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# 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: **DNV 23 ATEX 88264X** **Issue 0**
- [4] Product: **A100 PROEx Series Explosion-Proof Electric Actuators**
- [5] Manufacturer: **Doruk Endustri Vana ve Otomasyon Sistemleri Ltd. Sti**
- [5] Trademark **PROVAL**
- [6] Address: **KOBI OSB,1 Cad. 32 Sok No:10 Dilovasi Kocaeli Turkey**
- [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 and EN 60079-31:2014.**
- 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  
II 2 D

Ex db IIC T4~T6 Gb  
Ex tb IIIC T85°C/ T100°C/ T135°C Db



Date of issue:  
2023-03-30



Asle Kaastad  
For DNV Product Assurance AS  
The Certificate has been digitally signed.  
See [www.dnv.com/digitalsignatures](http://www.dnv.com/digitalsignatures) for info

[13] **Schedule**

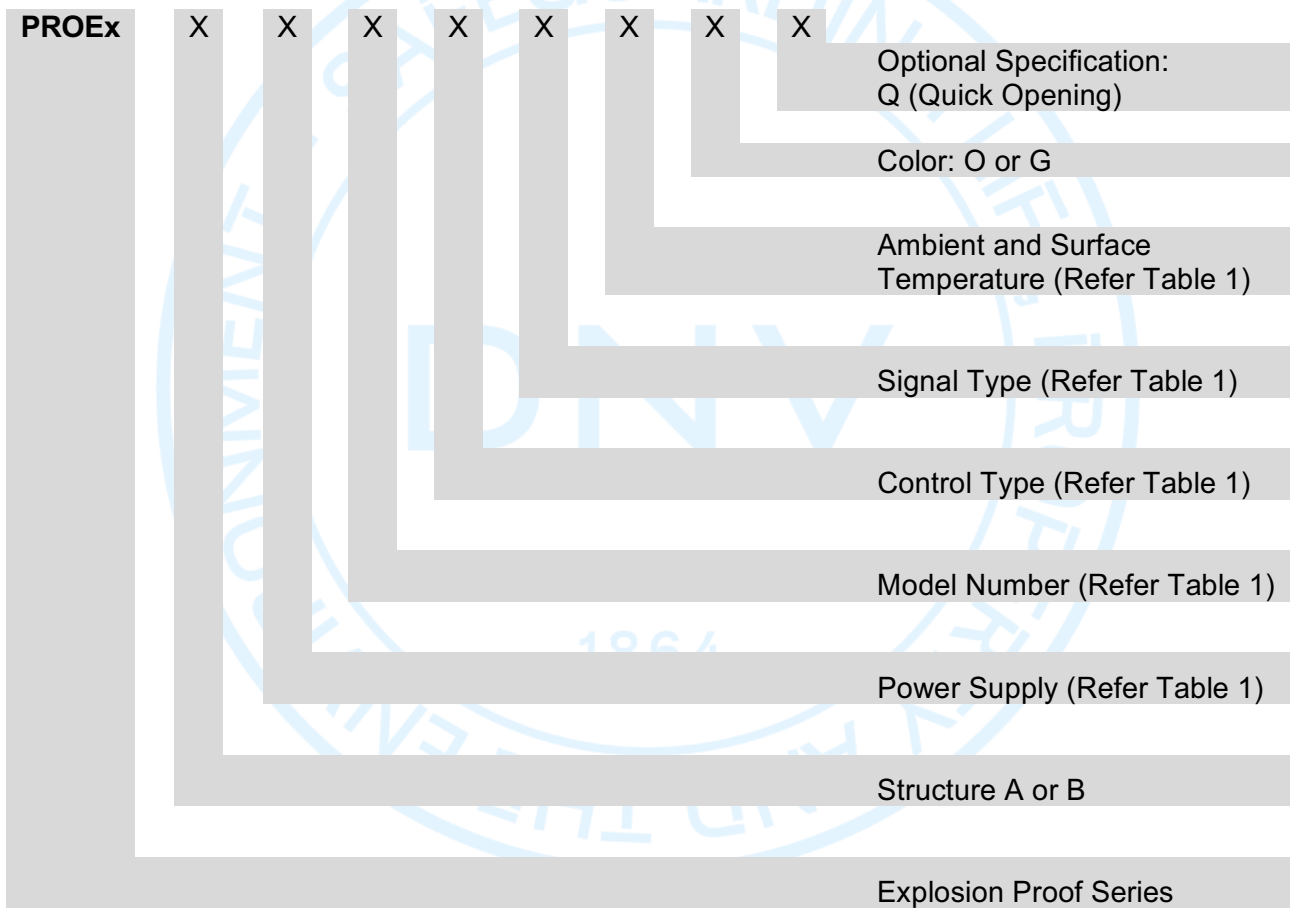
[14] **EU-Type Examination Certificate No:** DNV 23 ATEX 88264X Issue 0

