



Doc. No. 10000349939_14 / 08.2023

Art.- Nr. 263 018 / 263 518

S.A820

S.PA820

S.Security 19xx

S.Security 6-B19xx

Aluminium systems

A-opener for SafeMatic and InterLock

A-opener servo for SafeMatic (not for panic locks)

Further documentation:

Docu Center
Lock technology



Or

<http://dc.schueco.com/Schliesstechnik>

en 00 Operating Instructions

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1. Notes on this document

Before initial use, read through this manual thoroughly and adhere to the specified sequence of the instructions. Schüco International KG shall not be liable for any damage which arises from a failure to adhere to these instructions.

1.1. Target groups and use

This document is intended for qualified personnel, such as trained fitters and electricians. Before installing and commissioning, read through this document thoroughly and adhere to the specified sequence of the instructions. Schüco International KG shall not be liable for any damage which arises from a failure to adhere to these instructions.

1.2. Retention of the document

This document is a component of the product. Keep this document in an accessible place even after installation and commissioning, so that the information is always available.

1.3. Further documentation



<http://dc.schueco.com/Schliesstechnik>

2. Safety

2.1. About the safety instructions



KEY WORD

Type / source / consequence of the danger

Pictograms and key words advise of the type of danger and the level of danger:



General personal injury



Personal injury from electrocution



Damage to property

| | | |
|-------------|--|---|
| DANGER | | Imminent danger resulting in death or severe injuries. |
| WARNING | | Potential imminent danger which may lead to death or severe injuries. |
| CAUTION | | Potentially dangerous situation which may lead to minor injuries. |
| NOTE | | Imminent danger of damage to property which may lead to damage to or destruction of the product or environment. |
| INFORMATION | | Information Information, tips and advice |

2.2. Laws, regulations and technical rules

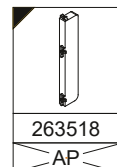
During installation and operation, observe the international, national and local safety regulations, laws and guidelines.

Generally accepted technical regulations must be followed. These are usually formulated by recognised bodies in the form of standards, guidelines, specifications and regulations.



WARNING

The A-opener servo is not approved for doors in accordance with DIN EN 1125 and DIN EN 179.



The A-opener / A-opener servo is certified in accordance with VdS – Class B.

2.3. Proper use

The A-opener / A-opener servo is provided for vertically installed doors.

The main application areas are external doors in private and public settings.

Proper use includes adhering to the installation and operating instructions specified by the manufacturer. This is the only way to avoid damage.



NOTE

The double latch bolt with monitoring (e.g. 241 463) cannot be used if using the A-opener servo. A special double latch bolt with monitoring is required.

The A-opener / A-opener servo can be used with the following locks:

| | Product family | Can be used with | |
|-----------|--------------------|-----------------------|------------------------------|
| | | A-opener (263 018) | A-opener, servo (263 518) |
| SafeMatic | S.A820 | ✓ | ✓ |
| | S.PA820 | ✓ | ✗ |
| InterLock | S.Security 19xx | ✓ | ✗ |
| | S.Security 6-B19xx | ✓ | ✗ |

For the S.PA820, S.Security 19xx and S.Security 6-B19xx product families these are locks in accordance with DIN EN 1125 and DIN EN 179. The A-opener servo is not approved for this application and therefore cannot be used with these product families.

Should damage arise as a result of any changes made to the operation of the lock without the agreement of Schüco, the manufacturer does not bear any responsibility.

2.4. General safety instructions

Follow the safety instructions in this document so as not to endanger your own life or that of others and to ensure error-free operation.



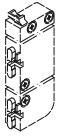
DANGER

Imminent danger resulting in death or severe injuries.

- ▶ Before any work is carried out on the product, all power packs must be disconnected and protected against anyone inadvertently switching them back on.
- ▶ Following each installation or alteration to the electrical system, carry out a test run to test all functions.

