

**EN TRANSLATION OF THE ORIGINAL INSTALLATION AND OPERATING  
MANUAL**

**Industrial gate control unit**

**GIGAcontrol T**  
**GIGAcontrol T+**

Download the current manual:



**Information on the operator:**

Serial No.: See the title page of the installation and operating manual (if applicable warranty label).

**Year of manufacture: from 01.2019****Information on the Installation and Operating Manual**

Version of the installation and operating manual:

GIGAcontrol-T-T-plus\_S11940-00001\_0-DRE\_192021\_Rev-D\_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 as well as 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 qualified specialist retailer or installer.

**Feedback on this Installation and Operating Manual**

We have tried to make the Installation and Operating Manual as easy as possible to follow. If you have any suggestions as to how we could improve it or if you think more information is needed, please send your suggestions to us:



[doku@sommer.eu](mailto:doku@sommer.eu)

**Service**

If you require service, please contact us on our service hotline (fee required) or see our web site:



**+49 (0) 900 1800-150**

(0.14 euros/minute from land line telephones in Germany, mobile prices may vary)

[www.sommer.eu/de/kundendienst.html](http://www.sommer.eu/de/kundendienst.html)

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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. Follow 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-giga-t-plus-rev-d>

## 1.3 Description of the product type

The control unit has been constructed according to state-of-the-art technology and recognised technical regulations and is subject to the EC Machinery Directive (2006/42/EC).

The control unit 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 warning symbols and notes

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



Hazard  
symbol



**Signal word**

Type and source of hazard  
Consequences of the hazard

► Preventing/avoiding 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**

**WARNING**

**CAUTION**

There are three different classifications of hazards.

# 1. About this Installation and Operating Manual



## 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 of serious injury or death**

**Describes the potential consequences of the danger to you or other persons.**

- Follow the instructions for avoiding or preventing the danger.



## CAUTION

**Describes a potential danger of a hazardous situation**

**Describes the potential consequences of the danger to you or other persons.**

- Follow the instructions for avoiding or preventing the danger.

The following symbols are used for notes and information:



## NOTE

**Describes additional information and useful notes for correct use of the product without endangering persons. If it is not observed, property damage or faults in the device or gate may occur.**



## INFORMATION

**Describes additional information and useful tips.**

**Functions for optimum usage of the product are described.**



## INFORMATION

**This symbol indicates that all device components that have been taken out of service must not be disposed of with household waste, as they contain hazardous substances. The components must be disposed of correctly at an authorised recycling centre. The local and national regulations must be observed.**



## INFORMATION

**This symbol indicates that all old accumulators and batteries must not be disposed of with household waste. Old accumulators and batteries contain hazardous substances. These must be disposed of properly at municipal collection points or in the containers provided by dealers. The local and national regulations must be observed.**

The following symbols are used in the figures and text.



Continue reading the installation and operating manual for more information.



Disconnect the device from the mains voltage.



Connect the device to the mains voltage.



Symbol refers to factory settings.



Symbol refers to a WiFi-enabled device, such as a smartphone.

## 1.6 Special warnings, hazard symbols and mandatory signs

To specify the source of danger more precisely, the following symbols are used together with the above-mentioned hazard symbols and signal words. Follow the instructions to prevent a potential hazard.

## 1.7 Special warnings, hazard symbols and mandatory signs

To specify the source of danger more precisely, the following symbols are used together with the above-mentioned hazard symbols and signal words. Follow the respective instructions to prevent a potential hazard.



**Danger due to electric current!**










**Danger of falling!**



**Danger due to falling parts**

# 1. About this Installation and Operating Manual

	Danger of entrapment!
	Danger of tripping and falling!
	Danger due to optical radiation!
	Danger due to hot parts!
	Risk of eye injury!
	Risk of injury in the head region!
	Risk of injury to hands!

## 1.8 Information regarding the depiction of text

- 1. Stands for directions for an action
  - ⇒ Stands for the results of the action

Lists are shown as a list of actions:

- List 1
- List 2

1, A **1** **A** Item number in the figure refers to a number in 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** and set in "quotation marks".

# 1. About this Installation and Operating Manual

## 1.9 Intended use of the control unit

The GIGAcontrol T and GIGAcontrol T+ control units are intended exclusively for opening and closing industrial doors, such as sectional and roller doors. Any other use does not constitute the intended use. The manufacturer accepts no liability for damage resulting from use other than the intended use. The user bears the sole responsibility for any risk involved. It also voids the warranty.

- Only command devices and sensors in perfect technical condition may be connected, and they must be used for the intended purpose, with an awareness of the hazards involved and in accordance with the instructions in the installation and operating manual.
- Doors automated with an operator must comply with all valid standards and directives, e.g. EN 13241, EN 12604, EN 12605.
- The door must be stable and resistant to warping, i.e. it must not bend or twist during opening or closing.
- Only use the control unit in dry, non-explosive areas.
- The control unit conforms to the requirements of protection class IP54.
- The control unit must not be operated in areas with a corrosive atmosphere (e.g. salty air).
- The control unit may only be used:
  - if the EC Declaration of Conformity has been issued for the door system
  - if the CE mark and the type plate for the door 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 door are present
- as specified in this installation and operating manual
- in good technical condition
- with an awareness of the safety hazards and risks involved

## 1.10 Improper use of the control unit

Any use other than or above and beyond that described in Chapter “1.9 Intended use of the control unit” on page 7 constitutes improper use. The user bears the sole responsibility for any risk involved.

The manufacturer's warranty will be voided by:

- damage caused by other use and improper use
- use with defective parts
- unauthorised modifications to the control unit
- modifications and non-approved programming of the device and its components

The door must not be part of a fire protection system, an escape route or an emergency exit that automatically closes the door in the event of fire. Installation of the operator will prevent automatic closing.

Observe the local building regulations.

The control unit must not be used in:

- areas with explosion hazard
- very salty air
- aggressive atmosphere, including chlorine

## 1.11 Qualifications of personnel

Persons under the influence of drugs, alcohol, or medications that can influence their ability to react may **not** work on the device.

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

The following are available:

- EC Declaration of Conformity
- handover protocol for the device



<http://som4.me/konform>

# 1. About this Installation and Operating Manual

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## Qualified specialist for installation, commissioning and disassembly

This installation and operating manual must be read, understood and complied with by a qualified specialist who installs or performs maintenance on the product. Work on the electrical system and live parts may be performed only by a **trained electrician** in accordance with EN 50110-1.

The installation, initial operation and disassembly of the product may only be performed by a qualified specialist. 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
- EN 12605 Doors and gates – Mechanical aspects – Test methods
- EN 12445 and EN 12453 – Safety in use of power-operated doors

A qualified specialist is a person commissioned by the installer. The qualified specialist must instruct the user:

- on the operation of the system and its dangers
- on the handling of the manual emergency release
- on regular maintenance, testing and care which the user can carry out

The user must be informed that other users must be instructed on the operation of the control unit, its dangers as well as the emergency release.

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
- troubleshooting and repairs

The following documents for the door 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

## 1.12 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 door system must be handed over to the user:

- the installation and operating manuals for the operator and the door
- Inspection book
- EC Declaration of Conformity
- Handover protocol

The user must always keep this Installation and Operating Manual at the place of use, ready for consultation and accessible to all users.

The user is responsible for:

- the intended use of the control unit
- its good condition
- instructing all users how to use the door system and in the associated hazards
- operation
- maintenance, inspection and care by a qualified specialist
- troubleshooting and repair by a qualified specialist

The product 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 door system, even under supervision. Children must be kept clear of the door system. Handheld transmitters or other command devices must never be given to children. Handheld transmitters must be safely stored and protected against unintended and unauthorised use.

The user must observe the accident prevention regulations and the applicable standards in Germany. In other countries, the user must comply with the applicable national regulations.

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. This applies for use in Germany. In other countries, the user must comply with the applicable national regulations.