[15] **Description of Product**

The A100 PROEx Series series actuators consist of flameproof enclosure and gear assembly with motor inside. The enclosure is made of casting aluminum alloy and the window is tempered glass cemented with the enclosure. The product uses O-rings seal made of NBR or VMQ, which corresponds to the ambient temperature -20°C to +65°C and -40°C to +65°C respectively to guarantee the IP66 class.

The size of cable entry is listed in nameplate.

**Type designation**



**Table 1**

Code	Value & Description																										
Power Supply	DC: 24V (A), 48V(B), 110V(C), 220V(D) AC: 24V(E), 110V (F), 115V(G), 120V(H), 220V(I), 230V(J), 240V(K), 380V(L), 415V(M), 440V(N), 460V(O), 480V(P) 50/60Hz																										
Model Number	005, 008, 010, 020, 030,040, 060, 080, 100, 170, 230, 350, 500, 800																										
Control Type	1: (On/Off with Torque Switch) 2: (Modulating Control) 3: (Modulating Control with Torque Switch)																										
Signal Type	0: (Active & Passive Feedback) 1: [Passive Feedback] 2: (Active & Passive Feedback with Over torque Alarm) 3: (Active & Passive Feedback with 1K $\Omega$ Potentiometer) 4: (Passive Feedback with Over torque and Failure Alarm) 5: (0-10V) 6: (0-10V with Passive Feedback) 7: (4-20 mA) 8: (4-20 mA with Passive Feedback) 9: (4-20 mA, Passive Feedback, Over torque and Failure Alarm)																										
Ambient and Surface Temperature	<table border="1"> <thead> <tr> <th rowspan="2">Ambient Temperature</th> <th rowspan="2">Code</th> <th colspan="2">Surface Temperature</th> </tr> <tr> <th>Gas</th> <th>Dust</th> </tr> </thead> <tbody> <tr> <td rowspan="3">-20°C to +65°C</td> <td>A</td> <td>T4</td> <td>T135°C</td> </tr> <tr> <td>B</td> <td>T5</td> <td>T100°C</td> </tr> <tr> <td>C</td> <td>T6</td> <td>T 85°C</td> </tr> <tr> <td rowspan="3">-40°C to +65°C</td> <td>D</td> <td>T4</td> <td>T135°C</td> </tr> <tr> <td>E</td> <td>T5</td> <td>T100°C</td> </tr> <tr> <td>F</td> <td>T6</td> <td>T 85°C</td> </tr> </tbody> </table>	Ambient Temperature	Code	Surface Temperature		Gas	Dust	-20°C to +65°C	A	T4	T135°C	B	T5	T100°C	C	T6	T 85°C	-40°C to +65°C	D	T4	T135°C	E	T5	T100°C	F	T6	T 85°C
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**Electrical Data**

Rated voltage:

DC : 24V, 48V, 110V, 220V

AC : 24V, 110V, 115V, 120V, 220V, 230V, 240V, 380V, 415V, 440V, 460V, 480V 50/60Hz

Rated Power: 200W

Operation Duty: S2 30min

**Degrees of protection (IP Code)**

IP66

IP68 (7m, 72h) (The equipment has been separately tested against the requirements of IEC 60529, can be specified as IP67 (1m, 30min) depending on client request)

**Ambient temperature:**

-20°C to +65°C (With NBR O-Ring) or

-40°C to +65°C (With VQM O-Ring)

**Routine tests**

None

[16] **Report No.:** 2023-9035, issue 00  
**Project No.:** PRJN-494406

[17] **Specific Conditions of Use**

- Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 2 and 3 of EN 60079-1.

- The entry holes shall be installed with appropriate ATEX certificated cable gland or plug according to the instruction manual.

- Fasteners related with flameproof joints shall have at least the A2-70 class.

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

Met by compliance with the requirements mentioned in item 9.

[19] **Drawings and documents**

As listed in confidential report 2023-9035.

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2023-03-30	2023-9035, issue 00

END OF CERTIFICATE