3. Contents of delivery, transportation and storage

3.1. Contents of delivery



A-opener / A-opener, servo
263 018 / 263 518



Tabs (pre-
assembled with
1x M4x10 Torx T 20)



Torx TR 20 screw
2x M4x14

3.2. Also available

3.2.1. Power supply

| Description | Art. no. | |
|--------------------------|----------|--|
| Power pack 24 V/2.0 A PE | 263 099 | |

3.2.2. Electric lock cables

| Description | Art. no. | |
|--|----------|--|
| Detachable electric lock cable (5.2 m - 5.2 m) | 262619 | |
| Electric lock cable – not detachable | 263033 | |

3.2.3. Cable link connectors

| Description | Opening angle | Art. no. | |
|---------------------------------|---------------|----------|--|
| Detachable cable link connector | 110° / 120° | 263016 | |
| | 180° | 263017 | |
| Cable link connector | 110° / 120° | 263306 | |
| | 180° | 263369 | |

3.3. Transportation and storage



NOTE

Damage to property

- ▶ Protect against impact.
- ▶ Store only in dry interior rooms.
- ▶ Protect the device against moisture and dirt.

4. Product description

4.1. How it works

The locked doors can be unlocked by an electrical pulse on the release input (potential-free contact).

The A-opener / A-opener servo then retracts the latch bolts, signals this with two audible tones and releases them again after approx. 2 seconds. The door is thereby guaranteed to lock again automatically when the door closes.

With permanent contact on the release input, the latch bolts of the multi-point locking system remain retracted until the contact is released again.



NOTE

After the permanent contact has been switched off, the door must be opened manually and closed again to ensure secure locking.



NOTE

The handle is blocked when the main bolt is engaged. Permanent activation of the A-opener in this state results in blocking of the multi-point locking system. Unlocking via the profile cylinder is then not possible.

A-opener servo additional function

The A-opener servo is activated by slightly turning the key in the opening direction or gently pressing on the door handle. The latch bolts of the multi-point locking system are retracted using electric motors. Following the initial activation of the A-opener servo, there must be a pause of at least 3 seconds until the next activation of the A-opener servo.

4.2. Switch bell on/off

In the delivery state, the A-opener / A-opener servo is programmed so that opening procedure is signalled with two audible tones. This indicates to the operator that the latches have no fully retracted and the door can be opened.

In the delivery state, the A-opener / A-opener servo is programmed so that opening procedure is signalled with two audible tones. This indicates to the operator that the latches have no fully retracted and the door can be opened.

1. Wait at least 10 seconds after the lock has been electronically disengaged (activation by potential-free contact).
2. Disconnect the lock from the power supply.
3. Leave the lock disconnected from the power supply for at least 10 seconds.
4. Re-connect the lock to the power supply.
5. Apply an initial pulse to the release input within 3-9 seconds.
6. Apply a second pulse immediately afterwards which should last at least 10 more seconds. The A-opener / A-opener servo does not operate in this case.
 - » The signalling tones are now switched off.

To activate the signal tones, you must follow the exact same programming sequence.

4.3. Technical data

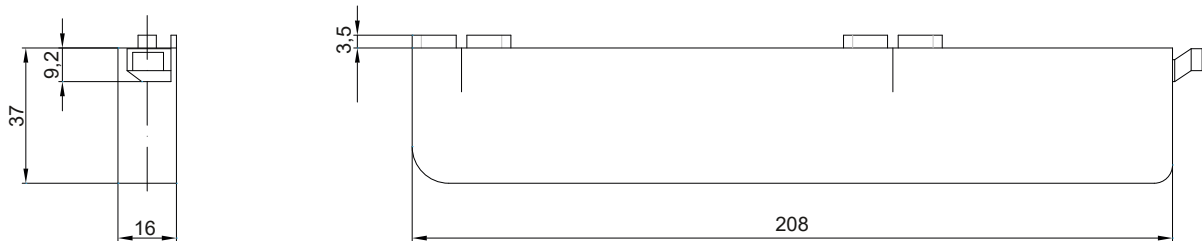
4.3.1. Electrical properties

| | |
|------------------------|--|
| Power supply | 12 V AC, 12-24 V DC (stabilised) |
| Rated current | 1 A |
| Protection rating | IP40 |
| Test load | Tested to 200,000 opening cycles as per DIN 18251 Part 3 |
| Initial load unlocking | at 12 V AC or DC up to 280 N at 24 V DC up to 400 N |

4.3.2. Cable lengths and cross sections

| Cable length | Cable cross section |
|--------------|----------------------|
| Max. 10 m | 0,5 mm ² |
| Max. 40 m | 0,75 mm ² |
| Max. 50 m | 1,0 mm ² |
| Max. 75 m | 1,5 mm ² |
| Max. 125 m | 2,5 mm ² |

4.3.3. Dimensions



5. Installation and connection

5.1. General notes on installation

The installation of the electrical components requires special care, as scratches and damaged cables or contacts etc. are required for security, and could result in failure or malfunctioning of the system. Before installation, ensure the components are in proper working order.

