



[1]

EU-TYPE EXAMINATION CERTIFICATE

[2]

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

[3]

Certificate Number: **EPT 18 ATEX 3053 X** issue 1

[4]

Protection system: **In-line deflagration flame arresters**

Models:

180 EN-P 1", 2" and 4";
181 EN-P 3";
182 EN-P 1";
330 EN-P 1", 1"½, 2", 3" and 4";
425 EN-P 2", 3" and 4";
1010 EN-P 2";
1524 EN-P 3"
1534 EN-P 3".

[5]

Manufacturer: **RIDART S.r.l.**

[6]

Address: **Via Adua, 17 - 21045 Gazzada Schianno (VA) - Italy**

[7]

This protection system 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 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 Report N°EPT.19.REL.01/1913011

[9]

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

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.

[11]

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

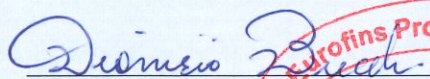
Further requirements of the Directive 2014/34/EU apply to the manufacture and supply of this protection system. These requirements are not object of this Certificate.

[12]

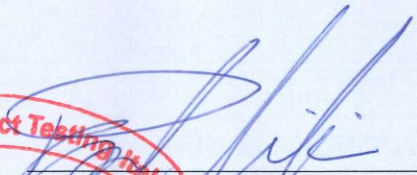
The protection system shall include the mark  G IIB3



Place and date of issue:

Torino, 2020-12-22


Dionisio Bucchieri
Directive Responsible



Paolo Trisoglio
Managing Director


PRD N° 119B

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
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This Certificate has 5 pages and it is reproducible only in its entirety. Conditions of validity are reported below.



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ANNEX

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Issue 1

[15] Protection system description

The flame arresters listed at point 4 of this certificate are protective systems designed to avoid the propagation of the flames in case of deflagration of mixtures of air with gas/vapors of group IIB3 (MESG > 0,65 mm).

The threaded joints of the housings allow a connection of two pipes on the protected and unprotected side.

The material of the body can be brass or aluminum or stainless steel. The flame arrester element is made of two stainless steel ribbons overlapped. One of the two ribbons is smooth while the other is wavy, they are sufficiently compressed in order to guarantee the required quenching ability.

The flame arresters are classified as safe against short time burning. The bodies of the devices do not presents entry points for the installation of one or more temperature sensors in order to detect the presence of the flames. The flame arresters must be installed with pipes that allow the installation of the temperature sensors.

Installation and use requirements

Type of flame arrester	Deflagration in-line
Maximum operational pressure (relative) p_0 / bar	0,1
Explosion group Ex Gp	IIB3
Burn rating	BC: b
	t_{BT} : 1 min
Maximum operational temperature T_0 / °C	60
Maximum ratio L_u/D	50
Operating direction for 180 EN-P 1" and 425 EN-P 2" type	Bidirectional
Operating direction for all other types	Unidirectional

Warning label

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

Routine tests

- Pressure test at a pressure not less than $1,1 \times 10^6$ Pa for not less than 3 min without deformation in accordance with § 6.5 of ISO 16852:2016
- Leak test with air at a pressure absolute not less than 150 kPa for not less than 3 min without leak in accordance with § 6.6 of ISO 16852:2016

[16] Assessment Report n° EPT.19.REL.01/1913011

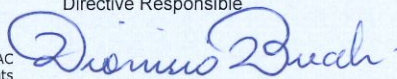
This EU-Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 2014/34/EU and to harmonized technical standards listed in this certificate performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment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


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[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 (two systems in case of bidirectional device)
- 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.

[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.

