



**record C 127 SU H**

User manual

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## Glossary

### BDE-D

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Control unit with display

### SSK

---

Key pivot contact

# 1 Safety

## 1 Safety

### 1.1 Presentation of warning signs

Various symbols are used in this guide for easier understanding:



#### NOTICE

Useful advice and information to ensure correct and efficient workflow of the system.



#### IMPORTANT

Specific details which are essential for trouble-free operation of the system.



#### IMPORTANT

Important details which must be read for proper function of the system.



#### CAUTION

Against a potential hazardous situation that can lead to minor personal injury and property damage.



#### WARNING

Against a latent hazardous situation that can lead to severe injuries or death and cause substantial property damage.



#### DANGER

Against an imminent hazardous situation that can lead to severe injury or death.



#### DANGER

Against an imminent or latent hazardous situation that could lead to electric shock and cause serious injury or death.

### 1.2 Intended purpose of use

The system is designed exclusively for use as a pedestrian passage. The installation must only occur in dry areas. If there are deviations then proper waterproofing and water drains will be required on-site.

Any other application or use beyond this purpose is not considered to be an intended purpose. The manufacturer bears no liability for any resulting damage; the operator alone shall bear the associated risk.

The intended purpose also includes observation of the operating conditions specified by the manufacturer, in addition to regular care, maintenance and repair.

Interventions in or alterations to the installation performed by non-authorized maintenance technicians exclude the manufacturer's liability for consequential damages.

## 1.3 General hazards

The following section lists hazards that can be caused by the system even when used as intended. To reduce the risk of malfunction, damage to property or injury to persons and to avoid dangerous situations, the safety instructions listed here must be observed.

The specific safety instructions in the other sections of this manual must also be observed.



### IMPORTANT

**The country-specific regulations must be observed and complied with!**



### IMPORTANT

**To avoid malfunctions, moving objects such as flags or parts of plants must not be allowed to enter the detection range of the sensors.**



### CAUTION

**Risk of malfunctions, material damage or injury due to improper settings!**

- a) Improper settings can lead to malfunctions, material damage or personal injury.
  - ⇒ Do not disconnect the system from the power supply overnight.
  - ⇒ Settings should only be made by personnel qualified to do so.
  - ⇒ Do not disassemble, put out of operation or manipulate safety devices.
  - ⇒ Have faults rectified by specialist personnel or by personnel qualified to do so.
  - ⇒ Have service and maintenance carried out according to locally applicable regulations or according to a maintenance contract.



### CAUTION

**Risk of malfunctions, material damage or injuries due to insufficient or missing cleaning or care!**

- a) Insufficient or inattentive cleaning or care of the system can lead to malfunctions, damage to property or injury to persons.
  - ⇒ Check the sensors regularly for dirt and clean them if necessary.
  - ⇒ Regularly remove dirt accumulations in the floor rail or under the floor mat.
  - ⇒ Keep the system free from snow and ice.
  - ⇒ Do not use aggressive or caustic cleaning agents.
  - ⇒ Use road salt or loose chippings only conditionally.
  - ⇒ Lay the floor mat without folds and flush with the floor.
  - ⇒ Equipment required for cleaning purposes such as ladders or similar must not be leaned on or attached to the system.



## CAUTION

### Risk of material damage or injury due to unforeseen opening, closing or turning of the door!

- a) The door can open, close or turn unexpectedly. This may result in damage to property or injury to persons.
  - ⇒ No persons may be present in the opening area of the system.
  - ⇒ Ensure that moving objects such as flags or parts of plants do not enter the detection range of the sensors.
  - ⇒ Do not make any settings on the control unit when the system is in use.
  - ⇒ Have faults rectified immediately by specialist or personnel qualified to do so.
  - ⇒ Remove objects from the opening area.
  - ⇒ Do not disassemble, put out of operation or manipulate safety devices.
  - ⇒ Do not rush through a closing system.



## CAUTION

### Risk of bruising and severing of limbs!

- a) If the system moves, careless behaviour can lead to serious injuries to limbs or severance of limbs.
  - ⇒ Do not reach in when parts of the system are moving.
  - ⇒ Keep a distance when parts of the system move.
  - ⇒ Do not bump into or touch the system when it is moving.
  - ⇒ Do not open or remove protective covers during operation.
  - ⇒ Do not permanently remove covers from the system.
  - ⇒ Only carry out inspection, service, maintenance and cleaning when the system is stationary and switched off.



## CAUTION

### Danger of material damage or injury due to non-functioning safety devices!

- a) If safety devices are not functioning, manipulated or put out of operation, there is a risk of damage to property or injuries that can lead to death.
  - ⇒ Never disable or manipulate safety devices.
  - ⇒ Have inspection, service and maintenance of the safety devices carried out according to local regulations or according to a maintenance contract.



## CAUTION

### Danger of malfunctions, damage to property or risk of injury if used by unauthorised persons!

- a) If unauthorised persons use the system, there is a risk of malfunction, damage to property or injury to persons.
  - ⇒ Children under 8 years of age may only use the system under supervision.
  - ⇒ Children must not play, clean or maintain the system.
  - ⇒ Persons with limited physical, sensory or mental abilities as well as persons with insufficient knowledge or experience may only use the system under supervision or must have received and understood instructions to do so.



## DANGER

### Danger to life due to electric current!

- a) In case of contact with live parts, there is an immediate danger to life due to electric shock. Damage to or removal of the insulation or individual components can be life-threatening.
  - ⇒ Before starting work on active parts of electrical systems and equipment, ensure that all poles are voltage free and that this is maintained for the duration of the work.
  - ⇒ Keep moisture away from live parts. This can lead to a short circuit.
  - ⇒ Never bridge fuses or put them out of operation.
  - ⇒ Do not connect the power supply until all work has been completed.
  - ⇒ Have work on the electrical system performed by qualified personnel only.



## DANGER

### Danger to life due to non-functioning safety devices of the fire protection system!

- a) If safety devices of the fire protection system do not function properly, there is a risk of serious or fatal injuries.
  - ⇒ Never disconnect the fire protection system from the power supply overnight.
  - ⇒ Do not disassemble, put out of operation or manipulate safety devices.
  - ⇒ Do not remove safety instructions on the system.
  - ⇒ Never block, hold open or otherwise prevent fire doors from closing.
  - ⇒ Have inspection, service and maintenance of the fire protection system carried out in accordance with locally applicable regulations or according to a maintenance contract.
  - ⇒ Have the fire protection system checked and maintained according to the state of the art.

## 1.4 State of technology

This system was developed using state of the art technology and officially recognized technical safety regulations. The system, depending on its options and diameter, comply with the requirements of the Machine Guidelines 2006/42/EG as well as EN 16005 and DIN 18650 (D).

Nevertheless, danger may arise if not used as intended.



## IMPORTANT

**Installation, commissioning, inspection, maintenance and repair work may only be conducted by qualified, trained and authorized technicians.**

**After commissioning or repair work, fill in the check list and give it to the customer for safe keeping.**

**We recommend obtaining a service agreement.**

## 1.5 Personal protective equipment

Personal protective equipment is used to protect persons from adverse effects on health. Personnel must wear personal protective equipment during the various work activities on and with the system.

Personal protective equipment is explained below:



Hearing protection is used to protect the hearing from noise. As a rule of thumb, hearing protection is compulsory from when normal conversation with other people is no longer possible.



The head protection serves to protect against falling and flying parts and materials. It also protects the head from bumping into hard objects.



Protective goggles protect the eyes from flying parts, dust, splinters or splashes.



Protective gloves are designed to protect hands from friction, abrasions, punctures or serious injury and from burning caused by contacting hot surfaces.



Safety shoes protect the feet from crushing, falling parts and slipping on surfaces. The puncture resistance of the shoes ensures, that pointy objects do not penetrate the foot.



The high-visibility vest is used to make the personnel stand out and therefore to be seen. With improved visibility and attention, the high-visibility vest protects personnel in busy work areas from collisions with vehicles.