The exact installation dimensions can be found in the fabrication drawings in fabrication manuals 1-2D, 3-3 and 1-4.



NOTE

- ▶ If the recess is not cut long enough or deep enough, it will lead to malfunctions.
- ▶ Prior to installing the A-opener servo, it may be necessary to remove the tie rod guide in the upper screw hole for the A-opener servo (e.g. by levering it out using a screwdriver).

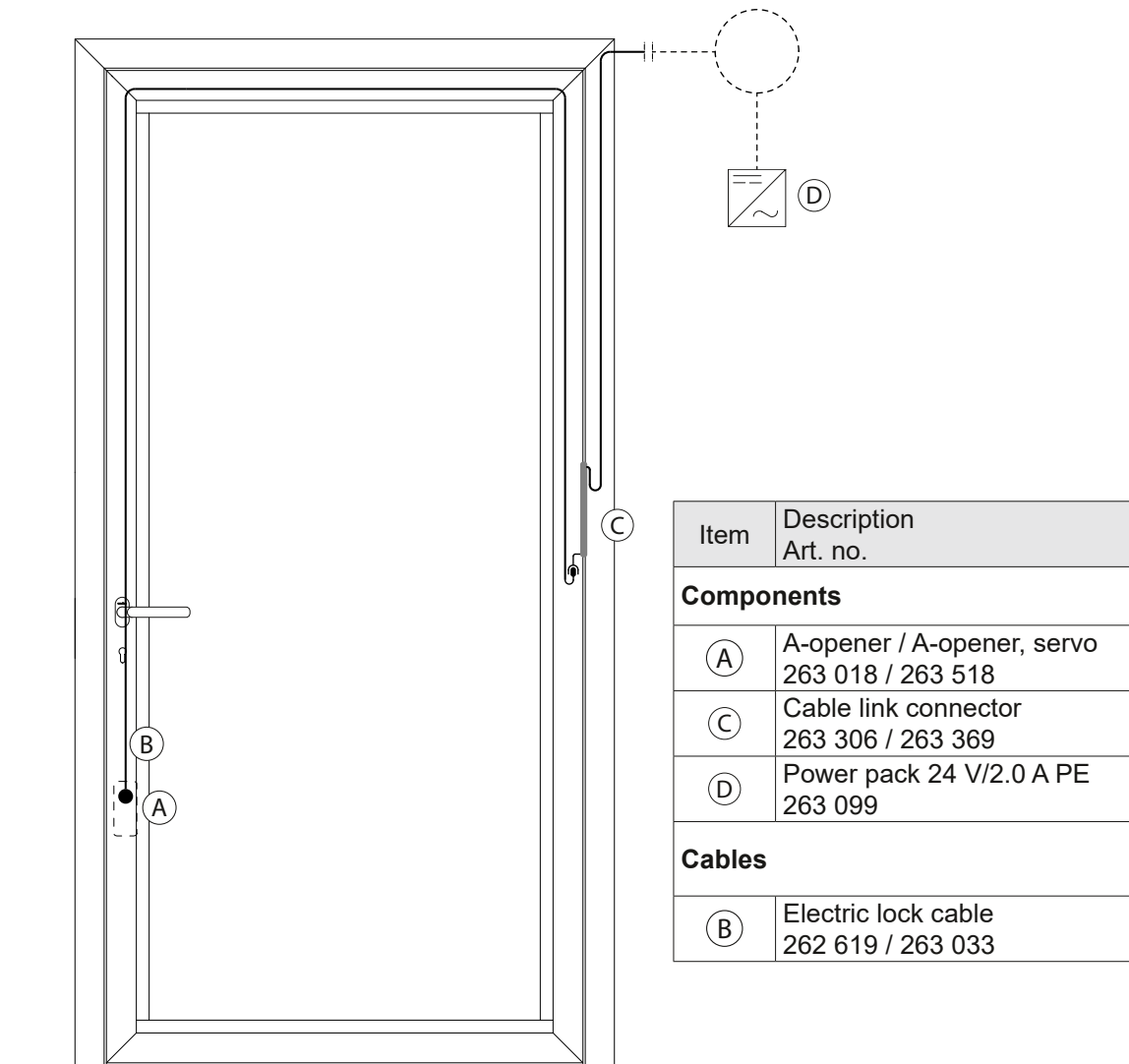
When laying cables and electrically connecting the A-opener to the plug connection, it is essential to ensure the cable cannot be crushed or damaged in the lock or meeting stile area (e.g. through the door warping, pressure from gaskets, wind load, etc.). Distributor points must be accessible for maintenance work. Cable type, cable lengths and cable cross sections must be designed as per the specifications (see section 4.4 "Technical data").



