



(1) **EU-TYPE-EXAMINATION CERTIFICATE**  
**(Translation)**

(2) Equipment or Protective Systems Intended for Use in  
Potentially Explosive Atmospheres - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

**PTB 13 ATEX 1019 U**

**Issue: 01**

(4) Equipment: Actuator attachment type 8602\*3-\*\*\*\_\*-\*\*\*\_\*\*\*\_\*\*\*\*

(5) Manufacturer: R. STAHL Schaltgeräte GmbH

(6) Address: Am Bahnhof 30, 74638 Waldenburg, Germany

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment 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 the confidential Test Report PTB Ex 17-17049.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 60079-0:2012+A11:2013, EN 60079-7:2015, EN 60079-31:2014**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment 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 equipment in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

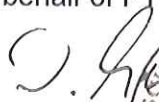
(12) The marking of the equipment shall include the following:

 **II 2 G Ex eb IIC Gb**

 **II 2 D Ex tb IIIC Db**

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Braunschweig, October 26, 2017

  
Dr.-Ing. D. Markus  
Oberregierungsrat



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(13)

## SCHEDULE



(14) **EU-Type Examination Certificate Number PTB 13 ATEX 1019 U, Issue: 01**

(15) Description of Product

The actuator attachments type 8602\*3-\*\*\*-\*\_-\*\*\*\_\*\*\*\_\*\*\*\*, mainly made of polyamide, can be mounted on enclosure covers and enclosure walls of electrical equipment in the types of protection Increased safety "eb" and Protection by Enclosure "tb".

### Changes to previous issues

1) The actuator attachment, type 8602\*3-\*\*\*-\*\_-\*\*\*\_\*\*\*\_\*\*\*\*, has been retested according to EN 60079-7:2015. Therefore, the marking changes to:

 II 2 G Ex eb IIC Gb  
 II 2 D Ex tb IIC Db

2) The protection collar, type 8602\*3-751-\*\_-\*\*\*\_\*\*\*\_\*\*\*\*, is also made of D0009-02.

3) New actuator attachment (rotary actuator small), type 8602\*3-732-\*\_-\*\*\*\_\*\*\*\_\*\*\*\*.

4) A "oil seal spring" is used as a new fastening system for the bellows seal as an alternative.

### Nomenclature

8602	*	3	-	***	-	*	-	***	-	***	-	****
1	2	3	-	4	-	5	-	6	-	7	-	8

- 1) Type series
- 2) General version  
 / = complete actuator  
 A = module, internal  
 C = customer module
- 3) Version
- 4) Design (see appendix)
- 5) Used gasket  
 B = NBR  
 S = Silicone
- 6) Switching function / lockable position / color filter / potentiometer-actuator scale
- 7) Switching position
- 8) Lock cylinder

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EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.



**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 13 ATEX 1019 U, Issue: 01**

**Technical data**

Mounted in enclosures with wall thickness:	see tables
Diameter of the through-hole	30.5 mm
Torque of the threaded ring	3 Nm
Maximum permissible service temperature range	-20 °C ≤ T <sub>s</sub> ≤ +60 °C (gasket D0114, D0117, D0129 and D0138), and -60 °C ≤ T <sub>s</sub> ≤ +70 °C (gasket D0115, D0116, D0130 and D0131)