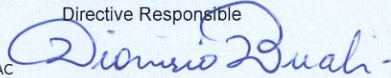
Type of document	Document identification	Revision-Date
Technical file	Fascicolo Tecnico ATEX 2018 - FT_ATEX_2018	04 - 2019/03/29
User manual	USER-MANUAL-180ENP	04 - 2019/03/29
User manual	USER-MANUAL-181ENP	04 - 2019/03/29
User manual	USER-MANUAL-182ENP	04 - 2019/03/29
User manual	USER-MANUAL-330	05 - 2019/03/29
User manual	USER-MANUAL-425ENP	04 - 2019/03/29
User manual	USER-MANUAL-1010ENP	04 - 2019/03/29
User manual	USER-MANUAL-1524ENP	04 - 2019/03/29
Technical drawing	425-50 EN P	04 - 2019/03/29
Technical drawing	425-50-02	04 - 2019/03/29
Technical drawing	425-50-03	04 - 2019/03/29
Technical drawing	425-150 EN P	04 - 2019/03/29
Technical drawing	425-150-02	04 - 2019/03/29
Technical drawing	425-80 EN P	04 - 2019/03/29
Technical drawing	425-80-02	04 - 2019/03/29
Technical drawing	425-80-03	04 - 2019/03/29
Technical drawing	0869121 EN P	04 - 2019/03/29
Technical drawing	086921-1	04 - 2019/03/29
Technical drawing	086921-2	04 - 2019/03/29
Technical drawing	086920 EN P	04 - 2019/03/29
Technical drawing	08692 W1	04 - 2019/03/29
Technical drawing	08692 W2	04 - 2019/03/29
Technical drawing	086910 EN P	04 - 2019/04/29
Technical drawing	086910 W1	04 - 2019/03/29
Technical drawing	086910 W2	04 - 2019/03/29
Technical drawing	086880 EN P	04 - 2019/03/29
Technical drawing	086880 W1 EN P	04 - 2019/03/29
Technical drawing	086880 W2 EN P	04 - 2019/03/29
Technical drawing	182-25T EN P	04 - 2019/03/29
Technical drawing	181-25T	04 - 2019/03/29
Technical drawing	182-25T-1	04 - 2019/03/29
Technical drawing	086855 EN P	04 - 2019/03/29
Technical drawing	086855-1	04 - 2019/03/29
Technical drawing	086855-2	04 - 2019/03/29
Technical drawing	1524-00-07	04 - 2019/03/29
Technical drawing	085691 EN P	04 - 2019/03/29


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Issue 1

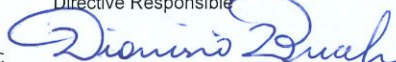


Technical drawing	085691-1	04 – 2019/03/29
Technical drawing	085691-1-G	04 – 2019/03/29
Technical drawing	085692 EN P	04 – 2019/03/29
Technical drawing	085692-1	04 – 2019/03/29
Technical drawing	085692-1-G	04 – 2019/03/29
Technical drawing	085693 EN P	04 – 2019/03/29
Technical drawing	085693-1	04 – 2019/03/29
Technical drawing	085693-1-G	04 – 2019/03/29
Technical drawing	085694 EN P	04 – 2019/03/29
Technical drawing	085694-1	04 – 2019/03/29
Technical drawing	085694-1-G	04 – 2019/03/29
Technical drawing	085697 EN P	04 – 2019/03/29
Technical drawing	085697-1	04 – 2019/03/29
Technical drawing	085697-1-G	04 – 2019/03/29
Technical drawing	085696 EN P	04 – 2019/03/29
Technical drawing	085696-1	04 – 2019/03/29
Technical drawing	085696-1-G	04 – 2019/03/29
Technical drawing	085761 EN P	04 – 2019/04/29
Technical drawing	085761-01-SS EN	04 – 2019/03/29
Technical drawing	085670-1-G SS	04 – 2019/03/29
Technical drawing	085760 EN P	04 – 2019/03/29
Technical drawing	085760-01 EN	04 – 2019/03/29
Technical drawing	085760-1-G	04 – 2019/03/29
Technical drawing	085790 EN P	04 – 2019/03/29
Technical drawing	085790-1	04 – 2019/03/29
Technical drawing	085790-1-G	04 – 2019/03/29
Technical drawing	094940 SS EN P	04 – 2019/03/29
Technical drawing	094940-1 SS	04 – 2019/03/29
Technical drawing	094940 EN P	04 – 2019/03/29
Technical drawing	094940-1	04 – 2019/03/29
Technical drawing	1524-01 EN P	04 – 2019/03/29
Technical drawing	1524-00-01 115	04 – 2019/03/29
Technical drawing	1524-01-02	04 – 2019/03/29
Technical drawing	1524-00-05 B	04 – 2019/03/29
Technical drawing	1524-00-06 B	04 – 2019/03/29
Technical drawing	1530-00-03 B	04 – 2019/03/29
Technical drawing	1535-00-09 B	04 – 2019/03/29
Technical drawing	1534-00 EN P	04 – 2019/03/29
Technical drawing	1534-01-02	04 – 2019/03/29
Technical drawing	1535-00-06-B	04 – 2019/03/29
Technical drawing	1535-00-09 B1	04 – 2019/03/29
Product production and verification	PROD_TEST_COIL	04 – 2019/03/29


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Issue 1


[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.

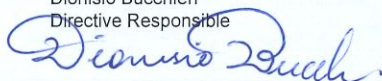
[21] History

Issue	Description	Date
0	First Emission.	2019-04-04
1	Correction typing error in the certificate number of the annex	2020-12-22


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End of Certificate

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