



Translation

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

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

(3) **BVS 05 ATEX E 090 X**

(4) **Equipment:** **Capacitive level measurement type Liquicap-M FMI51 and**  
**type Liquicap-M FMI52**

(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 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 05.2059 EG.

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


|                     |                                 |
|---------------------|---------------------------------|
| EN 50014:1997+A1-A2 | General requirements            |
| EN 50018:2000+A1    | Flameproof enclosure 'd'        |
| EN 50020:2002       | Intrinsic safety 'i'            |
| EN 50284:1999       | Equipment Group II, Category 1G |

(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 1/2G EEx d [ia] IIC T3 ... T6,**  
**II 1/2G EEx d [ia] IIB T3 ... T6,**  
 **II 2G EEx d [ia] IIC T3 ... T6 resp.**  
**II 2G EEx d [ia] IIB T3 ... T6**

**EXAM BBG Prüf- und Zertifizier GmbH**

Bochum, dated 13. June 2005

Signed: Dr. Jockers

Signed: Dr. Eickhoff

Certification body

Special services unit

(13) Appendix to

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

**BVS 04 ATEX E 090 X**

(15) 15.1 Subject and type

Capacitive level measurement type Liquicap-M FMI51 and type Liquicap-M FMI52

15.2 Description

The Capacitive level measurement is mounted to a tank by a flange. The probe is inserted into the tank and, in case of the rod probe or the rope probe, it forms a capacitor with the tank walls or, in case of the rod probe, with a grounded tube.

The Capacitive level measurement is manufactured in different variants. Amongst others there are different types of probes (type Liquicap-M FMI51 has a rod probe and type Liquicap-M FMI52 has a rope probe) and different flanges.

For the Capacitive level measurement the enclosure type T13 is used.

An electronic insert optionally with a display both with intrinsically safe circuits and a supply module are mounted inside the enclosure.

The testing of the intrinsically safe circuits of this apparatus is an item of the test report BVS PP 05.2055 EG.

The enclosures fulfil the requirements of category 2G. The intrinsically safe probe circuit fulfils the requirements of category 1G.

15.3 Parameters

|                             |     |   |          |    |
|-----------------------------|-----|---|----------|----|
| power dissipation           |     | ≤ | 1        | W  |
| voltage                     |     | ≤ | DC 37    | V  |
| process temperature *       | -80 |   | to 200   | °C |
| ambient temperature range * |     |   |          |    |
| temperature class T6        | -50 |   | up to 60 | °C |
| temperature class T4 and T3 | -50 |   | up to 70 | °C |

In the version with display and glass window in the cover of the flameproof enclosure the lower limit of the ambient temperature is -40 °C.

\* for limitations see temperature diagram in the Safety instructions

(16) Test and assessment report

BVS PP 05.2059 EG as of 13.06.2005

(17) Special conditions for safe use

For the IIC version:

The Capacitive level measurement should only be used where electrostatic charging of the probe caused by the process is not possible.

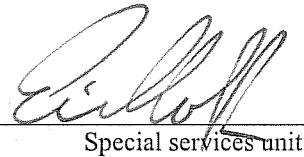
---

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, 13. June 2005  
BVS-Ru/Kw A 20040854

**EXAM BBG Prüf- und Zertifizier GmbH**

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit



**Translation**  
**1st Supplement**

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

**to the EC-Type Examination Certificate**  
**BVS 05 ATEX E 090 X**

**Equipment:** Capacitive level measurement type Liquicap-M FTI51 and type Liquicap-M FTI52

**Manufacturer:** Endress + Hauser GmbH + Co. KG

**Address:** 79690 Maulburg, Germany

A second capacitive level measurement is added to the capacitive level measurement type Liquicap-M FMI51 and type Liquicap-M FMI52. This is designated:

**Liquicap-M FTI51 and Liquicap-M FTI52**

The capacitive level measurement type Liquicap-M FTI51 and type FTI52 can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 50014:1997+A1-A2 General requirements  
EN 50018:2000 +A1 Flameproof enclosure 'd'  
EN 50020:2002 Intrinsic safety 'i'  
EN 50284:1999 Equipment Group II, Category 1G

The marking of the equipment shall include the following:



II 1/2G EEx d [ia] IIC T3 ... T6,  
II 1/2G EEx d [ia] IIB T3 ... T6,  
II 2G EEx d [ia] IIC T3 ... T6 resp.  
II 2G EEx d [ia] IIB T3 ... T6

## Description

The capacitive level measurement is manufactured in different variants. Amongst others there are different types of probes (type Liquicap-M FTI51 has a rod probe and type Liquicap-M FTI52 has a rope probe) and different flanges. For this level measurement the enclosure type T13 (two compartments) and F13 (one chamber) is used.