Depending on the place of work and the working environment, the protective equipment varies and must be adapted accordingly. In addition to protective equipment for specific work, the work site may require other protective equipment ( for example a harness).

In hygiene-protected areas, special or additional requirements of personal protective equipment may be required. These requirements must be considered when choosing personal protective equipment. If there is any uncertainty regarding the choice of personal protective equipment, the safety officer must be consulted at the place of work.

## 1.6 Spare parts and liability

Reliable and trouble free operation of the door is only guaranteed when using parts that were recommended by the manufacturer. The manufacturer declines any liability for damages resulting from unauthorized modifications to the door or the use of parts that are not permitted.

## 2 General information

### 2.1 Purpose and use of the instructions

These instructions are an integral part of the system and enable efficient and safe handling of the system. In order to ensure proper functioning, the instructions must be accessible at all times and kept in the immediate area of the system.

Although only the male form has been chosen for reasons of better legibility, the information refers to members of both sexes.

The operator must have read and understood the manual before starting any work. The basic requirement for safe working is to follow the safety instructions and the handling instructions. In addition, the local regulations and safety rules apply.

The manual can be handed over in extracts to instructed personnel who are familiar with the operation of the system.

The illustrations are for basic understanding and may differ from the actual presentation. Specific representations are contained in the drawings.

### 2.2 Copyright

The copyright for these instructions remains with:

agtatec ag

The instructions may not be reproduced, distributed, or used for the purpose of competition without the written consent of agtatec ag.

Infringements shall result in the obligation to pay damages.

### 2.3 Product identification

The nameplate located on the door provides accurate identification of the product.

### 2.4 Manufacturer agtatec ag

#### **agtatec ag**

Allmendstrasse 24

CH – 8320 Fehraltorf

Switzerland

Phone: +41 44 954 91 91

Fax: +41 44 954 92 00

### 2.5 Target groups



#### **CAUTION**

##### **Risk of injury if personnel are insufficiently qualified!**

If unqualified personnel work on the system or are in the danger zone of the system, dangers may arise which can cause serious injuries and considerable damage to property.

- a) All work must be carried out by qualified personnel only.
- b) Keep unqualified personnel away from danger areas.

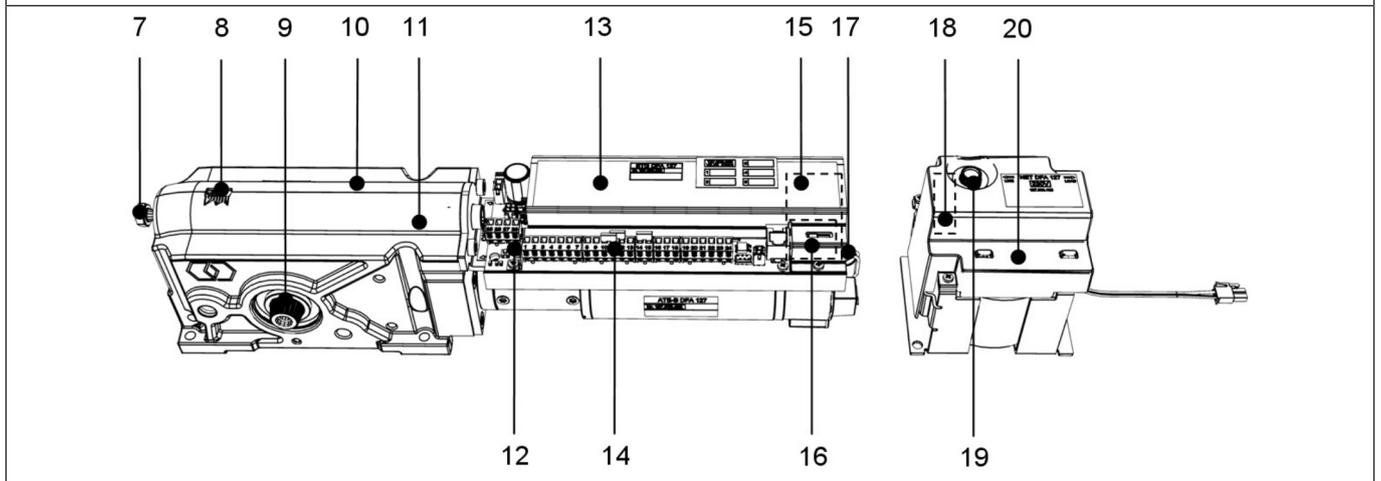
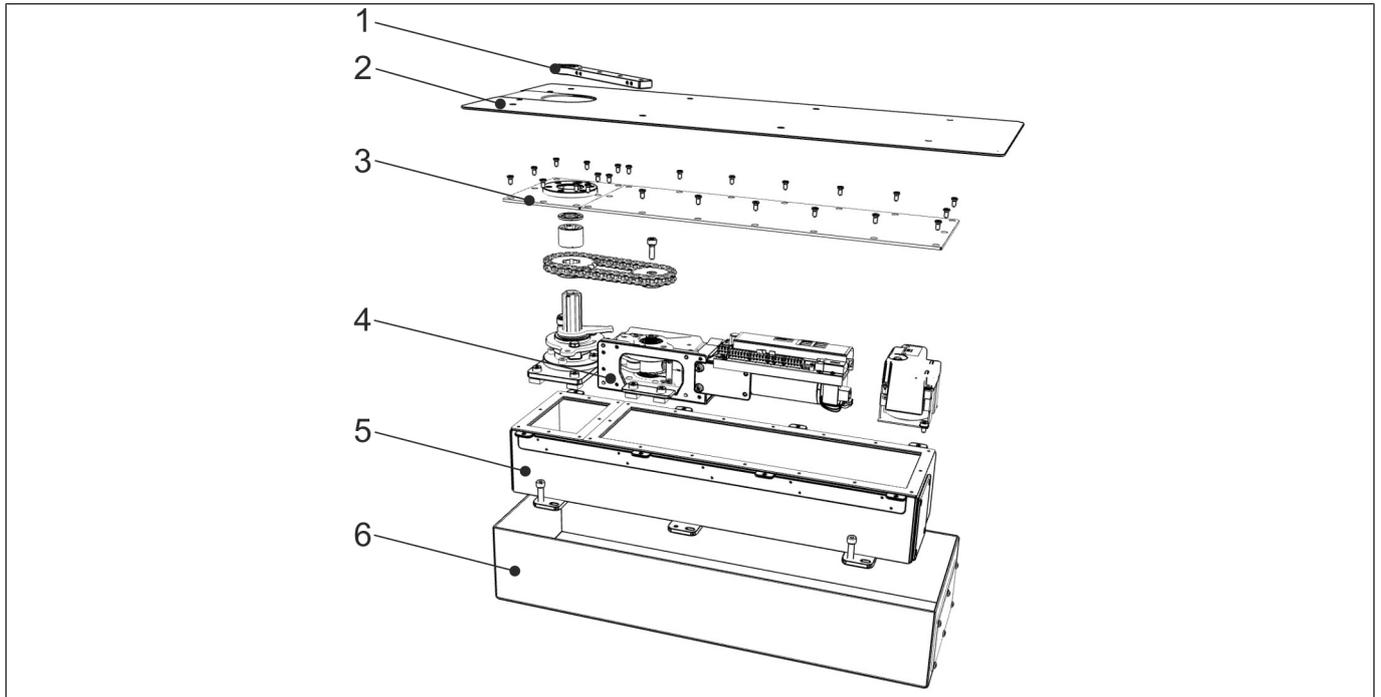
This operating manual is intended for the target groups listed below:

- Operating entity of the system:  
the person who is responsible for the technical maintenance of this system
- Operator of the system:  
the person who operates the system every day and has been suitably instructed

