



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 INE 14.0032U Issue No: 0 Certificate history:
Issue No. 0 (2014-07-25)

Status: **Current** Page 1 of 4

Date of Issue: **2014-07-25**

Applicant: **Officine Meccaniche M.A.M**
Via Vico Veneto, 32
I - 20090 Fizzonasco di Pieve Emanuele (MI)
Italy

Electrical Apparatus: **Operator Devices type P...-..., H...-... or L...-...**
Optional accessory:

Type of Protection: **d and tb**

Marking:
Ex d IIC Gb
Ex d I Mb
Ex tb IIIC Db IP66

Approved for issue on behalf of the IECEx
Certification Body:

Thierry HOUEIX

Position:

Ex Certification Officer

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:

INERIS
**Institut National de l'Environnement Industriel
et des Risques**
BP n2
Parc Technologique ALATA
F-60550 Verneuil-En-Halatte
France



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Manufacturer: **Officine Meccaniche M.A.M**
Via Vico Veneto, 32
I - 20090 Fizzonasco di Pieve Emanuele (MI)
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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	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:

[FR/INE/ExTR14.0028/00](#)

Quality Assessment Report:

[FR/INE/QAR11.0004/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

This range of operator devices is constituted by push-buttons, switches, signaling lamps and illuminated push-buttons. They are intended to be fitted on enclosure with type protection "d" and "tb".
These metallic devices get the degrees of protection IP66 in accordance with IEC 60529 standard.

SCHEDULE OF LIMITATIONS

These operator devices can be used in the ambient temperature down to -60°C .

For the push-buttons and switches the non transmission tests have been performed for a maximum ambient temperature of 60°C .

The signaling lamps and illuminated push-buttons have been assessed to be used in the operating temperatures -60°C to 140°C .

The width of the flameproof joints is superior to that specified in the tables of IEC 60079-1 standard.

The maximum gap of the flameproof joint, for push-button and switch, is 0.1mm.

These components could be fitted on enclosures in accordance the following maximum volumes:

- Maximum volume for Groups I, IIB, IIB+H₂ or IIIC: 147 dm³.
- Maximum volume for Groups IIC: 68 dm³.

The overpressure type tests have been performed at 32.4 bar.

ADDITIONAL SCHEDULE OF LIMITATION FOR GROUP I:

For installation, the user will take into account that the operator devices underwent only an impact test corresponding to an energy of a low risk.

CONDITIONS OF CERTIFICATION: NO



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Additional information:

PARAMETERS RELATING TO THE SAFETY

For the signaling lamps and illuminated push-buttons:

Type of lamp : LED

Maximum power : 1 W

MARKING

Marking has to be readable and indelible; it has to include the following indications:

For the operators made in stainless steel:

- M.A.M
- P... or H... or L...(*)
- IECEx INE 14.0032U
- Ex d IIC Gb
- Ex d I Mb
- Ex tb IIIC Db IP66

(*)Type is completed by number and/or letter in accordance with the manufacturing variations.

For the operators made in aluminum:

- M.A.M
- P... or H... or L...(*)
- IECEx INE 14.0032U
- Ex d IIC Gb
- Ex tb IIIC Db IP66

(*) Type is completed by number and/or letter in accordance with the manufacturing variations.

Due to the size the marking can be reduced as follow:

- M.A.M or its trade mark
- P... or H... or L...(*)
- IECEx INE 14.0032U
- Ex d/tb

(*) Type is completed by number and/or letter in accordance with the manufacturing variations.

ROUTINE EXAMINATIONS AND TESTS

None.