Inside the enclosure each one electronic insert is mounted.

The electronic insert type FEI55 (BVS PP 06.2064 EG) is mounted only in enclosure type T13.

The electronic inserts type FEI52 (BVS PP 06.2089 EG) and type FEI54 (BVS PP 06.2088 EG) can be mounted in both enclosures.

The testing of the intrinsically safe circuits of this apparatus is an item of the test reports above-mentioned.

The enclosures fulfil the requirements of category 2G. The intrinsically safe probe circuit fulfils the requirements of category 1G.

## Parameters

With electronic insert type FEI55 (BVS PP 06.2064 EG)

Input / signal circuit (terminals 1 – 2)

Power supply intrinsically safe

|                                |                |    |            |    |
|--------------------------------|----------------|----|------------|----|
| Voltage                        | U <sub>i</sub> | DC | 36         | V  |
| Current                        | I <sub>i</sub> |    | 100        | mA |
| Power                          | P <sub>i</sub> |    | 1          | W  |
| Effective internal inductance  | L <sub>i</sub> |    | negligible |    |
| Effective internal capacitance | C <sub>i</sub> |    | 2.4 nF     |    |

or

|   |  |      |    |    |
|---|--|------|----|----|
| Voltage   |  | ≤ DC | 37 | V  |
| Current/power has to be limited by a fuse with a nominal value of |  |      | 40 | mA |

|                           |                |  |                    |  |
|---------------------------|----------------|--|--------------------|--|
| Ambient temperature range | T <sub>a</sub> |  | -50 °C bis + 70 °C |  |
|---------------------------|----------------|--|--------------------|--|

With electronic insert type FEI54 (BVS PP 06.2088 EG)

Input circuit (terminals 1 (L+) – 2 (L-))

|              |                |    |          |   |
|--------------|----------------|----|----------|---|
| Voltage      |                | DC | 19... 55 | V |
|              |                | AC | 19...253 | V |
| Max. voltage | U <sub>m</sub> | AC | 253      | V |

Relay contact circuits (terminals 3 – 5 und 6 - 8)

|   |  |    |     |    |
|---|--|----|-----|----|
| Switching voltage                             |  | AC | 253 | V  |
| Switching current                             |  |    | 6   | A  |
| Switching power (at $\cos \varphi \geq 0,7$ ) |  |    | 750 | VA |

or

|                   |  |    |        |   |
|-------------------|--|----|--------|---|
| Switching voltage |  | DC | 30/125 | V |
| Switching current |  |    | 6/ 0.2 | A |

|                           |                |  |                      |  |
|---------------------------|----------------|--|----------------------|--|
| Ambient temperature range | T <sub>a</sub> |  | -50 °C up to + 70 °C |  |
|---------------------------|----------------|--|----------------------|--|

With electronic insert type FEI52 (BVS PP 06.2089 EG)

Input circuit (terminals 1 (L+) – 2 (L-)) and  
Signal circuit (terminals 3 – 2)

|                             |    |    |                       |   |
|-----------------------------|----|----|-----------------------|---|
| Voltage                     |    | DC | 10...55               | V |
| Max. voltage                | Um | AC | 253                   | V |
| Ambient temperature range   | Ta |    | -50 °C up to + 70 °C  |   |
| Process temperature *       |    |    | -80 °C up to + 200 °C |   |
| Ambient temperature range * |    |    | -50 °C up to + 60 °C  |   |
| Temperature class T6        |    |    | -50 °C up to + 70 °C  |   |
| Temperature class T4 and T3 |    |    |                       |   |

\* for limitations see temperature diagram in the Safety instructions

Special conditions for safe use

Unchanged

Test and assessment report

BVS PP 05.2059 EG as of 25.09.2006

**EXAM BBG Prüf- und Zertifizier GmbH**

Bochum, dated 25. September 2006

Signed: Dr. Jockers

Signed: Leiendecker

\_\_\_\_\_  
Certification body

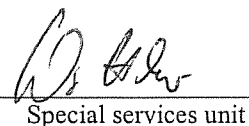
\_\_\_\_\_  
Special services unit

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, 25.10.2006  
BVS-Kem/Ar A 20060564