### 3 Description

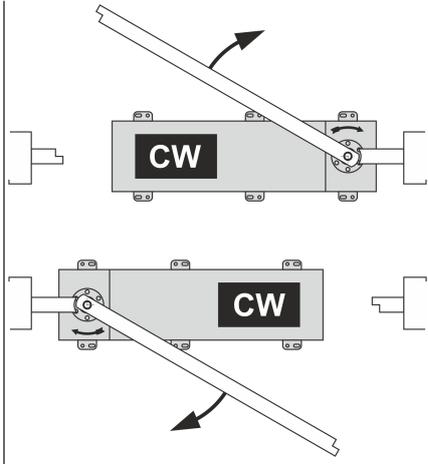
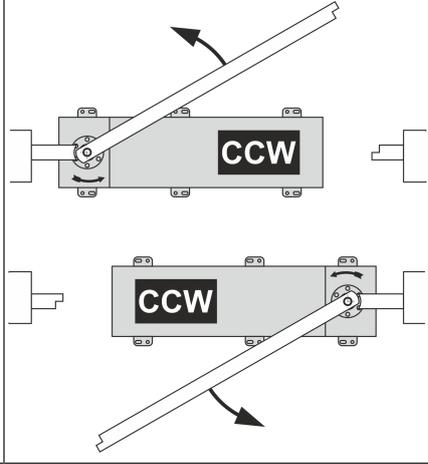
#### 3 Description

##### 3.1 Construction



1	Standard linkage SG	11	Closing spring (in drive housing)
2	Cover	12	Multi-function button on STG control unit
3	Housing cover with seal	13	STG control unit
4	C 127 SU H drive incl. control unit	14	STG connecting terminals
5	Stainless steel housing	15	Motorprint MOT
6	Masonry box	16	Rotation direction slide switch S1
7	Spring force adjustment bolt	17	ATE drive unit connections
8	Spring force setting sight glass	18	Mains supply terminals
9	Sprocket wheel connection (both sides)	19	Fine-wire fuse
10	Drive group ATG	20	Power supply unit NET

### 3.2 Types

Type and description	Door leaf weight	Mains voltage:	Rotation direction	Art. No.
C127 SU H-B CW C127 SU H-B CW US	< 400 kg < 400 kg	230 VAC 115 VAC		102-127809027 102-127810171
C127 SU H-B CCW C127 SU H-B CCW US	< 400 kg < 400 kg	230 VAC 115 VAC		102-127811385 102-127811386

### 3.3 Components

The swing door operator forms part of an electromechanical swing door system and comprises the following main components:

<b>Control unit:</b>	Intelligent, self-learning microprocessor-controlled control system
<b>Drive unit:</b>	Low maintenance DC geared motor with electronic path measurement and integral thermostatic protective switch, gear box with adjustable spring tension
<b>Power supply:</b>	Compact 230 V power supply with integral input filter
<b>Control unit:</b>	With simple mechanical operating unit and/or optionally with comfortable, programmable electronic operating unit BDE-D
<b>Lever System:</b>	Power transmission to the door leaf with standard lever pushing or sliding lever pulling / pushing
<b>Locking (optional):</b>	Possibility on site to connect an electrical door opener (24 VDC)
<b>Sensors:</b>	Aesthetic release and self-monitoring safety devices with adjustable sensitivity ensure optimal, smooth and safe operation of the door system

### 3.4 Functional description

The C 127 SU is designed so that it functions like a normal door closer when de-energised. It can therefore be easily opened by hand and is closed by the energy stored in the spring, damped by the motor which acts as a generator.

If the drive is connected to the mains, the opening and closing movements are motor-supported.

The following functions are solely intended for the safety of the user:

### 3 Description

#### Obstruction detection:

If the door hits an obstruction while opening, it stops immediately and records the position of the collision. The drive attempts to briefly reach the open position during the hold-open time. Once the hold-open time elapses, the door closes and, during the next opening, the obstruction position is passed over very carefully in slow mode. This prevents a second hard impact.

#### Reversing:

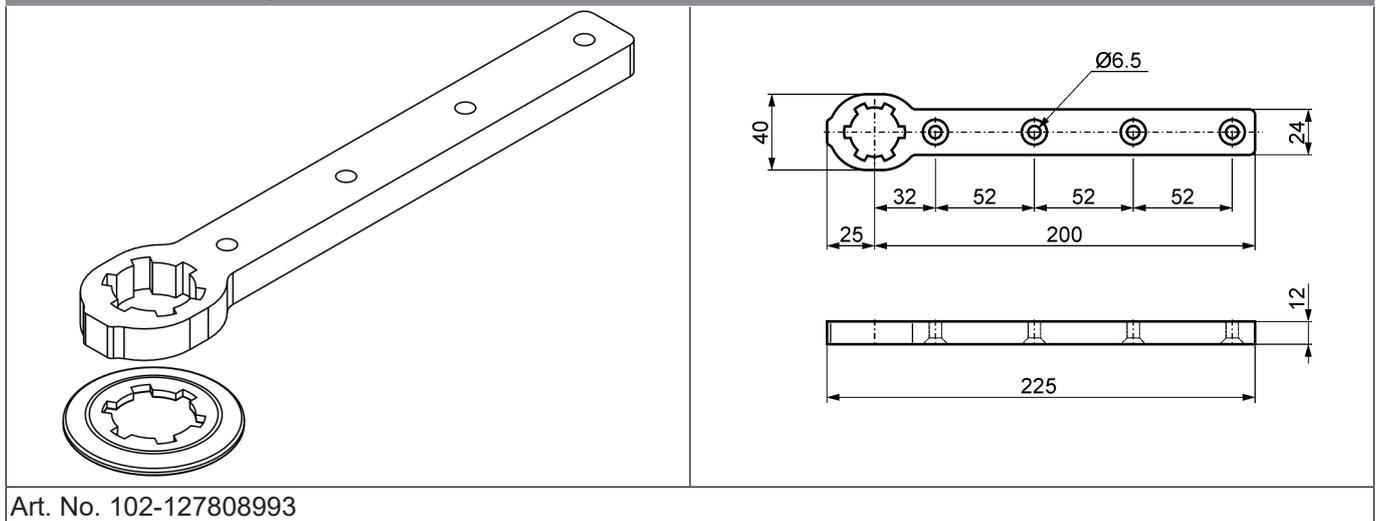
If the door hits an obstruction while closing, re-opening is immediately initiated.

### 3.5 Accessories

#### 3.5.1 Standard lever SG

- For direct connection and force transmission between the output shaft and door leaf.
- The lever arm can be installed in the door panel or bottom rail profile of the door leaf.
- A suitable counteracting bearing must be provided for the door leaf.

#### Standard lever C127, 12 mm



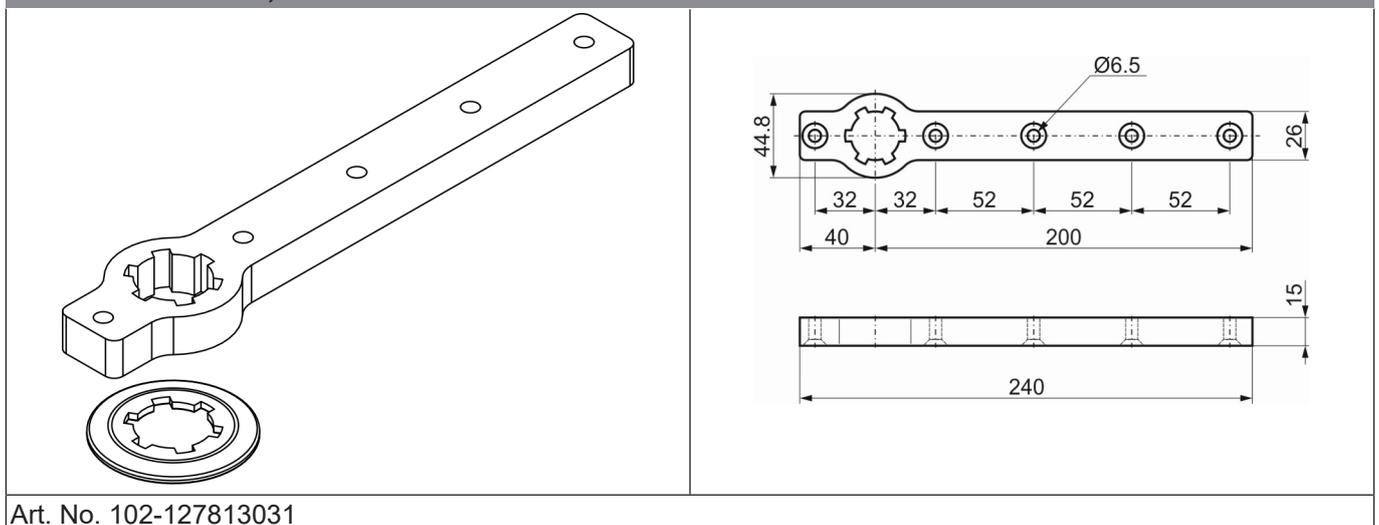
Art. No. 102-127808993



#### NOTICE

We recommend the use of the reinforced standard lever version for very heavy door leaf weights up to 400 kg, difficult ambient conditions and when using external door stops.

