

[1]

**EU-TYPE EXAMINATION CERTIFICATE**

[2]

**Equipment intended for use in potentially explosive atmospheres  
Directive 2014/34/EU – Annex III**

[3]

Certificate Number:

**EPT 16 ATEX 2552**

issue 1

[4]

Equipment:

**Vacuum groups****VVB, VVC, VVD**

[5]

Manufacturer:

**ITALVACUUM S.R.L.**

[6]

Address:

Via Stroppiana, 3 - 10071 Borgaro Torinese (TO)

[7]

This equipment and its accepted variations are specified in the annex to this Certificate.

[8]

Eurofins Product Testing Italy S.r.l., Notified Body n. 0477 in accordance with Article 21 of the Directive 2014/34/EU of the European Parliament and of the Council of 26th February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive. The examination and test results are recorded in the confidential Report N° EPT.19.REL.01/19-13-000103.

[9]

Compliance with the essential health and safety is assured through the verification of them and by compliance with the standard:

**EN ISO 80079-36:2016, EN ISO 80079-37:2016**

[10]


If the sign "X" is placed after the Certificate number, it indicates that the equipment is subject to the special conditions for safe use specified in the annex to this Certificate.

[11]

This EU-TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified equipment.

Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this equipment. These requirements are not object of this Certificate.

[12]

The equipment shall include the sign  and one of the following strings:

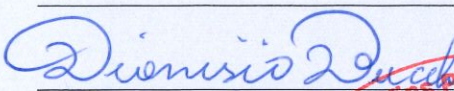
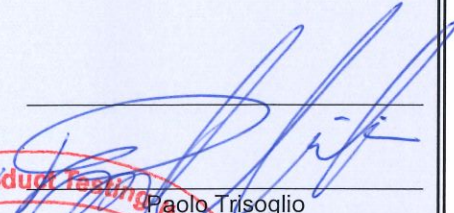
**II 1/2 G Ex h IIB T4 Ga/Gb****108 °C****II 1/2 G Ex h IIB 150°C Ga/Gb**

for temperature limiting device set to

**120 °C****II 1/2 G Ex h IIB T3 Ga/Gb****160 °C**

Place and date of issue:

Torino, 2019-11-13

  
Dionisio Bucchieri  
Directive Responsible  
Paolo Trisoglio  
Managing Director

Notified Body N. 0477



PRD N° 119B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC  
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

This Certificate has 3 pages and it is reproducible only in its entirety. Conditions of validity are reported below.

[13]

## ANNEX



[14]

EU-TYPE EXAMINATION CERTIFICATE N. EPT 16 ATEX 2552 issue 1

[15] **Equipment description**

The double-stage vacuum pump Italtvacuum is made in the following versions:

- VVB nominal flow 81 m<sup>3</sup> / h, vacuum 0.66 mbar limit;
- VVC nominal flow rate 200 m<sup>3</sup> / h, vacuum 0.66 mbar limit;
- VVD nominal flow rate 380 m<sup>3</sup> / h, vacuum 0.66 mbar limit.

The vacuum pump is driven by a single phase electric motor positioned under the body of the pump. The motion output shaft is connected with a belt to an external flywheel to the pump body in which they are connected through a mechanical distribution system all drives.

At the flywheel it is directly connected to the crankshaft of the internal crank mechanism to the pump body, which controls the primary drive, represented by the piston of the pump.

The piston slides inside the head and performs the function of the sucked fluid pumping, compressing it to atmospheric pressure discharge.

The piston is driven through the rod connected to the crank mechanism, which flows through the seal between the inner chamber and the pump body, made of teflon packing rings.

The two-stage pump is carried out through a single piston with two different bores, greater for the first stage and reduced for the second.

The piston, in the first stage, performs the pumping function by exploiting as useful stroke of the two directions of movement (double-acting). At both ends of the cylinder are positioned first phase of the intake ports and the exhaust valves, which are alternately used.

In the dual-stage pumps, the piston of the second stage instead works only in one direction, and to return sucks in the same room. The output of the compressed fluid from the pistons is controlled through the exhaust valves, which are of the non-return valves with a spring that allows the opening only in the direction of the fluid outlet.

**Warning label**

None.

**Routine tests**

None.

[16] **Assessment Report n° EPT.19.REL.01/19-13-000103**

This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report above cited.

[17] **Specific conditions of use**

None.

[18] **Essential Health and Safety Requirements**

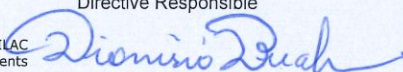
Assured by compliance with harmonized standards.



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Directive Responsible



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**ANNEX**

[14]

**EU-TYPE EXAMINATION CERTIFICATE N. EPT 16 ATEX 2552 issue 1**
**[19] Descriptive documents**

The equipment object of this Certificate is described by the following documents that are scheduled documents and therefore they cannot be modified without the explicit authorization of the Notified Body.

Document	Identification	Rev.	Date
Fascicolo tecnico Gruppo da vuoto ITALVACUUM Zona 0-1	UT04040	02	04/10/19
All.3 P&ID Vacuum Unit	VVX	0	
All.4.1 Pompa per vuoto Modello doppio stadio Complessivo	PWB	1	05/10/2016
All.4.2 Pompa per vuoto Modello doppio stadio Complessivo	PWC	1	05/10/2016
All.4.3 Pompa per vuoto Modello doppio stadio Complessivo	PWD	1	05/10/2016
All.5 Gruppo da vuoto Schema di lubrificazione	VD - VDD	5	05/12/2016
All.8 Istruzioni operative Ex II 1G/2G	UT04064	03	04-10-2019
All.9 Tabella elenco materiali metallici a contatto relativo	UT08128	01	06/12/16
All.12 Tabella elenco componenti commerciali certificati ATEX			

**[20] Terms and conditions**

The product liability rests with the Manufacturer, his representative or, in the absence of a representative, with the importer, in accordance with the General Product Safety Directive 2001/95/EC.

The following conditions may render this certificate invalid:

- changes in the design or construction of the product;
- changes or amendments to the Directive;
- changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the 2014/34/EU Directive.


**[21] History**

Issue	Description	Date
0	First issue.	2016-12-15
1	Change of some electrical parts, updating on temperature marking.	2019-11-13



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 End of Certificate

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