

G.U-SECURY Automatic with A-opener

Assembly and Operating Instructions

Technical Data Sheet



CE

Contents

1	Information	15
1.1	Technical description	15
1.2	Application range and intended use	15
2	Technical and operational safety	15
2.1	General mounting advice	16
3	Scope of delivery and installation position	17
4	Operating parameters	18
4.1	Technical specification	18
5	Mounting instructions	18
5.1	Wiring and electrical connection	18
5.2	Mounting sequence	19
6	Function	20
6.1	Settings	21
6.2	Trial run	21
7	Inspection and maintenance works, replacement parts	22
8	Trouble shooting / Possible causes / Remedies	22
9	G-U Customer services	23
10	Disposal	23

Symbols used

Symbol	Signal word	Meaning	Symbol	Signal word	Meaning
	Danger !	Warning of personal injury		Info	Special functions or user advice
	Danger !	Electrical hazard symbol sign		Attention !	Property damage warning sign
	Caution !	Risk of injury from limbs (hands) getting crushed			

General advice

The present installation and function description is exclusively addressed to specialists trained by GU who in turn will instruct the end user. For this reason, the instructions are provided in German (original language) and English (translation) only.

The body responsible for all instruction manuals is the Technical Office of GU in Ditzingen.

This product is to be considered as uncompleted apparatus. The instructions accompanying it do not contain a risk assessment. In fact, it is the installer of the complete technical equipment who is in charge of carrying out a risk analysis.

1 Information

These Assembly and Operating Instructions contain important advisory notes which must be followed by all means to ensure appropriate assembly and trouble-free operation.

The details and specifications given in these instructions are to be observed by door fabricators, installers, and operators.

1.1 Technical description

- Self-locking multipoint door lock
- Motor-driven release
- "G.U-SECURY Automatic with A-opener
- Latchbolts throwing 20 mm / secured against being forced back
- VdS approval class A

1.2 Application range and intended use

- SECURY Automatic with A-opener is designed for vertically installed doors.
- Its major field of application is house entrance doors both in private and public buildings.
- 'Intended use' comprises the observance of the manufacturer's operating and service instructions which is essential for the avoidance of damage and injury.
- G-U excludes any liability for damage arising from changes made on the lock without their consent.

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2 Technical and operational safety



Danger !

Installation works involving the use of electrical equipment are dangerous.

Insufficient wire cross sections may cause a fire.

Therefore it is important to always observe the specified cross sections.

Connections to a 230V mains are dangerous to life !

Never connect the A-opener to a 230 V supply!

3 Operating parameters

3.1 Technical specification

- Supply voltage 12 V AC
12-24 V DC (stabilised)
- Rated current 1 A
- IP protection class 40
- Endurance test 200,000 opening cycles in accordance with
DIN 18251 part 3
- Cable cross section see table on opposite page

3.2 Wiring and electrical connection

The cables must be laid in such a way that they cannot be squeezed in or damaged in the area of the lock for end during installation.

Distribution boxes must be accessible for maintenance work. Cable types, lengths, and cross sections must conform to the specifications.



Attention:

Observe standards and regulations for extra-low voltage (SELV) during installation and laying of cables.

Flexible cables must not be covered with plaster, free-hanging cables must be relieved from strain.

For a cable duct, or rather instead of such, we recommend the use of SECURE**connect** from the G.U-BKS product range.

