

EU-TYPE EXAMINATION CERTIFICATE



Protection System intended for use in potentially explosive atmospheres [2] Directive 2014/34/EU - Annex III

Certificate Number: [3]

EPT 19 ATEX 3333 X

issue 1

[4] Protection system:

End of line deflagration flame arresters

Model:

[1]

197 EN-P 2"-4"-6",197 SM 2"-4"-6", 197 VENT 2"-4"-6"

197 EN-P H2 2"-4"-6", 197 SM H2 2"-4"-6",197 VENT H2 2"-4"-6"

[5] Manufacturer:

RIDART S.r.I.

[6] Address: Via Adua, 17 - 21045 Gazzada Schianno (VA) - Italy

This protection system and its accepted variations are specified in the annex to this Certificate. [7]

Eurofins Product Testing Italy S.r.I., Notified Body n. 0477 in accordance with Article 21 of the Directive [8] 2014/34/EU of the European Parliament and of the Council of 26th February 2014, certifies that this protection system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of protection systems intended for use in potentially explosive atmospheres given in Annex II of the Directive. The examination and test results are recorded in the confidential reports EPT.19.REL.02/1913011, EPT.20.REL.01/2013079 and EPT.20.REL.02/2013079

Compliance with the essential health and safety requirements is assured through the verification of [9] them and by compliance with the following harmonized standard:

EN ISO 16852:2016

- [10] If the sign "X" is placed after the Certificate number, it indicates that the protection system is subject to the special conditions for safe use specified in the annex to this Certificate.
- This EU -TYPE EXAMINATION CERTIFICATE relates only to the design, the exam and the tests of the specified protection system. Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this protection system. These requirements are not object of this Certificate.
- The protection system shall include the mark: [12]

G IIB3

for the models 197 EN-P 2"-4"-6", 197 SM 2"-4"-6", 197 VENT 2"-4"-6"

for the models 197 EN-P H2 2"-4"-6", 197 SM H2 2"-4"-6",197 VENT H2 2"-4"-6"

Place and date of issue:

Torino, 2020-12-22

Dionisio Bucchieri Directive Responsible

Paolo Trisoglio Managing Director



This Certificate has 5 pages and it is reproducible only in its entirely. Conditions of validity are reported below

PRD Nº 119B

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ANNEX [13]

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[15] Protection system description

[14]

The 197 EN-P 2" - 4" - 6", 197 SM 2" - 4" - 6", 197 VENT 2" - 4" - 6" end of line flame arrester listed at point 4 of this certificate is a protective systems designed to avoid the propagation of the flames inside tanks or enclosures, in case of deflagration of mixtures of air with gas/vapors of group IIB3 (MESG ≥ 0,65 mm) in the atmosphere.

The 197 EN-P H2 2" - 4" - 6", 197 SM H2 2" - 4" - 6", 197 VENT H2 2" - 4" - 6" end of line flame arrester listed at point 4 of this certificate is a protective systems designed to avoid the propagation of the flames inside tanks or enclosures, in case of deflagration of mixtures of air with gas/vapors of group IIC (MESG < 0,50 mm) in the atmosphere.

The 2" 4" and 6" NPT threaded joints of the housings allow a connection with a line of pressure balance with the atmosphere inside tanks or enclosures.

The material of the body is die-cast aluminum 46100, while the flame arrester element is made of two stainless steel ribbon coils overlapped. The ribbon coil is made of two ribbons one of which is smooth while the other one is crimped; they are sufficiently compressed in order to guarantee the required quenching ability.

The flame arresters 197 EN-P 2" -4" -6", 197 SM 2" -4" -6", 197 VENT 2" -4" -6" are classified as safe against short time burning. The device does not present the temperature sensors in order to detect the presence of the flames. The temperature sensors must be installed by the final user.

The flame arresters 197 EN-P H2 2"-4"-6", 197 SM H2 2"-4"-6", 197 VENT H2 2"-4"-6" are not suitable for a stabilized burning on the flame arrester element and therefore are classified BC = c. The final user must guarantee the absence of stabilized burning in case of explosion.

Installation and use requirements

Model	197 (all dimensions)	197 H2 (all dimension)	
Type of flame arrester	Deflagration end of line		
Explosion group Ex Gp	IIB3	IIC	
Burn rating	BC: b	BC: c	
	t _{BT} : 1 min	t _{BT} : 0 min	
Maximum operational temperature T ₀ / °C	60		

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Warning label

- Flame arresters have installation and application limits
- Type designation in accordance with ISO 16852

[16] Assessment Report n° EPT.20.REL.01/2013079 - EPT.20.REL.02/2013079 - EPT.19.REL.02/1913011

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 condition of use

- The materials of the flame arrestors must be compatible with the fluids they come in contact with
- The flame arresters must be integrated with one or more temperature measurement systems as indicated in the instructions manual
- Do not open the flame arresters or remove blanking elements when they are working; when cleaning/replacement of the flame arrester is required carefully follow the manufacturer's instructions

[18] Essential Health and Safety Requirements

Assured by compliance with harmonized standards.



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[19] Descriptive documents

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

Type of document	Document identification	Revision-Date
*Technical file	NFT_ATEX_2020	03 - 2020/12/13
*User manual	USER-MANUAL-197ENP	06 - 2020/11/28
*Technical drawing	197FA-100-0035	02 - 2020/07/13
*Technical drawing	197FA-150-0035	02 - 2020/07/14
*Technical drawing	RIBBON COIL SERVIZIO STANDARD	02 - 2020/11/30
*Technical drawing	RIBBON COIL SERVIZIO IDROGENO	02 - 2020/11/30
Technical file	Fascicolo Tecnico ATEX 2018 - FT_ATEX_2018	04 – 2019/03/29
User manual	USER-MANUAL-197ENP	04 - 2019/03/29
Technical drawing	197 ENP 35	04 - 29/03/2019
Technical drawing	197 ENP 02	04 - 29/03/2019
Technical drawing	VRN-197 EN P 03P	04 - 29/03/2019
Technical drawing	197 EN P 05	04 - 29/03/2019
Technical drawing	197ENP DN80-7	04 - 29/03/2019
Technical drawing	09444 W3	04 - 29/03/2019
Technical drawing	09444 W6	04 - 29/03/2019
Technical drawing	09444 W7/1	04 - 29/03/2019
Technical drawing	197 SM	04 - 29/03/2019
Technical drawing	197SM 02	04 - 29/03/2019
Technical drawing	197SM 05	04 - 29/03/2019
Technical drawing	197 SM 06	04 - 29/03/2019
Technical drawing	197SM 07	04 - 29/03/2019
Technical drawing	EN-P DN	04 - 29/03/2019
Product production and verification	PROD_TEST_COIL	04 - 2019/03/29

^{*} New or modified document



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[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 Emission.	2019-04-04
1	Addition of the following model:	2020-12-22
	197 EN-P 4"-6",197 SM 4"-6", 197 VENT 4"-6"	
	197 EN-P H2 2"-4"-6", 197 SM H2 2"-4"-6",197 VENT H2 2"-4"-6"	





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