## 2. General safety instructions

### 2.1 Basic safety instructions for operation

Follow the basic safety instructions listed below.

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 instructions.

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 safely stored and protected against unintended and unauthorised use.



#### **DANGER**

**Danger if not observed!**  
Failure to observe the safety instructions may cause serious or fatal injury!

► All safety instructions must be observed!

#### **Danger due to electric current**

Contact with live components can lead to electric shocks, burns or fatal injury!

- All work on electrical components must be carried out by qualified personnel!
- Disconnect the mains plug before working on the operator!
- If an accumulator is used, disconnect it from the control unit!
- Check that the device is disconnected from the voltage supply!
- Secure it against being switched back on!

#### **Danger if faulty components are used**

Serious or fatal injury may result if faulty components are used!

- The control unit may only be used with the required settings and if it is in perfect condition!
- Have faults remedied immediately by a specialist!

#### **Danger of hazardous substances**

Incorrect handling of accumulators and batteries poses a risk of serious or fatal injury to persons and animals!

- Store accumulators and batteries out of the reach of children, persons with mental disabilities and animals!
- Keep batteries and accumulators away from chemical, mechanical and thermal influences!

- Do not recharge batteries and defective accumulators!
- Dispose of batteries, accumulators and other operator components professionally and in accordance with the locally applicable regulations!

#### **Danger of persons becoming trapped**

If persons or animals become trapped in a garage or production hall, this may cause serious injury or death.

- Check the emergency release regularly, including from the outside, for correct functioning!
- Have faults remedied immediately by a specialist!

#### **Danger through gate components projecting into a publicly accessible area**

There is a risk of serious or fatal injury if components of the gate system project into public roads or footpaths

- Make sure that components of the gate system do not project into public areas at any time!

#### **Danger due to falling parts of gates**

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

- springs are weak or broken
- the gate has not been optimally weight-balanced

If persons or animals are struck by gate parts, there is a risk of serious or fatal injury!

- Check the weight balance of the gate at regular intervals!
- Always pay attention to the movement of the gate when the emergency release is actuated!
- Keep out of the range of movement of the gate!

#### **Danger due to being pulled in**

If persons or animals are trapped and pulled along with the gate, this may cause serious injury or death!

- Keep out of the range of movement of the gate!

#### **Danger of crushing and shearing**

There is a risk of serious or fatal injury for persons or animals in the range of movement of the gate system!

- Never enter the range of movement of the gate!
- Only use the operator when you have a direct view of the gate system!
- Keep other persons and animals away from the movement area of the gate system!
- Never reach into moving mechanical components while the gate is moving!
- Never reach between the ceiling suspension unit and the motor carriage while the gate is moving!

## 2. General safety instructions

- Do not pass through the gate until it has been fully opened!
- Keep handheld transmitters out of the reach of children, persons with mental disabilities and animals!
- Never stand under the opened gate

### **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 an LED!

### 2.2 Further useful information

- Dispose of all components professionally and in accordance with the locally applicable regulations!
- The chain and rail are maintenance free and need no lubrication! To avoid impairment of electrical conductivity, never apply lubricants containing oil or grease to the chain or rail!
- Do not store objects within the range of movement of the gate!

### 2.3 Additional safety information for the handheld transmitter

Follow the basic safety instructions listed below.

#### **Danger of crushing and shearing**

Using the handheld transmitter without a direct view of the gate system can lead to serious or fatal injury to persons or animals!

- Never enter the range of movement of the gate!
- Only use the operator when you have a direct view of the gate system!
- Keep other persons and animals away from the movement area of the gate system!
- Never reach into moving mechanical components while the gate is moving!
- Never reach between the ceiling suspension unit and the motor carriage while the gate is moving!
- Do not pass through the gate until it has been fully opened!
- Keep handheld transmitters out of the reach of children, persons with mental disabilities and animals!
- Never stand under the opened gate

### 2.4 Additional useful information relating to the handheld transmitter

If the handheld transmitter is used without a direct view of the gate system, objects within the movement area of the

gate may be jammed and damaged

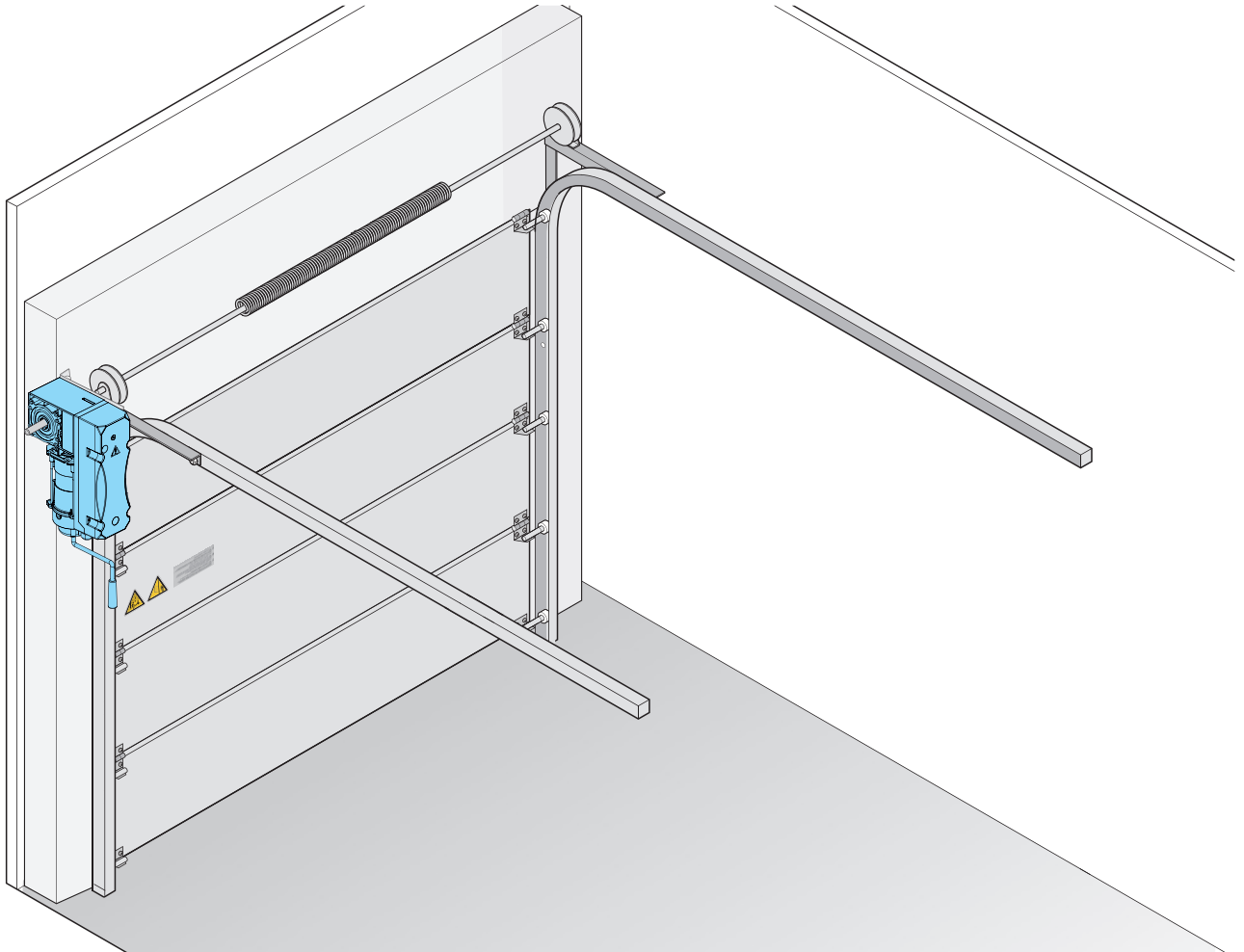
- Do not store objects within the range of movement of the gate!