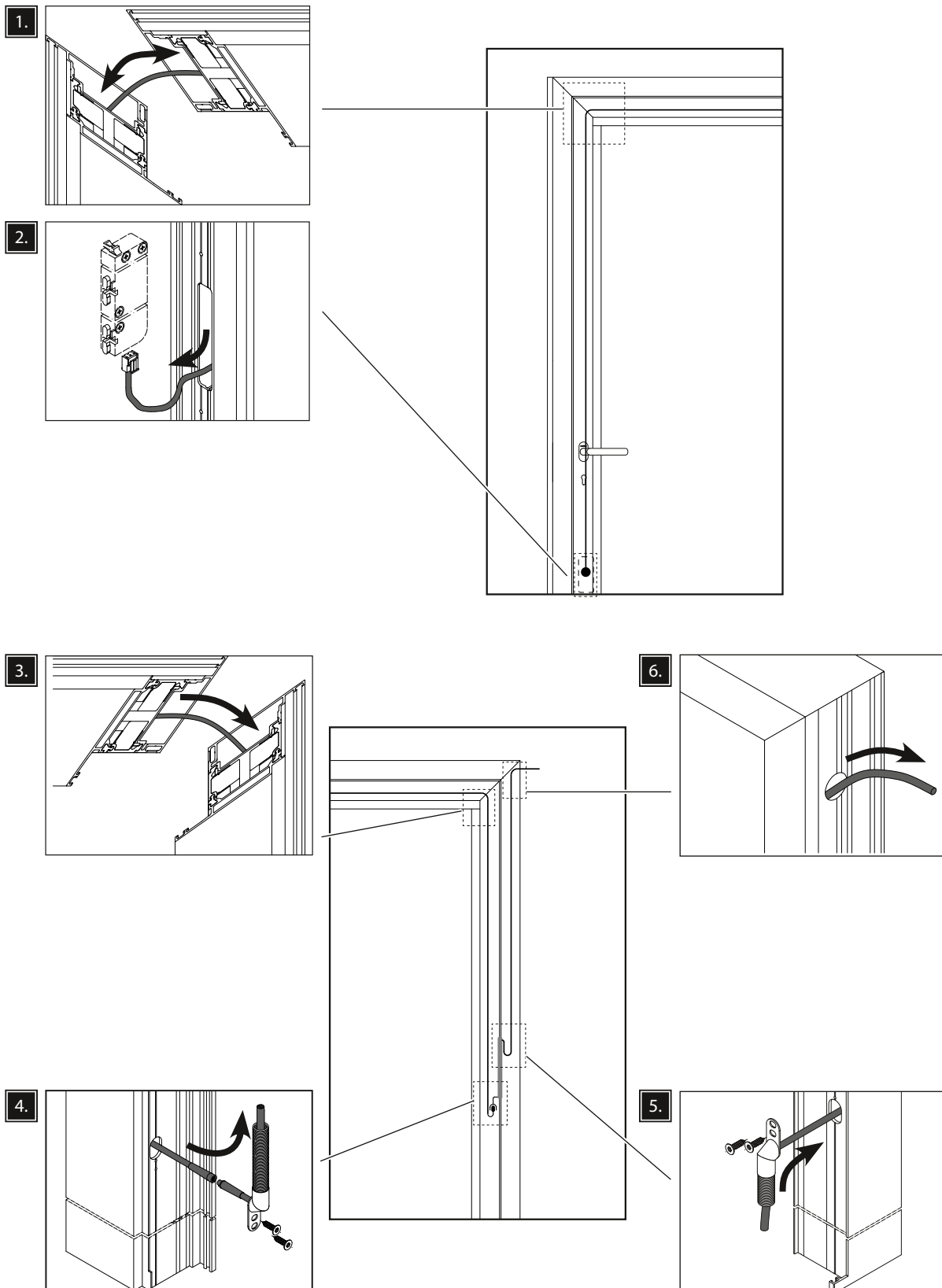
DANGER

- ▶ Adhere to the regulations and standards for SELV voltages when installing and laying cables.
- ▶ Do not plaster in the flexible cables and ensure free-hanging cable are relieved of tensile loads.