#### Standard lever C127, 15 mm

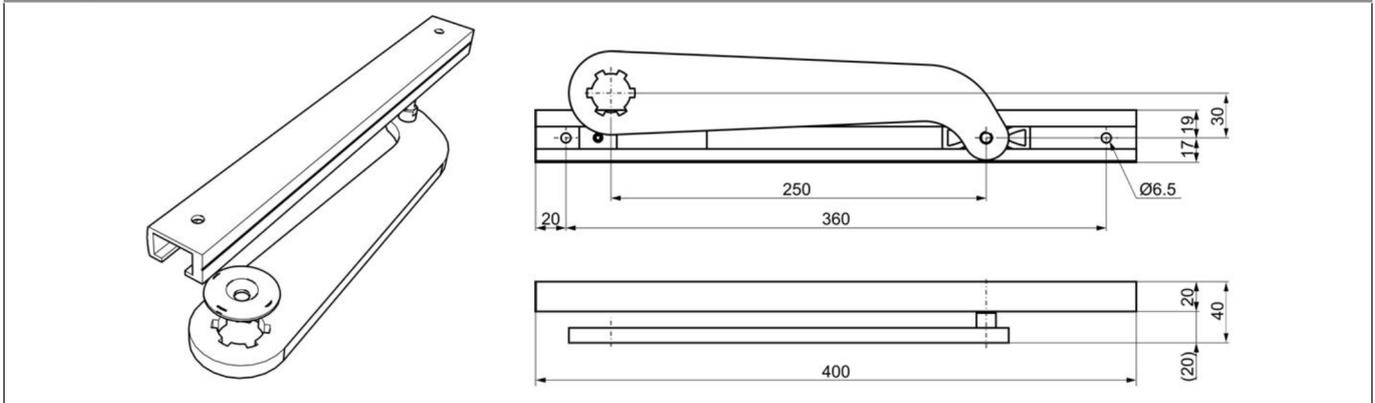


Art. No. 102-127813031

### 3.5.2 Sliding lever GG

- The door leaf must be fastened to the frame with hinges.
- Suitable for pulling and pushing applications.
- The slide rail can be installed in the door panel or bottom rail profile of the door leaf.
- An adjustable mechanical stop is integrated in the slide rail.
- The spigot shaft 10 is also available in lengths of 18 and 25 mm.

#### Sliding lever GG C127

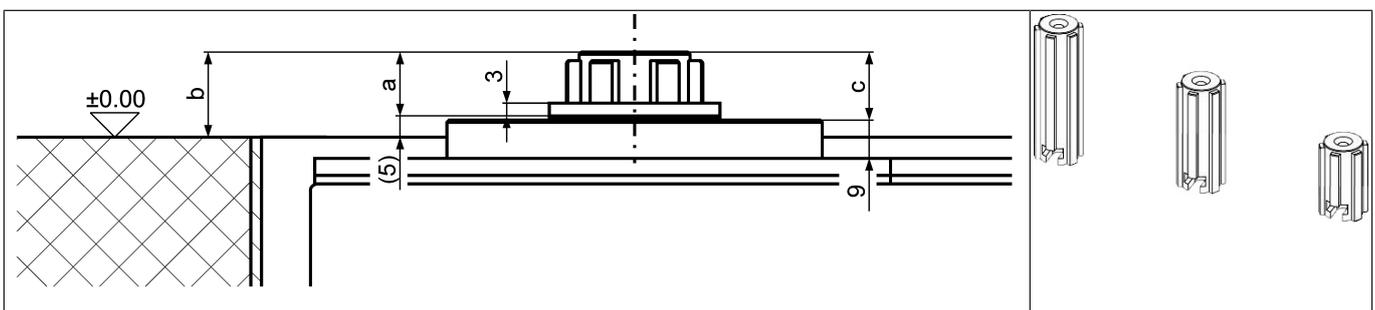


Art. No. 102-127809028

### 3.5.3 Spline shaft extensions

These are used as axis extension units to compensate for height differences between the drive and the lever connection on the door leaf.

An extension of 25 mm is integrated in the drive at the factory.

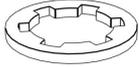
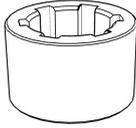
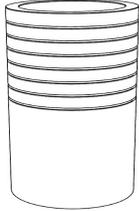


Lever type	Spline shaft extension 25	Spline shaft extension 50	Spline shaft extension 75	Spline shaft extension 100
(Dimensions in mm)	102-127115502	102-127115503	102-127115614	102-127115416
<b>Standard lever</b>				
a	15	40	65	90
b	20	45	70	95
c	16	41	66	91

### 3.5.4 Damping washer, splined hub and tubular spacer

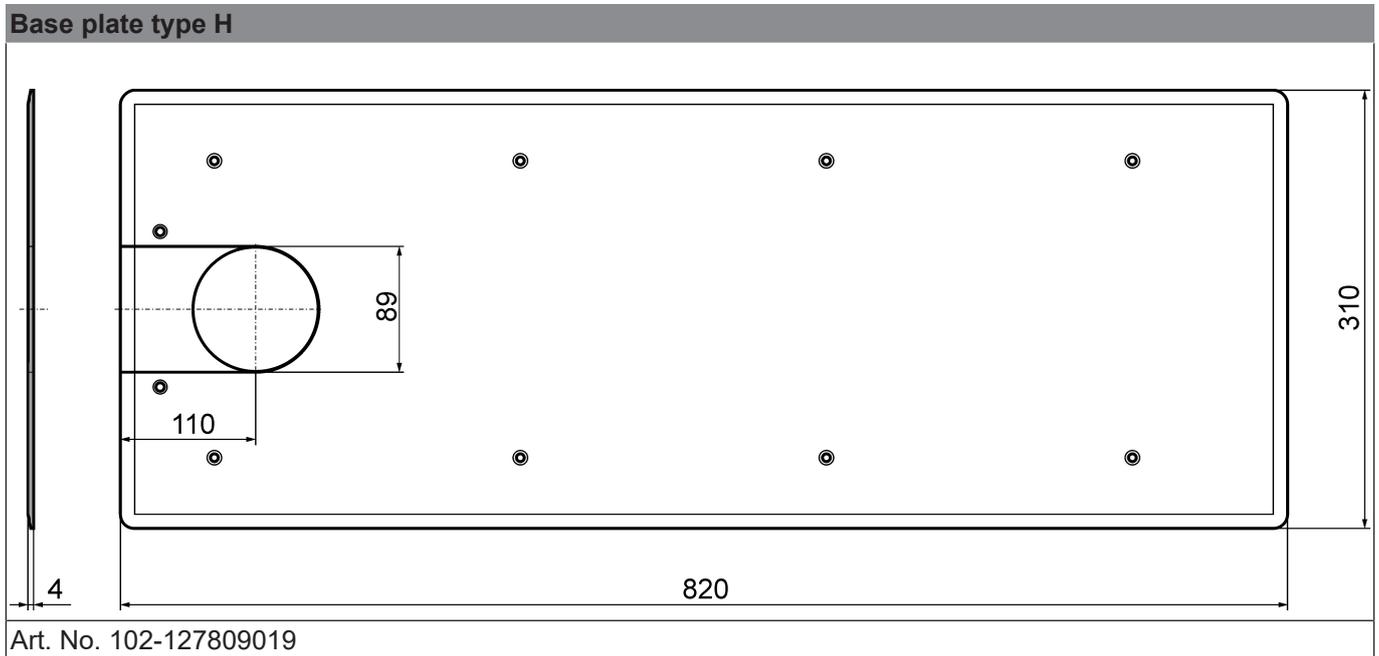
- Used as a spacer for the support surface of the standard or sliding lever in the case of axis extensions
- Damping washer, 3 mm thick, for small gaps or fine adjustment.
- Splined hub, 25 mm long, 40 mm diameter, black, for larger gaps.
- Tubular spacer, aluminium, 75 mm long, 40 mm diameter, painted black, can be cut to length in 5 mm steps.