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.

### 3. Description of function and product

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#### 3.1 Function of the control unit



The control unit is a component of GIGAsedo and GIGARoll industrial door operators.

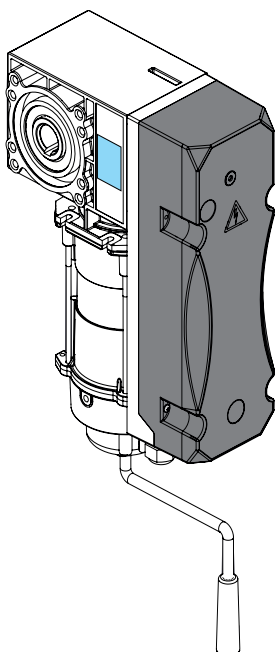
The control unit can be used to open and close sectional and roller doors in dead man operation.

#### 3.2 Safety equipment

No further safety measures are required for a gate operator which is used exclusively in dead man operation. However, various optional safety devices can be installed, see **“Electrical installation” on page 21**

## 3. Description of function and product

### 3.3 Product designation



The type plate is attached to the operator and contains:

- type designation
- Item Number
- date of manufacture with month and year
- Serial number

In the case of questions or service, you will need to specify the type designation, the date of manufacture and the serial number.

#### Tool symbols

These symbols refer to the use of tools required for installation.



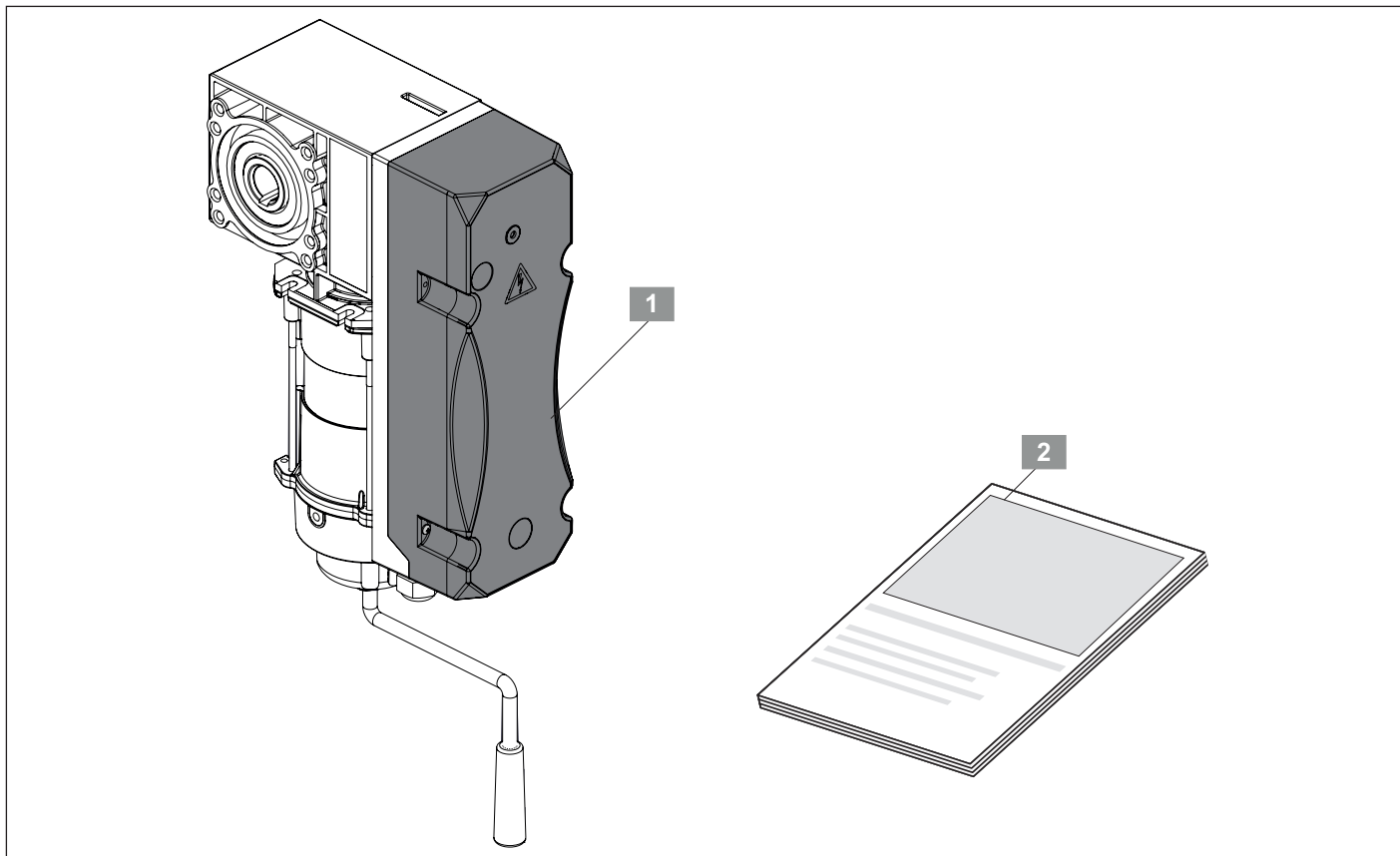
Phillips screwdriver



A drill suitable for the installation subsurface

### 3. Description of function and product

#### 3.4 Scope of delivery



- 1) Control unit GIGAcontrol T or T+ (integrated in the operator)
- 2) Installation and Operating Manual

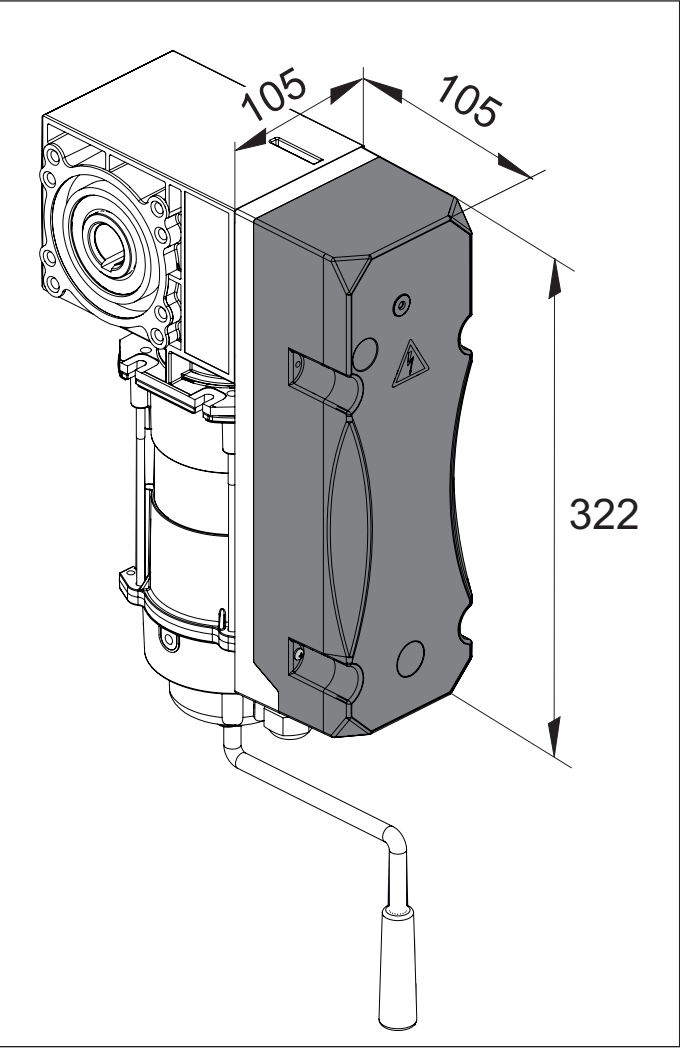


#### **INFORMATION**

When unpacking, make sure that all items are included in the packages. If anything is missing, contact your specialist dealer. The actual scope of delivery may vary depending on the type or customer specifications.

