

## Industrial sliding door operator

## GIGAslide 1800



## Information on the operator:

Serial No.: See the title page of this Installation and Operating Manual (if applicable, warranty sticker).

Year of manufacture: from 03.2023
Information on the Installation and Operating Manual Version of the installation and operating manual:
GIGAslide_S13884-00001_122023_0-DRE_Rev-A_EN

## Warranty

The warranty complies with statutory requirements. The contact person for warranties is the qualified dealer. The warranty is only valid in the country in which the operator was purchased. There is no warranty for consumables such as batteries, accumulators and safety products or light bulbs. This also applies for wear parts. The operator is only designed for a limited frequency of use. More frequent use leads to increased wear.

## Contact data

If you require after-sales service, spare parts or accessories, please contact your specialist retailer, your installer or contact:

## SOMMER Antriebs- und Funktechnik GmbH

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## 1. About this Installation and Operating Manual

### 1.1 Storage and circulation of the Installation and Operating Manual

Read this Installation and Operating Manual carefully and completely before installation, commissioning and operation and also before removal. Observe all warnings and safety instructions.
Keep this Installation and Operating Manual accessible to all users at all times at the place of use. A replacement for the installation and operating manual can be downloaded from SOMMER at:

## www.sommer.eu

During the transfer or resale of the operator to third parties, the following documents must be passed on to the new owner:

- EC Declaration of Conformity
- handover protocol and inspection book
- this Installation and Operating Manual
- proof of regular maintenance, testing and care
- documents recording retrofitting and repairs


### 1.2 Important for translations

The original installation and operating manual was written in German. The other available languages are translations of the German version. You can get the original installation and operating manual by scanning the QR code.


## http://som4.me/orig-gigaslide

For other language versions, see:
www.sommer.eu

### 1.3 Description of the product type

The operator has been constructed according to state-of-the-art technology and recognised technical regulations and is subject to the Machinery Directive 2006/42/EC. The operator is fitted with a radio receiver. Optionally available accessories are also described. The version can vary depending on the type. This means the use of accessories can vary.

### 1.4 Target groups of the Installation and Operating Manual

The installation and operating manual must be read and observed by everyone assigned with one of the following tasks or using the device:

- unloading and in-house transport
- unpacking and installation
- Initial operation
- setting
- usage
- maintenance, testing and care
- troubleshooting and repairs
- disassembly and disposal


### 1.5 Explanation of symbols and notes

The warnings in this installation and operating manual are structured as follows.

| Type and source of hazard |
| :--- |
| Consequences of the hazard |

The hazard symbol indicates the hazard. The signal word is linked to a hazard symbol. The hazard is classified into three classes depending on its danger:

## DANGER <br> WARNING <br> CAUTION

There are three different classifications of hazards.

## DANGER

!Describes an immediate danger that leads to serious injury or death.
Describes the consequences of the danger to you or other persons.

- Follow the instructions for avoiding or preventing the danger.


## WARNING

Describes a potential danger that may lead to fatal or serious injury.
Describes the possible consequences of the danger to you or other persons.

- Follow the instructions for avoiding or preventing the danger.


## CAUTION

Describes a potentially dangerous situation.
Describes the possible consequences of the danger to you or other persons.

- Follow the instructions for avoiding or preventing the danger.


## 1. About this Installation and Operating Manual

The following symbols are used for notes and information:

## NOTE

- Provides additional information and useful notes on correct use of the operator without endangering persons. If it is not observed, property damage or faults in the operator or gate may occur.


## INFORMATION

- Provides additional information and useful tips. Functions for optimum usage of the operator are described.

The following symbols are used in the figures and text.
Q3 Continue reading the Installation and Operating Manual for more information.

Trained electrician required for installation
141
(111)

Trained mechanic required for installation
$\underset{+}{\longrightarrow}$


Connect the operator to the mains voltage
5
Factory setting, as-delivered state depending on version

Connection via SOMlink to a WiFi-enabled device

Operator components must be disposed of properly

### 1.6 Information regarding the depiction of text

1. Stands for directions for an action
$\Rightarrow$ Stands for the results of the action
Lists are shown as a list of actions:

- List 1
- List 2

1, A Item number in the figure refers to a number in 1 A the text.

Important text items, for example in directions for actions, are emphasised in bold type.
References to other chapters or sections are in bold type and set in "quotation marks".

### 1.7 Intended use of the operator

The operator is designed exclusively for opening and closing sliding gates with the characteristics specified under "3.6 Technical data" on page 12. Moreover, the requirements described under "4.4 Foundation" on page 13 must be met. Any other use does not constitute intended use. The manufacturer accepts no liability for damage resulting from use other than intended use. The user bears the sole responsibility for any risk involved. It also voids the warranty.
Any changes to the operator must be made with original accessories from SOMMER only and only to the extent described. For more information on accessories, see:


## https://downloads.sommer.eu/

## 1. About this Installation and Operating Manual

Gates automated with this operator must comply with all valid international and domestic standards, directives and regulations in their currently valid version. These include EN 12604 and EN 13241.
The operator may only be used:

- if a correct Declaration of Conformity has been issued for the gate system
- if the CE mark/UKCA mark and the type plate for the gate system have been attached
- if the handover protocol and the inspection book have been completed and are available
- if the installation and operating manuals for the operator and the gate are present
- as specified in this Installation and Operating Manual
- in good technical condition
- with attention to safety and hazards by trained users.

After installation of the operator, the person responsible for the installation must complete an EC Declaration of Conformity for the gate system in accordance with Machinery Directive 2006/42/EC and apply the CE mark/UKCA mark and a type plate to the gate system. This also applies if the operator is retrofitted to a manually operated gate. In addition, a handover protocol and an inspection book must be completed.
The following are available:

- EC Declaration of Conformity
- handover protocol for the operator
- handover protocol for the operator


### 1.8 Improper use of the operator

Any use that deviates from or any use above and beyond that described in "1.7 Intended use of the operator" on page 5 is deemed to be improper. The user bears the sole responsibility for any risk involved.
The manufacturer's warranty will be voided by:

- damage caused by improper use
- use with defective parts
- unauthorised modifications to the operator
- modifications and non-approved programming of the operator and its components
The gate must not be part of a fire protection system, an escape route or an emergency exit. Installation of the operator will prevent automatic closing.
Observe the local building regulations.
The operator may not be used in:
- areas with explosion hazard
- very salty air
- aggressive atmosphere, including chlorine


### 1.9 Qualifications of personnel

This Installation and Operating Manual must be read and complied with by a qualified specialist who installs or performs maintenance on the operator.
In accordance with EN 50110-1, all work on the electrical system and live parts must be performed by a trained electrician.
The installation, initial operation and disassembly of the operator may only be performed by a qualified specialist. A qualified specialist is a person commissioned by the installer.
The qualified specialist must be familiar with the following standards:
-EN 13241 Doors and gates - Product standard

- EN 12604 Doors and gates - Mechanical aspects - Requirements and test methods
- EN 12453: Safety in use of power-operated doors 2022 (Plc)

When all work has been completed, the qualified specialist must:

- issue an EC Declaration of Conformity
- attach the CE mark/UKCA mark and the type plate to the gate system


### 1.10 Instructing the user and handover of documents

The qualified specialist must instruct the user:

- on the operation of the operator and its dangers
- on the handling of the manual emergency release on regular maintenance, testing and care which the user can carry out
The qualified specialist must inform the user which work may only be carried out by a qualified specialist:
- Installation of accessories
- settings
- regular maintenance, testing and care
- troubleshooting


## 1. About this Installation and Operating Manual

### 1.11 Information for the user

The user must ensure that the CE mark and the type plate have been attached to the door system.
The following documents for the gate system must be handed over to the user:

- EC Declaration of Conformity
- handover protocol and inspection book
- the installation and operating manuals for the operator and the door
The user is responsible for:
- keeping this Installation and Operating Manual to hand and easily accessible at all times at the place of use
- the intended use of the operator
- ensuring that the operator is in good condition
- instructing all users how to use the operator, the hazards involved and in the operation of the emergency release
- regular maintenance, testing and care
- troubleshooting

The operator must not be used by persons with restricted physical, sensory or mental capacity or who lack experience and knowledge. All users must be specially instructed and have read and understood the Installation and Operating Manual.
Children must never play with or use the operator, even under supervision. Children must be kept clear of the operator. Handheld transmitters or other command devices must never be given to children. Handheld transmitters must be stored in such a way that unauthorised or accidental operation is prevented.
The user must observe the accident prevention regulations and the applicable standards. The guideline "Technical regulations for workplaces ASR A1.7" of the German committee for workplaces (ASTA) is applicable for commercial use. The guidelines described must be observed and complied with. In other countries, the user must comply with the applicable national regulations.

## 2. General safety instructions

### 2.1 Basic safety instructions for operation

## Danger if not observed!

Serious injury or death may result if safety instructions are not observed.

- It is imperative to comply with all safety instructions!

Danger due to electric current!
Contact with live parts may result in electric current flowing through the body. Electric shock, burns, or death may result.

- Installation, testing and replacement of electrical components must be carried out by trained electricians.
- Disconnect the mains plug before working on the system.
- If an accumulator is connected, it must also be disconnected from the control unit.
- Check that the system is disconnected from the voltage supply.
- Secure the system against being switched back on.


## Danger due to use of the system with incorrect settings or when it is in need of repair!

If the system is used despite incorrect settings or if it is in need of repair, severe injury or death may result.

- The system may only be used with the required settings and in the proper condition.
- Inspect the system frequently for indications of wear, damage or defective weight balancing.
- Following installation and thereafter at monthly intervals, check that the operator reverses upon contacting a 40 mm high object on the floor (obstacle recognition).
- Faults, worn components or defects in the weight balance must be repaired professionally without delay.


## Danger caused by hazardous substances!

Improper storage, use or disposal of accumulators, batteries and components of the system are dangerous for the health of humans and animals.

