



Translation

EC-Type Examination Certificate

- (1)
- (2) **- Directive 94/9/EC -**
Equipment and protective systems intended for use
in potentially explosive atmospheres
- (3) **BVS 07 ATEX E 015**
- (4) **Equipment: Terminal type IND226x**
- (5) **Manufacturer: Mettler-Toledo (Changzhou) Scale & Systems Ltd.**
- (6) **Address: Changzhou, Jiangsu, 213001 PRC, 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 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 07.2019 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- | | |
|-------------------|------------------------------|
| EN 60079-0:2004 | General requirements |
| IEC 60079-11:2006 | Intrinsic safety 'i' |
| IEC 61241-0:2004 | General requirements |
| EN 61241-1:2004 | Protection by enclosure 'tD' |
- (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 G Ex ib IIC T4
II 2 D Ex tD A21 IP 66 T 60 °C

EXAM BBG Prüf- und Zertifizier GmbH

Bochum, dated 28. Februar 2007

Signed: Dr. Jockers

Signed: Dr. Eickhoff

Certification body

Special services unit

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(13) Appendix to

(14) **EC-Type Examination Certificate**
BVS 07 ATEX E 015

(15) 15.1 Subject and type
Terminal type IND226x

15.2 Description

The weighing terminal is used in potentially explosive atmospheres for input of parameters and in combination with weighing cells for recording and display of weight values.
The electrical components of the terminal are fixed in a metal enclosure. In the cover of the enclosure are a keyboard and a display mounted.

15.3 Parameters

15.3.1 Electrical data

15.3.1.1 Power Input (terminals P1-P9)

voltage	U _i	DC	13	V
internal capacitance	C _i		negligible	
internal inductance	L _i		negligible	

Remark: Current and power have not been mentioned because limiter stages are in the power supply circuit, which limit the input current and the power dissipation in the terminal.

15.3.1.2 Digital Active Input Port (terminals I1-I2)

voltage	U _o	DC	5,4	V
current	I _o		1	mA
power	P _o		1,4	mW
max. external capacitance	C _o		100	nF
max. external inductance	L _o		0,1	mH

15.3.1.3 Loadcell Connection (terminals B1-B7)

voltage	U _o	DC	5,88	V
current	I _o		156	mA
power	P _o		0,92	W
max. external capacitance	C _o		200	nF
max. external inductance	L _o		0,3	mH

15.3.2 Thermal data

15.3.2.1 Ambient temperature range Ta -10 °C up to +40 °C

15.3.2.2 Max. surface temperature T 60 °C

15.3.3 Degrees of protection according to EN 60529 IP66

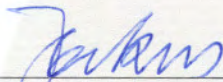
(16) Test and assessment report
BVS PP 07.2019 EG as of 28.02.2007

(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, 28.02.2007
BVS-Hk/Mi A 20060335

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 07 ATEX E 015

Equipment: Terminal type IND226x
Manufacturer: METTLER-Toledo (Changzhou) Measurement Technology Ltd
Address: 10 Kunlun Road, Changzhou Xinbei District, Jiangsu Province, PRC 213125

Description

In terminal type IND226x it is possible to install one active interface board (Interface IND) or one passive interface board (Interface Remote). This depends on the application of the weighing indicator. The corresponding part is located within the connected instrument. The approved intrinsic safe data of the IND226x are not affected by these interfaces.

additional electrical Parameters

Table with 2 main rows (Active and Passive Interface Board) and 5 columns (Parameter, Uo, DC, Value, Unit). Parameters include voltage, current, power, max. external capacitance, and max. external inductance.

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

Table mapping standards (EN 60079-0:2004, IEC 60079-11:2006, IEC 61241-0:2004, EN 61241-1:2004) to requirements (Allgemeine Anforderungen, Eigensicherheit, Schutz durch Gehäuse) and their English equivalents (General requirements, Intrinsic safety 'i', Protection by enclosures 'tD').