### 3. Description of function and product

#### 3.5 Dimensions



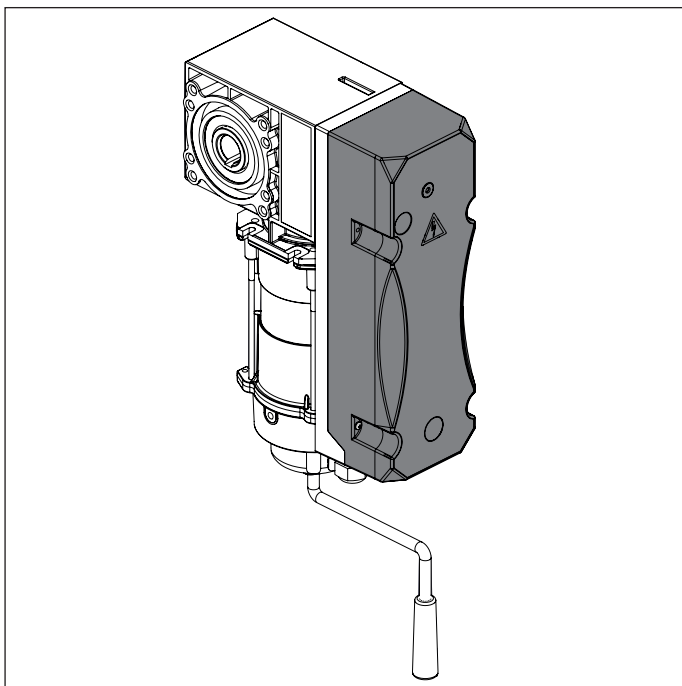
#### 3.6 Technical data

Dimensions	322 x 105 x 105 mm (H x W x D)
Control voltage	28 - 36 V DC max. load 400 mA
Temperature range	-25°C to + 65°C
Connection cross-section of the power cable	5 x 1.5 mm <sup>2</sup>
Protection class	IP 54 / optionally IP 65

## 3. Description of function and product

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### 3.7 Operator types



The GIGAcontrol T and GIGAcontrol T+ control units are compatible with **GIGAsedo+** and **GIGAröll+** operators. A comprehensive range of accessories is available for each operator type.



[www.som4.me/zubehör](http://www.som4.me/zubehör)

## 4. Tools and protective equipment

### 4.1 Required tools and personal protective equipment

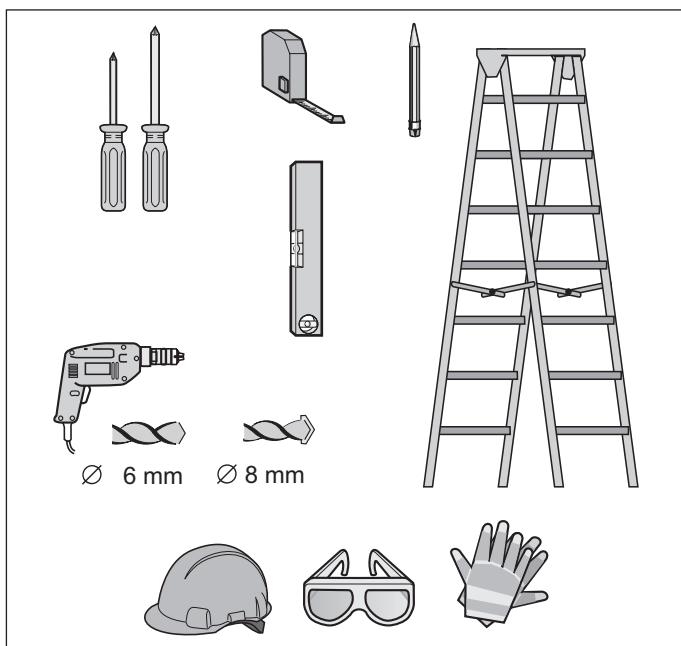


Fig. Recommended tools and personal protective equipment for installation

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.



#### WARNING



##### **Risk of eye injury!**

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

- Wear safety glasses when drilling.



**Risk of injury in the head region!**  
Impact with suspended objects may cause serious abrasions and cuts.

- You must wear a safety helmet when installing suspended parts.



##### **Risk of injury to hands!**

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

- Wear safety gloves when deburring or performing similar work.

Wear your personal protective equipment. This includes safety glasses, safety gloves and a safety helmet.



## 5. Declaration of Conformity

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

**SOMMER Antriebs- und Funktechnik GmbH**

Hans-Böckler-Straße 21-27  
73230 Kirchheim unter Teck  
Deutschland/Germany

hereby declares that the industrial gate control unit

### **GIGAcontrol T / T+**

has been developed, designed and manufactured in conformity with the

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

The following standards were applied:

- |                                 |  |
|---------------------------------|--|
| • EN ISO 13849-1, PL "C" Cat. 2 | Safety of machines - safety-related parts of controls<br>– Part 1: General design guidelines |
| • EN 60335-1, where applicable  | Safety of electrical appliances  |
| • EN 61000-6-3                  | Electromagnetic compatibility (EMC) – interference   |
| • EN 61000-6-2                  | Electromagnetic compatibility (EMC) – interference resistance                                |

The following requirements of Annex 1 of the Machinery Directive 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, 1.2.6, 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 incomplete machine is intended solely for installation in a gate 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 EC Directives listed above.

The undersigned is responsible for compilation of the technical documents.

Kirchheim, den 26.09.2018



i.V. 

Jochen Lude  
Responsible for documents

## 6. Installation

### 6.1 Important information on installation

In particular, please observe and comply with the following safety instructions to ensure safe installation. People under the influence of drugs, alcohol, or medications that can influence their ability to react may **not** work on the operator.

The installation of the operator may only be performed by a qualified specialist.

This Installation and Operating Manual must be read, understood and complied with by a qualified specialist who installs the operator.



#### **DANGER**

**Danger if not observed!**  
If safety instructions are not observed, serious injury or death may result.

- ▶ All safety instructions must be complied with.



#### **WARNING**



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

- ▶ Test the operation of the emergency release regularly from inside and if necessary, also from outside.
- ▶ If there is no second entrance to the garage, you must have a release lock or a Bowden wire for unlocking from the outside installed. This can be used to free persons who cannot free themselves.



#### **WARNING**

**Danger due to projecting parts!**  
Gate leaves or other parts must not project into public roads or footpaths. This also applies while the door is moving. This may cause serious injury or death to persons or animals.

- ▶ Keep public roads and footpaths clear of projecting parts.

**Danger due to falling ceiling and wall parts!**

The operator cannot be installed correctly if ceiling and walls are unstable or if unsuitable mounting materials are used. Persons or animals may be struck by falling parts of the wall, ceiling or operator. Severe injuries or death may result.

- ▶ You must test the stability of the ceiling and the walls.
- ▶ Use only permissible mounting materials appropriate for the supporting surface.

**Danger of entrapment!**

Loose clothing or long hair may be trapped by moving parts of the door. Severe injuries or death may result.

- ▶ Keep clear of the moving door.
- ▶ Always wear tight-fitting clothing.
- ▶ Wear a hairnet if you have long hair.



## 6. Installation



### **WARNING**



**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 use the operator when you have a direct view of the door.
- ▶ All danger zones must be visible during the entire gate operation.
- ▶ 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. In particular, do not reach into the moving push arm.
- ▶ Do not reach into the ceiling suspension unit when the motor carriage is running along the rail.
- ▶ Do not drive through the door until it has opened completely.
- ▶ Never stand under the opened door.

**Danger of tripping and falling!**  
Unsafely positioned parts such as packaging, operator parts or tools may cause trips or falls.