- Store accumulators and batteries out of the reach of children and animals.
- Keep batteries and accumulators away from chemical and thermal influences.
- Do not recharge batteries and defective accumulators.
- All components of the operator, including old accumulators and batteries, must be disposed of correctly and not with household waste.


## Danger for trapped persons!

Persons may be trapped inside the garage. If trapped persons cannot free themselves, severe injury or death may result.

- Check the function of the emergency release at monthly intervals, particularly from inside in the door CLOSE end position and if necessary, also from the outside.
- Ensure that the emergency release is installed at a height of no more than 1.8 m .
- Attach an information sign in a prominent, clearly visible position near the emergency release lever.
- Have faults repaired professionally without delay.


## Danger due to parts projecting

into publicly accessible areas!
No parts should project into public footpaths or roads. This also applies while the door is moving. Persons and animals may be seriously injured.

- Keep public roads or footpaths free of obstacles.


## Danger due to falling parts of doors!

Actuating the emergency release can lead to uncontrolled door movement if:

- springs are weakened or broken.
- the door has not been optimally weight-balanced.

Falling parts may cause a hazard. Severe injuries or death may result.

- Check the weight balance of the door at regular intervals.
- Pay attention to the movement of the door when the emergency release is actuated.
- Keep clear of the movement area of the door.


## Danger of entrapment!

Persons or animals in the movement area of the door may be trapped and pulled along with the door. Severe or fatal injuries may result.

- Keep clear of the movement area of the door.
- Before installation, remove all ropes or chains which are not required and disable all devices not needed for operation, for example blocks.


## Danger of crushing and shearing!

If the door moves and there are persons or animals in the movement area, crushing and shearing injuries may be caused by the mechanism and safety edges of the door.

- Before mounting the operator on the door, make sure that the door is in good mechanical condition, is optimally weight-balanced and opens and closes correctly.
- Only use the system when you have a direct view of the door.
- The danger zone must be visible during the entire door operation.
- Always keep the moving door in sight.
- Keep persons and animals away from the movement area of the door.
- Never put your hand near the door when it is moving or near moving parts. In particular, do not reach into the moving push arm.
- Do not touch the ceiling suspension unit when the motor carriage is running past the ceiling suspension unit.
- Do not drive through the door until it has opened completely.
- Never stand under the opened door.
- Attach warning signs in a prominent, clearly visible position near the fixed operating device.


## Danger caused by the door falling!

The door can drop in an uncontrolled manner if a support fails. Severe or fatal injuries may result.

- A suitable device (external safety catch, locking mechanism etc.) must be installed on-site.


## 2. General safety instructions

## Danger of falling!

Unsafe or defective ladders may tip and cause serious or fatal accidents.

- Use only a non-slip, stable ladder.
- Ensure that ladders are safely positioned.

Danger of tripping and falling!
Unsafely positioned parts such as packaging, operator parts or tools may cause persons to trip or fall.

- Keep the installation area free of unneeded items.
- Place all parts where no-one is likely to trip or fall over them.
- Observe the general workplace guidelines.

Danger due to optical radiation!
Looking into the beam of a bright LED for prolonged periods can cause temporary irritation of the eyes. Serious or fatal accidents can occur as a result.

- Never look directly into the LED.


## Risk of eye injury!

Chips flying when drilling may cause serious injuries to eyes and hands.

- Always wear safety glasses when drilling.


## Risk of hand injury!

Rough metal parts may cause abrasions and cuts when picked up or touched.

- Wear safety gloves when performing tasks such as deburring.


## Risk of injury in the head region!

Impact with suspended objects may cause serious abrasions and cuts.

- Wear a safety helmet when installing suspended parts.


## Additional safety information for the radio remote control

## Danger of crushing and shearing!

If the door is not visible and the radio control is operated, crushing and shearing injuries to persons or animals may be caused by the mechanism and safety edges of the door.

- In particular when operating control elements such as the radio remote control, all danger zones must be visible during the entire door operation.
- Before operating the handheld transmitter, check that the springs of the door are not weakened or broken.
- Always keep the moving door in sight.
- Keep persons and animals clear of the range of movement of the door.
- Never put your hand near the door when it is moving or near moving parts.
- Do not drive through the door until it has been fully opened.
- Store handheld transmitters so that unauthorised or accidental operation, e.g. by children or animals, is impossible.
- Operating devices in a fixed position (e.g. ext. buttons, key switches etc.) must be attached at a height of no more than 1.5 m and at a distance from moving parts.
- Never stand under the opened door.


## Notes and information on operation and remote control

The user of the radio system is not protected against interference due to other telecommunications equipment or devices. This includes radio-controlled systems that are licensed to operate in the same frequency range. If significant interference occurs, please contact your appropriate telecommunications office which has radio interference measuring equipment or radio location equipment.

## NOTE

- If the door is not in view and the radio remote control is actuated, objects in the movement area of the door may be jammed and damaged.
- Objects must not be in the range of movement of the door.
- Only use the operator if you have a direct view of the door.


## 3. Description of function and product

### 3.1 Operator and accessories



1) Operator with control unit
2) Inductive signal transmission system
3) Photocell (2- or 4-wire)
4) Main switch
5) Rod antenna
6) Safety contact strips
7) Warning light
8) Key switch (1- or 2-contact)

### 3.2 Safety equipment

The operator stops and reverses slightly if it encounters an obstacle. This prevents injury and damage to property. The gate will be partially or completely opened, depending on the setting.
In the event of a power failure, the gate can be opened manually using an emergency release.

### 3.3 Product designation



The type plate includes:

- Name of manufacturer
- type designation
- Item Number
- date of manufacture with month and year
- serial number

In case of questions or service, please supply the type designation, the date of manufacture and the serial number.

## 3. Description of function and product

### 3.4 Scope of delivery



1) Operator and control unit pre-assembled and connected with connection cable at the factory
2) Installation bag 1
1.1) Pinion
1.2) Drive shaft
1.3) $2 x$ keys
1.4) 1 x shaft spacing 6.7 mm
1.5) $1 x$ shaft spacing 13.3 mm
1.6) $1 x$ shaft end cap
1.7) $1 \times$ screw $\mathrm{M} 8 \times 45 \mathrm{~mm}$ (hexagon head 13 mm )
1.8) $1 x$ circlip
3) Installation bag 2
2.1) Shield
2.2) $2 \times$ screws $M 8 \times 16 \mathrm{~mm}$ (hexagon head 13 mm )
4) Translation of the Installation and Operating Manual

## 3. Description of function and product

### 3.5 Dimensions


*All dimensions in mm

### 3.6 Technical data

| Rated voltage | $220-240 \mathrm{~V} / \mathrm{AC}$ |
| :--- | :--- |
| Rated frequency | $50-60 \mathrm{~Hz}$ |
| Operating temperature range | $1-25^{\circ} \mathrm{C} \ldots \mathrm{I}+65^{\circ} \mathrm{C}$ |
| Protection class, housing | IP 44 |
| IP code controller/motor | IP 54 |
| Max. torque | 120 Nm |
| Max. current consumption | 3.6 A |
| Max. power consumption | 820 W |
| Max. speed | $240 \mathrm{~mm} / \mathrm{s}$ |
| Max. gate weight | 1800 kg |
| Max. movement range | 14000 mm |
| Inclination | - |
| Weight | 45 kg |
| Duty cycle | $\mathrm{S} 340 \%$ |

## 4. Installation

### 4.1 Required tools and personal protective equipment



You will require the tools shown above to assemble and install the operator. Lay out the required tools beforehand to ensure fast and safe installation.

### 4.2 Important notes and information

## $\triangle$ DANGER

## Danger if not observed!

Serious injury or death may result if warnings are not observed.

- Observe the safety instructions in Chapter "2. General safety instructions" from page 8.


### 4.3 Installation preparations

- Remove or disable all locking devices (bars etc.) before installing the operator.
- The structure of the gate must be stable and suitable for the purpose.
- The gate must not have excessive lateral deviation throughout its range of movement.
- The wheels/bottom track and the roller/top guide must operate without excessive friction.
- End stops must be installed at the "gate OPEN and gate CLOSED" positions to prevent the gate from leaving its track.
- Install empty ducts at the base of the gate for the mains supply cable and the accessory cables (photocell, warning light, key switch etc.).
- Only use permissible mounting materials appropriate for the supporting surface.
- During installation, observe all valid standards, e.g. EN 12604, EN 12605.


### 4.4 Foundation

- A professionally built foundation must be provided on site.
- The foundation must be equipped with connecting lines and cable conduits.
- With cantilever gates, install the operator centrally between the moving blocks.
- The foundation must extend below the frost line (approximately 800 mm in Germany), must be earthed and of reinforced design. Observe the relevant country-specific regulations!
- Concrete C25/30
- Observe the required distances of the mounting material from the edges.
- The foundation must be cured and horizontal.
- Foundation dimensions as shown.

* All dimensions in mm


### 4.5 Installation dimensions

- 6 oblong holes are provided for attaching the operator to the foundation.
- For stable attachment, it is sufficient to select 4 easily accessible oblong holes and connect them to the foundation with fixing anchors.

* All dimensions in mm


## 4. Installation



* All dimensions in mm



### 4.6 Removing the cover



1. Open protective cover (1).
2. Insert key (2) and turn it anti-clockwise.
3. Grip the recessed handle and lift the cover off upwards.

### 4.7 Fitting the cover



1. Position the cover as shown or allow it to slide downwards.
2. Insert key (2) and turn it clockwise.

### 4.8 Installing the drive shaft

Define the distance between the pinion and the operator.
One 6.7 mm and one 13.7 mm spacer ring are provided for this purpose. The following spacings can be set:


## 4. Installation

i

## INFORMATION

- Lightly grease the drive shaft before inserting it into the hollow shaft.


1. Insert the key into the groove of the drive shaft.
2. If applicable, fit washers at the front.
3. Insert drive shaft into the hollow shaft.
4. If applicable, fit washers at the rear.
5. Fit shaft end cap with screw (M8 x 45).

### 4.9 Installing the finger trap protection feature

The finger trap protection feature consists of 2 plastic parts installed depending on the pinion spacing.


