EC-TYPE EXAMINATION CERTIFICATE

(1)

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

(3) EC-Type Examination Certificate Number: **KEMA 04ATEX1303 X**

(4) Equipment or protective system: **Hand-Held Multifunction Process Calibrator Model 725Ex**

(5) Manufacturer: **Martel Electronics Corp.**

(6) Address: **1F Commons Drive, Suite 39, Londonderry, NH 03053, USA**

(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. 2078419.

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

EN 50014 : 1997 + A1, A2 **EN 50020 : 2002** **EN 50284 : 1999**

(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 1 G EEx ia IIB 171 °C

Arnhem, 14 April 2005
KEMA Quality B.V.

C.G. van Es
Certification Manager

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ACCREDITED BY THE DUTCH COUNCIL FOR ACCREDITATION

PRODUCTS RvA C 001

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 04ATEX1303 X**

(15) **Description**

The hand-held multifunction process calibrator model 725Ex is used to measure and source electrical and physical parameters of intrinsically safe process measurement and control equipment. For pressure measurement, a pressure module series 700PEx may be connected to the process calibrator.

Ambient temperature range -10 °C ... +55 °C.

The maximum surface temperature of 171 °C applies at an ambient temperature of 55 °C.

Electrical data

Supply ..... Four 1.5V AA type alkaline batteries of one of the following types:
- Duracell MN1500
- Eveready Energizer E91
- Panasonic Powerline LR6A
- Rayovac 815
- Varta 4906
- Ucar Gold LR6

Pressure module input circuit ..... (connector 1) *) in type of protection intrinsic safety EEx ia IIB, with following maximum values:

U_o = 7,14 V
I_o = 152 mA
P_o = 271 mW

	IIB	IIA
C_o	240 µF	1000 µF
L_o	5,9 mH	11,5 mH

Other measurement circuits ..... in type of protection intrinsic safety EEx ia IIB, only for connection to a certified intrinsically safe circuit, with the following maximum values:

U_i = 30 V
I_i = 100 mA
P_i = 750 mW
C_i = See table below
L_i = 0 mH

and in type of protection intrinsic safety EEx ia IIB, with the following maximum values:

No. *)	Name	C_i	U_o	I_o	P_o	C_o		L_o	
						IIB	IIA	IIB	IIA
②, ③	Measure V, mA terminals	0,01 µF	13,7 V	96,5 mA	330 mW	5 µF	18,1 µF	16 mH	32 mH
④	TC input/output	0,01 µF	13,7 V	26 mA	89 mW	5 µF	18,1 µF	200 mH	400 mH
⑤, ⑥	Source/Measure V, RTD, Hz, Ω terminals	0 µF	13,6 V	25,2 mA	86 mW	5,2 µF	18,6 µF	200 mH	400 mH
⑦, ⑧	Source/ Measure mA terminals, 3W, 4W	0 µF	13,7 V	76 mA	260 mW	5 µF	18,1 µF	22 mH	45 mH

*) Terminal or connector numbers as indicated in the Users Manual

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 04ATEX1303 X**

(16) **Report**

KEMA No. 2078419.

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

None.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 2078419.