

(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 04ATEX1061 X**

(4) Equipment or protective system: **Hand-Held Pressure Calibrator Model 718Ex**

(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. 2070708.

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

EN 50014 : 1997

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 IIC T4

Arnhem, 4 June 2004
KEMA Quality B.V.



T. Pijpker
Certification Manager

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SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 04ATEX1061 X

(15) **Description**

The hand-held pressure calibrator model 718Ex is used to calibrate pressure to current transmitters powered by an intrinsically safe source. The pressure modules are powered by model 718Ex and feedback a pressure reading.

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

Electrical data

Internal supply and measurement circuit

in type of explosion protection intrinsic safety EEx ia IIC
The circuit may only be powered by 9V alkaline battery of one of the following types:
- Duracell 6LR61/MN1604 or 6LR61/MX1604
- Eveready 6LR61/522
- Panasonic 6LR61.9V

Current input circuit

in type of explosion protection intrinsic safety EEx ia IIC, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$$\begin{aligned} U_i &= 30 && \text{V} \\ I_i &= 250 && \text{mA} \\ P_i &= 1,88 && \text{W} \\ C_i &= 0 && \mu\text{F} \\ L_i &= 0 && \text{mH} \end{aligned}$$

in type of explosion protection intrinsic safety EEx ia IIC, with the following maximum values:

$$\begin{aligned} U_o &= 7,14 && \text{V} \\ I_o &= 1,09 && \text{mA} \\ P_o &= 1,9 && \text{mW} \end{aligned}$$

C _o			L _o		
IIC	IIB	IIA	IIC	IIB	IIA
13,5 μF	240 μF	1000 μF	1 H	3 H	8 H

Pressure module output circuit in type of explosion protection intrinsic safety EEx ia IIC, with following maximum values:

$$\begin{aligned} U_o &= 7,14 && \text{V} \\ I_o &= 102 && \text{mA} \\ P_o &= 182 && \text{mW} \end{aligned}$$

C _o			L _o		
IIC	IIB	IIA	IIC	IIB	IIA
13,5 μF	240 μF	1000 μF	3,4 mH	10,2 mH	27,2 mH

SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 04ATEX1061 X

(16) **Report**

KEMA No. 2070708.

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

For ambient temperature range and electrical data, see (15).

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

Covered by the standards listed at (9).

(19) **Test documentation**

dated

Drawing No.	0000088 (3 sheets)	29.03.2004
	Bill of Material 1111086 Rev. B (4 pages)	26.01.2004
	FLUKE-718-2001 Rev. 101	-
	FLUKE-717-2502 Rev. 105 (2 sheets)	-
	FLUKE-718-2003 Rev. 103	-
	FLUKE-717-2001 Rev. 102	-
	FLUKE-718-2005 Rev. 101	-
	FLUKE87-2003 Rev. 101	-
	0340028 Rev. C	14.05.2004
	0340028-1 Rev. B	24.10.2003
	0340028-2 Rev. B	24.10.2003
	0340028-3 Rev. B	24.10.2003
	0340028-4 Rev. B	24.10.2003
	0340028-5 Rev. B	24.10.2003
	0340028-6 Rev. B	24.10.2003