1. Assemble the two parts of the finger trap protection feature in accordance with the pinion spacing.
2. Allow the snap-in hooks to click into place in the oblong holes.

3. Fix the finger trap protection feature in the desired position on the housing using the two screws (M8 x 16).

### 4.10 Removing the control unit carrier

The control unit carrier can be removed to allow easier access to the oblong holes.


1. Lightly loosen the 4 nuts.

2. Lift the control unit carrier off over the large opening of the keyhole.
3. Installation is performed in reverse order.

## 4. Installation

### 4.11 Installation on the foundation



1. Place operator on the foundation
i.

INFORMATION.

- It is easier to carry out this step with the help of a second person.
- Always use the handles to lift the operator.
- The control unit carrier can be removed to allow easier access to the oblong holes, see "4.10 Removing the control unit carrier" on page 15


2. Align the operator parallel to and at the desired distance from the gate

INFORMATION.
Observe the installation dimensions!


* All dimensions in mm


## NOTE

- Only use permissible mounting materials appropriate for the supporting surface.
- 4 fixing anchors are sufficient to attach the operator to the foundation. Select the 4 most easily accessible oblong holes.


3. Mark the drill holes.
4. Lift operator off the foundation again.
5. Drill holes for the fixing anchors (M12).
6. Clean the drill holes
7. Insert fixing anchors correctly in the foundation.

## 4. Installation


8. Replace operator on the foundation and align.
9. Bolt operator to the foundation.

### 4.12 Unlocking the operator

The lever for unlocking the operator is beneath the control unit, directly on the motor.


- To lock or unlock, turn the red lever through $90^{\circ}$.


### 4.13 Installing the gear racks

## NOTE

- Gear racks are not included in the scope of delivery.
- The gear racks are attached to the gate using screws (M8).
- If the wall thickness of the gate is not sufficient to establish a firm threaded connection with the gear racks, rivet nuts (steel blind rivet nuts) can be used.
- Optionally, the spacers can also be welded on.

* All dimensions in mm


1. Move gate to the "OPEN" end position.
2. Position the rack on the pinion and align it horizontally with a spirit level.
3. Mark the first hole, drill it and cut the thread.

## 4. Installation


4. Push the gate in gate CLOSE direction until the next drilling point is positioned in accordance with the illustration, mark the next hole, drill it and cut the thread.
5. Repeat until all threads are produced.

6. Bolt gear rack to the gate as shown, using spacer, washer and spring washer.

## Installing additional gear racks

INFORMATION.
First, mark the two outer holes and drill. Fasten rack temporarily and mark the remaining holes. Then remove the rack again and drill the remaining holes. The rack can then be finally bolted in position.


1. Position second rack (2) flush with the first rack (1) and hold another rack (3) against them from below so that the teeth of the additional rack (3) mesh with the teeth of the two top racks (1 and 2). This will ensure an accurate fit.
2. Drill holes, cut thread and fasten rack.
3. If additional racks are required, proceed as for installation of the second rack until all racks have been installed.

### 4.14 Adjusting the backlash

## i

## INFORMATION.

The optimum backlash between pinion and gear rack is 1.5 mm .

- The operator has an adjustment unit to allow adjustment of the optimum backlash.
- In the factory setting, the adjustment unit is in centre position, i.e. the pinion can be raised by a maximum of 15 mm or lowered by a maximum of 15 mm .
- Correct adjustment of the backlash compensates for minor unevenness and protects the gears.
- The weight of the gate must never rest on the drive shaft or pinion!



## 4. Installation



1. Release nut (1).
2. Raise or lower the operator using nut (2).
3. Set the optimum backlash ( 1.5 mm ).
4. Fix the set height by tightening nut (1).
5. Check that the set backlash is ensured over the entire movement range, and adjust if necessary.

### 4.15 Completing mechanical installation

## NOTE

- The gate must be moved manually to approximately the centre position before starting initial operation so that a detection of the motor direction is possible.


1. Slide the gate to centre position by hand.

2. Locking the operator
$\checkmark$ Operator is fully installed and ready for electrical connection!

## 5. Electrical connection

### 5.1 Mains supply line to the housing

Electrical connection must be performed by a trained electrician. Local and national installation regulations (e.g. VDE) must be observed.
In particular, observe the warnings below.

## DANGER

## Danger if not observed!

Serious injury or death may result if warnings are not observed.

- In particular, observe the warnings below.
- In addition, observe the safety instructions in Chapter "2. General safety instructions" from page 8.


## Danger due to electric current!

Contact with live parts may result in electric current flowing through the body. Electric shock, burns or death will result.

- All work on electrical components must be carried out by a trained electrician.
- Before supplying mains power to the operator for the first time, ensure that the voltage of the power source matches the voltage listed on the operator type plate.
- Do not connect the operator to the mains voltage until installation is complete.
- Disconnect the mains plug before working on the operator.
- Check that the operator is not live.
- Secure the operator against being switched back on.
-Control or regulating units in a fixed position must be mounted within sight of the gate and at a height of at least 1.5 m .
- The maximum cable length for connected accessories is 30 m .


## INFORMATION

- The contacts of all devices to be connected externally must be safely isolated from the mains voltage supply in accordance with IEC 60364-4-41.
-Wiring for external devices must be installed in accordance with IEC 60364-4-41.
- All electrical wiring must be firmly secured to prevent displacement.
- The mains connection is direct.
- The sheath on the power cord of the fixed connection must not be stripped further than absolutely necessary; a max. of 25 mm for the $L$ and N strands. The green/yellow PE strand should be somewhat longer.


1. Open the control unit housing.
2. Feed the mains supply line into the housing from below and route to the control unit.
3. Place cable insert (cable gland) in the control unit housing.
4. Feed mains cable through the cable gland into the control unit housing.

## NOTE

- The control unit housing is not firmly connected to the control unit carrier and can simply be removed if necessary.


## 5. Electrical connection



## 5. Electrical connection

### 5.2 Connection cable to the operator

## INFORMATION

- Connection cable is supplied pre-assembled.


| No. | Designation | Plug |
| :--- | :--- | :--- |
| 1 | Safety chain Door stop 1 | 2-pin |
| 2 | RS458 encoder | 4-pin |
| 3 | Motor | 5-pin |
| 4 | Protective earthing con- <br> ductor | Strands |

### 5.3 Mains connection

## NOTE

- The connection depends on the mains and the operator with which the control unit will be used.
- Before commissioning, it is essential to ensure that the specifications on the type plates of the operator and the control unit match.
- The jumper on the control unit must be checked before applying the mains voltage. An incorrectly positioned jumper may destroy the control unit.


## INFORMATION

- The control unit must be protected against short-circuit and overload by a nominal fuse value of max. 10 A per phase.
- A 3-pole automatic circuit breaker must be used with three-phase mains.
- A 1-pole automatic circuit breaker must be used with AC power supplies.
- The control unit must have an all-phase mains circuit breaker. This can be either via
- a plug connection (max. cable length 1.5 m)
or
- a main switch.
- The mains circuit breaker must be easily accessible at a height of between 0.6 m and 1.7 m .


### 5.4 Selecting and switching mains voltage

## NOTE

- With frequency converter operation, the mains voltage must not be set to 400 V !



## 5. Electrical connection

### 5.5 Connection to the mains power

## Operation with frequency converter

## INFORMATION



- If a frequency converter is used, the entry "Frequency converter" must be selected under menu item "Motor controller" (2533) in the Service menu, see ("6.22 Service (2500)" on page 50)

Frequency converter connection


Mains connection


$$
1 \sim 230
$$

### 5.6 Absolute value encoder

RS485


## 5. Electrical connection

### 5.7 Safety chain

## Manual emergency release and thermal contact

## INFORMATION

i.

- If one of the devices connected to DOOR STOP 1 has triggered, the following error message appears on the display: Thermo/H/C/D, see "6.23 Error messages" on page 53.
DOOR STOP 1 = Manual microswitch emergency release and thermal contact (connection with pink + grey motor cable).


INFORMATION
If one of the devices connected to DOOR STOP 2 has triggered, the following error message appears on the display: Safety chain 2, see "6.23 Error messages" on page 53.

DOOR STOP 2 = emergency stop


### 5.8 External command devices

Multiple button with 6 wires


OPEN

## STOP

## Multiple button with 4 wires



Pulse button


INFORMATION

- If the traffic light module (two way traffic control) is used, the external buttons have the following effect:

OPEN button (terminals $7+8$ ):
Request for the traffic light signal "Green external."

Pulse button (terminals $13+14$ ):
Request for the traffic light signal "Green internal."

- "Two way traffic" can only be selected if the traffic light module is connected. If the connection to the traffic light module is severed, the control unit automatically switches to pulse mode.


## 5. Electrical connection

### 5.9 Contact for alarm signal

## INFORMATION

- If the function "Alarm input" is activated, a normally closed (NC) contact must be connected at terminals 7+8.
- If one of the devices connected to OPEN has triggered, the following error message appears on the display: "ALARM INPUT" and the position defined in the menu, see "6.22 Service (2500)" on page 50 under "ALARM INPUT" (2568), is approached and held until the contact is closed again and the power supply has been interrupted.



## 5. Electrical connection

### 5.10 Safety edge

Safety contact strip 8.2 k $\Omega$
Programming from menu item "1240" et seq.


## Air wave switch

## NOTE

- Air wave switch cannot be used for sliding gates.


## Optical safety contact strip (OSE)

- Programming from menu item "1200" et seq.



## 5. Electrical connection

## 4-wire photocell without testing

- Programming from menu item "1100" et sea.


INFORMATION
Photocells must be installed at a height $<300 \mathrm{~mm}$.


28 Supply voltage (+24V) and signal

29 No function

30 Signal (+24V if photocell is not interrupted)

31 Supply voltage (GND)

## 4-wire photocell with testing



## 2-wire photocell

## NOTE

- Only SOMMER product approved.
- Proarammina from menu item "1115" et sea.


INFORMATION

- Photocells must be installed at a height < 300 mm .