**EXAM BBG Prüf- und Zertifizier GmbH**

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit



Translation  
**2nd Supplement**

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

**to the EC-Type Examination Certificate  
BVS 05 ATEX E 090 X**

**Equipment:** Capacitive level measurement Liquicap-M type FMI51, FMI52, FTI51 and FTI52

**Manufacturer:** Endress + Hauser GmbH + Co. KG

**Address:** 79689 Maulburg, Germany

Description

The capacitive level measurement Liquicap-M type FMI51, FMI52, FTI51 and FTI52 can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

|                  |                                     |
|------------------|-------------------------------------|
| EN 60079-0:2006  | General requirements                |
| EN 60079-1:2004  | Flameproof enclosure 'd'            |
| EN 60079-7:2003  | Increased safety 'e'                |
| EN 60079-11:2007 | Intrinsic safety 'i'                |
| EN 60079-26:2004 | Group II, Category 1G               |
| EN 61241-0:2006  | General requirements                |
| EN 61241-1:2004  | Protection by enclosure "tD"        |
| EN 61241-11:2006 | Protection by Intrinsic safety "iD" |

Description

The operation range of the capacitive level measurement Liquicap-M types FTI51 and FTI52 is enlarged for the use in the presences of combustible dust. Additionally the enclosure T13 (two compartment enclosure) is modified at type FTI51 and FTI52. A separate certified line-bushing (PTB 97 ATEX 1047 U) type 07-9102-E08E/G resp. type 07-9102-E03E/G is mounted in the separation wall of the two compartments of the enclosure. The terminal box has the type of protection Increased Safety. The electronic box has the type of protection Flameproof Enclosure. The terminal box is equipped with separately certified terminals.

Electronic inserts are mounted inside the enclosures. A further electronic insert in accordance with BVS PP 07.2109 EG can be mounted inside the enclosure.

The assessment of the intrinsically safe circuits of this apparatus is an item of the test reports above-mentioned.

The enclosures fulfil the requirements of category 2G and 2D. The intrinsically safe probe circuit fulfils the requirements of category 1G and 1D.

Ratings

Electronic insert type FEI51 (BVS PP 07.2109 EG )

Input circuit (terminals 1 (L+) – 2 (L-))

|              |    |    |          |   |
|--------------|----|----|----------|---|
| Voltage      |    | AC | 19...253 | V |
| max. voltage | Um | AC | 253      | V |

probe circuit (connector X101), type of protection Ex ia IIC

|         |    |  |      |    |
|---------|----|--|------|----|
| Voltage | Uo |  | 9.93 | V  |
| Current | Io |  | 36   | mA |
| Power   | Po |  | 99   | mW |

The other parameters are unchanged.

Thermal data

Process temperature range unchanged

Permitted ambient temperature range unchanged

Max. surface temperature T100°C

Type of protection according to EN 60529 IP65

The marking of the equipment shall include the following:

- ⊕ II 1/2G Ex de [ia] IIC T3 ... T6,
- ⊕ II 1/2G Ex de [ia] IIB T3 ... T6,
- ⊕ II 2G Ex de [ia] IIC T3 ... T6 resp.
- ⊕ II 2G Ex de [ia] IIB T3 ... T6,
- ⊕ II 1/2D Ex iaD 20 / Ex tD A21 IP65 T100 °C

Special conditions for safe use

For the IIC version:

The Capacitive level measurement should only be used where electrostatic charging of the probe caused by the process is not possible.

Test and assessment report

BVS PP 05.2059 EG as of 13.11.2007

**DEKRA EXAM GmbH**

Bochum, dated 13. November 2007

Signed: Dr. Jockers

Signed: Dr. Eickhoff

\_\_\_\_\_  
Certification body


\_\_\_\_\_  
Special services unit


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, 03.12.2007

BVS-Kem/Ar E 1694/07

**DEKRA EXAM GmbH**

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit





## Translation

# 3rd Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

## to the EC-Type Examination Certificate BVS 05 ATEX E 090 X

**Equipment:** Capacitive level measurement Liquicap-M type FMI51, FMI52, FTI51 and FTI52

**Manufacturer:** Endress + Hauser GmbH + Co. KG

**Address:** 79689 Maulburg, Germany

### Description

The capacitive level measurement Liquicap-M type FMI51, FMI52, FTI51 and FTI52 can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

|                  |                                     |
|------------------|-------------------------------------|
| EN 60079-0:2006  | General requirements                |
| EN 60079-1:2004  | Flameproof enclosure 'd'            |
| EN 60079-7:2003  | Increased safety 'e'                |
| EN 60079-11:2007 | Intrinsic safety 'i'                |
| EN 60079-26:2004 | Group II, Category 1G               |
| EN 61241-0:2006  | General requirements                |
| EN 61241-1:2004  | Protection by enclosure "tD"        |
| EN 61241-11:2006 | Protection by Intrinsic safety "iD" |

