IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx INE 12.0002U**

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Certificate history:

Issue 3 (2016-07-22)
Issue 2 (2014-12-19)
Issue 1 (2013-04-23)
Issue 0 (2012-05-04)

Status: **Current**

Issue No: 4

Date of Issue: 2021-04-15

Applicant: **OFFICINE MECCANICHE M.A.M**
Via Vico Veneto, 32
Fizzonasco Di Pieve Emanuele 20072
Italy

Ex Component: Breathing or Draining Devices or Flames Arrestor type FT/VS 61090...

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **db, eb and tb**

Marking: Ex db IIC T6 Gb
Ex eb IIC Gb
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)

Digitally signed by Thierry HOUEIX

Date: 2021-04-15

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 www.iecex.com or use of this QR Code.

Certificate issued by:

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

INERIS
controlling risks for sustainable development

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Manufacturer: **OFFICINE MECCANICHE M.A.M**
Via Vico Veneto, 32
Fizzonasco Di Pieve Emanuele 20072
Italy

Additional manufacturing locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with 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/ExTR12.0003/04

Quality Assessment Report:

FR/INE/QAR11.0004/09

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Ex Component(s) covered by this certificate is described below:

These breathing and draining devices or flames arrestor are intended to be fitted on enclosure "Ex db", with maximum volume 68 dm^3 for group IIC and 150 dm^3 for group IIB or IIB+H_2 and without limitation of volume for "Ex eb", "Ex tb" and "Ex tc" versions.
These Ex components get the degrees of protection IP66 in accordance with IEC 60529 standard.

SCHEDULE OF LIMITATIONS:

This component can be used in range of ambient temperatures from -60°C to 65°C.
The maximum temperature recorded is 79°C for ambient temperature 65°C.
The non transmission tests was performed on the standard test rig as specified on figure 21 of IEC 60079-1 standard.
This Ex component can be fitted only on the external parts of the following enclosures:

- For group IIC with a maximum volume 68 dm^3
- For group IIB or IIB+H_2 with a maximum volume volume 150 dm^3
- With a maximum reference pressure 40 bar
- Without limitation of volume for type protection "e", "eb", "tb" and "tc"

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 01

- Increase of ambient temperature up to 65°C

Issue 02

- Application of the IEC 60079-31:2013
- Possibility to install this breathing and draining device on flameproof enclosures IIB or IIB + H2 with a maximum volume 150 dm3 and maximum pressure 40 bar
- Add some new type of threaded joints

Issue 03

- Application of the standard IEC 60079-1:2014
- Modification of the name : Breathing or Draining devices or Flame arrestor

Issue 04

- Application of the standard IEC 60079-0:2017 and IEC 60079-7:2017
- Zip code update
- Addition of a new model VS 61090-18

Annex:

IECEx INE 12.0002U-04_Annex.pdf

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Certificate No.: IECEx INE 12.0002U

Issue No.: 04

Annex: IECEx INE 12.0002U-04_Annex.pdf

PARAMETERS RELATING TO THE SAFETY

None

MARKING

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

- OFFICINE MECCANICHE MAM
- I – 20072 Fizzonasco di Pieve Emannuele
- FT/VS 61090 … (*)
- IECEx INE 12.0002U
- Ex db IIC T6 Gb
- Ex eb IIC Gb
- Ex tb IIIC Db IP66

(*) The type is completed by numbers and/or letters in accordance with the manufacturing variations.

ROUTINE EXAMINATIONS AND TESTS

In accordance with clause 16.2 of the IEC 60079-1 standard, when this breathing and draining device is fitted on equipment with a maximum reference pressure of 15 bar, it is exempted of routine test in view to the fact that it has undergone a static type test under 60 bar.

In accordance with clause 16.1 of the IEC 60079-1 standard, when this breathing and draining device is fitted on equipment with a maximum reference pressure higher than 15 bar it is necessary to make a routine test under 1.5 times of the reference pressure.