



Translation

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

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

(3) **BVS 07 ATEX E 149**

(4) **Equipment:** **Communication module type ACM200**

(5) **Manufacturer:** **Mettler-Toledo (Changzhou) Measurement Technologie Ltd.**

(6) **Address:** **10 Kunlun Road, Changzhou Xinbei District,**
Jiangsu Province, PRC 213125, China

(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 DEKRA EXAM 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 07.2110 EG.

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

EN 60079-0:2006 General requirements

EN 60079-11:2007 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 (2) GD [Ex ib] IIC

DEKRA EXAM GmbH

Bochum, dated 10. October 2007

Signed: Dr. Jockers

Signed: Dr. Eickhoff

Certification body

Special services unit

(13) Appendix to

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

BVS 07 ATEX E 149

(15) 15.1 Subject and type
Communication module type ACM200

15.2 Description

The communication module is an associated apparatus mounted outside the hazardous area and is used, in conjunction with weighing indicators in the hazardous area, for data transmission between the safe and the hazardous area.

The communication module consists of an interface board fastened inside a metallic enclosure; inside this enclosure a switchmode power supply unit can also be fastened optionally.

The IS circuits are passive circuits.

15.3 Parameters

| | | | | | |
|--------|---------------------------------------|----|----|---------------------|----|
| 15.3.1 | Non-intrinsically safe circuits | | | | |
| | Max. voltage | Um | AC | 250 | V |
| 15.3.2 | Intrinsically safe interface circuits | | | | |
| | Level of protection Ex ib IIC | | | | |
| | Voltage | Ui | DC | 10 | V |
| | Current | Ii | | 300 | mA |
| | Power | Pi | | 500 | mW |
| | Internal Capacitance | Ci | | 120 | nF |
| | Internal inductance | Li | | negligible | |
| 15.3.3 | Ambient temperature range | Ta | | -10 °C up to +40 °C | |

(16) Test and assessment report
BVS PP 07.2110 EG as of 10.10.2007

(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.

44809 Bochum, 10.10.2007
BVS-Schu/Mi A 20070571

DEKRA EXAM GmbH



Certification body



Special services unit



Translation

(1) **1. Supplement to the EC-Type Examination Certificate**

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **BVS 07 ATEX E 149**
- (4) Equipment: **Communication module type ACM200-*****
- (5) Manufacturer: **METTLER-Toledo (Changzhou) Measurement Technology Ltd.**
- (6) Address: **Xinbei District, Changzhou, Jiangsu 213125, P. R. China**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM 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 07.2110 EG
- (9) The Essential Health and Safety Requirements are assured by compliance with:
IEC 60079-0:2011 General requirements
IEC 60079-11:2011 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 appendix to this certificate.
- (11) This supplement to the 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 (2) G [Ex ib Gb] IIC**
II (2) D [Ex ib Db] IIIC

DEKRA EXAM GmbH
Bochum, dated 30.11.2011

Signed: Simanski

Signed: Dr. Eickhoff

Certification body

Special services unit

(13) Appendix to

(14) **1. Supplement to the EC-Type Examination Certificate
BVS 07 ATEX E 149**

(15) 15.1 Subject and type

Communication module type ACM200-***

Instead of the *** in the complete denomination the letters AC or DC depending on the used power supply will be inserted.

15.2 Description

The communication module can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report. The circuitry of the module will be modified and assessed in acc. with IEC 60079-0:2011 and IEC 60079-11:2011. Therefore the communication module gets a modified marking.

15.3 Parameters

15.3.1 Non-intrinsically safe circuits

15.3.1.1 Mains supply

Type ACM200-AC

Nominal voltage

Max. voltage

| | | |
|----|----|------------|
| | AC | 100 – 240V |
| Um | AC | 250 V |

Type ACM200-DC

Nominal voltage

Max. voltage

| | | |
|----|----|-----------|
| | DC | 12 – 24 V |
| Um | AC | 250 V |

15.3.1.2 Data output circuit

Max. voltage

| | | |
|----|----|-------|
| Um | AC | 250 V |
|----|----|-------|

15.3.2 Intrinsically safe interface circuits

Level of protection Ex ib IIC

Voltage

Current

Power

Internal Capacitance

Internal inductance

| | | |
|----|----|------------|
| Ui | DC | 10 V |
| Ii | | 300 mA |
| Pi | | 500 mW |
| Ci | | 120 nF |
| Li | | negligible |

15.3.3 Ambient temperature range

| | |
|----|---------------------|
| Ta | -10 °C up to +40 °C |
|----|---------------------|

(16) Test and assessment report

BVS PP 07.2110 EG as of 30.11.2011



(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.

DEKRA EXAM GmbH
44809 Bochum, 30.11.2011
BVS-Schu/Her A 20110778

Certification body

Special services unit