### 3 Description

Damping washer	Splined hub	Tubular spacer
		
Art. No. 102-127111070	Art. No. 102-127111136	Art. No. 102-127116168

#### 3.5.5 Base plate

- Stainless steel plate for placing on the finished floor.
- Material thickness 2 mm, polished in longitudinal direction with grain size 240
- Wedge is screwed to the base plate.
- Attached to the drive with 8 countersunk bolts M5x30.
- Support the base plate with shims (A) on the drive housing in case of heavy usage.



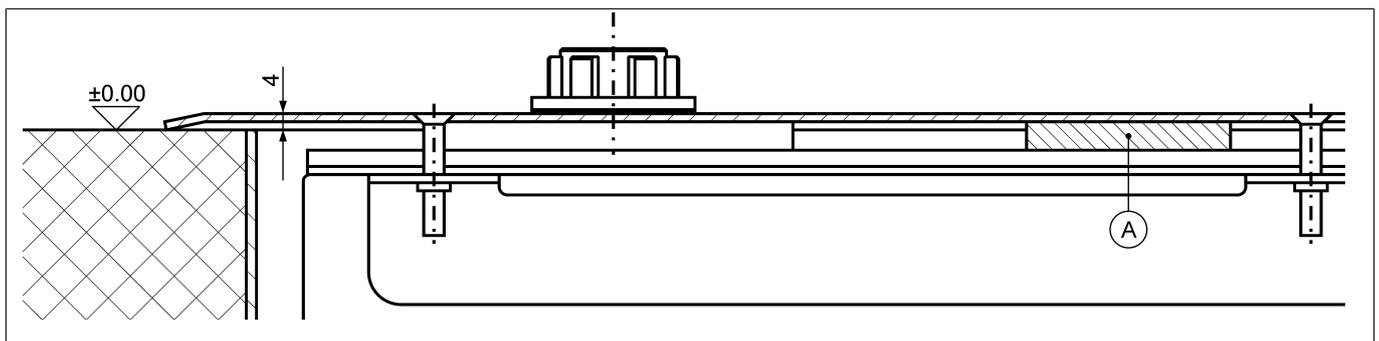
#### CAUTION

**Danger of slipping if the surface is wet or dirty.**

Persons can injure themselves if they slip or fall.

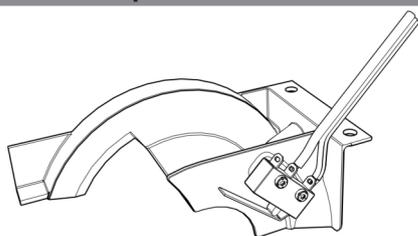
- Attach sufficient anti-slip strips, e.g. with slip resistance R13 in acc. with EN 13552.

#### 3.5.5.1 Installation dimensions of base plate



## 3.5.6 Gearbox cover with position switch

## Gearbox cover with position switch

MS gearbox cover with switch  
(position switch)

Art. 102-127808257

The normal gearbox cover is replaced by the gearbox cover with position switch. The adjustable switch clasp in the gearbox housing actuates the microswitch with floating contact.

Solutions with externally mounted microswitches and appropriate operation or magnetic contacts need to be implemented by the customer onsite.

Information for installing and setting can be found in the attached instructions *Retrofitting microswitches* (Nr. 102-127109418).

**CAUTION****Unforeseen adjustment of the switch clasp during operation**

- a) Incorrect information about the position of the door leaf  
⇒ The switch contact may not be used for safety applications.

**NOTICE**

The AUX1\_OUT output can be programmed with the functions Closed or Locked:

**Closed: Door is closed.**

**Locked: Door is closed and locked.**

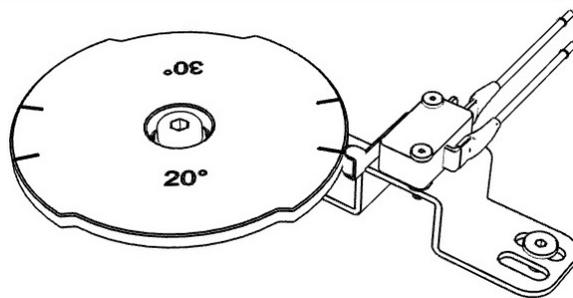
**For parameter configuration please also see the chapter *Parameter Descriptions!***

## 3.5.7 Wind load brake

If the door system is disconnected from the power supply, this will reduce any possible adverse effects caused by wind load and manual slamming open/close of the door.

## Wind load module

Set comprising cam wheel, micro-switch with cable and mounting bracket.



Art. No. 121-127812369

**IMPORTANT**

**The wind load brake only functions when the drive is de-energised.**

## 4 Technical Data

### 4 Technical Data

Dimensions:	733 x 240 x 159 mm (LxWxD)
Operating voltage:	230VAC, 50/60 Hz or 115VAC, 50/60 Hz
Power consumption:	Standby 13 W, rated power 67 W
Max. torque:	80 Nm
Mass moment of inertia of door leaf:	140 kgm <sup>2</sup> (C 127 SU H)
Opening angle:	Adjustable from 70° to 95°
Time delay:	Adjustable from 0 to 60 seconds (40 steps)
Opening speed:	Adjustable from 3 to 20 seconds (40 steps)
Closing speed:	Adjustable from 5 to 20 seconds (40 steps)
Noise emission:	< 45 dB
Protection class:	IP67
<b>Environmental conditions</b>	
Temperature range:	-15° C to +50° C
Humidity range:	Up to 85% relative humidity, non condensing
Wind load:	On request

#### 4.1 Door leaf weights and door widths



The curves are calculated using the following formula:			
<b><math>J=1/3 \times m \times b^2</math></b>			
Standard arms:	J max. 140 kgm <sup>2</sup>	Key:	J = Mass moment of inertia kgm <sup>2</sup>
Slide arms:	J max. 140 kgm <sup>2</sup>		m = Door leaf weight in kg
			b = Door leaf width in m

## 5 Operation

### See also:

- 📄 Configuration C 127 STG 127 V3\_00\_E [▶ 22]
- 📄 Configuration FEM V1\_10 with STG127 V2\_40\_E [▶ 23]

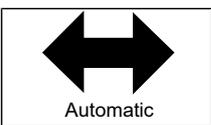
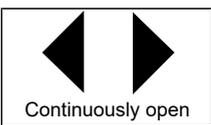
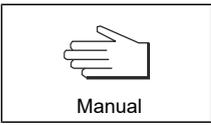
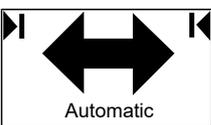
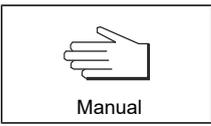
### 5.1 Control panel BDE-D

#### 5.1.1 Operation modes and button functions

The buttons on the control panel BDE-D are used to set the door system operation modes in the main menu. The parameters of the door system are set in the sub menu.