- ▶ Keep the installation area free of unnecessary items.
- ▶ Place all parts where no-one is likely to trip or fall over them.
- ▶ The general workplace guidelines must be observed.



**Risk of eye injury!**  
Chips flying when drilling may cause serious injuries to eyes and hands.

- ▶ Wear safety glasses when drilling.

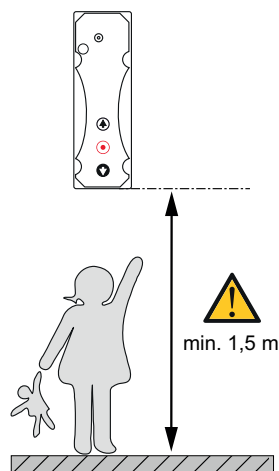


### **CAUTION**

**Danger if the system is used by children!**

If the gate system is operated by children, there is a danger of them being trapped by the gate or pulled into the mechanism!

- ▶ Keep children away from the door system.
- ▶ Observe the minimum installation height of 1.5 m.



### **CAUTION**

**Risk of injury to hands!**

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

- ▶ Wear safety gloves when deburring or performing similar work.



### **NOTE**

- ▶ If the ceiling and walls are not stable, parts of the ceiling, walls or the operator may fall. Objects may be damaged. Ceiling and walls must be stable.
- ▶ To prevent damage to the gate or operator, use only approved mounting materials such as wall plugs or screws. The mounting material must be suitable for the material of the ceiling and walls. This applies particularly for prefabricated garages.



### **INFORMATION**

Ask your specialist dealer if you require additional installation accessories for different installation or attachment situations.

# 6. Installation

## 6.2 Preparation for installation

Before installation, you must check whether the operator is suitable for the door, see also Chapter "3.6 Technical data".

### Removal of actuation parts



#### **WARNING**

##### **Danger of entrapment!**

Persons or animals may be trapped by straps or cords and pulled into the movement zone of the gate. Severe injuries or death may result.

- ▶ Remove straps and cords used for mechanical actuation of the door.

Before installation remove:

- manual locking on door
- all cords or straps necessary to operate the door by hand.

### Disabling mechanical locks



#### **NOTE**

If locks or other locking systems are installed on a mechanical door, they may block the operator. This may cause faults or damage to the operator. Before the installation of the operator, all mechanical locking systems must be disabled.

The mechanical lock on a door with an operator must be removed or disabled if it is not compatible with the operator.

### Checking the mechanism and weight balance



#### **WARNING**

**Danger due to falling parts of doors or complete door panels!** Wires, spring sets and other fittings can be damaged and break. The complete door panel can fall. Persons or animals may be struck by falling parts of the gate or the complete gate panel. Severe injuries or death may result.

Before installation, qualified personnel must check the following and adapt if necessary:

- ▶ wires, spring sets and other fittings of the door.
- ▶ the weight balance of the door.

##### **Danger of entrapment!**

If the force setting is too high, persons or animals in the movement area of the gate may be trapped and pulled along with the gate. Severe injuries or death may result.

- ▶ The force setting is relevant to safety and must be carried out by a trained specialist.
- ▶ You must proceed with extreme caution if you check and if necessary adjust the force setting.



#### **NOTE**

If the weight compensation of the door is incorrectly adjusted, the operator may be damaged.

- The door must be stable.
- It must not bend, rotate or twist when opening and closing.
- The door must move easily in the rails.

## 7. Electrical installation

---

### 7.1 Warning and safety information on electrical installation



#### **DANGER**

**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 **trained electricians**.
- ▶ The mains plug must be disconnected before working on the control unit.
- ▶ Check that the system is disconnected from the voltage supply.
- ▶ Secure it against being switched back on.
- ▶ Observe the requirements of the local power supplier.
- ▶ The mains cable may only be replaced by the manufacturer, customer service or other qualified electrician!

## 7.2 Overview of GIGAcontrol T



# 7. Electrical installation

## 7.3 Connection options

1)	terminal block X9 (5-pin)
<b>Motor connection</b>	
3)	fuses F2, F3
<b>Mains connection fuses</b>	
2 x 3.15 A T	
4)	terminal block X10 (3-pin)
<b>Mains connection</b>	
3 ~ 400 V/Y	
5)	terminal block X3 (2-pin)
<b>Earth</b>	
7)	terminal block X5 (6-pin)
<b>External command device (3-function pad)</b>	
8)	terminal block X5 (6-pin)
<b>Slack wire switch and wicket door contact</b>	
9)	X6 slot
<b>Absolute value encoder</b>	
10)	X11 slot
<b>Safety circuit</b>	
11)	X1 slot
<b>Message LED</b>	
12)	fuse F4
<b>Transformer fuse</b>	
1 x 400 mA T	

13)	Relay slot
<b>multi functional relay</b>	
<b>Pre-set function:</b> status display gate CLOSE end position	
<b>Allowable contact load:</b> max. 1 A, 60 V DC	
14)	terminal block X12 (3-pin)
<b>End position relay</b>	
<b>Pre-set function:</b> status display gate OPEN end position	
<b>Allowable contact load:</b> max. 1 A, 60 V DC	
15)	DIP switch S1
<b>Selection switches for operating modes / special functions</b>	
16)	LED 3
<b>Control unit ready for operation</b>	

A connection diagram can be found here: "Page 36"