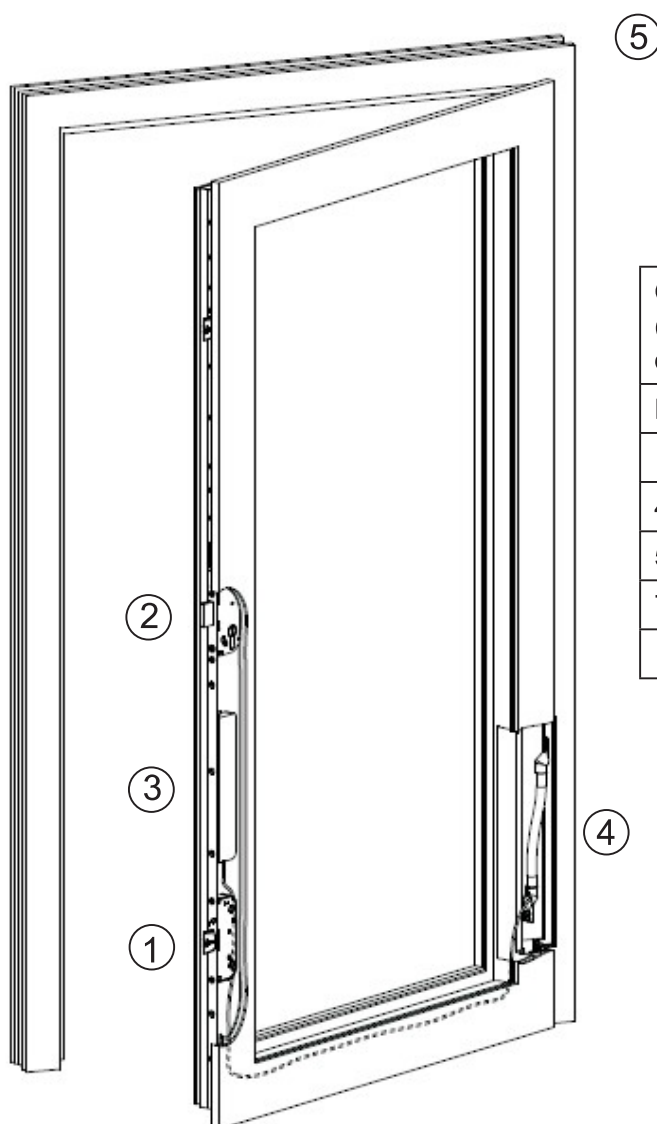
4 Scope of delivery and installation position

G.U-SECURY Automatic with A-opener

Bag of connecting cable (from A-opener to distribution box)

Installation position as shown in drawing below

- ① Automatic latchbolts
- ② Deadbolt of central lock
- ③ A-opener with connecting cable (approx. 6 m incl. plug for A-opener and wire end sleeves on side of distribution box)
- ④ Cable duct not included in delivery (**SECUREconnect**)
- ⑤ Distribution box and 3-wire cable from distribution box to be provided by customer (see chapter 4 "Operating parameters")



Cable cross section

(3-wire cable from customer-provided distribution box)

Length up to	Cross section
10 m	0.5 mm ²
40 m	0.75 mm ²
50 m	1 mm ²
75 m	1.5 mm ²
125 m	2.5 mm ²

5 Mounting instructions

5.1 General mounting advice

The electronic components should be installed with utmost care since chafed or defective cables, damaged contacts etc. may seriously affect the safety of the system and cause its failure. Ensure that all components are in faultless state before mounting them.



It is imperative to observe the cutting specifications given in the drawing below!

In case of any problems or questions please contact the distributor or manufacturer.

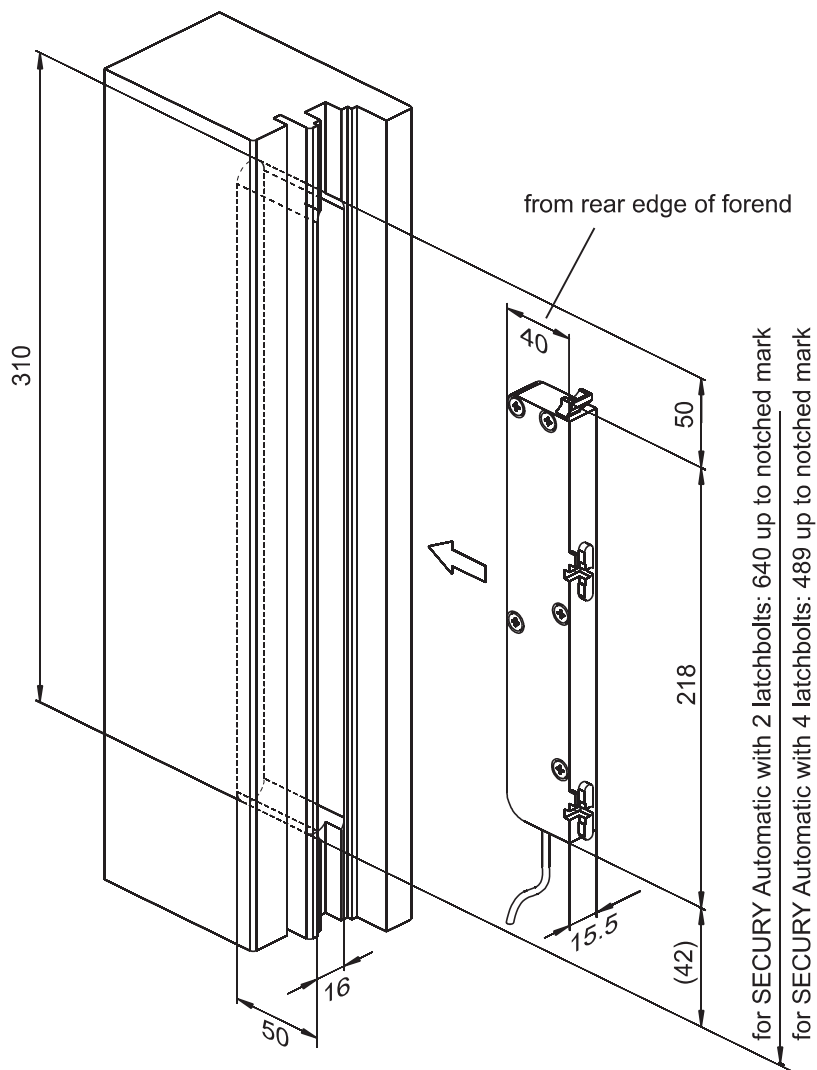
The appropriate installation of the drive requires general electrical and mechanical knowledge, as is to be expected from a skilled and safety-conscious expert.



