



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 12.0018X Issue No.:0
Certificate history: -----

Status: **Current**

Date of Issue: **2012-11-16** Page 1 of 3

Applicant: **MAC3 S.p.A.**
Via Maestri del Lavoro, 25 – 27
I-50013 Campi Bisenzio (FI)
Italy

Electrical Apparatus: **Float level switch, type SMALL S-EX and SMALL R-EX**
Optional accessory:

Type of Protection: **Type of protection "n"**

Marking: **Ex nC IIC T6 Gc**

*Approved for issue on behalf of the IECEx
Certification Body:* Mirko Balaz

Position: Head of IECEx CB

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



IECEX Certificate of Conformity

Certificate No.: IECEx CES 12.0018X

Date of Issue: 2012-11-16

Issue No.: 0

Page 2 of 3

Manufacturer:

MAC3 S.p.A.
Via Maestri del Lavoro, 25 – 27
I-50013 Campi Bisenzio (FI)
Italy

Additional 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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition: 4

*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/ExTR12.0021/00](#)

Quality Assessment Report:

[IT/CES/QAR12.0001/01](#)



IECEx Certificate of Conformity

Certificate No.: IECEx CES 12.0018X

Date of Issue: 2012-11-16

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Description of the equipment:

The float level switch SMALL is an electromechanical device that, coupled through a flexible cable to a submersible pump or to other controlled device, performs the level control of sewage water applications.

The position assumed by the float, depending on the level of the liquid, determines the switching of the microswitch.

The float level switch SMALL consists of a sealed plastic watertight floating enclosure inside which is housed a microswitch connected to the flexible cable. The enclosure material is polypropylene.

The device assumes a different designation depending on the type of microswitch used:

SMALL S-EX: single voltage microswitch

SMALL R-EX: multi voltage microswitch

Electrical characteristics

SMALL S-EX:

Rated current / voltage: 10(8)A / 250Vac

SMALL R-EX:

Rated current / voltage: 10(8)A / 250Vac and 10(6)A / 400Vac

- Degree of protection (IEC 60529): IP 65 and IP 68 (10 m 168 hours)

- Ambient temperature range: from 0°C to +45° C

CONDITIONS OF CERTIFICATION: YES as shown below:

The cable shall be protected against the risk of damage due to mechanical stresses.

The end connection of the cable shall be made in safe area or according to one of the types of protection listed in IEC 60079-0 standard suitable for the installation in the hazardous area.

The equipment installation has to ensure that the plastic enclosure is protected from light (daylight or light from luminaries).

The conditions of the installation of the equipment are included within the safety instructions. For a safe use these mounting instructions are to be followed precisely.