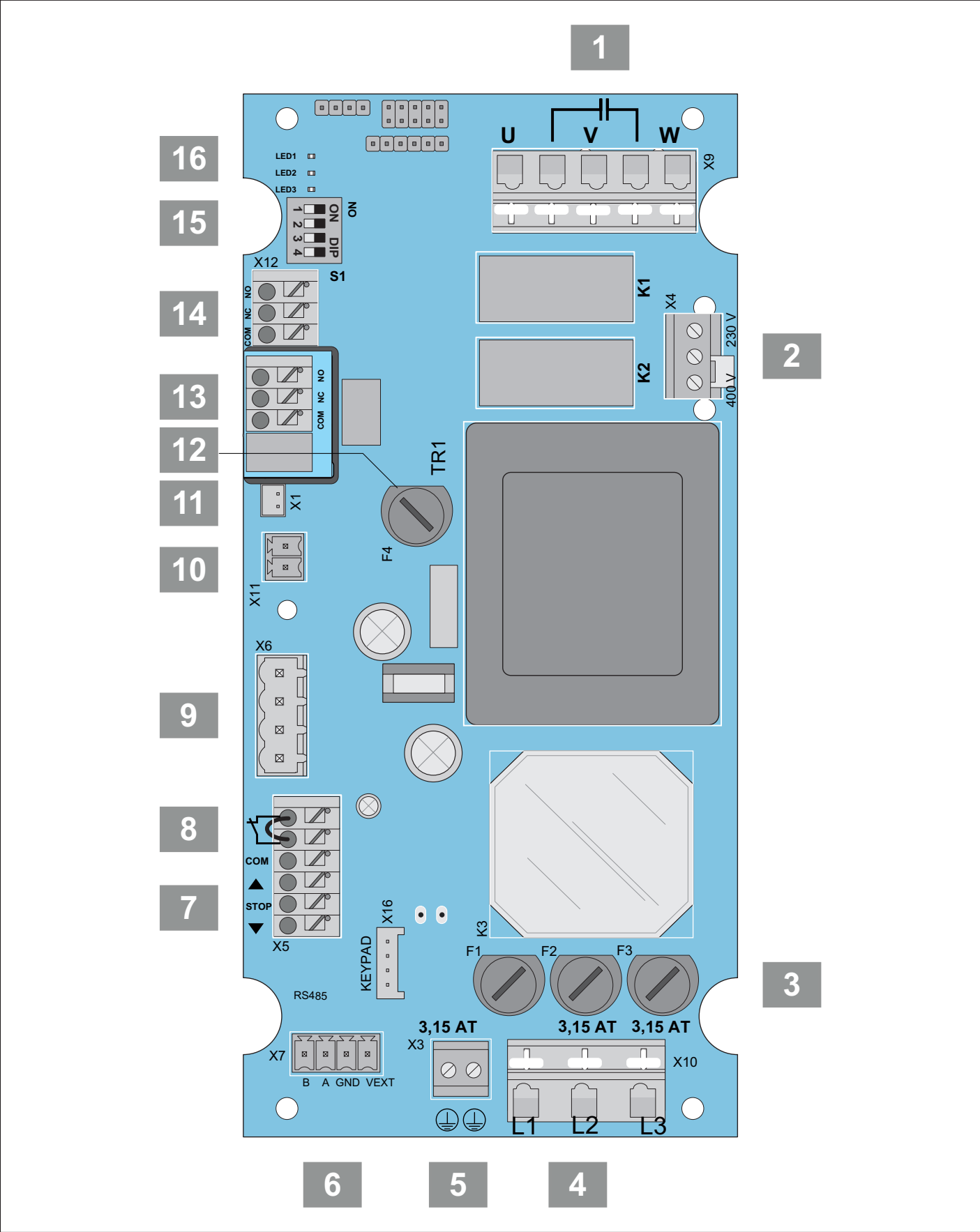


### NOTE

**The GIGAcontrol T can only be operated with a mains voltage of 3~400 V!**

# 7. Electrical installation

## 7.4 Overview of GIGAcontrol T+





## 7. Electrical installation

1)	terminal block X9 (5-pin)	<b>Motor connection</b>	13)	Relay slot	<b>multi functional relay</b>  <b>Pre-set function:</b> status display gate CLOSE end position  <b>Allowable contact load:</b> max. 1 A, 60 V DC
2)	terminal X4 (3-pin)	<b>Selecting and switching mains voltage</b>	14)	terminal block X12 (3-pin)	<b>End position relay</b>  <b>Pre-set function:</b> status display gate OPEN end position  <b>Allowable contact load:</b> max. 1 A, 60 V DC
3)	fuses F1, F2, F3	<b>Mains connection fuses</b>  3 x 3.15 A T	15)	DIP switch S1	<b>Selection switches for operating modes / special functions</b>
4)	terminal block X10 (3-pin)	<b>Mains connection</b>  3 ~ 230/400 V/Y 1 ~ 230 V/Δ	16)	LED 1, 2, 3	<b>LED1: Direction of motion gate CLOSE</b> <b>LED2: Direction of motion gate OPEN</b> <b>LED3: Control unit ready for operation</b>
5)	terminal block X3 (2-pin)	<b>Earth</b>	A connection diagram can be found here: " <b>Page 36</b> "		
6)	terminal block X7 (4-pin)	<b>Cable connection to GIGAcontrol TA</b>			
7)	terminal block X5 (6-pin)	<b>External command device (3-function pad)</b>			
8)	terminal block X5 (6-pin)	<b>Slack wire switch and wicket door contact</b>			
9)	X6 slot	<b>Absolute value encoder</b>			
10)	X11 slot	<b>Safety circuit</b>			
11)	X1 slot	<b>Message LED</b>			
12)	fuse F4	<b>Transformer fuse</b>  1 x 1 A T			

## 7. Electrical installation

### 7.5 Selecting and switching mains voltage



#### IMPORTANT

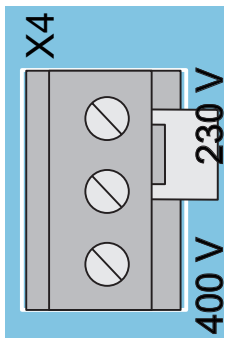
It is essential to ensure that the jumper on the board conforms to the actual voltage used. Otherwise the board may be destroyed!



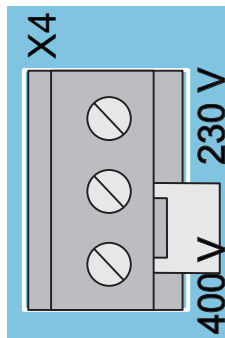
#### NOTE

- ▶ Only for GIGAcontrol T+
- ▶ The GIGAcontrol T+ can only be operated with a mains voltage of 3~400 V!