II 1/2G Ex de [ia] IIC T3 ... T6,  
 II 1/2G Ex de [ia] IIB T3 ... T6,  
 II 2G Ex de [ia] IIC T3 ... T6 resp.  
 II 2G Ex de [ia] IIB T3 ... T6,  
 II 1/2D Ex iaD 20 / Ex tD A21 IP65 T100 °C

### Special conditions for safe use

Unchanged

Test and assessment report  
BVS PP 05.2059 EG as of 30.06.2008

**DEKRA EXAM GmbH**

Bochum, dated 30. June 2008

Signed: Dr. Jockers

Signed: Dr. Eickhoff

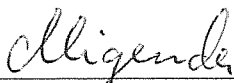
\_\_\_\_\_  
Certification body

\_\_\_\_\_  
Special services unit

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, 04.07.2008  
BVS-Kem/Ar E 0988/08

**DEKRA EXAM GmbH**

  
\_\_\_\_\_  
Certification body

  
\_\_\_\_\_  
Special services unit

## Translation

# (1) 4. 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 05 ATEX E 090 X**
- (4) Equipment: **Capacitive level measurement type Liquicap-M FTI51 and type Liquicap-M FTI52**
- (5) Manufacturer: **Endress + Hauser GmbH + Co. KG**
- (6) Address: **79689 Maulburg**
- (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 05.2059 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- |                         |  |
|-------------------------|--|
| <b>EN 60079-0:2009</b>  | <b>General requirements</b>                |
| <b>EN 60079-1:2007</b>  | <b>Flameproof enclosure "d"</b>            |
| <b>EN 60079-7:2007</b>  | <b>Increased safety "e"</b>                |
| <b>EN 60079-11:2007</b> | <b>Intrinsic safety "i"</b>                |
| <b>EN 60079-26:2007</b> | <b>Equipment Protection Level Ga</b>       |
| <b>EN 61241-0:2006</b>  | <b>General requirements</b>                |
| <b>EN 61241-1:2004</b>  | <b>Protection by enclosures</b>            |
| <b>EN 61241-11:2006</b> | <b>Protection by intrinsic safety "iD"</b> |
- (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:

Type Liquicap-M FMI51 or Liquicap-M FMI52

II 1/2G Ex d [ia Ga] IIC T3 ... T6 Ga/Gb,



II 1/2G Ex d [ia Ga] IIB T3 ... T6 Ga/Gb,

II 2G Ex d [ia Gb] IIC T3 ... T6 Gb or

II 2G Ex d [ia Gb] IIB T3 ... T6 Gb

Type Liquicap-M FTI51 or Liquicap-M FTI52

II 1/2G Ex d [ia Ga] IIC T3 ... T6 Ga/Gb,

II 1/2G Ex d [ia Ga] IIB T3 ... T6 Ga/Gb,



II 2G Ex d [ia Gb] IIC T3 ... T6 Gb or

II 2G Ex d [ia Gb] IIB T3 ... T6 Gb

II 1/2D Ex iaD 20 / Ex tD A21 IP6X T100 °C

DEKRA EXAM GmbH  
Bochum, dated 13.04.2011

Signed: Dr. Eickhoff

Signed: Leiendecker

\_\_\_\_\_  
Certification body

\_\_\_\_\_  
Special services unit

(13) Appendix to

(14) **4. Supplement to the EC-Type Examination Certificate  
BVS 05 ATEX E 090 X**

(15) 15.1 Subject and type  
Capacitive level measurement type Liquicap-M FTI51 and type Liquicap-M FTI52

15.2 Description

The capacitive level measurement is mounted to a tank by a flange. The probe is inserted into the tank and, in case of the rod probe or the rope probe, it forms a capacitor with the tank walls or, in case of the rod probe, with a grounded tube.

The capacitive level measurement is manufactured in different variants. Amongst others there are different types of probes (type Liquicap-M FMI51 has a rod probe and type Liquicap-M FMI52 has a rope probe) and different flanges. For this level measurement the enclosure type T13 (two compartments) and F13 (one chamber) is used.

A separate certified line-bushing (PTB 97 ATEX 1047 U) type 07-9102-E08E/G resp. type 07-9102-E03E/G will be mounted in the partition wall of the two compartments of the enclosure T13. So it comes into being a terminal box in type of protection Increase safety and an electronic box in type of protection Flameproof Enclosure. The terminal box is equipped with separate certified terminals.