## Programmable relays

- Programming from menu item "6.17 Relay Setup (1600)" et seq.


## 5. Electrical connection

## INFORMATION

- Relay 1 is available only if it is not being used to control the brake.

Factory setting: brake active.

1 INFORMATION

- max. 8 A 250VIAC
- max. $250 \mathrm{~V} / \mathrm{AC} \cos \phi=0.4$
- max. 2000 VA / 300 W


## INFORMATION



- Relays are freely programmable:
- not active (every relay)
- message when end positions reached (Pos.: top / bottom / both + permanent / pulse) (every relay)
- Active during movement up / down / both + permanent / blink + 1-5s lead time (every relay)
- switch brake (relay 1 only)
- Switch electric lock (every relay)
- radio commands (relay 3 only)


## 6. Initial operation

* These are display examples. They are intended to help explain the individual areas of the display and its function.

Depending on context, the upper line shows the possibility to scroll back in the menu, change a value or parameter upwards using the $\hat{\imath}$ key or select an option

Here, the position of the door is shown in increments. If there is a plus sign (+) after the number, this means that the door is in the pre-end position switch area.

The middle line contains information (such as the date, mode of operation, etc.) and instructions (e.g. confirm end position, abort current procedure, etc.)

Here, the current position in the menu is shown. This display serves as an orientation aid. By means of a comparison with the instructions, you can quickly find out where you are in the menu at the moment

Depending on the context, the possibility to scroll forward in the menu, change a value or parameter downwards using the $\sqrt{ }$ key, or selecting an option is displayed here.

- Door OPEN
- Door STOP while the door is moving DOWN
- "Back" in main menu
- "Change parameters/values" in submenus
- Door DOWN
- Door STOP while the door is moving UP
- "Forward" in main menu
- "Change parameters/values" in submenus


## 6. Initial operation

### 6.1 Starting initial operation

NOTE:
The door must be moved manually to approximately the centre position before starting initial operation so that a detection of the motor direction is possible.

NOTE:
If the error message "Security Chain" appears during activation, check whether the manual emergency release is enabled.

1. Switch on control unit


## NOTE:

After a few seconds, the display of the software version disappears and the system switches automatically to the display of the currently set mode of operation.

NOTE:
During initial operation, the set mode of operation is displayed.

### 6.2 Enter password (0110)

1. Press STOP button for approx. 5 seconds.
$\Rightarrow \quad$ The display becomes blank.
2. Then also press $\hat{\Downarrow}$ or $\sqrt{ }$ for 4 seconds.

| INV HW:110 SW: 157 |  |
| :---: | :---: |
| INV ID: 16777215 |  |
| 介 <br> P-X.X-W |  |
| 5884 | ת |

$\Rightarrow$ 仓 The following appears:

## - NOTE:

The factory-set main password for the main menu is 0000 s . "Page 30 ".
Alternatively, the quick start menu can be accessed with the password 9001; see "Page 32".
For security reasons, the passwords must always be changed by a trained person (menu: "Service -> Passwords no. 2570")

| PASSWORD ENTRY |  |  |
| :---: | :---: | :---: |
| $0^{* * * *}$ <br> P-X.X-W |  |  |
| 0110 |  |  |

3. Release all buttons.
$\Rightarrow$ The prompt to enter the password appears on the display.
$\Rightarrow$ The active position flashes.
4. Select the applicable digit with $\hat{\imath}$ or $\sqrt{ }$ and confirm with "STOP".
$\Rightarrow$ The next position is automatically selected.

## 6. Initial operation

### 6.3 Main menu

## INFORMATION

- For a clearer display, this overview shows level 1 of the menu. The pages listed next to the menu items contain precise information on the submenus and the setting options
- The door must be moved manually to approximately the centre position before starting initial operation so that a detection of the motor direction is possible.
- If the error message "Security Chain" appears during activation, check whether the manual emergency release is enabled
- The menu structure is dynamic. Menus of unused components are hidden (e.g., functions that are not available when mechanical limit stops, frequency converters, and traffic light modules are used).

|  |  |
| :---: | :---: |
| PROFILES |  |
| Selection |  |
| P-3.7-W |  |
| forward | 2580 |

"Page 30"
i) Access menu

| back |
| :---: |
| LANGUAGE ENGLISH |
| LANGUAGE/LENGUA |
| SELECTION |
| forward $\quad 0200$ |

"Page 33"

| back |  |
| :---: | :---: |
| SET TIME |  |
| forward | 0300 |

"Page 33"

| back |
| :---: |
| CHECK DIRECTION |
| forward 0400 |


| back |  |
| :---: | :---: |
| END POSITIONS <br> ADJUST |  |
| forward | 0500 |

"Page 34"

| back |
| :---: |
| END POSITIONS |
| FINE PITCH |
| ADJUST |
| forward $\quad 0600$ |

"Page 35"

| back |
| :---: |
| PRE END POS SWITCH |
| ADJUST |

"Page 34"

## Page 35

"Page 36"


| back |
| :---: |
| AUTOMATIC |
| CLOSE |
| ADJUST |
| forward |


| back |
| :---: |
| RELAY |
| ADJUST |
| forward |


| back |
| :---: |
| PARTIAL OPEN |
| forward $\quad 1700$ |


| back |
| :---: |
| INV PROFILE UP |
| forward $\quad 1900$ |


"Page 47"

| back |
| :---: |
| TRAFFIC LIGHT SETTINGS <br> ADJUST |
| forward $\quad 2200$ |

"Page 49"

| back |  |
| :---: | :---: |
| SERVICE |  |
| forward | 2500 |

"Page 50"

| back |  |
| :---: | :---: |
| EXIT MENU |  |
| forward | 3000 |

"Page 52"

## 6. Initial operation

### 6.4 Quick start menu

## INFORMATION

- This simplified menu allows quick initial operation of the control unit. It contains only the menu items listed below. For further information on the individual menu items, please see the page references!
- For a clearer display, this overview shows level 1 of the menu. The pages listed next to the menu items contain precise information on the submenus and the setting options
- The door must be moved manually to approximately the centre position before starting initial operation so that a detection of the motor direction is possible.
- If the error message "Security Chain" appears during activation, check whether the manual emergency release is enabled.

"Page 30"


## [i] Access menu

| back |
| :---: |
| LANGUAGE ENGLISH |
| LANGUAGE/LENGUA |
| SELECTION |
| forward 0200 |


| back |  |
| :---: | :---: |
| SET TIME |  |
| forward | 0300 |

"Page 33"

"Page 33"


| back |
| :---: |
| SAFETY DEVICES <br> SELECT |
| forward $\quad 1000$ |

"Page 37"

| back |  |
| :---: | :---: |
| AUTOMATIC |  |
| CLOSE |  |
| ADJUST |  |
| forward | 1500 |

"Page 41"

| back |  |
| :---: | :---: |
| EXIT MENU |  |
| forward | 3000 |

"Page 52"

| back |
| :---: | :---: |
| END POSITIONS <br> ADJUST |
| forward 0500 |

"Page 34"

### 6.7 Select profile (2580)



Select / change the values using if $\sqrt{3}$

Confirm with STOP button

## INFORMATION

- Customer profiles are presettings for safety devices and modes of operation set at the factory; see "7. Factory settings" on page 54.


### 6.5 Select language (0200)

| SELECT LANGUAGE |  |
| :---: | :---: |
| ENGLISH <br> CONFIRM |  |
| ת | 0200 |

Select the language using if

Confirm with STOP button

### 6.6 Set date and time (300)

NOTE:
The date and time are retained for a maximum of 10 days in the event of a power failure and are correctly displayed when the voltage supply is restored.

| $\hat{\imath}$ |  |
| ---: | ---: |
| 2022-01-02 | 10:20:30 |
| ת | 0300 |


| Select the digits using $\uparrow \sqrt{ }$ |
| :--- |
| Confirm with STOP button |

## INFORMATION

YYYY-MM-DD HH:MM:SS
The active number flashes!

### 6.8 Check direction (0400)

## INFORMATION

- The motor direction must be checked during initial commissioning to allow the OPEN/CLOSE buttons to be correctly assigned.
- This step is an important part of initial commissioning. All following steps are based on this.
- This requires the door to be in an approximately central position between the end positions to allow sufficient travel distance for checking the motor direction. If this menu item is selected, the door can only be moved with the it button in the housing cover. The $\widehat{\imath}$ button must be pressed and held pressed until the movement is automatically limited by the control unit (approx. 1 sec.). If the direction of movement of the door is in the OPEN direction, this must be confirmed with the STOP button. If the direction of movement of the door is in the CLOSE direction, the $\sqrt{ }$ button for incorrect motor direction must be pressed. The control unit again offers the option of moving the door in the OPEN direction with the $仑$ button and changed door direction. Confirm with the STOP button.

| 仑 $=>$ Door OPEN |
| :---: |
| OK |
| NOT OK 0400 |



### 6.9 Adjust end positions (0500)

## (via encoder)

## INFORMATION



- The end positions can also be corrected later using the fine pitch (menu item 600).
- Control unit automatically moves to "END POSITION BOTTOM."



### 6.10 Adjust fine pitch of end positions (0600)

## (via encoder)

## INFORMATION

- After initial operation of the system, the end positions can be more finely adjusted using this item.
- The door does not move during adjustment of the fine pitch of the end positions!
- A maximum of only 50 increments can be finely adjusted in both directions.

| $\hat{\imath}$ |  |  |
| :---: | :---: | :---: |
| END POSITION TOP - FINE |  |  |
| CONFIRM |  |  |
| 5110* |  |  |$]$



### 6.11 Overrun correction

The control unit is equipped with automatic position correction. If the door run-on time changes, e.g. as a result of temperature fluctuations, changes in the spring tension of sectional doors or binding as a result of mechanical damage, the control unit automatically corrects the stopping distance to the defined position value.
The first correction takes place in the first 2 to 3 complete door cycles after setting the end positions.

## INFORMATION

- The end position is intentionally not reached during the first movement after setting the end positions!