5.2. Example of cabling – Overview drawing



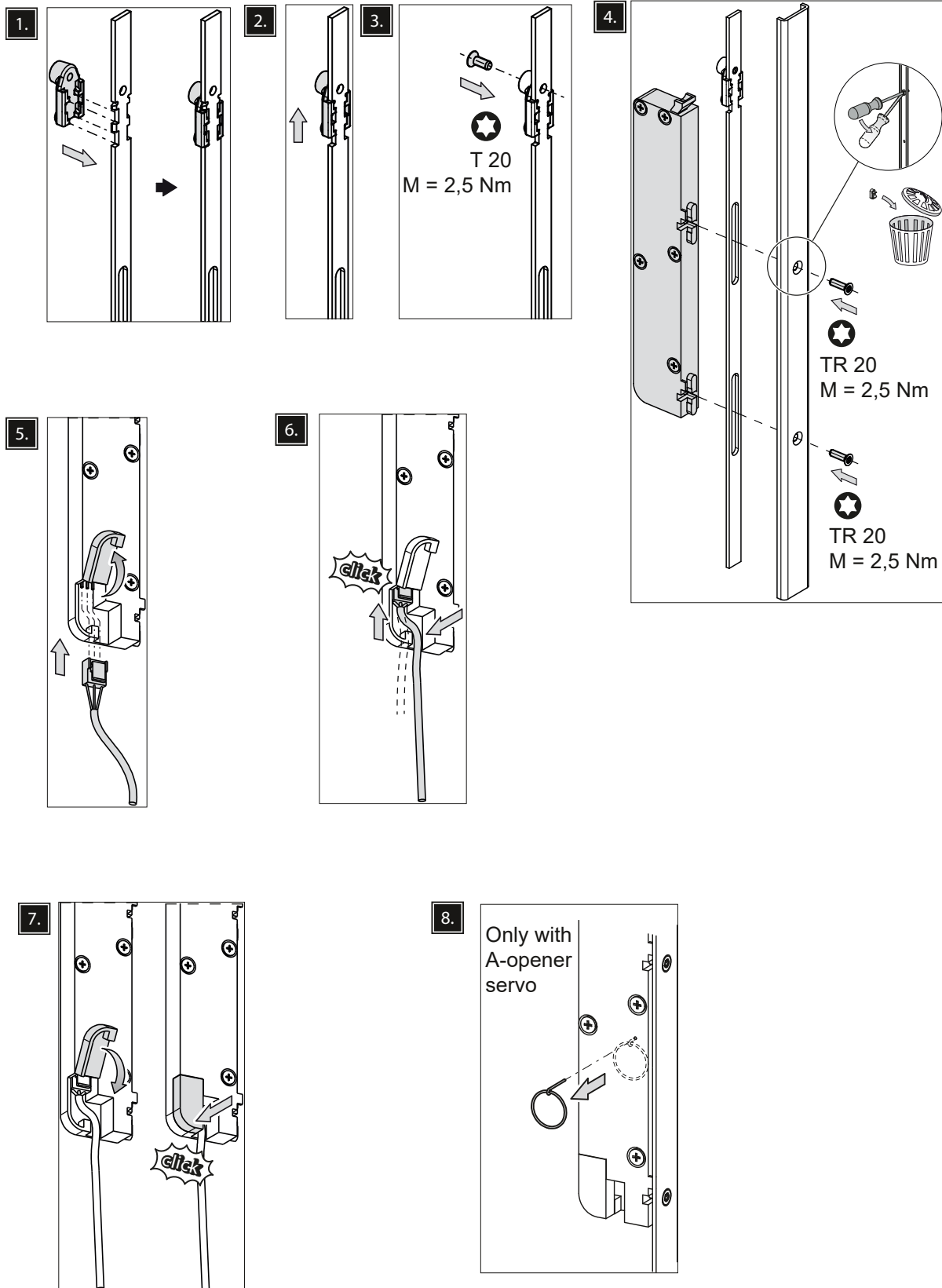
5.3. Wiring of the electric lock cable



5.4. Installation sequence

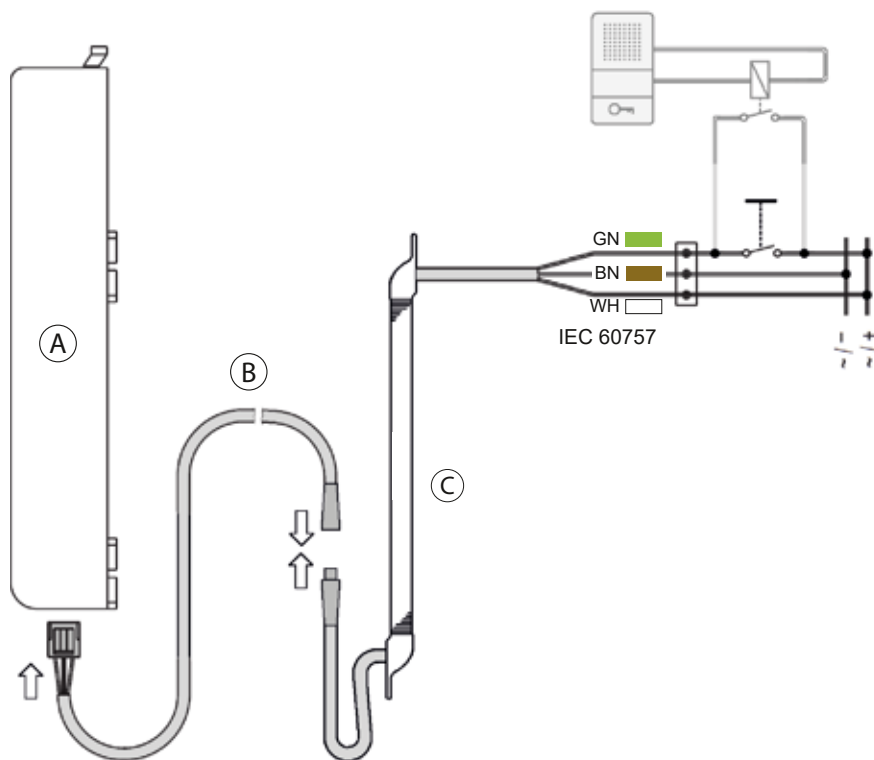
Preparation:

| |
|------------------------------|
| Tools |
| Bit with bore hole ISR 20 TR |



5.5. Electrical connection

Example of electrical connection (illustrated)



| Item | Description Art. no. |
|-------------------|---|
| Components | |
| Ⓐ | A-opener / A-opener, servo 263 018 / 263 518 |
| Ⓒ | Cable link connector 263 306 / 263 369 |
| Cables | |
| Ⓑ | Electric lock cable 262 619 / 263 033 |

| Wire colour | Configuration |
|-------------|-------------------|
| WH | 24 V DC / 12 V AC |
| BN | GND / 12 V AC |
| GN | Release signal |