For level measurement type FTI5\* the enclosure F27 is used for heavy duty applications. This enclosure is designed in shape of the F13 enclosure but the material is stainless steel.

The testing of the intrinsically safe circuits of this apparatus is an item of the test reports above-mentioned.

The enclosures fulfil the requirements of category 2G resp. 2D. The intrinsically safe probe circuit fulfils the requirements of category 1G and 1D.

15.3 Parameters

15.3.1 Electrical parameters

15.3.1.1 With electronic insert type FEI50H (BVS PP 05.2055 EG)

Input / signal circuit (terminals 1 – 2)

power supply intrinsically safe

|                                |                |    |            |    |
|--------------------------------|----------------|----|------------|----|
| voltage                        | U <sub>i</sub> | DC | 30         | V  |
| current                        | I <sub>i</sub> |    | 120        | mA |
| power                          | P <sub>i</sub> |    | 1          | W  |
| effective internal inductance  | L <sub>i</sub> |    | negligible |    |
| effective internal capacitance | C <sub>i</sub> |    | 2.4        | nF |

or

power supply not intrinsically safe, energy limited

|   |  |    |    |    |
|---|--|----|----|----|
| voltage   |  | DC | 37 | V  |
| current/power has to be limited by a fuse with a nominal value of |  |    | 40 | mA |

15.3.1.2 With electronic insert type FEI55 (BVS PP 06.2064 EG)

Input / signal circuit (Klemmen – terminals 1 – 2)

power supply intrinsically safe

|                                |                |    |            |    |
|--------------------------------|----------------|----|------------|----|
| voltage                        | U <sub>i</sub> | DC | 36         | V  |
| current                        | I <sub>i</sub> |    | 100        | mA |
| power                          | P <sub>i</sub> |    | 1          | W  |
| effective internal inductance  | L <sub>i</sub> |    | negligible |    |
| effective internal capacitance | C <sub>i</sub> |    | 2.4        | nF |

or

|   |  |      |    |    |
|---|--|------|----|----|
| voltage   |  | ≤ DC | 37 | V  |
| current/power has to be limited by a fuse with a nominal value of |  |      | 40 | mA |

15.3.1.3 With electronic insert type FEI54 (BVS PP 06.2088 EG)

|   |    |    |          |    |
|---|----|----|----------|----|
| Input circuit (terminals 1 (L+) – 2 (L-))<br>voltage                    |    | DC | 19...55  | V  |
|   |    | AC | 19...253 | V  |
| max. voltage  | Um | AC | 253      | V  |
| relay contact circuits (terminals 3 – 5 and 6 - 8)<br>switching voltage |    | AC | 253      | V  |
| switching current   |    |    | 6        | A  |
| switching power (cos φ ≥ 0,7)   |    |    | 750      | VA |
| or<br>switching voltage   |    | DC | 30/125   | V  |
| switching current   |    |    | 6/ 0.2   | A  |

15.3.1.4 With electronic insert type FEI52 (BVS PP 06.2089 EG)

|  |    |    |         |   |
|--|----|----|---------|---|
| Input circuit (terminals 1 (L+) – 2 (L-)) and<br>signal circuit (terminals 3 – 2)<br>voltage |    | DC | 10...55 | V |
| max. voltage   | Um | AC | 253     | V |

15.3.1.5 With electronic insert type FEI51 (BVS PP 07.2109 EG)

|  |    |    |          |   |
|--|----|----|----------|---|
| Input circuit (terminals 1 (L+) – 2 (L-))<br>voltage |    | AC | 19...253 | V |
| max. voltage   | Um | AC | 253      | V |

15.3.2 Thermal parameters

|                             |  |  |              |         |
|-----------------------------|--|--|--------------|---------|
| ambient temperature range * |  |  |              |         |
| temperature class T6        |  |  | -50 °C up to | +60 °C  |
| temperature class T4 and T3 |  |  | -50 °C up to | +70 °C  |
| process temperature *       |  |  | -80 °C up to | +200 °C |

\* for limitations see temperature diagram in the Safety instructions

(16) Test and assessment report  
BVS PP 05.2059 EG as of 13.04.2011

(17) Special conditions for safe use  
For the IIC version:  
The capacitive level measurement should only be used where electrostatic charging of the probe caused by the process is not possible.

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, 13.04.2011  
BVS-Hk/Schae A 20100865

Certification body

Special services unit