## 6．12 Adjust pre end position switch（0650）

## INFORMATION

DIN EN 12453 allows the closing edge to be blanked in an area max． 50 mm above the ground or switching from＂Stop Emergen－ cy Reverse＂to＂Stop only＂．It is essential to comply with the requirements of this standard．
The optical safety edges are blanked in this area，whilst the $8.2 \mathrm{~K} \Omega$ safety edges are switched to＂STOP ONLY．＂The test is enabled for the safety contact strips with air wave switches．After crossing the pre－end position switch，the control unit expects a signal from the air wave switch within a specified time window．This requires the door with the safety contact strip to be in contact with the ground．

| 仑े |
| :---: |
| PRE END POS SWITCH <br> MOVE TO POSITION <br> CONFIRM |
| $\Omega$ |

Move to the position using $\hat{\text { in }}$

Confirm with STOP button

## 6．13 Adjust security limit switch（0680）

## INFORMATION

The security limit switches are a redundant safety device for the standard limit and end position switches．If the standard limit and end position switches are crossed，the system is stopped by the security limit switches．
－If the security limit switches have tripped，the door stops．The system must be moved back to the normal limit and end position switch area in stutter mode．The error is then automatically corrected．

| $\Uparrow$ |  |  |
| :---: | :---: | ---: |
| SECU LIMIT SWITCH |  |  |
| ．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． 100 |  |  |
| CONFIRM |  |  |
| 3222 | ת | 0685 |



## Setting range：

50 to 300 increments

## 6．14 Select mode of operation（0700）

## DANGER

## Danger of crush injuries！

The safety contact strips are not active in the dead man range．
－Never enter the range of movement of the door．

## Selection using 介』 <br> Confirm with STOP <br> button

| 仓 |  |
| :---: | :---: |
| IMPULSE UP／DEADMANDOWN |  |
| 8 | 0700 |
| $\checkmark$ |  |
| back |  |
| EXIT MENU |  |
| $\Omega$ | 300 |


| Move to the desired position using $\hat{\imath} \sqrt{ }$ |
| :--- |
| Confirm with STOP button |

## INFORMATION

This menu item is used to select dead man mode or pulse mode．If dead man mode is selected，all other menu items are skipped because they are only relevant for pulse mode（with the exception of＂Inv．Parametrisation＂）．
－In dead man mode，the buttons must be pressed as long as the gate is to move．

## INFORMATION



If＂Deadman＂is selected as the mode of operation，the sys－ tem will jump directly to the last menu item，＂Goto operation （3000）．＂

### 6.15 Select safety device (1000)

INFORMATION

- Photocells must be installed at a height < 300 mm .

－The control unit recognises whether a 2－wire photocell（frame photocell）is connected and displays＂CONNECTED．＂
－If there is a fault or no photocell is connected，the display shows＂NOT CONNECTED．＂

| back |
| :---: | :---: |
| 2－WIRE PHOTOCELL <br> DISABLED |
| forward $\quad 1115$ |


$\longrightarrow$| 2－WIRE PHOTOCELL |  |
| :---: | :---: |
| NOT CONNECTED <br> DOWN FULL REVERSE <br> CONFIRM |  |
| forward | 1116 |

$\downarrow$
Selection options：
－Disabled back
－DOWN full reverse
－DOWN part．reverse
－UP part．reverse
－DOWN STOP


Selection using 凤ヘ

Confirm with STOP button

Move to upper end position using 仑̂

Abort with STOP button

Move door in DOWN direction with $\sqrt{ }$ ．
As soon as the photocell is interrupted by the door，the door stops．

Confirm with STOP button


## INFORMATION

- The optical safety contact strips are blanked in the pre-end position switch area.
- The control unit recognises at the respective inputs whether optical $8.2 \mathrm{~K} \Omega$ safety contact strips are connected and displays "CONNECTED".

| back |
| :---: | :---: |
| OSE1 |
| DISABLED |
| SELECT/CHANGE |



Selection using Лง

Confirm with STOP button

## Selection options:

- OSE 1
- Light curtain


## Selection options:

- Disabled back
- DOWN full reverse
- DOWN part. reverse
- UP part. reverse
- DOWN STOP
- UP / STOP / retraction safety

- Disabled back
- DOWN full reverse*
- DOWN part. reverse*
- DOWN STOP
- UP part. reverse
- UP / STOP retraction safety

INFORMATION
When using the automatic closing function, the safety device connected at the OSE 2 input has no limitation for the closing attempts after detection of an obstacle! For this reason, we recommend that it is used in this mode of operation exclusively for approved, contactless safety devices (light curtains)!

INFORMATION
The $8.2 \mathrm{~K} \Omega$ safety contact strips are switched to "STOP ONLY" in the pre-end position switch area. After crossing the pre-end position switch, the control unit expects a signal from the air wave switch within a specified time window. This requires the DOOR with the safety contact strip to be in contact with the ground (pulse).


## DANGER

## Danger of crush injuries!

- After the activation of obstacle recognition (force detection), at least one complete teach-in run must be performed without interruption in the UP and DOWN directions in goto operation! Only when this has been done is the obstacle detection active and effective!
- The obstacle recognition (force detection) is effective only in the Gate UP direction of travel and must be adapted to the respective gate!
- Never enter the range of movement of the door.



### 6.16 Automatic close (1500)

## INFORMATION



This function is possible only if a photocell is used and it is active for the CLOSE direction of movement (menu item 1100 or 1115).

Select / change the values
using 介®

Confirm with STOP button


## Setting range:

5 to 999 seconds

INFORMATION
When using a light curtain, no additional photocell is required.
This input (terminals $28+30$ ) can be jumpered.

## INFORMATION

- The setting 0 s means that automatic closing after time is disabled.


## INFORMATION

- The setting 0 s means that automatic opening after a set time is disabled.


### 6.17 Relay Setup (1600)

## INFORMATION

- Relay 1 is available only if it is not being used to control the brake or the start capacitor (factory setting: brake active).

Selection options:

- Inactive
- End position
- Movement
- El. lock
- Maintenance




Relay 2

| RELAY 2 | INACTIVE |
| :--- | :--- |
|  |  |
| (0) -> CHANGE | 1640 |

Select / proceed to next or previous relay via 介 介ु

Confirm with STOP button


For the following settings, the procedure is identical to that for Relay 1.

- End position
- Movement
- Electric lock
- Maintenance

Relay 3

| RELAY 3 $\quad$ INACTIVE |  |
| ---: | ---: |
|  |  |
| (0) -> CHANGE 1660 |  |

Select / proceed to next or previous
relay via $\uparrow$ 亿

Confirm with STOP button


For the following settings, the procedure is identical to that for Relay 1.


### 6.18 Partial open (1700)

## INFORMATION

- Partial opening does not function in "two way traffic" mode of operation!
- The behaviour of an external command device (terminals $7+8$ "OPEN") or a handheld transmitter can be defined under the menu item "Service (2500)" - "MODE EXT. KEY UP (2565)."
- If the partial opening function is used, the control unit behaves as follows:
- Press button once = partial open
- Press button twice = door opens completely

| YES |  | ¢ |  |
| :---: | :---: | :---: | :---: |
| PARTIAL OPEN |  | PARTIAL OPEN MOVE TO |  |
| NO | 1705 | $\Omega$ | 1710 |

Move to the desired partial opening height via $\hat{4} \sqrt{ }$

Confirm with STOP button

## Selection options:

- Disabled back
- Enabled


### 6.19 Inverter profile UP (1900)

1. Max. speed $(\mathrm{Hz})$
2. Startslope (ms)
3. Stopslope (inc.)


## Setting range:

20 to 120 Hz

## Setting range:

600 to 2000 ms


## INFORMATION

The steepness of the slopes changes with the speed adjustment.

## Setting range:

0 to 1500 inc.

## INFORMATION

This value is the difference to the end position at which the stopslope begins.

### 6.20 Inverter profile DOWN (2000)

1. Max. speed (Hz)
2. Startslope (ms)
3. Stopslope (inc.)
4. Medium gear $(\mathrm{Hz})$


## Setting range:

20 to 120 Hz

## Setting range:

600 to 2000 ms


## INFORMATION

The steepness of the slopes changes with the speed adjustment.

## Setting range:

0 to 1500 inc.

## INFORMATION

This value is the difference to the end position at which the stopslope begins.


Select the frequency for the

Confirm with STOP button

Select the desired time via介 $\sqrt{5}$

Confirm with STOP button

Setting range:
Limited by slow gear and max speed

INFORMATION
This value is the frequency for the desired speed from which the door is stopped at the end position from 2.5 m in the DOWN direction in order to comply with the closing forces.

## Setting range:

20 ms to 1000 ms

## DANGER

Danger of crush injuries!
Any change in the reverse time of the main closing edge influences compliance with the closing forces.

- Check compliance with the closing forces again after changes to this parameter.


### 6.21 Adjust traffic light control (2200)

## INFORMATION

- The individual times can be selected separately.


| Adjustable times | Meaning |
| :--- | :--- |
| Door OPEN lead time | Lead time before the door starts in UP direction |
| Hold open time | Time after which the door closes automatically |
| Door CLOSE lead time | Lead time before the door starts in DOWN direction |
| Clearing time | Time for clearing the roadway before the traffic lights switch |

### 6.22 Service (2500)







## Selection options:

- Mechanical limit stops
- SOMMER encoder
- Encoder 01

Selection options:

| End position top partial opening | Both positions can be moved to |
| :--- | :--- |
| END POSITION TOP | Only the upper end position is moved to |
| Partial opening | Only the partial opening position is moved to |

## Selection options:

- Inactive
- End position top
- Partial opening*
- End position bottom
*The desired partial opening position must be set in Menu 2565 before activating the alarm function.


## INFORMATION

As soon as the alarm is triggered, the defined position is approached and held until the alarm signal is no longer present. Operation can only be resumed after interrupting the power supply.

## NOTE

- In the case of a motor change from frequency converter to 400 V , the motor plug must not be connected.




