



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 14.0045U Issue No: 0 Certificate history:
Issue No. 0 (2014-07-25)

Status: **Current** Page 1 of 4

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

Applicant: **RIBCO S.r.l.**
Via dei Mille, 12
20061 Carugate (MI)
Italy

Electrical Apparatus: **Breathing and draining devices and bulkheads type V**S or VD**S or
VF**S or VDF**S or P**S-****

Optional accessory:

Type of Protection: **d, e and tb**

Marking:
Ex d I Mb
Ex d IIB+H2 or IIC T6 Gb
Ex e IIC Gb
Ex tb IIIC Db IP64 or 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: **RIBCO**
Via dei Mille, 12
20061 Carugate (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 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2006-07 Edition:4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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/ExTR14.0040/00](#)

Quality Assessment Report:

[IT/CES/QAR11.0001/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The bulkheads and the breathing and draining devices are made in AISI 316L.
These devices get the degree of protection IP66 or IP64 according to the IEC 60529 standard.

SCHEDULE OF LIMITATIONS:

The devices IIC are for Ex d enclosures with maximal internal volume equal to 62.9 liters.
The devices IIB+H2 are for Ex d enclosures with maximal internal volume equal to 160.6 liters.
The devices Ex d are T6 for an ambient temperature of +60°C.(maximum heating of +13.9 K)
The Ex components have been tested for pressure of 60 bar (-20°C) and 100 bar (-60°C).
All devices get the degree of protection IP66, except for the devices series VD**S, V**S and P**S-** that have the degree of protection IP64. The IP test has been performed without O-Ring.
The devices series VD**S can reach the degree of protection IP66 with a plastic cap. The IP test has been performed without the IEC 60079-0 preliminary tests on the plastic cap.
An impact test of 20 J has been performed on the devices.

CONDITIONS OF CERTIFICATION: NO



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Additional information:

PARAMETERS RELATING TO THE SAFETY

Size of cable entries:

Breathing and draining devices:

Taper threading: 3/8 " NPT or 1/2 " NPT or 3/4 " NPT.

Cylindrical threading: M16x1.5 or M20x1.5 or M25x1.5

Bulkheads:

Cylindrical threading: M12x1.5 or M16x1.5 or M20x1.5 or M25x1.5

MARKING

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

a) Marking:

- RIBCO
- 20061 Carugate (MI)-ITALY
- V**S or VD**S or VF**S or VDF**S or P**S-**
- IECEx INE 14.0045U
- (Year of construction)
- Ex d I Mb
- Ex d IIB+H2 or IIC T6 Gb
- Ex e IIC Gb
- Ex tb IIIC Db IP64 or IP66
- Tamb. -20°C/-30°C/-40°C/-50°C/-60°C to +60°C

On the small equipments the marking can be reduced at:

- RIBCO-I
- (Year of construction)
- V**S or VD**S or VF**S or VDF**S or P**S-**
- IECEx INE 14.0045U
- Ex d/e/tb
- IP64 or IP66
- Tamb. -20°C/-30°C/-40°C/-50°C/-60°C to +60°C

ROUTINE EXAMINATIONS AND TESTS

In accordance with clause 16.1 of the IEC 60079-1 standard, an overpressure test of a period comprised between 10 and 60 seconds under:

- 60 bar for -20°C.
- 82.2 bar for -30°C.
- 87 bar for -40°C.
- 91.8 bar for -50°C.
- 97.2 bar for -60°C.