The marking of the equipment shall include the following:

 **II 2G Ex ib IIC T4**
II 2D Ex tD A21 IP 66 T 60 °C

Special conditions for safe use

none

Test and assessment report

BVS PP 07.2019 EG/N1 as of 25.06.07

DEKRA EXAM GmbH

Bochum, dated 25. June 2007

Signed: Dr. Jockers

Signed: Dr. Wittler

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, 24.07.2007
BVS-/Ha/Mi A 20070254

DEKRA EXAM GmbH



Certification body




Special services unit

Translation

(1) 2. 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 015**
- (4) Equipment: **Terminal type IND226x**
- (5) Manufacturer: **Mettler-Toledo (ChangZhou) Measurement Technology Ltd.**
- (6) Address: **JiangSu Province, 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 07.2019 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- EN 60079-0:2009 General requirements**
EN 60079-11:2007 Intrinsic safety "i"
EN 61241-11:2006 Intrinsic safety "iD"
- (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 2G Ex ib IIC T4 Gb**
II 2D Ex ib IIIC T60 °C Db
IP 66

DEKRA EXAM GmbH
Bochum, dated 31. March 2011

Signed: Simanski

Certification body

Signed: Leiendecker

Special services unit

- (13) Appendix to
- (14) **2. Supplement to the EC-Type Examination Certificate
BVS 07 ATEX E 015**
- (15) 15.1 Subject and type

Terminal type IND226x

15.2 Description

The weighing terminal is used in potentially explosive atmospheres for input of parameters and in combination with weighing cells for recording and display of weight values.

The electrical components of the terminal are fixed in a metal enclosure. In the cover of the enclosure a keyboard and a display are mounted.

It is possible to install one active interface board (Interface IND) or one passive interface board (Interface Remote) in terminal type IND226x. This depends on the application of the weighing indicator. The corresponding part is located within the connected instrument.

The reason for this supplement is the upgrading to the new standards and the inventory of new drawings with modifications not relevant for explosion protection.

15.3 Parameters

15.3.1 Electrical data

15.3.1.1 Power Input (Terminals P1-P9)

Voltage	U_i	DC	13	V
Internal capacitance	C_i		negligible	
Internal inductance	L_i		negligible	

Remark: Current and power have not been mentioned because limiter stages are in the power supply circuit, which limit the input current and the power dissipation in the terminal.

15.3.1.2 Digital Active Input Port (terminals I1-I2)

Voltage	U_o	DC	5.4	V
Current	I_o		1	mA
Power	P_o		1.4	mW
Max. external capacitance	C_o		100	nF
Max. external inductance	L_o		0.1	mH

15.3.1.3 Loadcell Connection (terminals B1-B7)

Voltage	U_o	DC	5.88	V
Current	I_o		156	mA
Power	P_o		0.92	W
Max. external capacitance	C_o		200	nF
Max. external inductance	L_o		0.3	mH

15.3.1.4 Optional: active Interface Board (Interface IND) - Option COM4

Voltage	U_o	DC	5.88	V
Current	I_o		144	mA
Power	P_o		212	mW
Max. external capacitance	C_o		600	nF
Max. external inductance	L_o		0.4	mH

15.3.1.5 Optional: passive Interface Board (Interface Remote) - Option COM4

Voltage	U_i	DC	10	V
Current	I_i		300	mA
Power	P_i		500	mW
Internal capacitance	C_i		120	nF
Internal inductance	L_i		negligible	

15.3.2 Thermal data

15.3.2.1 Ambient temperature range

Ta -10 °C up to +40 °C

15.3.2.2 Max. surface temperature T

60 °C

15.3.3 Degrees of protection according to EN 60529

IP66

(16) Test and assessment report

BVS PP 07.2019 EG as of 31.03.2011

(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, 31.03.2011
BVS-Hk/Her A 20110097



Certification body



Special services unit