## 6. Initial operation

### 6.23 Error messages

The control unit is self-monitoring and partially self-healing. This means that it detects errors (including errors in connected devices) and shows them on the LC display.
Depending on the severity of the error, the display is automatically reset after correction of the error or must be manually reset as directed.

All errors and events that affect the safety of the system are logged with date and time. They can be viewed in the Service menu under "Event history."

## INFORMATION

- Self-healing means that the control unit automatically resets the error display as soon as the error has been corrected.

* Error classes:

F = fatal error
S = serious error
D = defect
E = safety event
** Event is logged in the service menu (parameter menu)

|  | Error message | Error class* | Log** | Self-healing |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Security Chain <br> Emergency release active or motor overheated | S | Yes | Yes |
| 2 | Safety chain 2 <br> Wicket door switch activated or wicket door opened | S | Yes | Yes |
| 3 | INVERTER STANDBY <br> Frequency converter switched off or communication faulty | S | Yes | No |
| 4 | CHECK ENCODER <br> Absolute value encoder or connection cable defective | F | Yes | Yes |
| 5 | THERMO SWITCH <br> Frequency converter overheated | S | Yes | Yes |
| 6 | SW.RAIL 1 TRIGGERED <br> Safety device at terminals 17-18 was triggered | E/D | No | Yes |
| 7 | SW.RAIL 2 triggered <br> Safety device at terminals 19-20 was triggered | E/D | No | Yes |
| 8 | OSE 1 TRIGGERED <br> Safety device at terminals 21-23 was triggered | E/D | No | Yes |
| 9 | OSE 2 TRIGGERED <br> Safety device at terminals 24-27 was triggered | E/D | No | Yes |
| 10 | 4-WIRE PHOTOCELL TRIGGERED <br> Safety device at terminals 28-31 was triggered | E/D | No | Yes |
| 11 | 2-WIRE PHOTOCELL TRIGGERED <br> Safety device at terminals 32-33 was triggered | E/D | No | Yes |
| 12 | CONFIG. ERROR <br> System error, control unit defective | F | Yes | No |
| 13 | SECU LIMIT SWITCH <br> End position crossed | S | Yes | Yes |
| 14 | RUNTIME ERROR <br> The programmed runtime was exceeded (mechanical limit stops) | F | No | Yes |
| 15 | WRONG DIRECTION <br> Operator running in the wrong direction. (Phases have been reversed) | S | Yes | Yes |
| 16 | Blocked <br> Movement not possible. (Further messages on the display) | S | Yes | Yes |
| 17 | Check motor Check encoder <br> Despite the start command of the control unit, the encoder values are not changed | F | Yes | No |
| 18 | Fuse 24V <br> Replace fuse F5 (40mA F) | D | No | Yes |

Factory settings

| $\mathrm{i}_{\text {NOTE }}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profiles can be activated via menu item 2580; see "6.7 Select profile (2580)" on page 33. | Standard 8K2 | Standard OSE | Standard light curtain | $8 \mathrm{k} 2+$ warning light | OSE + warning light | Light curtain + warning light + autom. closing | PNEU + warning light obstacle detection during UP | Standard 400 V GIGAspeed motors | Mech. Limit stop | Roll-up grille |
| Profile | 1a | 2a | 3a | 4a | 5a | 6a | 7a | 8a | 9a | 10a |
| Brake |  |  |  |  |  |  |  |  |  |  |
| Upper brake point | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Lower brake point | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Start delay | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 |  |
| Safety limit switch | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 150 | 100 | 100 |
| Operating mode | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN | Imp. UP/DOWN |
| Safety devices |  |  |  |  |  |  |  |  |  |  |
| 4-wire photocell | untested DOWN full rev. | untested DOWN full rev. | untested DOWN full rev. | untested DOWN full rev. | untested DOWN full rev. | untested DOWN full rev. | untested DOWN full rev. | untested DOWN full rev. | untested DOWN full rev. | tested retr. safety |
| 2-wire photocell | --- | --- | --- | --- | --- | --- | --- |  | --- | DOWN full rev. |
| OSE 1 | --- | DOWN full rev. | --- | --- | DOWN full rev. | --- | --- |  | --- | DOWN full rev. |
| OSE 2 | --- | --- | LC DOWN full rev. | --- | --- | LC DOWN full rev. | --- |  | --- | Retr. safety |
| Safety contact strip 1 | 8k2 DOWN full rev. | --- | --- | 8k2 DOWN full rev. | --- | --- | PNEU DOWN full rev. | 8k2 DOWN full rev. | 8k2 DOWN full rev. |  |
| Safety contact strip 2 | --- | --- | --- | --- | --- | --- | --- |  | --- |  |
| Force detection UP | 0 | 0 | 0 | 0 | 0 | 0 | 5 |  | 0 |  |
| Automatic close | --- | -- | --- | --- | --- | 15s | --- | 15s | --- |  |
| Premature close photocell | --- | --- | --- | --- | --- | --- | --- |  | --- |  |
| Relay |  |  |  |  |  |  |  |  |  |  |
| Relay 1 | Brake | Brake | Brake | Brake | Brake | Brake | Brake | Brake | Brake | Brake |
| Relay 2 | End pos. CLOSE_ permanent | End pos. CLOSE_ permanent | End pos. CLOSE_ permanent | Both_directions_ flash | Both_directions_ flash | Both_directions_ flash | End pos. CLOSE_ permanent | Both_directions_ flash | End pos. CLOSE_ permanent | Both_directions_ flash |
| Relay 3 | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent | End pos. UP_ permanent |



## 7. Factory settings

i

## INFORMATION

- The factory settings are applicable for standard control units only. There may be differences with personalised control units, see menu item " 2520 " on page 52

| Language: |  | German |
| :---: | :---: | :---: |
| Date/time |  | Unchanged |
| Brake |  | Active |
| Upper brake point |  | 20 |
| Lower brake point |  | 20 |
| Brake delay |  | 0 |
| End positions |  | Position retained |
| Pre-end position switch |  | Position retained |
| Safety limit switch |  | 100 increments |
| Operating mode |  | Impulse UP / Deadman DOWN |
| Safety devices | Safety input tested/untested | Deactivated |
|  | 2-wire photocell | Deactivated |
|  | OSE 1 | Deactivated |
|  | OSE 2 | Deactivated |
|  | Safety contact strip 1 | Deactivated |
|  | Safety contact strip 2 | Deactivated |
| Automatic close |  | 0 sec . (disabled) |
| Relay 1 |  | Brake |
| Relay 2 |  | Inactive |
| Relay 3 |  | Inactive |
| Partial opening |  | Pos. deleted |
| Inverter profile UP | Max. speed | 50 Hz |
|  | Startslope (ms) | 600 ms |
|  | Stopslope (inc.) | 400 inc. |
| Inverter profile DOWN | Max. speed | 50 Hz |
|  | Startslope (ms) | 600 ms |
|  | Stopslope (inc.) | 400 inc. |
|  | medium gear | 40 Hz |
|  | Emergency reverse time | 50 ms |
| Switchpoint 2.5 m |  | Pos. deleted |
| Traffic light control | Door UP lead time | 3 sec . |
|  | Hold open time | 20 sec . |
|  | Door DOWN lead time | 3 sec . |
|  | Clearing time | 5 sec . |
| Door cycles |  | Unchanged |
| Event history |  | Unchanged |
| Motor setup | Motor direction | Unchanged |
|  | Encoder direction | Unchanged |
|  | Motor controller | Unchanged |
| Service interval | Time | 12 months |
|  | Cycles | 10,000 cycles |
| Emergency reverse time |  | 100 ms |
| Limit / end position switch type |  | Unchanged |
| Password |  | 0000 |

## 8. Accessories

INFORMATION
The traffic lights require an external power source.

- The output contacts of the traffic light module are floating.
- If the traffic light module (two way traffic control) is used, the external buttons have the following effect:

OPEN button (terminals $7+8$ ):
Request for the traffic light signal "Green external."

Pulse button (terminals $13+14$ ):
Request for the traffic light signal "Green internal."

### 8.1 Radio

## (optional)

Programming from menu item "2560" on page 50 et seq.
Four radio channels are available when using the radio receiver.
Every radio channel has a preset function which can be changed manually in the radio configuration menu.


Radio channels

|  | Channel <br> $\mathbf{1}$ | Channel <br> $\mathbf{2}$ | Chan- <br> nel 3 | Chan- <br> nel 4 |
| :--- | :---: | :---: | :---: | :---: |
| Radio mode 1 | Pulse | Partial <br> opening | OPEN | CLOSE |
| Radio mode 2 | Pulse | OPEN | CLOSE | Relay |
| Radio mode 3 | OPEN <br> internal | OPEN <br> external | CLOSE | Relay |
| Radio mode 4 | OPEN | Partial <br> opening | CLOSE | Relay |

## 8. Accessories

### 8.2 Traffic light module /

 two-way traffic control
## (optional)

Programming from menu item " 2200 " on page 31 et seq.

## Mechanical installation



1. Open the control unit housing
2. Install traffic light module in the control unit housing with the four 12 mm bolts

## Electrical installation

## NOTE

- Allowable contact load:
max. 3 A $250 \mathrm{~V} / \mathrm{AC} / \cos \phi=1$
AC : $250 \mathrm{~V}, 3 \mathrm{~A}$
DC : $24 \mathrm{~V}, 2 \mathrm{~A}$



## 8. Accessories

### 8.3 Induction loop module

(optional)

## Technical data

| Power consumption | 1 VA |
| :--- | :--- |
| Response time | 200 ms |
| Loop inductance | $100-1000 \mu \mathrm{H}$ |
| Loop frequency range | 20 to 120 kHz |

## Retrofit:



1. Unscrew the screws.
2. Remove cover.

3. Fit induction loop module.
$\Rightarrow$ Spacers lock.

4. Break out openings for terminal area from cover.
5. Replace the cover.

6. Connect the control unit and the induction loop module with the connection cable.
$\Rightarrow$ Plug-in terminal (top terminal strip) on the induction loop module
$\Rightarrow$ Plug-in terminals: 59-63 on the control unit

## NOTE

- No electrical isolation between loop and operating voltage!
- Do not install these cables in the same duct as high-voltage cables!


