Translation

(1) # EC-Type Examination Certificate

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

(3) ## DMT 00 ATEX E 062 X

(4) **Equipment:** **Magnetic scanning amplifier Type PV10**

(5) **Manufacturer:** **Bopp & Reuther Messtechnik GmbH**

(6) **Address:** **68305 Mannheim**

(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 Deutsche Montan Technologie 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 00.2054 EG.

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

EN 50014:1997+A1-A2	General requirements
EN 50020:1994	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 and construction of the specified equipment. Further requirements of Directive 94/9/EC apply to the manufacture and placing on the market of this equipment.

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

II 2G EEx ib IIC T6/5/4

Deutsche Montan Technologie GmbH

Essen, dated 20. November 2000

Signed: Jockers
DMT-Certification body

Signed: Dill
Head of special services unit

Am Technologiepark 1, 45307 Essen, Telefon (0201)172-1416, Telefax (0201)172-1716

(13) Appendix to

(14) # EC-Type Examination Certificate

DMT 00 ATEX E 062 X

(15) 15.1 Magnetic scanning amplifier type PV10

15.2 Description

The magnetic scanning amplifier type PV10 is used to record pulses from an external coil.

The supply and signal transmission is carried out by means of a NAMUR electrical loop with two wires.

Connecting terminals nos. 3 and 4 are electrically linked to each other and do not have a galvanic connection with the intrinsically safe electric circuit.

The classification of temperature classes and maximum ambient temperature can be taken from the table below.

Temperature class	Maximum ambient temperature
T6	60 °C
T5	75 °C
T4	85 °C

The minimum temperature is –50 °C

15.3 Parameters

15.3.1 Supply and signalling circuit
(terminals Nos.: 1 - 2)

voltage Ui	20	V
current Ii	50	mA
power Pi	160	mW
effective internal capacitance Ci	25	nF
effective internal inductance Li	1	mH

15.3.2 Output circuit (sensor)
(terminals No.: 5 - 6)

voltage Uo	± 1,1	V
current Io	± 3,8	mA
power Po	1,1	mW
max. external capacitance Co	200	µF
max. external inductance Lo	1	H

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(16) Test and assessment report
BVS PP 00.2054 EG, 14 pages

(17) Special conditions for safe use

17.1 The magnetic scanning amplifier type PV10 shall be installed in an enclosure which at least conforms with degrees of protection IP 54 as defined in IEC publication 529

17.2 The magnetic scanning amplifier type PV 10 may be used in ambient temperatures of - 50°C to 60/75/85 °C (depending on the temperature class T6/T5/T4).

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.

45307 Essen, 20. November 2000
BVS-Kan/Hm A 20000479

Deutsche Montan Technologie GmbH

DMT-Certification body

Head of special services unit

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