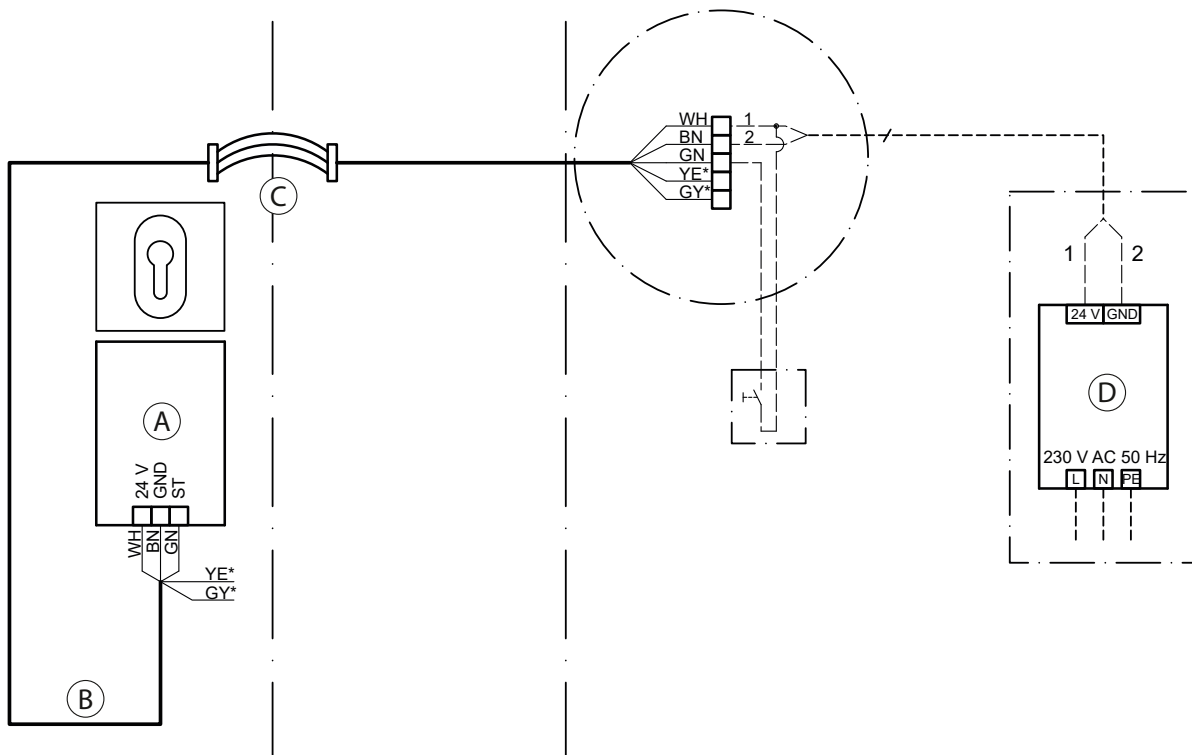
Example of electrical connection (circuit diagram)



NOTE

Damage to property

- Individually isolate all unused wires.



| Item | Description Art. no. |
|---------------------|---|
| Components | |
| (A) | A-opener / A-opener, servo 263 018 / 263 518 |
| (C) | Cable link connector 263 306 / 263 369 |
| (D) | Power pack 24 V/2.0 A PE 263 099 |
| Other cables | |
| (B) | Detachable electric lock cable (5.2 m - 5.2 m) (262619) |

| Wire colour | Configuration |
|-------------|-------------------|
| WH | 24 V DC / 12 V AC |
| BN | GND / 12 V AC |
| GN | Release signal |
| YE | Not used |
| GY | Not used |

5.6. Test run

After installation and after any alteration to the construction, a test run must be carried out on all functions to check them.



WARNING

There is a risk of injury between the door and the frame.

After the installation is complete, the end user must be given instruction in all key operating steps. As a test run, the door is unlocked by an electrical pulse on the release input (e.g. the building intercom system). The A-opener / A-opener servo now retracts all latches, ends the procedure after approx. 1.5 seconds and signals the open state with tones. The door can then be opened manually.

The latches are kept retracted for approx. 2 seconds. The A-opener / A-opener servo then releases the latches and they return to the initial position. The door can now be manually closed again.



INFORMATION

The servo function (A-opener servo only) activates 10 seconds after the power supply is switched on.

For the test run, the A-opener servo is activated by slightly turning the key in the opening direction or gently pressing on the door handle. The A-opener / A-opener servo now retracts all latches.

From the inside, with an unlocked main latch, the door can be opened at any time using the handle.