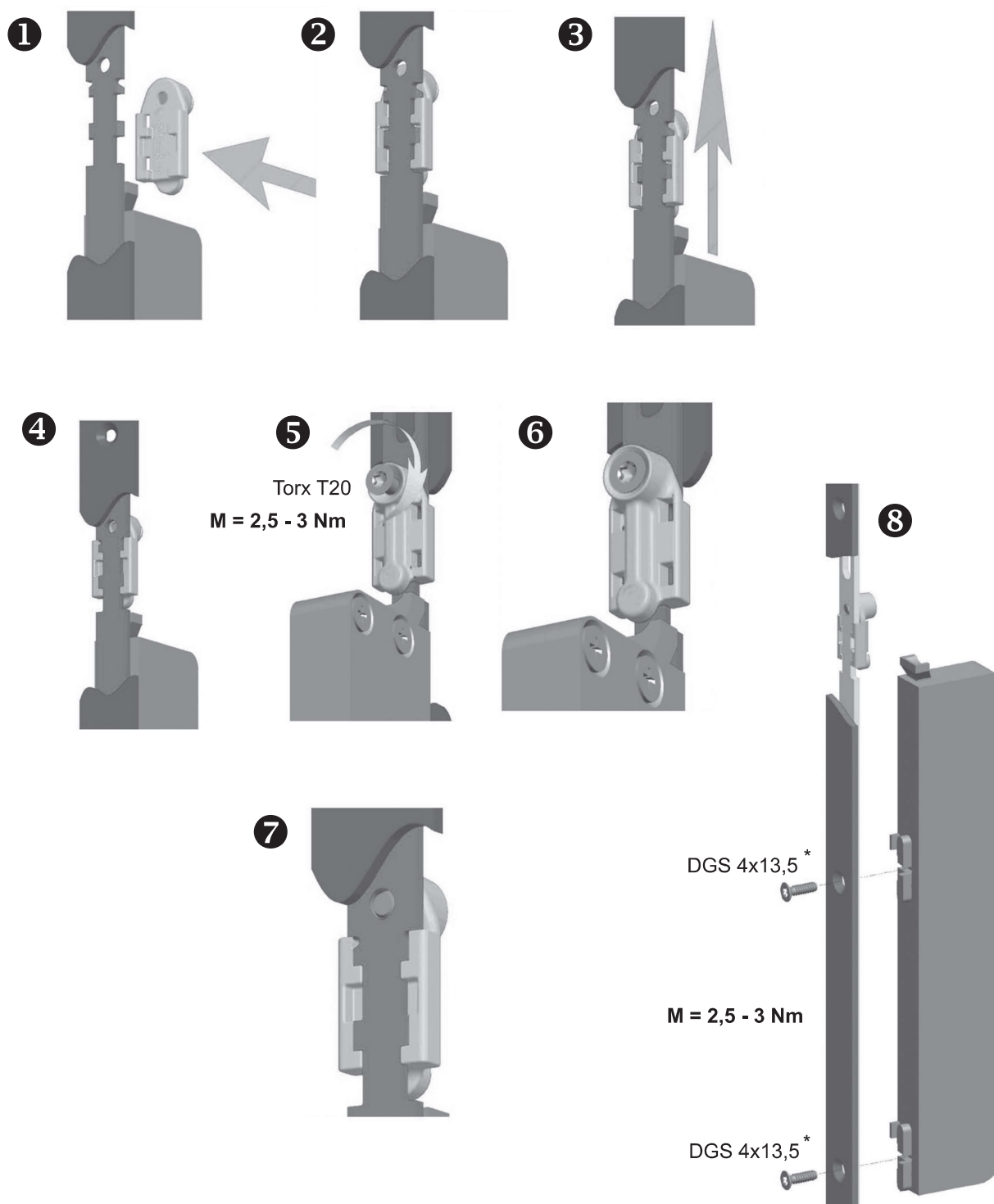
Attention:

