



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx LCI 11.0012X issue No.: 0 Certificate history:

Status: **Current**

Date of Issue: 2011-04-27 Page 1 of 4

Applicant: **MOTION SENSORS INC**
786 Pitts Chapel Road
Elizabeth City, NC 27909
United States of America

Electrical Apparatus: **Explosion proof pickup**
Optional accessory:

Type of Protection: **d**

Marking: **MOTION SENSORS INC**
Address :
Type :
Serial number :
Year of construction :
Ex d IIC T6 to T2
IECEx LCI11.0012 X
xx°C ≤ Ta ≤ xx°C (1)
(1) see table

Approved for issue on behalf of the IECEx
Certification Body:

Marc GILLAUX

Position:

Certification Manager

Signature:
(for printed version)

Date:

28 AVR. 2011

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France



L C I E



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Manufacturer: **MOTION SENSORS INC**
786 Pitts Chapel Road
Elizabeth City, NC 27909
United States of America

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2004 Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
Edition: 4.0

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 6

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

FR/LCI/ExTR11.0012/00

Quality Assessment Report:

FR/LCI/QAR10.0010/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description

The Explosion Proof pickups (Stainless steel) contain an internal speed sensor. They are designed with a cable or some conductors and they are flooded with epoxy potting compound.

The mating thread types include :

- For Female and Male NPT, size 1/8" thru 1 1/2"NPT
- For Female and Male cylindrical, size M10 thru M20

Types :

RF75-XXX, DR75-XXX, H75-XXX, HD75-XXX, PC75-XXX, DM75-XXX, HM75-XXX, HN75-XXX, MR75-XXX, MS75-XXX, PC45-XXX, RF10-XXX

CONDITIONS OF CERTIFICATION: YES as shown below:

The mating to flameproof enclosure threaded types must be performed by a certified connector for the considered to use.

Ambient temperature :

Product filled in with epoxy resin :

Emerson & CUMING, EPOXIES INC. OR EQUAL : STYCAST 2651-40 or STYCAST 2850 FT		
Catalyst	Ambient temperature	Temperature class
17M-1	-20 ≤ Ta ≤ +70°C	T6
	-20 ≤ Ta ≤ +85°C	T5
	-20 ≤ Ta ≤ +120°C	T4
	-20 ≤ Ta ≤ +185°C	T3
	-20 ≤ Ta ≤ +200°C	T2
9	-40°C ≤ Ta ≤ +70°C	T6
	-40°C ≤ Ta ≤ +85°C	T5
	-40°C ≤ Ta ≤ +100°C	T4
11	-55°C ≤ Ta ≤ +70°C	T6
	-55°C ≤ Ta ≤ +85°C	T5
	-55°C ≤ Ta ≤ +120°C	T4
	-55°C ≤ Ta ≤ +125°C	T3
24LV	-65°C ≤ Ta ≤ +70°C	T6
	-65°C ≤ Ta ≤ +75°C	T5



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EQUIPMENT(continued):

Marking :

MOTION SENSORS INC

Address :

Type :

Serial number :

Year of construction :

Ex d IIC T6 to T2

IECEx LCI 11.0012X

$xx^{\circ}\text{C} \leq \text{Ta} \leq xx^{\circ}\text{C}$

(1)

(1) see table

Manufacturers	Epoxy resin	Catalyst	Ambient temperature	Temperature class
Emerson & CUMING, EPOXIES INC. OR EQUAL	STYCAST 2651-40 or STYCAST 2850 FT	17M-1	$-20 \leq \text{Ta} \leq +70^{\circ}\text{C}$	T6
			$-20 \leq \text{Ta} \leq +85^{\circ}\text{C}$	T5
			$-20 \leq \text{Ta} \leq +120^{\circ}\text{C}$	T4
			$-20 \leq \text{Ta} \leq +185^{\circ}\text{C}$	T3
			$-20 \leq \text{Ta} \leq +200^{\circ}\text{C}$	T2
		9	$-40^{\circ}\text{C} \leq \text{Ta} \leq +70^{\circ}\text{C}$	T6
			$-40^{\circ}\text{C} \leq \text{Ta} \leq +85^{\circ}\text{C}$	T5
			$-40^{\circ}\text{C} \leq \text{Ta} \leq +100^{\circ}\text{C}$	T4
		11	$-55^{\circ}\text{C} \leq \text{Ta} \leq +70^{\circ}\text{C}$	T6
			$-55^{\circ}\text{C} \leq \text{Ta} \leq +85^{\circ}\text{C}$	T5
			$-55^{\circ}\text{C} \leq \text{Ta} \leq +120^{\circ}\text{C}$	T4
			$-55^{\circ}\text{C} \leq \text{Ta} \leq +125^{\circ}\text{C}$	T3
		24LV	$-65^{\circ}\text{C} \leq \text{Ta} \leq +70^{\circ}\text{C}$	T6
			$-65^{\circ}\text{C} \leq \text{Ta} \leq +75^{\circ}\text{C}$	T5