



Translation

**EC-Type Examination Certificate**

(1)

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

(2)

(3)

**DMT 02 ATEX E 099**

(4) **Equipment:** Fieldgate Type FXA520-G-\*\*\*

(5) **Manufacturer:** Endress + Hauser GmbH + Co. KG

(6) **Address:** D 79690 Maulburg

(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 02.2050 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'  
EN 50284:1999 Equipment Group II Category 1G  
EN 50281-1-1:1998 Dust explosion protection

(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 (1) GD [EEx ia] IIC**

**Deutsche Montan Technologie GmbH**

Essen, dated 07. June 2002

Signed: Jockers

Signed: Eickhoff

DMT-Certification body

Head of special services unit

(13) Appendix to

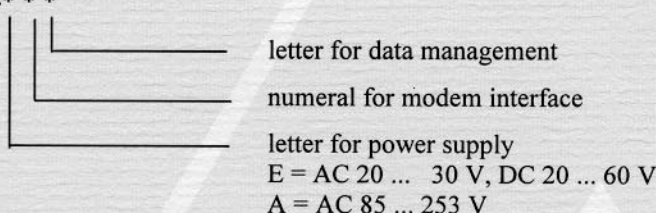
(14) **EC-Type Examination Certificate**  
**DMT 02 ATEX E 099**

(15) 15.1 Subject and type

Fieldgate type FXA520-G-\*\*\*

Instead of the \*\*\* in the complete denomination letters and numerals will be inserted which characterise the following variations:

Type FXA520-G-\*\*\*



15.2 Description

The Fieldgate is used for management of parameters and data of HART equipment.

The device comprises a number of components as transformers, fuses, resistors and zener diodes, all mounted on printed boards. These boards are located in a plastic enclosure with terminals; this enclosure will be mounted outside the hazardous area.

15.3 Parameters

15.3.1 Power supply circuit (terminals 1 – 2)

15.3.1.1 Type FXA520-G-A\*\*

Nominal voltage		AC	85 ... 253	V
max. voltage	Um	AC	253	V

15.3.1.2 Typ - type FXA520-G-E\*\*

Nominal voltage		AC	20 ... 30	V
		DC	20 ... 60	V
max. voltage	Um	AC	253	V

15.3.2 Intrinsically safe circuits (terminals 21 – 22 and 23 – 24)

Values for each circuit

Voltage	Uo	DC	6,5	V
Current	Io		6	mA
Power	Po		9,8	mW

max. external values in accordance with the following table

Group	Capacitance Co [ $\mu$ F]	Inductance Lo [mH]
IIC	25	1000
IIB	570	1000

if inductances and capacitances are concentrated the following values apply:

Group	Capacitance Co [ $\mu$ F]	Inductance Lo [mH]
IIC	2	0,5
	2	1
	1,5	5
IIB	10	1
	10	2
	7	5

for the connection of an intrinsically safe circuit with the following maximum value:

Voltage	Ui	DC	30	V
effective internal inductance		Li	negligible	
effective internal capacitance		Ci	negligible	

15.3.3	Ambient temperature range	Ta	
	Separate mounting		0 °C up to +60 °C
	Row mounting		0 °C up to +50 °C

(16) Test and assessment report  
BVS PP 02.2050 EG as of 07.06.02

(17) Special conditions for safe use  
None

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, 07. June 2002  
BVS-Schu/Ar A 20020180

**Deutsche Montan Technologie GmbH**

  
DMT-Certification body

  
Head of special services unit