It is imperative that a space of 50 mm should be provided above the upper end of the A-opener allowing for the driving rod's travel (see installation drawing under 2.1).

If the recess is cut too small in length and depth, the lock's functions will be disturbed!



5.2 Mounting sequence



Before installing the lock in the door leaf:

- It is important to ensure that the driving rods move smoothly and to verify the A-openers correct functioning (see also chapter "6.2 Trial run" on page 21)

* DGS = double threaded screw for direct fixing into die cast and duroplasts (screws included in delivery)

6 Function

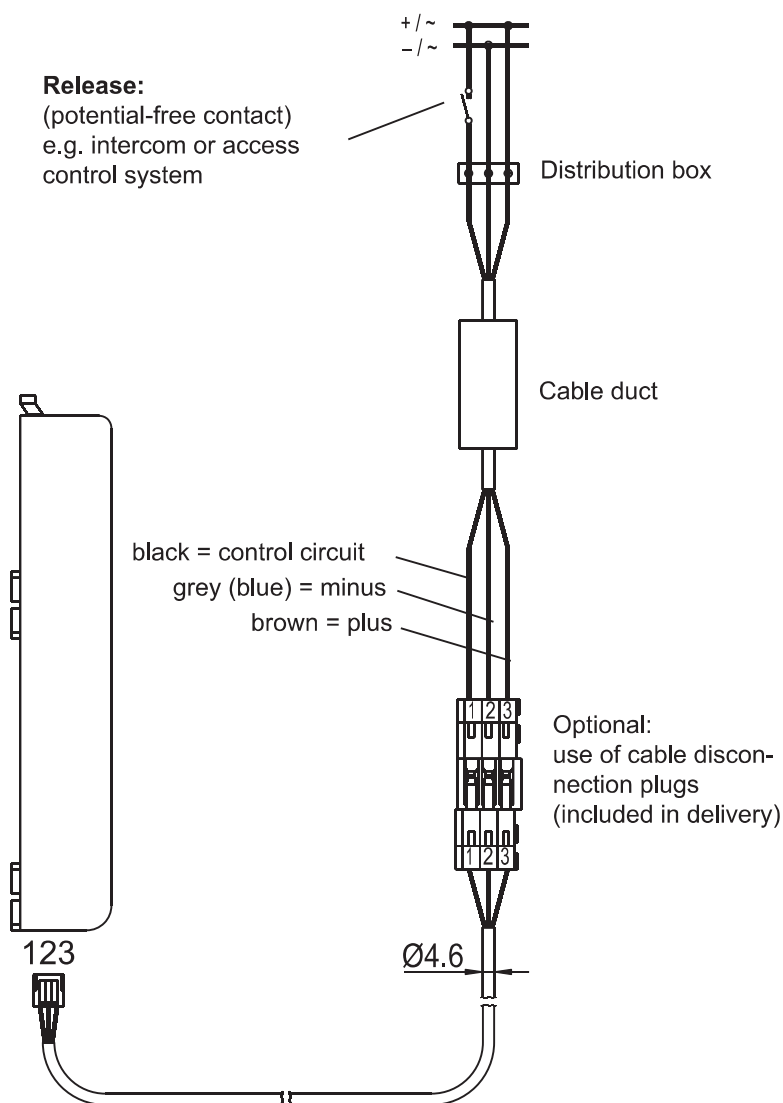
- The locked door can be released by a pulse given to the door release input (potential-free contact).
- The motor retracts the automatic latchbolts, which is acknowledged by two audible signals, and after approx. 2 seconds releases them again. Thus, the lock is prepared again for automatic locking after the door has been pulled or pushed shut.
- With continuous contacting on the door release input, the automatic latchbolts of the lock remain retracted until the contact is open again. This functioning principle allows for release over a longer time period by means of a switch or a timer switch.



Attention:

The operating mode "PERMANENT OPEN" is not permitted on fire or smoke protection doors!