1~230 V /  
3~230 V



3 ~ 400V

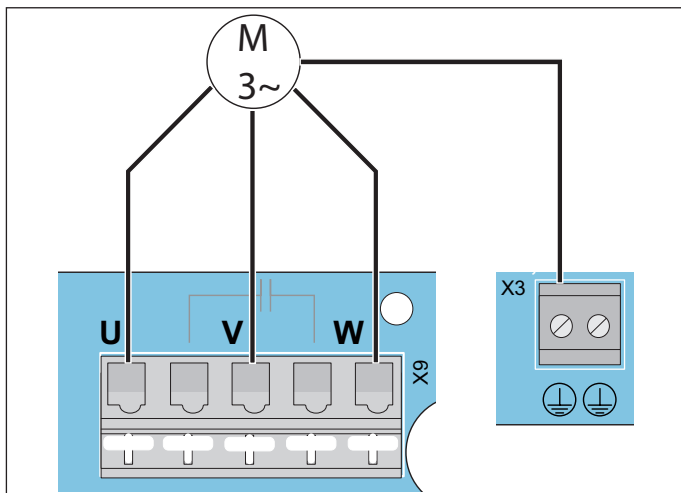


# 7. Electrical installation

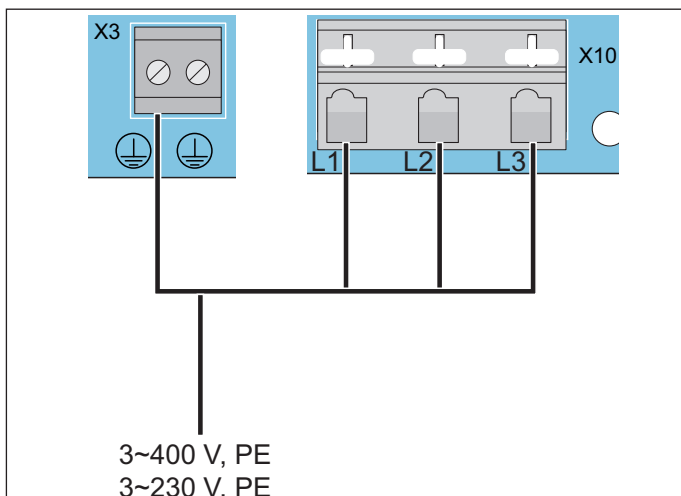
## 7.6 Connection variants

### 3-phase operation

Motor connection 3~230/400 V/Y

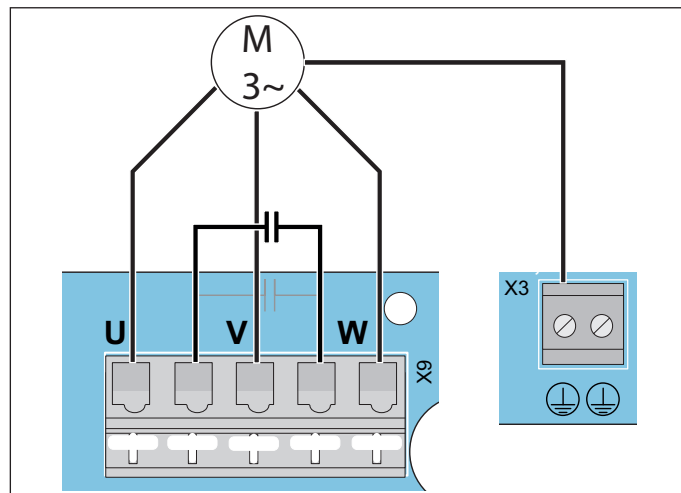


### Mains connection

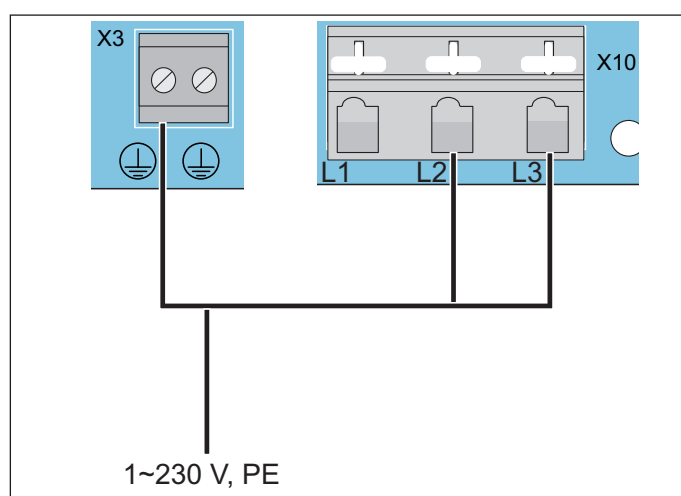


### Operation with Steinmetz circuit (capacitor)

Motor connection 1~230 V/Δ

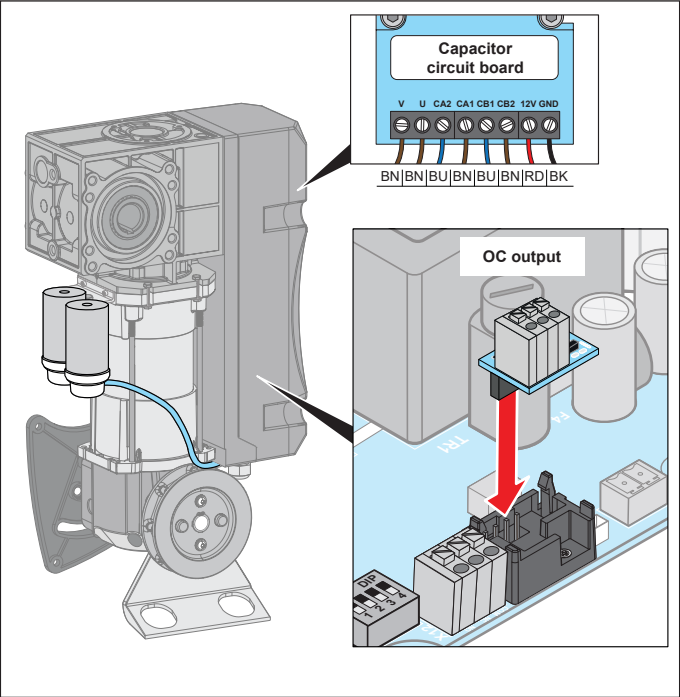


### Mains connection




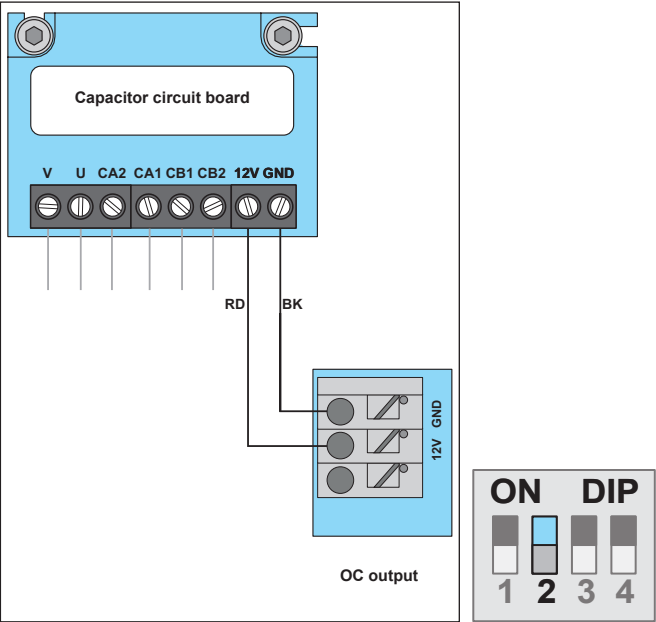
# 7. Electrical installation

## 7.7 Start and operating capacitor



Connection table

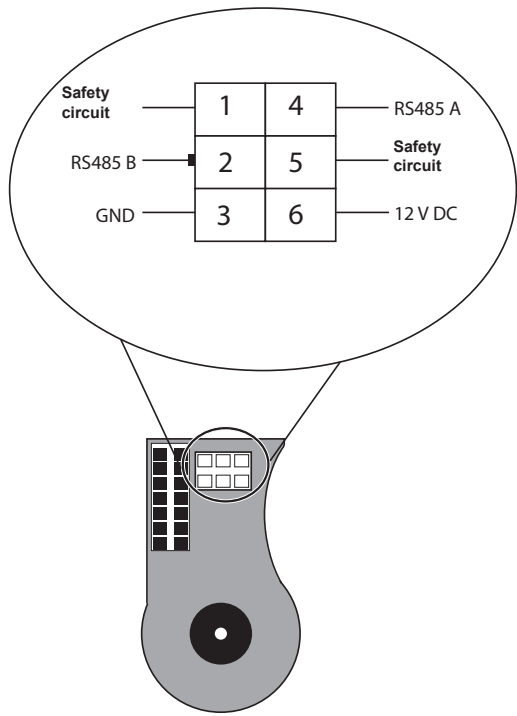
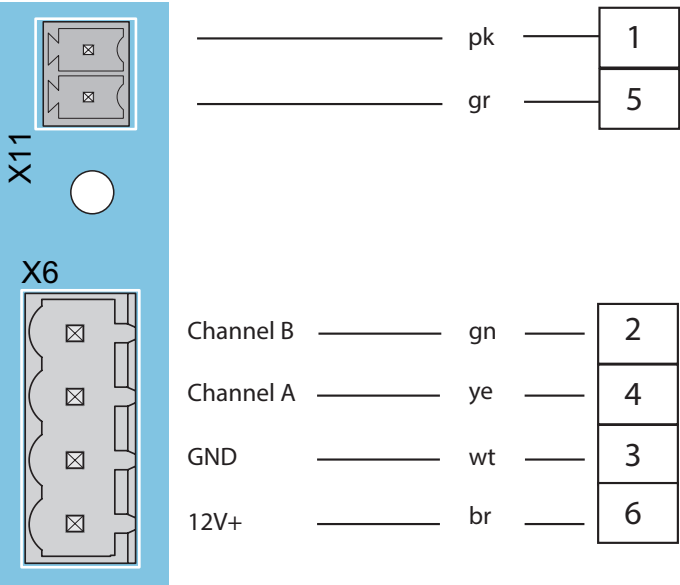
Capacitor circuit board	Connections
V / U	GIGAcontrol T+ 
CA1 / CA2	Start capacitor
CB1 / CB2	Operating capacitor
+12 V	12 V OC output
GND	GND OC output



1. Wire capacitor circuit board and OC output.
2. Set DIP switch 2 to "ON".

# 7. Electrical installation

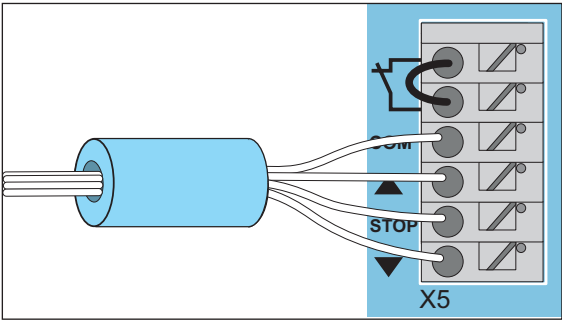
## 7.8 Absolute value encoder (encoder)