6. Inspections and maintenance work, replacement parts

Only operate the A-opener / A-opener servo with power supplies with outputs which meet at least the requirements of the lock (see chapter 4.4 "Technical data"). No guarantees are valid if this is not adhered to.

Regularly check the readiness for operation of the locking system. To do this, inspect the fixing points and tighten the screws if necessary.

The mechanical properties of the lock (key or handle operation / latch bolt) must not be impaired due to contamination. Clean these at least once per year and lubricate them with non-hardening oil.

The A-opener / A-opener servo itself does not require maintenance.

7. Corrective action

| Error specification | Possible cause(s) | Corrective action |
|--|---|--|
| A-opener / A-opener servo does not move | The cables are incorrectly connected or not there | <ul style="list-style-type: none"> • Check electrical connections • Check power supply • Check jamming points |
| Latches are retracted when operated, but no longer released | Cables incorrectly connected | <ul style="list-style-type: none"> • Check electrical connections • Recess for A-opener too small: the toothed rack is jammed / tie rod is caught. The recess must be enlarged |
| The A-opener / A-opener servo hums for an extended period of time or the A-opener does not retract the latches | The A-opener receives too little current or a weak power supply | <ul style="list-style-type: none"> • Check the power supply (min. 1 amp) |
| | Cables used are too thin or too long | <ul style="list-style-type: none"> • Check cable cross section |
| | Consumers connected in parallel | <ul style="list-style-type: none"> • The power supply output is insufficient |
| Only the additional locking points are retracted | - | <ul style="list-style-type: none"> • Functioning as intended. No fault has occurred. |
| | Malfunctioning main lock case | <ul style="list-style-type: none"> • Contact Schüco |
| No "servo" function | - | <ul style="list-style-type: none"> • Check tie rods for free movement |
| | - | <ul style="list-style-type: none"> • Check that the key turns smoothly. |
| A-opener / A-opener servo cannot be operated for several seconds | Following repeated opening and closing of the door in rapid succession, the A-opener / A-opener servo locks for at most 15 seconds. | <ul style="list-style-type: none"> • Wait 15 seconds |

8. Care and maintenance



NOTE

Damage to property

Prevent water getting inside the device.

Do not use any aggressive or abrasive cleaning agents. Clean DCS modules using a dry or damp cloth. Remove more stubborn dirt using a domestic cleaning agent for glass.

9. Decommissioning and disposal



The materials used can be recycled. Observe the environmental requirements with regard to recycling, re-use and disposal of operating materials and components in accordance with the local, country-specific and international current technical regulations and official regulations. Make a contribution towards protecting our environment and dispose of the device at a collection point.

The symbol of the crossed-out rubbish bin indicates that this electrical/electronic device may not be disposed of in household waste at the end of its working life. It can be returned to free collection points for old electric and electronic devices in your area. Addresses can be obtained from your city council or local administration. Collecting old electric and electronic devices separately enables the reuse, the recycling of materials or other forms of recycling, and prevents dangerous substances which may be contained in the devices from having negative effects on the environment or human health during their disposal.

For more information, visit www.elektrogesetz.de

10. Service and support

At Schüco, a high level of customer satisfaction is our priority.

Should you require further information or encounter problems not dealt with in detail in this document, you can request the requisite information from Building Automation Technical Support.

You can reach your contact partners on the service phone numbers below:

Hotline - Metal systems

Please contact your local branch.

Hotline - Building Automation Technical Support

Tel.: +49 (0) 521 - 783 665

E-mail: Support_automation@schueco.com

Office hours:

Mon - Thurs: 8:00 - 16:30

Fri: 8:00 - 15:00

en Original instructions

The export, fabrication and assembling of Schüco products within the scope of building projects in the USA are subject to specific regulations (product testing/certification) which must be coordinated with Schüco USA LLLP prior to importing the products into the USA. If you have any questions on this matter, please contact Schüco USA LLLP, e-mail: alutechsupport@schuco-usa.com. Schüco International KG assumes no liability for damages which result from the use / fabrication / assembling of products which have not been approved by Schüco for the US market or which are fabricated and assembled there by contractors who are not sufficiently qualified to work with Schüco products.

Please note the special instructions in the general section of the manual for the fabrication and assembly of Schüco products for building projects in the USA.

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