



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 CES 10.0018X issue No.:0 Certificate history:

Status: **Current**

Date of Issue: **2011-03-01** Page 1 of 4

Applicant: **DYNAMIN Srl**
Piazza Venini, 8
I – 20010 Vittuone (MI)
Italy

Electrical Apparatus: **Vibration switch series CS*-INV***
Optional accessory:

Type of Protection: **Flameproof enclosures 'd'; Dust ignition protection 't'**

Marking: **Ex d IIC T6 Gb**
Ex t IIIC T85°C Db IP66
Ex d I Mb

Approved for issue on behalf of the IECEx
Certification Body:

Mirko Balaz

Position:

Head of IECEx CB

Signature:
(for printed version)

Date:

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](http://www.iecex.com).

Certificate issued by:

CESI
Centro Elettrotecnico
Sperimentale Italiano S.p.A.
Via Rubattino 54
20134 Milano
Italy

CESI



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Manufacturer: **DYNAMIN Srl**
Piazza Venini, 8
I – 20010 Vittuone (MI)
Italy

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 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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:

[IT/CES/ExTR10.0018/00](#)

Quality Assessment Report:

[IT/CES/QAR09.0002/01](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Vibration switch series CS*-INV* are realized with 2 different types of explosion proof enclosure:

- CS with cylindrical joint
- CST with threaded joint.

Generally, the enclosures for the equipment are realized in cast iron, light alloy, bronze or in stainless steel. The enclosures for the equipment of Group I are made in cast iron, bronze or in stainless steel.

Inside the enclosure a vibration switch is installed.

Rated ambient temperature range (°C) :

from -60 or -40 or -20°C to +60 °C (Group II and Group III) or
from -20 to + 40 °C (Group I).

Degree of protection (IEC 60529) : IP 66

The cable entry devices used on the enclosure shall be suitably certified according to the applicable standards. For the equipment with dust protection 'tb' the accessories used for cable entries and for unused holes shall guarantee the degree of protection IP66 according to IEC 60529 standard.

CONDITIONS OF CERTIFICATION: YES as shown below:

- The flame paths are specified in the manufacturer drawings. For information regarding the dimensions of the flameproof joints the manufacturer shall be contacted.
- Use fasteners with minimum property class A2-80 (see Annex F, table F.1 – IEC60079-1).
- Information relating to use, installation repair and maintenance of the equipment are included within the safety instructions.



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EQUIPMENT(continued):

The vibration switch series CS*-INV* are identified by the following code:

a - b c d e

a - Enclosure type:

CS with cylindrical joint

CST with threaded joint

b . Device type:

INV vibration switch without reset

INVR vibration switch with reset

c - Model: 166, 266, 366, 376

d - Material enclosure:

B bronze

G cast iron

L aluminium alloy

S stainless steel

e - Optional code not affecting the type of protection

Electrical characteristics

Model	Supply voltage	Max current on contacts	Reset coil voltage	Frequency
166	100 ÷ 250 Vac	5 A	---	50 / 60 Hz
266	---	7 A	120-240Vac / 24-120 Vdc	
366	---	7 A	120-240Vac / 12-120 Vdc	
376	120 Vac	5 A	---	

The vibration switch may be equipped with an optional space heater of 2 W max power.

Electrical and functional parameters of the devices installed within the enclosures are specified in the Manufacturer's documents, in the instructions supplied with the equipment and if opportune also on the nameplate.