type 4763-1..

Marking:  **II 2 G EEx ia IIC T6**

Manufacturer: SAMSON AG Mess- und Regeltechnik

Address: Weismüllerstr. 3, 60314 Frankfurt, Germany

Description of supplements and modifications

The i/p-positioner, type 4763-1.. is mounted onto pneumatic control valves. It is used for the conversion of (0) 4 ... 20 mA- or 1 ... 5 mA-control-signals from a controlling system into a pneumatic control pressure up to max. 6 bar. Non-flammable media are used as pneumatic auxiliary power.

The i/p converter circuit is a passive two-terminal network that may be connected into all certified intrinsically safe circuits provided that the permissible maximum values for U_i , I_i , and P_i are not exceeded. The equipment is intended for the application inside or outside the hazardous area.

In the future the i/p-positioner, type 4763-1.. may also be manufactured according to the test documents listed in the test report.

The state of the standards has been adapted. Further modifications have not been made.

For relationship between variant, temperature class, permissible ranges of the ambient temperature and maximum short-circuit currents, reference is made to the following tables:

Variant 4763-1...1. with i/p-module, type 6109-1..

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

Electrical data

Signal circuit type of protection Intrinsic Safety Ex ia IIC
(terminals 11/12) only for connection to a certified intrinsically safe circuit

Maximum values:

$U_i = 28 \text{ V}$
 $I_i = 100 \text{ mA or } 85 \text{ mA}$
 $P_i = 0.7 \text{ W}$

C_i negligibly low
 L_i negligibly low

Variant 4763-1...2. with i/p-module, type 6112-2..

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

Electrical data

Signal circuit type of protection Intrinsic Safety Ex ia IIC
(terminals 11/12) 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 negligibly low
 L_i negligibly low

The future marking reads:

 II 2 G Ex ia IIC T6 Gb

Applied standards

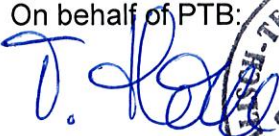
EN 60079-0:2009

EN 60079-11:2012

Test report: PTB Ex 14-23194

Konformitätsbewertungsstelle Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 28, 2014


Dr.-Ing. T. Horn
Regierungsrat

