

CERTIFICATE



Italia

[1] EU-TYPE EXAMINATION CERTIFICATE

[2] Equipment or Protective System intended for use
in potentially explosive atmospheres
Directive 2014/34/EU

[3] EU-Type Examination Certificate number:

TÜV IT 21 ATEX 049 X Rev.1

[4] Equipment: Vapour Recovery pump with electric motor type "VRP21/.."

[5] Manufacturer: **ASSYTECH S.r.l.**

[6] Address: **Via Val d'Aosta, 169
I-23018 Talamona (SO)**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] TÜV Italia, notified body no. 0948 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. R 21 EX 037

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0:2018; EN 60079-1:2014;
EN ISO 80079-36:2016; EN ISO 80037:2016; EN ISO 16852:2016;**

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to special conditions for safe use specified in the schedule to this certificate.

[11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:



**II 1/2G Ex db h IIA T3 Ga/Gb (motor + pump)
II G IIA (flame arrestor)**

This certificate may only be reproduced in its entirety and without any change, schedule included.

Issue date: 15th June 2022



PRD N° 081B

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



**TÜV Italia S.r.l.
Notified body N° 0948**

Alberto Carelli

**Industry Service - Real Estate & Infrastructure
Managing Director**

TÜV Italia has been authorized by Italian government to operate as notified body for the certification of equipment or protective system intended for use in potentially explosive atmospheres. This document is not valid without official signature and logo. The internal reference code is 722285317

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PEX-01-M002_r07 del 29/03/2018

[13]

SCHEDULE

[14]

EU-TYPE EXAMINATION CERTIFICATE
No. TÜV IT 21 ATEX 049 X Rev.1



Certificate History

Revision:	Description:	Report rev.:	Issue Date:
-	First issue	0	01/10/2021
1	Removed routine test, update some documents	1	15/06/2022

[15] Description of equipment

The vapour recovery pumps type “VRP21/..” is a volumetric pump driven by an electric brushless motor. The product is equipped with integrated flame arrestors on the suction and delivery pipe which are used to suck off explosive fuel vapour/air mixtures in vapour recovery systems of delivery facilities at petrol stations. The product runs in intermittent operation.

Ex Equipment

Internal parts of the suction and delivery line: according to Category 1G

Vapour recovery pump: according to Category 2G requirements (Ex h protection)

Electric motor: according to Category 2G requirements (Ex db protection)

Ex Protective system

Flame arrestor in case of deflagrations or detonations of explosive vapour/air mixtures of gas group IIA with a MESG > 0.9 mm for potential ignition at the filling nozzle and secondary hoses and pipes of the vapour recovery lines of petrol stations.

Code	Description
VRP21/1	with internal drive electronic board
VRP21/2	with internal drive electronic board with flow meter arrangement
VRP21/3	with external sensorless drive electronic board
VRP21/4	with external drive electronic board with position sensor

The product is manufactured with cable permanently connected to it.

Rated characteristics

Rated voltage DC: 36 Vdc
Rated current AC/DC: 2 A
Ambient temperature -20°C +50°C

Warning label

None

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SCHEDULE

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No. TÜV IT 21 ATEX 049 X Rev.1



[16] Report no. R 21 EX 037 Rev.1

Routine tests

None

[17] Special conditions for safe use

- The dimensions of the joints are different from those indicated in the reference standards. For information about dimensions of the flameproof joints the manufacturer shall be contacted
- The product is provided with cables permanently connected which shall be protected against the risk of damage due to mechanical stresses. The end connection shall be made according to one of the types of protection indicated in the EN 60079-0 standard and in accordance with the installation rules in force in the site of installation
- The driver shall be as specified by manufacture and suitable for the motor electrical specifications and operating characteristics. The driver will ensure that the motor is switched off at 3 A current limit
- The following maximum hose and pipe lengths are permitted between filling nozzle and vapour recovery pump: hose with internal diameter ≤ 10 mm in the coaxial hose ≤ 6m, together with a secondary pipeline DN 15 (G ½) ≤ 3m

[18] Essential Health and Safety Requirements

Assured by compliance with the standards set out in the [9].

[19] Drawings and Documents

Listed documents (prot. 722246419 + 722285317)

Title:	Description:	Pages:	Rev:	Date:
FTVRP21	Technical file	12	00.02	01/04/2022
ATG22620	Marking label	1	00.01	08/04/2021
ATA02821	Risk analysis	6	00.02	15/09/2021
ATA05121	Safety Instruction	7	00.01	12/04/2021
ATD04920	User Instruction	33	00.05	04/2022
ATA22520	Scheme for Atex Evaluation	1	00.02	06/05/2022
ATO22920	Unit VRP21/1 drawing	1	00.03	01/12/2020
ATO09421	Unit VRP21/2 drawing	1	00.01	31/03/2022

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Title:	Description:	Pages:	Rev:	Date:
ATO09521	Unit VRP21/3 drawing	1	00.01	31/03/2022
TLO1477700	Unit VRP21/4 drawing	1	00.02	31/03/2022
TLO59757	VRP21/4 motor drawing	1	00.03	31/03/2022
ATO22720	VRP21/1 motor drawing	1	00.03	31/03/2022
ATO09721	VRP21/2 motor drawing	1	00.01	31/03/2022
ATO09821	VRP21/3 motor drawing	1	00.01	31/03/2022
TLV59761	Gland's nut drawing	1	00.01	08/04/2021
AT001121	Blanking element drawing	1	01.01	08/04/2021
TLV59731	Flame arrester support drawing	1	00.01	01/12/2020
TLR59068	Flame arrester	1	00.02	31/03/2022
TLO28067	Bearing drawing	1	00.00	08/04/2021

One copy of all documents is kept in TÜV Italia files.

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