Maximum permissible service temperature range: -20 °C up to +60 °C		
Types 8602*3	Max. wall thickness in mm	Designation
8602*3-001-B	5	Push button
8602*3-003-B	5	Mushroom push button, black Ø38
8602*3-004-B	5	Mushroom push button, red Ø38
8602*3-006-B	5	Mushroom stay-put button with key lock, black
8602*3-008-B	5	Key-operated switch with 2 or 3 switching positions
8602*3-009-B	5	Mushroom stay-put button with key lock, Emergency stop
8602*3-010-B	5	Mushroom stay-put button, Emergency stop
8602*3-012-B	5	Mushroom stay-put button, black
8602*3-014-B	5	Mushroom push button, red Ø55
8602*3-015-B	5	Mushroom stay-put button Emergency Stop, Ø55
8602*3-023-B	5	Twin push button
8602*3-054-B	5	Indicator lamp bezel
8602*3-092-B	5	Potentiometer
8602*3-703-B	5	Mushroom push button, black Ø55
8602*3-712-B	5	Mushroom stay-put button, black-black, black-red, Ø55
8602*3-726-B	5	Rotary actuator axial with 2 or 3 switching positions
8602*3-727-B	5	Rotary actuator axial, lockable pad with 2 or 3 switching positions
8602*3-728-B	3	Rotary actuator, large, increased height, black-black
8602*3-729-B	3	Rotary actuator, large, increased height, red-yellow
8602*3-730-B	3	Rotary actuator, large, red-yellow
8602*3-731-B	3	Rotary actuator, large, black-black
8602*3-732-B	3	Rotary actuator small
8602*3-733-B	5	Closure part
8602*3-734-B	3	Rotary actuator small, lockable

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<b>Maximum permissible service temperature range: -20 °C up to +60 °C</b>		
Types 8602*3	Max. wall thickness in mm	Designation
8602*3-735-B	5	Illuminated push button
8602*3-751-B	5	Protective collar, mushroom stay-put button / mushroom stay-put button with key lock
8602*3-752-B	5	Locking device for actuated mushroom stay-put button, protective lid
8602*3-753-B	5	Locking device for not actuated pushbutton, protective lid
8602*3-754-B	5	Locking device for actuated push button
8602*3-755-B	5	Locking device for not actuated push button
8602*3-756-B	5	Locking device for actuated mushroom stay-put button, locking bolt
8602*3-758-B	5	Locking device for not actuated mushroom stay-put button, protective lid

<b>Maximum permissible service temperature range: -60 °C up to +70 °C</b>		
Types 8602*3	Max. wall thickness in mm	Designation
8602*3-001-S	5	Push button
8602*3-003-S	5	Mushroom push button, black Ø38
8602*3-004-S	5	Mushroom push button, red Ø38
8602*3-006-S	5	Mushroom stay-put button with key lock, black
8602*3-008-S	5	Key-operated switch with 2 or 3 switching positions
8602*3-009-S	5	Mushroom stay-put button with key lock, Emergency stop
8602*3-010-S	5	Mushroom stay-put button, Emergency stop
8602*3-012-S	5	Mushroom stay-put button, black
8602*3-014-S	5	Mushroom push button, red Ø55
8602*3-015-S	5	Mushroom stay-put button Emergency Stop, Ø55
8602*3-023-S	5	Twin push button
8602*3-054-S	5	Indicator lamp bezel
8602*3-092-S	5	Potentiometer
8602*3-703-S	5	Mushroom push button, black Ø55
8602*3-712-S	5	Mushroom stay-put button, black-black, black-red, Ø55
8602*3-726-S	5	Rotary actuator axial with 2 or 3 switching positions
8602*3-727-S	5	Rotary actuator axial, lockable pad with 2 or 3 switching positions
8602*3-728-S	3	Rotary actuator, large, increased height, black-black

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**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 13 ATEX 1019 U, Issue: 01**

<b>Maximum permissible service temperature range: -60 °C up to +70 °C</b>		
Types 8602*3	Max. wall thickness in mm	Designation
8602*3-729-S	3	Rotary actuator, large, increased height, red-yellow
8602*3-730-S	3	Rotary actuator, large, red-yellow
8602*3-731-S	3	Rotary actuator, large, black-black
8602*3-732-S	3	Rotary actuator small
8602*3-733-S	5	Closure part
8602*3-734-S	3	Rotary actuator small, lockable
8602*3-735-S	5	Illuminated push button
8602*3-751-S	5	Protective collar, mushroom stay-put button / mushroom stay-put button with key lock
8602*3-752-S	5	Locking device for actuated mushroom stay-put button, protective lid
8602*3-753-S	5	Locking device for not actuated pushbutton, protective lid
8602*3-754-S	5	Locking device for actuated push button
8602*3-755-S	5	Locking device for not actuated push button
8602*3-756-S	5	Locking device for actuated mushroom stay-put button, locking bolt
8602*3-758-S	5	Locking device for not actuated mushroom stay-put button, protective lid

