(1) EC-TYPE EXAMINATION CERTIFICATE

(2) Equipment or protective system intended for use in potentially explosive atmospheres – Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **KEMA 03ATEX1130 X**

(4) Equipment or protective system: **Weighing Cell Type TBrick 15-Ex and TBrick 32-Ex**

(5) Manufacturer: **Mettler-Toledo GmbH**

(6) Address: **Heuwinkelstrasse, CH-8606 Nänikon, Switzerland**

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 confidential report no. 2015457.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1997 **EN 50020 : 2002** **EN 50281-1-1 : 1998**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 or protective system according to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

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

II 2 G EEx ib IIC T4
II 2 D T 55 °C

Arnhem, 16 May 2003
KEMA Quality B.V.

T. Pijpker
Certification Manager

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ACCREDITED BY THE DUTCH ACCREDITATION COUNCIL

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 03ATEX1130 X**

(15) **Description**

The Weighing Cell Type TBrick 15-Ex and Type TBrick 32-Ex is a unit that is used in weighing systems. It converts an external mechanical load into electrical signals that are processed and displayed by external equipment.

The weighing cell is either used with a dedicated interface, for example of the certified Power Supply Unit PSU or PSUx, or it can be used as replacement for existing equipment, using supply converter type GD13x/GD130x.
For the connection of the wiring a terminal board, which includes the supply converter if required, is housed in a separate connection box.

The enclosure of the weighing cell and the connection box provide a degree of ingress protection of at least IP 65 in accordance with EN 60529.

Ambient temperature range -10 °C ... +40 °C.

The maximum temperature of the enclosure T 55 °C is referred to an ambient temperature of 40 °C.

Electrical data

Supply and data circuits ..... (terminals as listed in table)

in type of explosion protection intrinsic safety EEx ib IIC, only for connection to the intrinsically safe circuits of a certified power supply unit, e.g. type PSUx or PSU; or to supply converter type GD13x/GD130x, with the maximum values as specified in the table below:

Signal designation and terminals		U_i (V)	I_i (mA)	P_i (W)	C_i (nF)	L_i (µH)
For direct connection						
U1	5, 8/9	8,7	133	1,16	0,4	10
U2	10, 8/9	12,6	42	0,53	110	10
U3	6, 8/9	15,0	74	0,8	0,4	10
U4	7, 8/9	15,0	74	0,8	0,4	10
For use with supply converter GD13x/GD130x						
U1	5, 8/9	12,6	330	2,0	0	0
U2	10, 8/9	25,2	48	0,44	0	0
U3	7, 8/9	15,0	74	0,8	0,4	10
U4	6, 8/9	15,0	74	0,8	0,4	10

Installation instructions

To maintain the degree of ingress protection of at least IP 65 in accordance with EN 60529, certified cable entries in accordance with EN 50281-1-1 must be used and correctly installed. Unused openings must be closed with a suitable stopping plug.

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 03ATEX1130 X**

(16) **Report**

KEMA No. 2015457.

(17) **Special conditions for safe use**

Because the intrinsically safe circuits are connected to the frame of the cell, the external GND connector of the cell shall be connected to the potential equalizing system within the hazardous area.

The interconnecting cable between the Weighing Cell and the connection terminals (which do or do not include Supply Converter GD13x/GD130x) and the interconnecting cable between power supply unit and connection terminals must be mechanically protected according to EN 50039: 1980, clause 5.3.2.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

			dated
1.	Description, rev. 1.6 (32 pages)		14.05.2003
2.	Drawing No.	ES-42101801, rev. D (2 sheets)	15.05.2003
		ME-42101801, rev. C (2 sheets)	26.03.2003
		ME-42101811, rev. C (5 sheets)	26.03.2003
		ES-42101802, rev. B	11.02.2003
		ME-42101802, rev. C	24.03.2003
		ME-42101812, rev. C (3 sheets)	24.03.2003
		ES-42101803, rev. B	22.01.2003
		ME-42101839, rev. C	25.03.2003
		ME-42101840, rev. C	25.03.2003
		ME-42101813, rev. C (3 sheets)	25.03.2003
		ES-42101841, rev. B	15.05.2003
		ME-42101841, rev. A	22.01.2003
		ME-42101842, rev. A (5 sheets)	22.01.2003
		ME-21100400-1	24.10.2001
		ME-21100400B	24.10.2001
		ME-21100407C	12.06.1998
		2-86-056-410-00, rev. E	12.12.1989
		ME-11 505 470	12.05.2003
		A0073004 (2 sheets)	26.11.2002
3.	Parts List	ME-42101801, rev. A (4 pages)	15.05.2003
		ME-42101802, rev. A	24.03.2003
		ME-42101839, rev. A	25.03.2003
		ME-42101840, rev. A	25.03.2003
		ME-42101841, rev. A (2 pages)	15.05.2003