

[1]

EU-TYPE EXAMINATION CERTIFICATE

[2] Product Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate Number: **Presafe 21 ATEX 84137X** **Issue 0**

[4] Product: **Electric Actuator**

[5] Manufacturer: **Chemsun Europe GmbH**

[6] Address: **Schumannstraße 156, 63069
Offenbach am Main,
Germany**

[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 and EN 60079-1:2014**

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 specified in the schedule to 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 IIC T6/T5 Gb -40 to 70°C/-40 to 80°C**

Date of issue:
2021-11-10



Bjørn Spongsveen
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 21 ATEX 84137X Issue 0

[15] **Description of Product**

The Electric Actuator Type CSR/L-G01 which is manufactured from cast aluminium YL104 and comprises three compartments, a main body, a top cover, an HMI cover, which contains a glass window for viewing an internal display and a side cover.

The side cover and HMI cover are secured to the main body by four M6 secured by hexagon socket-head screws. The top cover is secured by four M8 hexagon socket-head screws. The three bodies are connected via cemented joints. There are two M20 entries on the side cover to accommodate external cables, a suitably certified M20 cable entry device is used, any unused entry holes are blanked with suitably certified blanking plugs.

Type designation

CSR/L-G01

Electrical Data

24 Vdc 100/230/380 Vac

Ambient temperature:

-40°C to +70°C// -40°C to +80°C

Routine tests

An overpressure pressure test must be carried out according to IEC 60079-1:2014 Clause 16.1 Clause 16.1 at 1.2 MPa.

[16] **Report No.:** 193332

[17] **Specific Conditions of Use**

The following conditions relate to the installation and/or safe use of the equipment:

1. Only suitably certified cable entry devices shall be used with the equipment to maintain explosion protection and must maintain a degree of protection of at least IP67 for operational reasons.
2. The flameproof joints are not to be repaired. Contact the manufacturer for details.
3. Only cables rated to least 90°C shall be used.
4. When the rated ambient temperature is -40°C to +70°C the Ex-marking is "Ex db IIC T6 Gb".
5. When the rated ambient temperature is -40°C to +80°C, the Ex-marking is "Ex db IIC T5 Gb".
6. At least 11 full threads must be engaged between the button cover and HMI Cover

Notes for manufacture, installation and operation:

- Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- The Electric Actuator Type CSR/L. G01 is to be designed in accordance with general electrical safety standards e.g., IEC 60950 or IEC 61010-1.

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

Met by compliance with the requirements mentioned in item 9.

[19] **Drawings and documents**

Number	Title	Rev.	Date
CSR/L. G01.01	CSR/L. G01 Explosionproof Assembling Drawing	1.0	Jun 2020
CSR/L. G01.01.01-01	Main Body	1.0	Jun 2020
CSR/L. G01.01.08-01	HMI Cover	1.0	Jun 2020
CSR/L. G01.01.08-01.02	Button	1.0	Jun 2020
CSR/L. G01.01.08-01.03	Button Cover	1.0	Jun 2020
CSR/L. G01.01.08-02	HMI Glass	1.0	Jun 2020
CSR/L. G01.01.01-03	Glass Gland	1.0	Jun 2020
CSR/L. G01.01.05-02	Copper Sleeve-02	1.0	Jun 2020
CSR/L. G01.01.01-02-01	Top Cover	1.0	Jun 2020
CSR/L. G01.01.03-15	Copper Sleeve-01	1.0	Jun 2020
CSR/L. G01.01.02-10	Side Cover	1.0	Jun 2020
CSR/L. G01.01.03-08	Basin Gear	1.0	Jun 2020
CSR/L. G01.01.01-09	Shaft	1.0	Jun 2020
CSR/L. G01.01.01.13	Nameplate	1.1	Feb 2021
CSR/L. G01.01.01-12	Grounding Label	1.0	May 2017
CSR/L. G01.01.01-07	Hand Wheel Shaft	1.0	Jun 2020
CSR/L. G01.01.01-08	Thrust Base	1.0	Jun 2020

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2021-11-10	193332

END OF CERTIFICATE