The button functions are divided into main menu and sub menu.

#### Main menu

Button	Name	Operation	Function	Display on LCD
	Automatic button	Press button 1 x	Automatic operation via sensors	 Automatic
	Continuously open button	Press button 1 x	For sliding door operator and swing door operator: continuously open, sensors disabled	 Continuously open
		Press button 2 x or hold it down for 2 seconds	For sliding door operator: manual operation	 Manual
	One-way button	Press button 1 x	Passage only possible from one direction	 One-way
	Locking button	Press button 1 x	Door closed, sensors disabled	 Locked
		Press button again	The door opens again, closes, and locks again. Can be opened with a key (optional).	 Locked
	Star button	Press button 1 x	For sliding door operator: Reduced open width	 Automatic
		Press button 1 x	For swing door operator: manual operation	 Manual
<b>E</b> 	Menu button	Restart control device: press button for 5 seconds Restart hardware BDE-D: press button for 12 seconds	Access to parameter menu Enable control lock Restart control device Restart hardware BDE-D	

## 5 Operation

Sub menu



### NOTICE

The main menu is returned to automatically 3 minutes after the last entry.

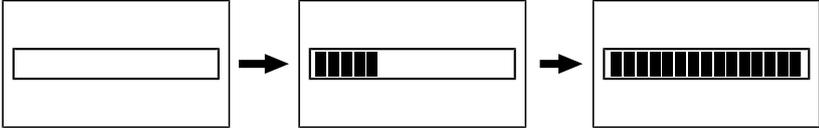
Button	Name	Operation	Function	Display on LCD
	Enter button	Press button 1 x to go to the next sub menu.	Select menu item, confirm entry	
	Plus button	Press button 1 x to go down.	Navigate downwards in the menu	
		Press button 1 x to increase the value.	Move the slide control to the right to increase the value	
	Minus button	Press button 1 x to go up.	Navigate upwards in the menu	
		Press button 1 x to reduce the value.	Move the slide control to the left to reduce the value	
	Clear button	Press button 1 x to go to the previous menu.	Leave the menu item without saving.	

### 5.1.2 Perform reset

Reset controller

Step	Button	Operation	Function	Display on LCD
1.		Press button for 5 seconds	Perform controller reset	
2.		Press button 1 x	Cancel reset	
		Press button 1 x	Perform reset	

### Reset control panel

Step	Button	Operation	Function	Display on LCD
1.	<b>E</b> 	Press button for 12 seconds	Perform control panel reset	
2.				
3.			The connection has been established	

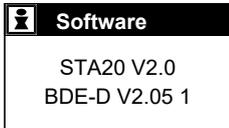
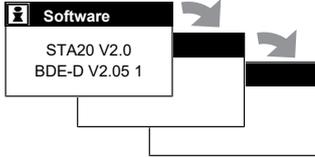
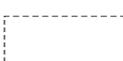
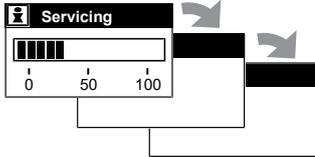
### 5.1.3 Display system information

Information about the door system, such as software version, door type, or servicing status, can be shown on the display.



#### NOTICE

The main view is returned to by scrolling or automatically after 20 seconds.

Step	Button	Operation	Function	
1.	<b>E</b> 	Press button for approx. 2 seconds	Software information is displayed	
2.	<b>E</b> 	Press button 1 x	Scroll through the information and/or return to main view	
3.	<b>E</b> 	Press button 1 x	Scroll through the information and/or return to main view	

### 5.2 Parameter overview

Factory settings: **Basic operator** (Full Power)



#### NOTICE

Parameterization of the swing door operator can only be carried out with the optional electronic BDE-D, the App i-record or the service and flash programmer FPC 902 or the test box.



#### NOTICE

Please always leave the parameter list in the drive even when replacing the STG!

System C 127 SU parameter overview				STG 127				≥ V3.00	
D = Value will reset after default parameter loading				□ Master					
S = Programming of slave 1 or slave 2				□ Slave					
M = Parameter modification via MFT (key) on STG (technical level)									
PARAMETER				Parameter value (factory settings printed bold)					
Description	D	S	M	1	2	3	4	5	6
<b>DRIVING CYCLE</b>									
↳ Closing speed	D			<b>18</b>	(Speedo)				
↳ Opening speed	D			<b>36</b>	(Speedo)			<b>DIN : &gt; 1.5 s &lt; 4 s</b>	
↳ Acceleration	D		M	<b>36</b>	(Speedo)			<b>Different accelerations</b>	
↳ Latch check	D		M	<b>0</b>	(Speedo)			<b>Start latch check by closing</b>	
↳ Force when closing	D		M	<b>0</b>	(Speedo)			<b>DIN : 0</b>	
<b>TIME DELAY OPEN</b>									
↳ Time delay open	D			<b>2</b>	(Speedo)				
↳ Time delay SSK	D			<b>5</b>	(Speedo)				
<b>DRIVE</b>									
↳ Opening angle	D	S		<b>35</b>	(Speedo)			<b>DIN : min. 95°</b>	
↳ Collision close	D	S	M	<b>20</b>	(Speedo)				
↳ Collision open	D	S	M	<b>20</b>	(Speedo)				
↳ Brake			S M	<b>Without</b>	Closed posit.	Open posit.	Open/Clos. pos.		
↳ Types of arms			S M	<b>Standard arm</b>	<b>Sliding pulling</b>	Sliding pushing	Inheader		
↳ Inverse			M	<b>Disabled</b>	Enabled				
↳ Spring type			S M	<b>Unknown</b>	EN 4	EN 5	EN 6		
↳ Limit open	D	S	M	<b>Disabled</b>	Enabled				
↳ Momentum	D	S	M	<b>Disabled</b>	Enabled				
<b>ENTRANCE SYSTEM</b>									
↳ Measure A			M	<b>0</b>	(Speedo)				
↳ Measure G			M	<b>0</b>	(Speedo)				
↳ Fire alarm			M	<b>Disabled</b>	Enabled				
↳ Control			S M	<b>Single control</b>	Master control	Slave control	Master Interlock	Slave Interlock	
↳ Interlock			M	<b>Disabled</b>	All operation modes	<b>Only one-way /locked</b>			
↳ Door type			M	<b>Basic operator</b>	USA	US Low Energy	EU Low Energy	UK	UK Low Energy
			M	Airport Brussels	Default 1	Nordics High	Nordics Low		
<b>MS 2-LEAVES</b>									
↳ Function AKA	D		M	<b>Master+slave</b>	Master only				
↳ Overlap	D		M	<b>5</b>	(Speedo)			<b>0 = No overlap</b>	
↳ Open sequence	D		M	<b>5</b>	(Speedo)			<b>0 = Simultaneous opening</b>	
↳ Close sequence	D		M	<b>15</b>	(Speedo)			<b>0 = Simultaneous closing</b>	
<b>MANUAL CONTROL</b>									
↳ During closing	D		M	<b>Disabled</b>	Enabled				
↳ When locked	D		M	<b>Disabled</b>	Enabled				
↳ When one-way	D		M	<b>Disabled</b>	Enabled				
↳ When automatic	D		M	<b>Disabled</b>	Enabled				
↳ Collision	D		M	<b>Disabled</b>	Enabled				
↳ Support during closing	D		M	<b>Disabled</b>	Constant	Cumulative	Final bang	Slowly, cumulative	Slowly, final bang
			M	Final bang stronger	Slow, final bang stronger				
↳ Active sensors	D		M	<b>Disabled</b>	SIS disabled	SIS enabled	SIS enabled AUTO	SIS without	
↳ Closing speed	D		M	<b>20</b>	(Speedo)				
↳ Opening assist	D		M	<b>0</b>	(Speedo)				
<b>CONTROL PANEL</b>									
↳ BDE-M (mech. panel)	D	S	M	<b>3 Pos. (AUTO)</b> Manual; Automatic; Cont. open	4 Positions Automatic; Manual; Cont. open; Locked	3 Pos.(OFF-A) Automatic; OFF; Cont. open	3 Pos. (OFF-M) Manual; OFF; Cont. open	3 Pos.(Lock-A) Automatic; Locked; Cont. open	3 Pos(Lock-M) Manual; Locked; Cont. open
↳ BDE-D				4 Positions Automatic; One-way; Cont. open; Locked					
↳ Language			M	Deutsch	Français	<b>English</b>	English US	Español	Nederlands
			M	Danish	Slovenscina	Polski	Magyar	Italiano	Czech
			M	Türkçe					
↳ Keyboard	D		M	<b>Normal</b>	OFF-Mode				
↳ Contrast BDE 1			M	<b>20</b>	(Speedo)				
↳ Contrast BDE 2			M	<b>20</b>	(Speedo)				
↳ Brightness BDE 1			M	<b>20</b>	(Speedo)				
↳ Brightness BDE 2			M	<b>20</b>	(Speedo)				
↳ Light time			M	<b>10</b>	(Speedo)			<b>40 = permanent lighting</b>	
<b>LOCKING</b>									
↳ Locking function			M	<b>Normally locked</b>	1way locked	Always locked			
↳ Lock type			M	<b>Standard</b>	Locking bolt	Magnet	Pulse		
↳ VRR manually			S M	<b>Disabled</b>	Enabled				
↳ Start delay			M	<b>0</b>	(Speedo)				
<b>CAN-BUS</b>									
↳ (Units connected to CAN bus)	D		M	FEM 0... FEM 2	AKI 1	SI 1	AKA 1	SA 1	AKI 1
			M	SI 2	AKA 2	SA 2			
<b>INPUT/OUTPUT</b>									
↳ STG									
↳ AUX1 IN	D		M	<b>Disabled</b>	BEA Bodyguard	Closing button			
↳ AKA IN	D		M	<b>AKA</b>	Railbeam				
↳ AKA_IN_F	D		M	<b>Disabled</b>	Inactive by 1way and locked				
↳ AUX1 OUT	D		M	<b>Disabled</b>	BEA Bodyguard	Test sensors	Locked	Closed	Gong
↳ Sequential	D		M	<b>Disabled</b>	Seq. AKI / AKA	Seq. AKI	Seq. SSK		
↳ EMERG. STOP Reset				Disabled	<b>Enabled</b>				
<b>MISCELLANEOUS</b>									
↳ Push to actuate to open	D	S	M	<b>Disabled</b>	Normal (motored)	Slow (motored)			
↳ Alarm display									
↳ Time activation	D	S	M	<b>18</b>	(Speedo)				
↳ Time safety	D	S	M	<b>18</b>	(Speedo)				