<b>Ingress protection according to EN 60079</b>				
Type	Designation	Sealing material	Front piece material	Ingress protection according to EN 60079
8602*3-735-S-***_***_****	Illuminated push button	D0131 D0115	D0012	IP64
8602*3-735-B-***_***_****		D0138 D0114	D0012	IP66
8602*3-735-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-023-S-***_***_****	Twin push button	D0131 D0115	D0010	IP64
8602*3-023-B-***_***_****		D0138 D0114	D0010	IP66
8602*3-023-B-***_***_****		D0117 D0114	D0010	IP66
8602*3-092-S-***_***_****	Potentiometer	D0116 D0115	D0012	IP66

**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 13 ATEX 1019 U, Issue: 01**

<b>Ingress protection according to EN 60079</b>				
Type	Designation	Sealing material	Front piece material	Ingress protection according to EN 60079
8602*3-092-B-***_***_****		D0117 D0114	D0012	IP66
8602*3-727-S-***_***_****	Rotary actuator axial, lockable pad with 2 or 3 switching positions	D0116 D0115	D0010	IP66
8602*3-727-S-***_***_****		D0116 D0115	D0012	IP66
8602*3-727-B-***_***_****		D0117 D0114	D0012	IP66
8602*3-726-S-***_***_****	Rotary actuator axial with 2 or 3 switching positions	D0116 D0115	D0010	IP66
8602*3-726-S-***_***_****		D0116 D0115	D0012	IP66
8602*3-726-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-732-S-***_***_****	Rotary actuator small	D0116 D0115	D0010	IP66
8602*3-732-S-***_***_****		D0116 D0115	D0012	IP66
8602*3-732-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-734-S-***_***_****	Rotary actuator small, lockable	D0116 D0115	D0010	IP66
8602*3-734-S-***_***_****		D0116 D0115	D0012	IP66
8602*3-734-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-008-S-***_***_****	Key operated switch MS with 2 or 3 switching positions	D0116 D0115	D0010	IP66
8602*3-008-S-***_***_****		D0116 D0115	D0012	IP66
8602*3-008-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-008-S-***_***_****	Key operated switch KMS with 2 or 3 switching positions	D0116 D0115	D0010	IP66
8602*3-008-S-***_***_****		D0116 D0115	D0012	IP66
8602*3-008-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-003-S-***_***_****	Mushroom push button, black Ø38	D0131 D0115	D0010	IP64
8602*3-003-S-***_***_****		D0131 D0115	D0012	IP64



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<b>Ingress protection according to EN 60079</b>				
Type	Designation	Sealing material	Front piece material	Ingress protection according to EN 60079
8602*3-003-B-***_***_****		D0138 D0114	D0012	IP66
8602*3-003-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-004-S-***_***_****	Mushroom push button, red Ø38	D0131 D0115	D0010	IP64
8602*3-004-S-***_***_****		D0131 D0115	D0012	IP64
8602*3-004-B-***_***_****		D0138 D0114	D0012	IP66
8602*3-004-B-***_***_****		D0117 D0114	D0012	IP64
8602*3-014-S-***_***_****		Mushroom push button, red Ø55	D0131 D0115	D0010
8602*3-014-S-***_***_****	D0131 D0115		D0012	IP66
8602*3-014-B-***_***_****	D0138 D0114		D0012	IP66
8602*3-014-B-***_***_****	D0117 D0114		D0012	IP66
8602*3-015-S-***_***_****	Mushroom stay-put button Emergency Stop, Ø55		D0131 D0115 D0130	D0010
8602*3-015-S-***_***_****		D0131 D0115 D0130	D0012	IP66
8602*3-015-B-***_***_****		D0138 D0114 D0129	D0012	IP66
8602*3-015-B-***_***_****		D0117 D0114 D0129	D0012	IP66
8602*3-703-S-***_***_****		Mushroom push button, black Ø55	D0131 D0115	D0010
8602*3-703-S-***_***_****	D0131 D0115		D0012	IP66
8602*3-703-B-***_***_****	D0138 D0114		D0012	IP66
8602*3-703-B-***_***_****	D0117 D0114		D0012	IP66
8602*3-712-S-***_***_****	Mushroom push button, black Ø55		D0131 D0115	D0010