If a motor-driven lock is used on a fire or smoke door, it is necessary to ensure (e.g. by means of UPS = uninterruptible power supply) that there is always sufficient energy to extend the latchbolts into locking position even in the event of a power failure. With the use of SECUREconnect 100, this requirement is fulfilled.



6.1 Settings

Audible A-opener signals

The ex-factory setting of SECURY Automatic with A-opener is two signal tones acknowledging the opening cycle and indicating to the user that the latchbolts are completely retracted for access.

The signal tones can be switched off as an option.

Deactivation is done as follows:

- After the lock's electric release (triggered by a potential-free contact), the lock must be disconnected from the voltage supply, however, not earlier than 10 seconds after disconnection.
 - The lock must be disconnected from the voltage supply for at least 10 seconds.
 - Afterwards switch the power on again.
 - Now a first pulse must be given to the door release input within 2 seconds,
 - and a second one immediately afterwards which has to last for at least 10 seconds.
- Note:** the motor is not operating meanwhile.
- After this the signal tones are deactivated.

In order to activate the signal tones, follow the same programming steps.

6.2 Trial run

After installation, check all functions in a trial run.



Attention!

Risk of injury when reaching between door leaf and frame!

When the installation is completed, the building operator/end user must be instructed in all important operating steps.

In order to test the lock in a trial run, a pulse is given to the door release input (e.g. via intercom). The motor retracts the latchbolts, and after approx. 1.5 seconds acknowledges open status with signal tones. This is when the door can be opened by hand.

The latchbolts are retained for approx. 2 seconds. Afterwards the motor releases them again and they extend to their initial position. Now the door can be closed again by hand.

Note: With the SECURY variants "AutomaticDay" and "AutomaticTE" with "daytime release function", the latch of the central lock is not retracted by the A-opener!

The lock can always be operated mechanically by key from both sides. With the central dead-bolt retracted, door opening from inside via lever handle is possible at any time.

7 Inspection and maintenance works, replacement parts

SECURY Automatic with A-opener must only be operated with power supply units meeting the minimum requirements of the lock (see "Technical data" under 4.1)

Any warranty claims for damage caused by non-observance are rejected.

The serviceability of the locking system must be verified at regular intervals. For doing so, check all fixing points and retighten screws, if required.

In order to avoid that the mechanical properties of the lock – especially with regard to key, handle, and latchbolt movement – are affected by dirt, it is necessary that the lock is inspected and lubricated with non-resinous oil at least once a year.

The A-opener itself is maintenance-free.

8 Trouble shooting / Possible causes / Remedies

☒ Motor not running

➡ Cable(s) connected wrongly or not at all, verify connections:

- Voltage supply V direct voltage/alternating voltage
brown: +/~
grey (blue): -/~
black: +/~ (control voltage for release).
- Check transformer and exchange microfuse, if necessary.
- Check terminals.

☒ Latchbolts are retracted after activation, however not extended again.

➡ Cable connected wrongly, verify connections:

- Voltage supply V direct voltage/alternating voltage
brown: +/~
grey (blue): -/~
black: +/~ (control voltage for release).
- Milled recess for A-opener too small: driving rod gets jammed or stuck.
The recess must be cut larger.

☒ Motor hums over a longer period of time or

☒ A-opener cannot retract the latchbolts

➡ A-opener not getting enough current, transformer too weak:

- Check transformer:
Voltage supply V direct voltage/alternating voltage min. 1 Ampere (1000mA!)
Cables used are too long or too thin: verify cable cross sections:
 - up to 10 m – 0.5 mm²
 - up to 40 m – 0.75 mm²
 - up to 50 m – 1.0 mm²
 - up to 75 m – 1.5 mm²
 - up to 125 m – 2.5 mm²

➡ Consumers switched in parallel:

- Transformer not powerful enough to provide the energy required for A-opener plus additional consumers connected to it!

☒ **Additional latchbolts are retracted only.**

➡ **SECURY "AutomaticDay" and SECURY "AutomaticTE" with A-opener:**

- No error, function is intended.

➡ **Defective central lock case:**

- Please contact G-U.

9 G-U Customer services

- Installation of motor drive and start-up
- Annual inspection in compliance with the prevailing standards and regulations
- Maintenance and repair works
- Retrofitting or changing existing door assemblies.

For clarifying any technical questions please contact our aftersales service.

10 Disposal

The device contains electrical parts and must be disposed of in compliance with the legal regulations.