Order number:	Client:
Programming by end customer / changes	Date / Initials

 This parameter overview shows all possible settings. Depending on drive type and configuration the access is restricted.

System DFA 127 parameter overview				FEM 1 STG 127				≥ V1.10 ≥ V2.40	
D = Value will not be reset after loading default parameter									
M = Parameter modification via MFT (key) on STG (technical level)									
<b>PARAMETER FEM 1</b>				Parameter value ( <b>factory settings</b> printed bold)					
Description		D	M	1	2	3	4	5	6
<b>FEM 1</b>				<b>FEM 1 in use with STG 127</b>					
L ▶ FEM type			M	<b>Basis</b>	Interlock	I/O-Set 1			
<b>INPUT FEM 1</b>									
L ▶ AUX10_IN [64/65]		D	M	<b>Disabled</b>	S_AUS				
L ▶ AUX11_IN [66/67]		D	M	<b>Disabled</b>	SEA				
L ▶ AUX12_IN [68/69]		D	M	<b>Disabled</b>	SFS_IN				
L ▶ AUX13_IN [70/71]		D	M	<b>Disabled</b>					
<b>OUTPUT FEM 1</b>				All outputs can be configured according to AUX1x_OUT					
L ▶ AUX1x_OUT		D	M	<b>Disabled</b>	Alarm output	Locked	Closed	Open	SAMP
				SAA	SFS_OUT	OM Automatic	OM One-way	OM Locked	OM Cont. open
				OM Manual	OM OFF	Locking error	Emerg. stop or open	Maintenance is due	Maint. time exceeded
L ▶ AUX10_OUT [73/74]		D	M	<b>Disabled</b>					
L ▶ AUX11_OUT [76/77]		D	M	<b>Disabled</b>					
L ▶ AUX12_OUT [79/80]		D	M	<b>Disabled</b>					
L ▶ AUX13_OUT [82/83]		D	M	<b>Disabled</b>					
L ▶ AUX14_OUT [88/89]		D	M	<b>Disabled</b>					
L ▶ AUX15_OUT [90/91]		D	M	<b>Disabled</b>					
L ▶ AUX16_OUT [92/93]		D	M	<b>Disabled</b>					
L ▶ AUX17_OUT [94/95]		D	M	<b>Disabled</b>					
L ▶ AUX18_OUT [96/97]		D	M	<b>Disabled</b>					
L ▶ AUX19_OUT [98/99]		D	M	<b>Disabled</b>					
L ▶ AUX1A_OUT [100/101]		D	M	<b>Disabled</b>					
L ▶ AUX1B_OUT [102/103]		D	M	<b>Disabled</b>					
L ▶ AUX1C_OUT [104/105]		D	M	<b>Disabled</b>					
L ▶ AUX1D_OUT [106/107]		D	M	<b>Disabled</b>					

Instruction FEM 1: Not configurable functions in use with STG 127 are marked with an (\*).

Instruction software: The possibilities of FEM 1 depend chiefly on the software version of the control.

## 5 Operation

### 5.5 Description of parameters

W = Factory settings: **Basic drive** (FP)

PARAMETER	W	REMARK
DRIVING CYCLE		
→ closing speed	18	Speed when closing the door. 0 = lowest speed 40 = highest speed – The maximum speed depends on the opening angle and acceleration.
→ Opening speed	36	Driving speed of the opening door. 0 = lowest speed 40 = highest speed – The maximum reachable speed depends on the driven distance (door width) and the acceleration setting. – DIN: >1.5 s <4 s
TIME DELAY OPEN		
→ time delay open	2	Determines how long the door remains open after it has been opened by a trigger signal. 0..20 = 0 to 20 seconds, increment 1 s 21..40 = 22 to 60 seconds, increment 2 s – The time delay open starts when all trigger and safety signals for closing stop.
→ SSK time delay open	5	Determines the minimum time the door remains open after it has been opened by a trigger signal of the type <b>SSK</b> . 0..20 = 0 to 20 seconds, increment 1 s 21..40 = 22 to 60 seconds, increment 2 s – The hold open time starts when all trigger and safety signals for closing stop.
<div style="display: flex; align-items: center;">  <div style="background-color: #0070C0; color: white; padding: 5px; font-weight: bold; font-size: 1.2em;">NOTICE</div> </div> <p>The open duration can be reduced when sensors are used which keep the door open, for example <i>Time delay</i>.</p>		
OPERATOR		
→ opening angle	35	The opening angle is determined during the teach-in run and corresponds to the value 40. 0 = minimum opening angle 40 = maximum opening angle – <b>DIN</b> : min. 95°

## 6 Servicing and maintenance

### 6.1 General remarks

According to current legislation, the operator of an automatic door system is responsible for its maintenance and safety.

Accidents or defects can be avoided if the system operator takes good care of the system.

#### Testing

Type of test	Measure
Visual inspection	Check door leaves, guides, bearings, limiting devices, sensors, and the securing of crushing and shearing points for damage.
Mechanical inspection	Check fastenings for tight fit.
Safety check (exit and escape routes)	Check sensors, safety devices, and monitoring devices for tight fit and damage.
Function testing	Check functioning of switches, operators, controllers, power or energy storage devices, and sensors. Also check the adjustment of the safety devices and the setting of all movement sequences including the end points.

