



Italia

CERTIFICATE

[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 20 ATEX 033 X Rev. 3

[4] Equipment: **Electric submersible pumps provided with cable**

[5] Manufacturer: **Caprari S.p.A.**

[6] Address: **Via Emilia Ovest 900
I-41123 Modena (MO)**

[7] This equipment or protective system 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 20 EX 033 Rev.3

[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 80079-37:2016;

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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:



**I M2 Ex db h I Mb
II 2G Ex db h IIB T4 Gb**

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

Issue date: 20th December 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
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 722309477

page 1 of 4

[13]

SCHEDULE

[14]

**EU-TYPE EXAMINATION CERTIFICATE
No. TÜV IT 20 ATEX 033 X Rev.3**

Italia

Certificate History

Revision:	Description:	Report rev.:	Issue Date:
-	First emission	0	16/06//2020
1	Added 090(F) and 100(F) size	1	18/01/2021
2	Added models size 180 - 200 Added Flame arrester	2	16/02/2022
3	Added voltage up to 1000 V	3	20/12/2022

[15] Description of equipment

Submersible motor-pump provided with cable.

F

H

Type K_ _ _ _ _ L_ + _ _ _ _ _ X_ / # # # # # #

N

P

Equivalent surface motor frame size: 090(F), 100(F), 112(H), 132(H), 132(L), 160(L),
160(N) – 180(N/P) – 200(N/P)**Rated characteristics**

Asynchronous A. C. motors standard version (-10°C<Tamb<+60°C):

Max 1000 V / 50 Hz (2900 rpm MAX)

Max 1000 V / 60 Hz (3500 rpm MAX)

Power from 0,37 kW to 35 kW

Service: S1, S3 (only "F")

Insulation Class H (180°C)

n.2 thermic probes connected in series; sunk in the stator winding with intervention at
132°C ± 3%; resetting at T < 114°C or with intervention at 130°C ± 5°C; resetting at T < 115°C.
As alternative, n.1 PTC thermistor sensors, with nominal response temperature:
130°C (blue-blue).Only for size 180 and 200: 2 thermal probes connected in series inside the stator windings.
Intervention temperature: 140°C ± 5°C, reset temperature: 110°C ± 15°C

Motors can be driven by an inverter/converter (-10°C<Tamb<+40°C)

Vortex recessed impellers or impellers with blades, characterized by wide free passages or
vortex with shredder; performances according to UNI EN ISO 9906:2012**Warning label**

"DO NOT OPEN WHILE ENERGIZED"

"READ MANUAL FOR INVERTER PARAMETERS"

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

TÜV Italia • Gruppo TÜV SÜD • Viale Fulvio Testi, 280/6 • 20126 Milano • Italia • www.tuvsud.com/it

TÜV®

[13]

SCHEDULE

[14]

**EU-TYPE EXAMINATION CERTIFICATE
No. TÜV IT 20 ATEX 033 X Rev.3**

Italia

[16] **Report no.** R 20 EX 033 Rev.3**Routine tests**

Routine tests according to EN 60079-1 cl. 15.2.3.2 are not required, as the enclosures have been successfully tested at four times the reference pressure

[17] **Special conditions for safe use**

- Parameters for inverter are not written on the label on equipment. Read manual for information.
- The electric pump is supplied with the power cable permanently connected and without switch. The electric cable must therefore be connected to the power supply in a safe area or using one of the protection methods provided for in the EN 60079-0 standard with a switch off button; The cable cannot be reduced in length less than 3 m;
- The screws class used for the assembly of explosion-proof enclosures must be A2-70 ISO 3506-1.
- Flameproof joints are not intended to be repaired.
- If motor provided with PTC thermistor, read manual for installation information

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

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

[19] **Drawings and Documents****Listed documents** (prot. 722226913 + 722215065 + 722252674 + 722309477)

Title:	Description:	Pages:	Rev:	Date:
0022533	Product description	1/3	8	18/03/2020
0022533	Product description	2/3	10	19/12/2022
0022533	Product description	3/3	3	18/03/2020
0024757	Product description	1/3	6	10/01/2022
0024757	Product description	2/3	7	19/12/2022
0024757	Product description	3/3	1	10/01/2022
0041921	Motor-pump section drawing	1	A	27/04/2020
0044917	Motor-pump section drawing	1	-	14/12/2021
0033971	Complete female connector with power supply cable	1	F	27/03/2019
0041326	Complete female connector with power supply cable	1	C	19/01/2021
0041319	Complete male connector	1	A	06/05/2019
0034007	Complete male connector	1	F	27/03/2019
0022534	Electric Submersible sewage pumps	1/3	4	20/03/2020
0022534	Electric cable and pin	2/3	2	20/03/2020

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

[13]

[14]

SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE
No. TÜV IT 20 ATEX 033 X Rev.3

Italia

Title:	Description:	Pages:	Rev:	Date:
0022534	Electric Submersible sewage pumps	3/3	2	20/03/2020
0024758	Electric Submersible sewage pumps	1/3	5	15/12/2021
0024758	Electric Submersible sewage pumps	2/3	3	15/12/2021
0024758	Electric Submersible sewage pumps	3/3	0	15/12/2021
0038127	Electric pump motor-pump plate drawing for Ex motor-pump	2	I	28/04/2020
0023047	Warning PVC-plate for motor-pump	1	B	11/01/1996
0020239	Warning PVC-plate for feeding cables	1	E	09/07/2003
996649/ATEX	Use and maintenance instructions	128	I	05/2020
996684ATEX	Use and maintenance instructions	156	G	12/2021
056b-001	Explosion risk analysis type	4	B	10/03/2020
0038267	Flame arrester	1	A	21/07/2021
0042079	Hydraulic section drawing	3	2	28/01/2020
0044918	Hydraulic section drawing	1	-	14/12/2021
0021827	Varnish specification	1/3	7	21/02/2006
0021827	Varnish specification	2/3	1	21/02/2006
0021827	Varnish specification	3/3	0	21/02/2006
0022562	Caprari submersible pump K-Ex series	1/3	6	09/12/2020
0022562	Caprari submersible pump K-Ex series	2/3	7	19/12/2022
0022562	Caprari submersible pump K-Ex series	3/3	1	09/12/2020
0042490	KCW065F..+002141N3	1	-	30/11/2020
0042491	KCW065F..+002141N3	1	-	30/11/2020
0022563	Electric motors component list	2	7	11/12/20
0042492	Free internal volume	3	-	03/02/2020
0044908	Free internal volume	3	-	11/02/2020
996679	Use and maintenance instructions	114	G	--/01/2021

One copy of all documents is kept in TÜV Italia files

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

TÜV Italia • Gruppo TÜV SÜD • Viale Fulvio Testi, 280/6 • 20126 Milano • Italia • www.tuvsud.com/it

TÜV®