**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 13 ATEX 1019 U, Issue: 01**

Ingress protection according to EN 60079				
Type	Designation	Sealing material	Front piece material	Ingress protection according to EN 60079
8602*3-712-S-***_***_****		D0131 D0115	D0012	IP66
8602*3-712-B-***_***_****		D0138 D0114	D0012	IP66
8602*3-712-B-***_***_****		D0117 D0114	D0012	IP66
8602*3-010-B-***_***_****	Mushroom stay-put button, Emergency Stop	D0138 D0114 D0129	D0012	IP66
8602*3-010-B-***_***_****		D0117 D0114 D0129	D0012	IP66
8602*3-009-B-***_***_****	Mushroom stay-put button with key lock, Emergency Stop	D0138 D0114 D0129	D0012	IP66
8602*3-009-B-***_***_****		D0117 D0114 D0129	D0012	IP66
8602*3-733-B-***_***_****	Closure part	D0114	D0012	IP66
8602*3-733-S-***_***_****		D0115	D0012	IP66

(16) Test Report PTB Ex 17-17049

(17) Specific conditions of use

Coated protective metallic collars must not be used in areas that are affected by high charge producing processes, mechanical friction and separation processes, electron emission (e.g. near electrostatic coating equipment), and pneumatically conveyed dust.

The use of this component requires a further assessment by an ExCB.

Notes for installation and operation

1. The actuator attachment type 8602\*3-\*\*\*\_\*\_\*\*\*\_\*\*\*\_\*\*\*\* shall be installed in an enclosure that meets the requirements of an approved type of protection in accordance with EN 60079-0, section 1.
2. The degree of protection according to EN 60529 will only be safeguarded if the component is properly installed in the electrical equipment. Electrical equipment must be suited for the operating conditions, and have a separate examination certificate.





**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 13 ATEX 1019 U, Issue: 01**

3. Each actuator attachment type 8602\*3-\*\*\*-\*\_\*\_\*\_\*\_\*\_\*\_\*\_\*\_\*\_\* shall be placed by the threaded part into the corresponding bore-hole ( $\varnothing$  30.5 mm) of an enclosure cover or enclosure wall and shall be fixed with a threaded ring and the appropriate torque.
4. The torque of the threaded ring of the actuator attachment must be checked during revision work.
5. ~~The types of protection can be ensured only, if the information and instructions provided by the manufacturer are followed and the items are properly installed in the enclosure, the enclosure cover and/or the electrical equipment.~~
6. When installing the component in the electrical equipment, measures must be taken to ensure that the temperatures at the place of installation remain within the range of ambient temperatures.
7. The installation of electrical components is subject to re-assessment by a notified body.

This information must accompany each device in an adequate form.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

According to Article 41 of Directive 2014/34/EU, EC-type examination certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (April 20, 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-type examination certificates and new issues of such certificates may continue to hold the original certificate number issued before April 20, 2016.

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Braunschweig, October 26, 2017

  
Dr.-Ing. D. Markus  
Oberregierungsrat