## Connecting induction loops:


6. Connect induction loops
$\Rightarrow$ Terminals $1+2=$ induction loop 2
$\Rightarrow$ Terminals $3+4=$ induction loop 1
*Twist wires ( 20 x / metre line length)

## 8. Accessories

### 8.4 DIP switches 1 + 2 (frequency adjustment for loop 1)



| Switch 1 | Switch 2 | Frequency |
| :---: | :---: | :---: |
| OFF | OFF | Standard fre- <br> quency f |
| ON | OFF | $\mathrm{f}-10 \%$ |
| OFF | ON | $\mathrm{f}-15 \%$ |
| ON | ON | $\mathrm{f}-20 \%$ |

Switches $1+2$ can be used to change the loop frequency for loop 1 in 4 steps. This prevents the loops from interfering with each other.
When the frequency switch is actuated, loop 1 must be recalibrated with the OFF / OFF position.

### 8.5 DIP switches $3,4,5,6$ (sensitivity)

## Loop 1

| Switch 3 | Switch 4 | Sensitivity |
| :--- | :--- | :--- |
| OFF | ON | low (1) |
| ON | OFF | medium (2) |
| ON | ON | high (3) |
| OFF | OFF | Loop disabled |

## Loop 2

| Switch 5 | Switch 6 | Sensitivity |
| :--- | :--- | :--- |
| OFF | ON | low (1) |
| ON | OFF | medium (2) |
| ON | ON | high (3) |
| OFF | OFF | Loop disabled |

## NOTE

- Recommended setting: medium
8.6 DIP switch 7 (direction detection)

| Switch | Effect |
| :--- | :--- |
| OFF | Goto operation - the assignment states of <br> the loops are output independently over the <br> channels |
| ON | Direction detection enabled <br> The signal is sent depending on the assign- <br> ment sequence |

Special features:
If loop 1 is actuated before loop 2, the signal output for loop 2 is blocked until both loops are free again.
If loop 2 is actuated before loop 1 , the signal output for loop 1 is blocked until both loops are free again.

### 8.7 DIP switch 8 (sensitivity increase)

| Switch | Effect |
| :--- | :--- |
| OFF | Normal sensitivity |
| ON | Loop sensitivity is increased. <br> This mode of operation allows high vehicles <br> (lorries) to be correctly recognised over their <br> entire length |

## Testing sensitivity

The recommended sensitivity can be displayed using the LED display.

## NOTE

- After the second step, one of the LEDs starts flashing. The frequency of the flashing must be counted. The sensitivity is set manually based on the calculated value.

1. Drive a high vehicle, e.g. a lorry, over the induction loop. The induction loop module measures the values generated by the vehicle
2. Set DIP switches $3+4$ and $5+6$ to the "OFF" position
$\Rightarrow$ The recommended sensitivity setting is displayed by the flash frequency of the LED
e.g.

| $\square$ | $\square$ | $\square$ | sensitivity level 3 |
| :--- | :--- | :--- | :--- |
| $\square$ | $\square$ | $\square$ | $\square$ |

etc.

## 8. Accessories

### 8.8 Measuring the loop frequency

The recommended loop frequency can be displayed via the LED display.

## NOTE

- When the DIP switches (sensitivity switches) have been switched from OFF position to ON position, the LED belonging to the loop flashes.
- The following items are important for measuring the loop frequency:

1. How often the LED flashes.
2. The frequency of flashing.

The loop frequency can be calculated based on the measured values.


Loop frequency $=33 \mathrm{kHz}$

## 9. Final test / handover

### 9.1 Testing obstacle detection

## INFORMATION

- After installation of the operator, the person responsible for installation must complete a Declaration of Conformity for the gate system and apply the CE/UKCA mark and a type plate. This documentation and this installation and operating manual must be handed over to the user. This also applies if the operator is retrofitted to a manually operated gate.
- If a photocell is interrupted, the gate reverses in soft run.
- If an obstacle is encountered, the operator stops and reverses fully or partially, depending on the setting and operating mode.
- All closing edges must be secured with active safety contact strips.

The operating forces must be tested with a force measurement device. Then, additional safety equipment such as photocells or safety contact strips must be tested for perfect functioning. If the gate hits an obstacle, it must reverse immediately.

### 9.2 Handover of the gate system

The qualified specialist must instruct the user:

- on the operation of the operator and its dangers
- on the handling of the manual emergency release
- on regular maintenance, testing and care which the user can carry out; see "Maintenance and care" on page 65
- on the troubleshooting measures which the user can carry out; see"Error messages" on page 53
The user must be informed about which work may only be performed by a qualified specialist:
- Installation of accessories
- settings
- regular maintenance, testing and care, except that described in Chapter "Maintenance and care" on page 65
- troubleshooting, except that described in Chapter "Error messages" on page 53
- repairs

The following documents for the door system must be handed over to the user:

- the installation and operating manuals for the entire gate system
- Inspection book
- Declaration of Conformity
- handover protocol for the control unit/operator

http://som4.me/konform


## $\triangle$ DANGER

## Danger if not observed!

Serious injury or death may result if warnings are not observed.

- In particular, observe the warnings below.
- In addition, observe the safety instructions in Chapter "2. General safety instructions" from page 8.


## WARNING

## Danger caused by young children operating the door!

If the gate system is operated by young children, there is a danger of them or other persons being trapped under the gate. Severe or fatal injuries may result.

- Command devices in a fixed position must be installed at a height of at least 1.5 m .
Danger of crushing and shearing!
If the door moves and there are persons or animals in the movement area, crushing and shearing injuries may be caused by the mechanism and safety edges of the door.
- Only operate the door when you have a direct view of the movement area.
- The danger zone must be visible during the entire door operation.
- Always keep the moving door in sight.
- Keep persons and animals away from the danger zone.
- The installation of a photocell is mandatory for operation with automatic closing.


## NOTE

- Objects must not be in the range of movement of the door.


## INFORMATION

- Keep this installation and operating manual accessible to all users at the place of use.


### 10.1 Overview of gate movements

The figures show the sequence of movements of the gate. The prerequisite
for button assignment is that the gate system is programmed; see "6. Initial operation" on page 29.

All functions can be programmed for all buttons. The button assignment shown here serves as an example and shows radio mode 1 (factory setting).

## Button 1 (CH1)



Pulse mode OPEN, STOP, CLOSE, STOP

## Button 2 (CH2)



Partial opening
Button 3 (CH3)


Defined OPEN

## 10. Operation

## Button 4 (CH4)



Defined CLOSE


## INFORMATION

- The table below shows further operating modes of the radio remote control which can be set via the menu.


## Radio channels

|  | Channel <br> $\mathbf{1}$ | Channel <br> $\mathbf{2}$ | Chan- <br> nel 3 | Chan- <br> nel 4 |
| :--- | :---: | :---: | :---: | :---: |
| Radio mode 1 | Pulse | Partial <br> opening | OPEN | CLOSE |
| Radio mode 2 | Pulse | OPEN | CLOSE | Relay |
| Radio mode 3 | OPEN <br> internal | OPEN <br> external | CLOSE | Relay |
| Radio mode 4 | OPEN | Partial <br> opening | CLOSE | Relay |

### 10.2 Obstacle detection

The operator stops and reverses if it encounters an obstacle. This prevents injury and damage to property. The gate will be partially or completely opened, depending on the setting. The partial reversion is pre-set at the factory.

## INFORMATION

- Reversing: The operator stops when it hits an obstacle. The gate then moves slightly in the opposite direction to release the obstacle.
In the automatic closing function, the gate opens completely.

The following safety devices are installed to detect obstacles:

- photocell (object protection)
- safety contact strips (personal protection)

See also Chapter "Error messages" on page 53

### 10.3 Operation after a power failure

The programmed run times and all other values remain saved in the event of a power failure. After the power supply has been restored, the first movement of the operator after a pulse is always gate OPEN. The door moves the entire way into the door OPEN end position.

## 10. Operation

### 10.4 Function of the emergency release

In the event of a power failure, the gate can be opened and closed manually from the inside using the emergency release.
The gate can be unlocked in any gate position. To lock it, the gate must be moved back and forth slightly.

## NOTE

- The emergency release is only suitable for opening or closing the gate in emergencies. The emergency release is not suitable for regular opening and closing. This could cause damage to the operator and gate. The emergency release must only be used in emergencies such as a power failure.

INFORMATION

- The function of the emergency release must be checked above all in the gate CLOSE end position. Unlocking must be possible.
- It can be locked and released in any gate position.
- The emergency release must be easy to operate in all necessary positions.


## Unlocking



- Turn lever $90^{\circ}$ in clockwise direction.
$\Rightarrow$ Operator is released and the gate can be moved manually


## Locking



- Turn lever $90^{\circ}$ in anti-clockwise direction. $\Rightarrow$ Operator is locked, and the gate can no longer be moved by hand.


### 11.1 Notes on maintenance and care

! $\dagger$ WARNING

Danger due to use of the gate system with incorrect settings or when it is in need of repair! If the gate system is used despite incorrect settings or if it is in need of repair, severe injury or death may result.

- The gate system may only be used with the required settings and in the proper condition. - Have faults repaired professionally without delay.


## NOTE

- Never use a water hose or high-pressure cleaner to clean the operator/control unit.
- Do not use acid or alkaline cleaning products.


