



## Translation

# (1) EC-Type Examination Certificate

(2) - Directive 94/9/EC -  
Equipment and protective systems intended for use  
in potentially explosive atmospheres

(3) **BVS 04 ATEX E 179**

(4) **Equipment:** P/I-Signal converter type TEPI 11 V18321-005xx

(5) **Manufacturer:** ABB Automation Products GmbH

(6) **Address:** D 32425 Minden

(7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.

(8) The certification body of EXAM BBG Prüf- und Zertifizier GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council 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, given in Annex II to the Directive.

The examination and test results are recorded in the test and assessment report BVS PP 04.2142 EG.

(9) The Essential Health and Safety Requirements are assured by compliance with:

EN 50014:1997+A1-A2 General requirements  
EN 50020:2002 Intrinsic Safety 'i'

(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 in accordance to Directive 94/9/EC.

Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate

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

 **II 2G EEx ib IIC T6**

**EXAM BBG Prüf- und Zertifizier GmbH**

Bochum, dated 19. August 2004

Signed: Migenda

Certification body

Signed: Dr. Eickhoff

Special services unit

(13) Appendix to

(14) **EC-Type Examination Certificate**

**BVS 04 ATEX E 179**

(15) 15.1 Subject and type

P/I-Signal converter type TEPI 11 V18321-005xx

In the complete designation the "x" are replaced by numbers / letters specifying characteristic curve (rising 4...20 mA / falling 20...4 mA) and pressure range.

The type code may be extended optionally with further designations not relevant to explosion protection characteristics.

15.2 Description

The P/I-Signal converter type TEPI 11 V18321-005xx is intended for pressure measuring purposes of non flammable media and transfers the pressure signal to an intrinsically safe circuit (4 ...20 mA current loop).

The P/I-Signal converter type TEPI 11 V18321-005xx - shape: field housing - comprise an aluminium enclosure containing printed circuit boards fitted with electronic components partly embedded in casting compound in the electronic compartment.

Pressure sensors and process connectors- adapted to individual application - are mounted in the bottom part of the enclosure.

The intrinsically safe supply and signal circuit is introduced into the enclosure via cable entry and connected to terminals.

15.3 Parameters

15.3.1 Supply and signal circuit

Voltage	$U_i$	DC	30	V
Current	$I_i$		100	mA
Power	$P_i$		750	mW
Effective internal capacitance	$C_i$		15	nF
Effective internal inductance	$L_i$		90	$\mu$ H
Capacitance between circuit and enclosure			$\leq$ 2,2	nF

15.3.2 Ambient temperature range -  $20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

(16) Test and assessment report

BVS PP 04.2142 EG as of 19.08.2004

(17) Special conditions for safe use

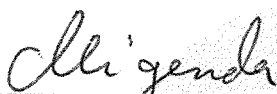
None

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We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 19.08.2004  
BVS-Scha/Mi A 20040446

**EXAM BBG Prüf- und Zertifizier GmbH**



Certification body



Special services unit