

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

[3] EU-Type Examination Certificate Number: **Presafe 14 ATEX 5472X** **Issue 3**

[4] Product: **Valve Actuator**

[5] Manufacturer: **Eltorque AS**

[6] Address: **Julianus Holms veg 34
N-7041 Trondheim
Norway**

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

[8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 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 reports listed in item 16.

[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 60079-7:2015, EN ISO 80079-36:2016 and EN ISO 80079-37:2016.**
Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. 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 2 G Ex db eb h IIB T4 Gb**

Date of issue:
2024-10-14



Ståle Sandstad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info



[13]

Schedule[14] **EU-Type Examination Certificate No:**

Presafe 14 ATEX 5472X

Issue 3

[15] **Description of Product**

Valve actuator model QT250 without external gear and QT800 and QT2500 with an external gear. Electric step motor, internal gear, electronics and communication interfaces incorporated in a flameproof enclosure made of aluminium and terminals located in an increased safety compartment with threaded M20x1.5 holes for certified cable glands or blanking elements. The flameproof enclosure has two covers that are secured with ten special fasteners each. Connection between the flameproof enclosure and increased safety terminals is through a certified bushing. The actuator shall be installed to the valve with a flange according to ISO standard and instructions. There are three variants to each model and differ regarding to interface used, see below.

Type designation: QTXXX Ex d <interface>

Applicable models: QT250 Ex d <interface>, QT800 Ex d <interface>, QT2500 Ex d <interface>

Interface variants: CANopen, DIGITAL or ANALOG.

Electrical Data

Supply Voltage: 110 - 240 VAC 50/60 Hz

Power: 130 W

Ambient temperature:

-25°C to +70°C

Routine tests

Dielectric strength test according the 60079-7, Clause 7.1 of 1500 R.M.S (+0-5%) maintained 60 s or 1.2 x test voltage maintained at least 100ms.

Warning markings:

“WARNING – DO NOT OPEN WHEN A HAZARDOUS ATMOSPHERE IS PRESENT”

“WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS”

Special conditions of use (manufacturer): To maintain the Ex protection the Instruction files which accompanies the product must be considered

[16] **Report No.:** 242106/02

Project No.: PRJN-242106-2021-PA-NOR

[17] **Specific Conditions of Use**

1. To avoid electrostatic charging hazard, use only a damp cloth when cleaning the protective cover and to avoid contact charging due to manual operation use appropriate antistatic measures e.g. by grounding operators.
2. Mechanical properties for screws used for both covers shall be at minimum of A4-80.

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

Met by compliance with the requirements mentioned in item 9.

Contact charging of conductive non-earthed plastic cover is prevented by X-marking with guidance how to minimize this risk by assessment of safety measures according to clause 7.4.2 e) in EN IEC 60079-0:2018.

[19] Drawings and documents

Number	Title	Rev.	Date
EX150.0005	User Manual	8	2024-07-03
EX150.0004	Ex Instructions Manual	11	2024-09-17
EX146.0011	General marking plate Ex d e QT250 QT800	6	2024-09-25
EX146.0015	Marking plate matrix	5	2024-09-23
EX146.0016	Warning Marking Ex d e	0	2014-11-07
EX146.0014_00	Marking plate connection CanOpen	0	2014-09-26
EX146.0017_00	Marking plate connection Digital	0	2015-02-16
EX146.0018_00	Marking plate connection Analog	0	2015-07-28
EXD250.125.1	EXD250 with CAN Open interface	4	2022-10-18
EXD250.800_01	Main assy EXD QT 250,800	1	2014-10-20
EXD800.125.1	EXD 800 with CAN Open interface	3	2015-12-11
EXD2500.125.1	Main Assembly EXD QT 250, 2500 CAN Open	0	2024-05-07
EXD250.025.1	EXD250 CAN Open	0	2014-12-06
EXD250.115.1	Main assy. QT250EXD DIGI	1	2022-10-18
EXD250.815	Main Assembly EXD QT250.800 DIGI	0	2015-07-17
EXD800.115.1	Main Assembly QT800 EXD DIGI	0	2015-07-17
EXD2500.115.1	Main Assembly EXD QT 250, 2500 Digital	0	2024-05-07
EXD250.015.1	EXD250 Digital	0	2015-07-30
EXD250.135.1	EXD250 Analog	1	2022-10-18
EXD250.835	Main Assembly EXD QT250.800 Analog	0	2015-07-17
EXD800.135.1	Main Assembly QT800 EXD Analog	0	2015-07-17
EXD2500.135.1	*Main Assembly EXD QT 250, 2500 Analog	0	2024-05-07
EXD250.035.1	EXD250Analog	0	2015-07-30
EXD250.201	Assy gear motor QT 250 EXD	0	2014-04-25
EXD250.209	Assy gear motor QT 250,800	0	2014-04-25
EXD250.202	Assy Bottom QT 250 EXD	1	2014-12-11
EXD250.207	Assy Bottom QT250,800 EXD	1	2014-12-11
EXD250.203	Assy Top cover QT 250,800 EXD	2	2024-07-01
EXD250.206	Assy connector house	0	2014-04-25
EXD250.205	Assy Main shaft QT 250 EXD	1	2014-10-10
EX110.0003	Protective cover Ø115	0	2013-07-10
EX110.0004	Wheel A1 Ø117	0	2013-07-10
EX110.0043	Capsule EXD_QT_250	4	2014-09-22
EX110.0044	Bottom_EXD_QT_250	6	2024-04-17
EX110.0068	Bottom_EXD_QT_250, 800	6	2024-04-17
EX110.0045	Top_Cover_EXD_QT_250,800	6	2024-04-17
EX110.0046	Connector house	1	2024-05-29
EX110.0047	Cover Connector house	0	2013-05-16
EX110.0048	Main shaft square 17 EXD	2	2024-04-17
EX110.0049	Adapter Shaft EXD	3	2015-01-20
EX110.0050	Position_ind._ext._M6_EXD	1	2013-11-28
EX110.0051	Main_shaft_square_17_QT 800EXD	3	2024-04-17
EX110.0052	Position_ind._ext._M6_QT800EXD	0	2014-04-25
EX144.0031	Line-bushing and connectors	3	2015-11-04
800.004	Assy encoder	0	2013-03-01
EX144.0037	14 Line-bushing with connectors and thermal fuse	2	2015-11-04
EX110.0053	Gear QT 800	2	2014-10-10

EX110.0066	Lay plate EXD	0	2014-01-10
EX110.0067	Bottom_B1 QT_800 EXD	0	2014-05-16
45022	Rim gear M2.5Z60	6	2024-04-17
45014	Sun gear M2, 5Z24	3	2024-04-17
45016	Main shaft 27x27 QT800	4	2010-07-02
45060	Gear M2, 5Z18b15S2	0	2014-10-17
EX250.800R	Main assy. EXD QT 250,800	0	2022-10-18

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2015-03-10	D0000182/00
1	Additional variants with Digital- and Analog protocol.	2016-01-29	D0000182/01
2	-manufacturer's address change -minor technical changes -update to the latest harmonized standards -bearings tolerance class change	2024-08-06	242106/02
3	-new model QT2500 included	2024-10-14	242106/03

END OF CERTIFICATE