### 11.2 Regular testing

- Keep the operator clean and wipe it occasionally with a dry cloth.
- Check the control unit regularly for insect infestations and moisture. If necessary, clean and dry it.
- Check regularly, but at least once a year, that safety devices are fully functional.
- Regularly check power cables and wires for breakage or insulation defects.

| Testing | Behaviour | Yes/No | Possible cause | Remedy |
| :---: | :---: | :---: | :---: | :---: |
| Safety contact strip, Open/close the gate, actuating the safety contact strip at the same time. | Behaviour of the door as set at the control unit. | Yes | All OK! |  |
|  |  | No | Cable breakage, terminal loose. | Check the wiring and tighten the terminals. |
|  |  |  | Control unit incorrectly adjusted. | Adjust control unit. |
|  |  |  | Safety contact strip defective. | Decommission the system and lock it to prevent reactivation. Then, contact customer service. |
| Photo eye, if present <br> See instructions for control unit Open and close the gate while interrupting the photocell. | Behaviour of the door as set at the control unit. | Yes | All OK! |  |
|  |  | No | Cable breakage, terminal loose. | Check the wiring and tighten the terminals. |
|  |  |  | Control unit incorrectly adjusted. | Adjust control unit. |
|  |  |  | Photocell dirty. | Clean the photocell. |
|  |  |  | Photocell defective. | Decommission the system and lock it to prevent reactivation. Then, contact customer service. |
| Safety limit switch <br> See instructions for control unit | The control unit must display an error message. The door must no longer be powered by the motor. |  |  | Adjust the safety limit switches so there is no damage when end positions are reached or the ropes jump off the tracks. |
| Move gate to the gate "OPEN" or "CLOSE" end position. | Then move the door back manually via emergency |  |  |  |
| Move door past the end position with the emergency manual actuation. | manual actuation. When the door reaches the set end position again, it can be operated with the motor again. |  |  |  |

### 12.1 Taking the control unit out of operation and disassembly

Follow the basic safety instructions listed below.
Persons under the influence of drugs, alcohol, or medications that can influence their ability to react may not work on the control unit.
The disassembly and disposal of the operator may only be performed by a qualified specialist.
This installation and operating manual must be read, understood and complied with by the specialist who disassembles the operator.

## $\triangle$ DANGER

## Danger due to electric current!

Contact with live parts may result in electric current flowing through the body. Electric shock, burns, or death may result.

- Before commissioning, it is essential to ensure that the specifications on the type plates of the operator and the control unit match.
- Read and observe the safety information and warnings on Page 20.

The system must be disconnected from the power supply when taking it out of operation or during disassembly.

1. Turn off the control unit voltage supply. Then check that the power is disconnected.
2. Disassembly is carried out in reverse order of installation.

### 12.2 Storage

## NOTE

Improper storage may damage the operator.
Store the packaging units as follows:

- in enclosed, dry rooms so that they are protected from moisture
- at a storage temperature from $-25^{\circ} \mathrm{C}$ to $+65^{\circ} \mathrm{C}$
- secure to prevent falling
- leave room for unhindered passage


### 12.3 Information on disposal

| @ WARNING |
| :--- |
| Danger caused by hazardous substances! |
| Improper storage, use or disposal of accumulators, |
| batteries and operator components pose a risk to the |
| health of humans and animals. Serious injury or death |
| may result. |
| Accumulators and batteries must be stored out of the |
| reach of children and animals. |
| Keep accumulators and batteries away from chemical, |
| mechanical and thermal influences. |
| Batteries may contain hazardous chemical substance |
| which damage the environment and pose a risk to the |
| health of humans and animals. Caution must be exer- |
| cised, in particular when handling batteries containing |
| lithium, as these can easily ignite and cause fires if not |
| handled correctly. |
| Batteries and accumulators in electrical appliances and |
| which can be removed non-destructively must be dis- |
| posed of separate from the appliance. |

## NOTE

- Dispose of all components in accordance with local and national regulations to avoid environmental damage.
- Wherever possible, avoid the production of waste. Please check before disposing of components whether it is possible to recycle them.


## INFORMATION

This device is labelled in accordance with European Directive 2012/19/EU on used electrical and electronic devices (WEEE - waste electrical and electronic equipment).
This Directive provides the framework for the EU-wide return and recycling of used equipment.

Operator components that have been taken out of service as well as old accumulators and batteries must not be disposed of with household waste. Components which are no longer in use, old accumulators and batteries must be disposed of properly. You must observe the local and national regulations here. Contact your specialist retailer to find out more about current disposal channels.


### 13.1 EC Declaration of Incorporation

## Declaration of incorporation

for installation of an incomplete machine in accordance with the Machinery Directive 2006/42/EC, Annex II, Part 1 B

## SOMMER Antriebs- ind Funktechnik GmbH

Hans-Böckler-Straße 21-27
D-73230 Kirchheim/Teck
Germany
hereby declares that the sliding gate operator

## GIGAslide 1800

have been developed, designed and manufactured in conformty with the:

- Machinery Directive 2006/42/EC
- Low Voltage Directive 2014/35/EU
- Electromagnetic Compatibility Directive 2014/30/EU
- RoBS Directive 2011/65/EU

The following standards were applied:
EN ISO 13849-1, Safety of machines - Safety-related parts of conPL "C" Cat. 2 trons

- Part 1: General design guidelines

EN 60335-1, Safety of electrical appliances/operators for gates where applicable
EN 61000-6-3 Electromagnetic compatibility (EMC) - interference
EN 61000-6-2 Electromagnetic compatibility (EMC) - interference resistance
EN 60335-2-95 General safety requirements for household and similar electrical appliances

- Part 2: Particular requirements for operators for vertically moving garage doors for residential use

EN 60335-2-103 General safety requirements for household and similar electrical appliances

- Part 2: Special requirements for operators for gates, doors and windows
The following requirements of Annex 1 of the Machinery Direclive 2006/42/EC are met: 1.1.2, 1.1.3, 1.1.5, 1.2.1, 1.2.2, 1.2.3, $1.2 .4,1.2 .5,1.2 .6,1.3 .1,1.3 .2,1.3 .4,1.3 .7,1.5 .1,1.5 .4,1.5 .6$, 1.5.14, 1.6.1, 1.6.2, 1.6.3, 1.7.1, 1.7.3, 1.7.4

The special technical documentation was prepared in accordance with Annex VII Part B and will be submitted to regulators electronically on request.
The operator may only be used:

- in combination with door types in the reference list, which can be found under Certifications:
www.sommer.eu
The incomplete machine is intended solely for installation in a door system to form a complete machine as defined by the Machinery Directive 2006/42/EC. The door system may only be put into operation after it has been established that the complete system complies with the regulations of the above EC Directives.
The undersigned is responsible for compilation of the technical documents.
Kirchheim/Teck, 01.03.2023


Jochen Rude Responsible for documents

### 13.2 Simplified EU Declaration of Conformits for radio systems

## SOMMER Antriebs- end Funktechnik GmbH,

hereby declares that the radio system (GIGAslide 1800) complies with Directive 2014/53/EU. The full text of the EU Declaration of Conformity for the radio system can be found at:


## 13. Declarations of Conformity

### 13.3 UKCA Declaration of Incorporation

SOMMER Antriebs- und Funktechnik GmbH<br>Hans - Böckler - Straße 27<br>73230 Kirchheim unter Teck Germany

hereby declares that the products designated below, have been developed, designed and manufactured in conformity with the:

- Supply of Machinery (Safety) Regulations 2008
- Electrical Equipment (Safety) Regulations 2016
- Electromagnetic Compatibility Regulations 2016
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

The machine component must not be put into service until it has been established that the machine into which the machine component is to be incorporated complies with the provisions of the Supply of Machinery (Safety) Regulations 2008

## The following standards were applied:

BS EN ISO 13849-1,
PL "C" Cat. 2

BS EN 60335-1+A15 where applicable BS EN IEC 61000-6-3

BS EN IEC 61000-6-2

BS EN 60335-2-95+A2

BS EN 60335-2-103

Safety of machinery. Safety-related parts of control systems. General principles for design

- Part 1: General principles for design Household and similar electrical appliances. Safety. General requirements Electromagnetic compatibility (EMC). Generic standards. Emission standard Electromagnetic compatibility (EMC). Generic standards. Immunity standard for industrial environments
Household and similar electrical appliances. Safety.
- Part 2: Particular requirements for drives for vertically moving garage doors for residential use
Household and similar electrical appliances. Safety.
- Part 2: Particular requirements for drives for gates, doors and windows


## Product type

Sliding gate operator
GIGAslide 1800
The following requirements of Annex 1 of the Supply of Machinery (Safety) Regulations 2008 are met:
1.1.2, 1.1.3, 1.1.5, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.5, 1.2.6, 1.3.1, 1.3.2, 1.3.4, 1.3.7, 1.5.1, 1.5.4, 1.5.6, 1.5.14, 1.6.1, 1.6.2, 1.6.3, 1.7.1, 1.7.3, 1.7.4

The special technical documentation was prepared in accordance with Annex VII Part B and will be submitted to regulators electronically on request.
The product may only be used in combination with door types in the reference list, which can be found under Certifications at www.sommer.eu

The products are imported into the United Kingdom by:
SOMMER Doco
Unit B3 Elvington Industrial Estate
Elvington
York
YO41 4AR
Kirchheim unter Teck
01.03.2023


Responsible for documents

### 13.4 UKCA Declaration of Conformity for radio systems

SOMMER Antriebs- und Funktechnik GmbH<br>Hans - Böckler - Straße 27<br>73230 Kirchheim unter Teck Germany

hereby declares that the products designated below, when used as intended, comply with the essential requirements of the Radio Equipment Regulations 2017 and that, in addition, the standards listed below have been applied.

| DIN VDE 0620-1 |  |
| :--- | :--- |
| (where applicable) | $2016-01$ |
| EN 62368-1:2016-05 + | $2016-05$ |
| AC:2015 |  |
| EN 62479:2011 | $2011-09$ |
| ETSI EN 300 220-2 |  |
| V3.1.1 |  |
| ETSI EN 300 328 V2.2.2 |  |
| ETSI EN 301 489-1 | $2019-11$ |
| V2.2.2 |  |
| ETSI EN 301 489-3 | $2019-03$ |

V2.1.1

## Product type <br> Product

## Sliding gate operator

GIGAslide 1800

The product was imported into the United Kingdom by

## SOMMER Doco

Unit B3 Elvington Industrial Estate

## Elvington

York
YO41 4AR
Kirchheim unter Teck
01.03.2023


Jochen Lude
Responsible for documents

