

(1) **EC-TYPE EXAMINATION CERTIFICATE**

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

(3) EC-Type Examination Certificate Number: **KEMA 04ATEX1066** Issue Number: **2**

(4) Equipment: **Vibration Sensor Model AC9...-..., Model LP8...-... and Model LP9...-...**

(5) Manufacturer: **Connection Technology Center, Inc.**

(6) Address: **590 Fishers Station Drive, Victor, NY 14564, USA**

(7) This equipment 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 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 test report number 2095582.

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

**EN 60079-0 : 2004**  
**EN 60079-15 : 2005**

**EN 50020 : 2002**

**EN 50284 : 1999**

(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 according to the 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 G Ex ia IIC T3 or T4**  
**II 3 G Ex nA II T3 or T4**

This certificate is issued on 15 June, 2007 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

KEMA Quality B.V.

T. Pijpker  
Certification Manager



Page 1/2

® Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

KEMA Quality B.V. Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands  
T +31 26 3 56 20 00 F +31 26 3 52 58 00 customer@kema.com www.kema.com Registered Arnhem 09085396

Experience you can trust.

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 04ATEX1066** **Issue No. 2**

(15) **Description**

The Vibration Sensors Model AC9.-... , Model LP8.-... and Model LP9.-... are used for acceleration measurement. The piezoelectric sensor convert mechanical forces (e.g. vibrations) of the equipment to which it is mounted into an electrical signal, depending on the version either a voltage signal or a current signal.

The apparatus is provided with a fixed cable or a connector for the electrical connections.

Ambient temperature range and Temperature Code:

- Model AC9.-...:  $-54\text{ °C} \leq T_a \leq +125\text{ °C}$ ; Temperature Code = T3

- Model LP8.-... and Model LP9.-...:  $-40\text{ °C} \leq T_a \leq +80\text{ °C}$ ; Temperature Code = T4

**Electrical data**

Models AC90.-... , LP80.-... and LP90.-...:

Supply and output circuit in type of protection Ex ia IIC, only for connection to a certified intrinsically safe circuit with the following maximum values:

$U_i = 28\text{ V}$ ,  $I_i = 100\text{ mA}$ ,  $P_i = 1\text{ W}$ ,  $C_i = 70\text{ nF}$ ,  $L_i = 51\text{ }\mu\text{H}$

Models AC92.-... , LP82.-... and LP92.-...:

Supply and output circuit in type of protection Ex nA II, only for connection to a circuit with the following maximum values:

$U_i = 28\text{ V}$ ,  $I_i = 100\text{ mA}$ ,  $P_i = 1\text{ W}$ ,  $C_i = 70\text{ nF}$ ,  $L_i = 51\text{ }\mu\text{H}$

**Installation instructions**

The Installation, Operation & Maintenance Manual as provided by the manufacturer with the equipment shall be followed in detail to assure safe operation of the sensors.

**Routine tests**

The routine electric strength test according to EN 60079-15, clause 34.2.1 and EN 50020, clause 10.6 shall be carried out between the input terminals and the equipment chassis.

(16) **Test Report**

KEMA No. 2095582.

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

None.

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

Assured by compliance with the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 2095582.