#### Servicing

Type of servicing	Measure
Adjusting and cleaning	Clean and adjust bearings, sliding points, and power transmission.

For documentation and information purposes, the testing and servicing work as well as the condition of the system are recorded in a test log book. The test log book must be kept for at least one year or until the next testing/servicing.



#### IMPORTANT

The testing and/or servicing interval according to the manufacturer's specification is at least 1 to 2 times a year.



#### IMPORTANT

The recommended and planned spare parts and wearing parts can be requested from your service center.

### 6.2 Door care

The entire system, including the sensors and safety devices, can be cleaned with a moist cloth and standard commercial cleaners (non-scouring, do not use any solvents). First test the cleaners on a hidden (not easily visible) place. Keep all guides free of dirt.



#### NOTICE

It is recommended that for carrying out this work, the operating mode  (Locked) or  (Continuously open) be used, so as to avoid possible injuries from unwanted door movements.

## 6 Servicing and maintenance

### 6.3 Logbook



#### IMPORTANT

The following example of a logbook is just a pattern.  
According to local regulations such a logbook must be attached to the door installation and all interventions and recurrent controls must be recorded in it.

Date	Error description / status-no.	Troubleshooting / maintenance / recurrent controls	Repairs / replacements	Service technician signature



#### IMPORTANT

Spare parts change plan recommendation is attached in the annex or can also be requested at your after-sales centre.

#### 6.3.1 General information

Manufacturer – Information	
Name:	
Street:	
City:	
Telephone:	
Fax:	
E-Mail:	

Distributor – Information	
Name:	
Street:	
City:	
Telephone:	
Fax:	
E-Mail:	

Location of system installation (Project information)	
Name:	
Street:	
City:	
Telephone:	
Fax:	
E-Mail:	

System – Information	
Conf. serial – No.:	
System – Type:	
System – Installation date:	

6.3.2 Operator duties

Personal protection requires compliance with the standards and guidelines for publicly accessible facilities.

According to applicable standards and guidelines, automatic door systems must be tested and serviced by qualified persons.

The system operator is responsible for carrying out testing and servicing.

System operator tasks

Task	Personnel	When?	Entered in test log book?
Maintenance and cleaning of the sensors for safety and triggering	System operator	Weekly, or as required	No
Function and safety check	System operator	Monthly	No

Tasks of qualified person

Task	Personnel	When?	Entered in test log book?
Acceptance test	Qualified person	After assembly of the door system ready for operation	Yes
Servicing	Qualified person	1 x annually, or according to country-specific standards and guidelines	Yes
Test (inspection)	Qualified person	1 x annually, or according to country-specific standards and guidelines	Yes
Test (inspection) for door systems in escape routes	Qualified person	2 x annually, or according to country-specific standards and guidelines	Yes
Testing of fire doors	Qualified person	1 x annually, or according to country-specific standards and guidelines	Yes

6.3.3 Commissioned technician

Technicians are people:

- that on the basis of their technical training, knowledge, experience and work, perform their assigned test properly and identify and evaluate potential hazards.
- that have sufficient knowledge in the field of automatic door systems, relevant national safety regulations, accident prevention regulations, directives and generally recognized technical regulations, so they can judge the secure working condition of automatic door systems. These people include, for example, technicians from the manufacturing or supplying company, relevantly experienced, trained personnel authorized by the manufacturer or other persons with appropriate expertise.

Experts must submit their assessment objectively from the standpoint of personal and operational safety without being influenced by other requirements, such as i.e. economic circumstances.

6.3.4 Legal principle



**NOTICE**

According to EN 16005 / DIN 18650 / Machinery Directive, the system must be inspected by an expert before initial commissioning and then according to the manufacturer's instructions or at least once a year.

The special significance for personal protection requires compliance with these special regulations.

## 6 Servicing and maintenance

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### 6.3.5 Extent of the inspection

The test is carried out according to the manufacturer's test instructions. The result of the test is recorded in a test protocol and recorded in the test logbook.

The inspection usually takes place at the same time as the maintenance of the system.

The inspection also checks whether no changes have been made to the system since the last inspection and whether it meets the current safety requirements.

### 6.3.6 Requirements for documentation

Extent, results and dates of the periodic inspections, must be documented and kept by the operator in an Inspection- and Maintenance log book.

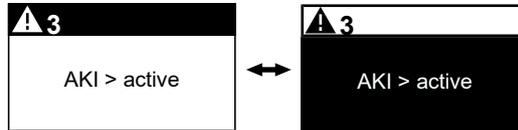
The contractor / operator must be informed of the results in writing.

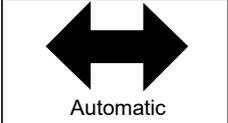
The contractor / operator requires the inspection report (check list) for proof that the periodic inspection was performed and/or as documentation for construction authorities or accident and liability insurances, etc.

# 7 Malfuctions

## 7.1 Status displays

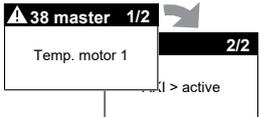
Malfuctions are shown on the LCD display. If there is a malfunction, the display changes between light and dark, as shown in the following figure. Multiple malfuctions can be displayed, e.g. 1 / 2. If there are multiple malfuctions, they are numbered as follows.



Step	Button	Operation	Function	Display on LCD
1.	<b>E</b> 	Press button 1 x	Return to the main menu for 4 seconds	 Automatic

### Malfunction display for primary / secondary operator

It is possible to switch between the malfunction display of the primary / secondary operator  
The main view is returned to by scrolling through the malfunction displays.

Step	Button	Operation	Function	Display on LCD
1.	<b>E</b> 	Press button 1 x	Scroll through the malfunction displays	

## 7.2 Troubleshooting

The following malfuctions on the door can only be rectified if an electronic control panel with display is present.

Malfunction	Cause	Measure	Personnel
Display shows a malfunction message.	Malfunction present	Restart controller and/or control panel.	System operator
Door does not work.	No power connected.	Check power connection	System operator
	Incorrect operation mode selected.	Check operation mode.	System operator
	Status LED flashing	Restart controller and/or control panel.	System operator
	Malfunction message on the display of the <u>BDE-D</u>	Restart controller and/or control panel.	System operator
	Defective	Close the door manually and notify a service engineer.	System operator

## 7 Malfunctions

Malfunction	Cause	Measure	Personnel
Malfunction message still present after restart.	Malfunction could not be rectified.	Qualified personnel are required to rectify the malfunction.	Qualified personnel
		Show and read out system information about the door on the display.  Notify service center. If necessary, close the door manually.	System operator
Beep every 5 seconds (only with battery pack option)	No power present.	Switch on the mains power supply.	System operator
	Mains fuse defective.	Replace the fuse.	System operator
	Fuse on the operator's power supply unit defective.	Replace the fuse.	Qualified personnel

## 8 Taking out of service and disposal

### 8.1 Decommissioning

When shutting down or taking out of service, the system is disconnected from the mains supply and any existing battery is unplugged.



#### NOTICE

After each temporary shutdown a new commissioning must be carried out.

### 8.2 Dismantling and disposal



#### IMPORTANT

All machine parts must be sorted by type of material and disposed of according to local regulations and guidelines.



#### NOTICE

The door systems can be completely disassembled in reverse order.

The automatic door mainly consists of the following materials:

#### Aluminum:

- Linking profiles
- Gearbox, Drive panel
- Door wing profiles and side profiles
- Various profiles and small parts

#### Steel / iron parts:

- Stainless steel casing, Floor panel, Box recess for floor installation
- Optional spacer or reinforcement profiles
- Gear components, springs
- Various small parts like fittings, covers, linking parts, etc.

#### Glass:

- Door wings and side panels

#### Various electronic and electromechanical components:

- Sensors, control and operator components
- Lead batteries and nickel-cadmium rechargeable batteries

#### Various plastics:

- Rollers
- Cable clips, coupling and linking parts
- Sealing profiles
- Casing of electromechanical components and sensors



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