## 7.9 External command devices

### Ferrite core

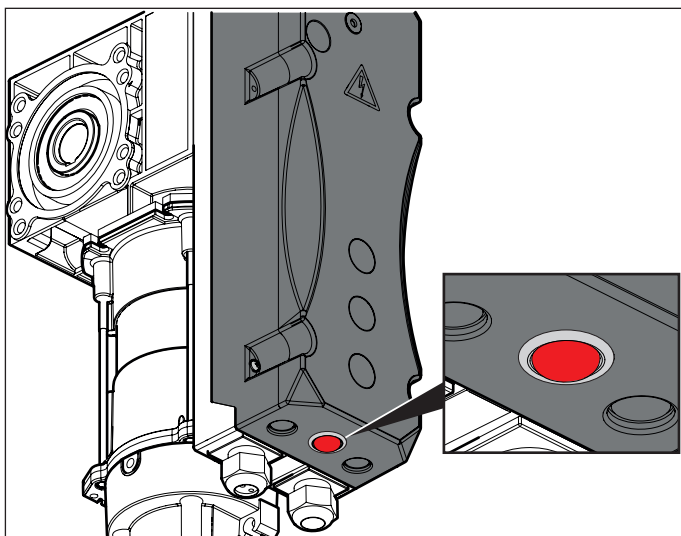
**IMPORTANT**  
To prevent electromagnetic errors, the individual strands of the external command initiators must be led through the supplied ferrite core on the control unit side.



1. Bundle cables and insert in ferrite core.
2. Close ferrite core.

## 8. Initial operation

### 8.1 Message LED








On the underside of the control unit, there is a message LED which displays information on various control unit states via different blinking and illumination sequences. The respective behaviour of the message LED is described at the corresponding points in the description of initial operation.



#### **IMPORTANT**

The control unit cannot be put into operation until an external 3-function pad has been connected, see “10. Connection diagram GIGAcontrol T / GIGAcontrol T+” on page 36

## 8. Initial operation

Mes- sage LED	Status	Cause
	 ON	<ul style="list-style-type: none"> <li>• 3-function pad pressed longer than 1 sec. for deletion, LED on. The LED goes out following successful reset (30 seconds)</li> </ul>
		<ul style="list-style-type: none"> <li>• End positions not set</li> <li>• The LED also blinks in this pattern during movement to motor direction and end position settings</li> </ul>
		<ul style="list-style-type: none"> <li>• Programming run interrupted before confirmation of the motor direction end positions</li> <li>• Control unit is waiting for confirmation</li> </ul>
		<ul style="list-style-type: none"> <li>• Fault               <ul style="list-style-type: none"> <li>— Safety circuit active (slack wire switch, thermal switch)</li> </ul> </li> </ul>
		<ul style="list-style-type: none"> <li>• No signal from absolute encoder               <ul style="list-style-type: none"> <li>— Error</li> <li>— Cable not inserted</li> </ul> </li> </ul>

## 8. Initial operation

### Initial operation



#### **DANGER**

**Danger due to electric current!**  
If the technical data on the operator and control unit do not match

- ▶ Before commissioning, it is essential to ensure that the specifications on the type plates of the operator and the control unit match.

### 8.2 Detecting the motor direction and setting the end positions



#### **INFORMATION**

Before initial operation can be started, the door must be moved to the centre position. To move the door to the centre position, it can be moved to the required position with the emergency manual actuation or moved to the required position in emergency jog mode.



#### **INFORMATION**

It is important to read the complete description of initial commissioning carefully and in full and only then start commissioning to be able to complete the various commissioning steps correctly.

#### 1. Detecting motor direction



- Press and hold the "STOP button" and the "UP button" simultaneously.
    - ⇒ After three seconds, the motor automatically starts briefly, showing the motor direction
    - ⇒ The message LED on the operator blinks slowly
1. A) If the motor direction is correct, i.e. in OPEN direction:
    - Continue pressing the "OPEN button" and the "STOP button."

- ⇒ The message LED on the operator blinks slowly
- ⇒ The operator starts after a further 7 seconds
- ⇒ The motor direction was confirmed
- ⇒ The top end position can be defined

1. B) If the motor direction is not correct, i.e. in CLOSE direction:

- Release both buttons and wait for 3 seconds.
- Repeat step 1



#### **INFORMATION**

10 seconds after successful completion of detection of the motor direction (and continuously pressed "OPEN" and "STOP" buttons), the operator runs in the "OPEN direction."

If a button is released during the process, the operator stops.

- The process can continued within 60 seconds by pressing and holding the "OPEN button" and the "STOP button" again.

- If the process is not continued within this period, the control unit automatically resets itself. After this, only jog mode is available



#### **INFORMATION**

To ensure that any possible backlash in the gearing does not displace the end positions, the top end position should be approached from the "OPEN direction" and the bottom end position from the "CLOSE direction."

#### 2. Defining the top end position



- Approach the desired position by pressing the "STOP button" and the "OPEN button" simultaneously.
- Release both buttons when the desired position has been reached.
  - ⇒ The message LED on the operator now always blinks twice



## 8. Initial operation



### INFORMATION

If you overshoot the top end position, this can be corrected by pressing the **STOP** button and the **CLOSE** button simultaneously until the desired end position is reached.

- Press and hold the "STOP button" for 10 seconds to confirm the end position.
  - ⇒ The message LED on the operator blinks slowly
  - ⇒ The operator moves a short distance in "CLOSE direction"
  - ⇒ The top end position has been successfully defined

### 3. Defining the bottom end position



- Approach the desired position by pressing the "STOP button" and the "CLOSE button" simultaneously.
- Release both buttons when the desired position has been reached.
  - ⇒ The message LED on the operator now always blinks twice



### INFORMATION

If you overshoot the bottom end position, this can be corrected by pressing the **STOP** button and the **OPEN** button simultaneously until the desired end position is reached.

- Press and hold the "STOP button" for 10 seconds to confirm the end position.
  - ⇒ The message LED on the operator blinks slowly
  - ⇒ The operator moves a short distance in "OPEN direction"
  - ⇒ The bottom end position has been successfully defined
  - ⇒ The control unit automatically switches to normal operation

### 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, binding as a result of mechanical dam-

age, 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.



### NOTE

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

**Initial commissioning has been completed!**

## 8. Initial operation

### 8.3 Subsequent end position correction



#### INFORMATION

To ensure that any possible backlash in the gearing does not displace the end positions, the top end position should be approached from the "OPEN direction" and the bottom end position from the "CLOSE direction."

#### Correcting the top end position

1. Press and hold the "STOP button" and the "UP button" simultaneously.
  - ⇒ The motor starts after 10 seconds.
  - ⇒ The top end position can be redefined
2. Repeat step: "2. **Defining the top end position**" on page 32.

#### Correcting the bottom end position

1. Press and hold the "STOP button" and the "CLOSE button" simultaneously.
  - ⇒ The motor starts after 10 seconds.
  - ⇒ The bottom end position can be redefined
2. Repeat step: "3. **Defining the bottom end position**" on page 33.

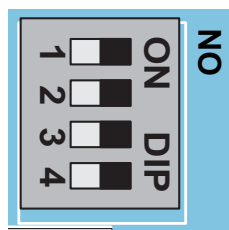
### 8.4 DIP switch


You can select different functions via the DIP switches. The following table summarises the various setting options.



#### INFORMATION

- All DIP switches are set to "OFF" in the factory settings
- To prevent damage to the DIP switches or the circuit board, do not use sharp objects to change the position of the DIP switches.



DIP switch	ON	OFF 
1	Tolerance of the safety limit switch 200 increments	Tolerance of the safety limit switch 100 increments
2	Multi-function relay for activation of start-up capacitor*	Multi-function relay for gate CLOSE status display
3	End position relay Status display gate CLOSE	End position relay Status display gate OPEN
4	Dead man operation in both directions	Automatic mode in direction gate OPEN / dead man operation in direction gate CLOSE

\*Only for operators with 2 capacitors:  
1 x start-up + 1 x operation

# 9. Reset and factory settings

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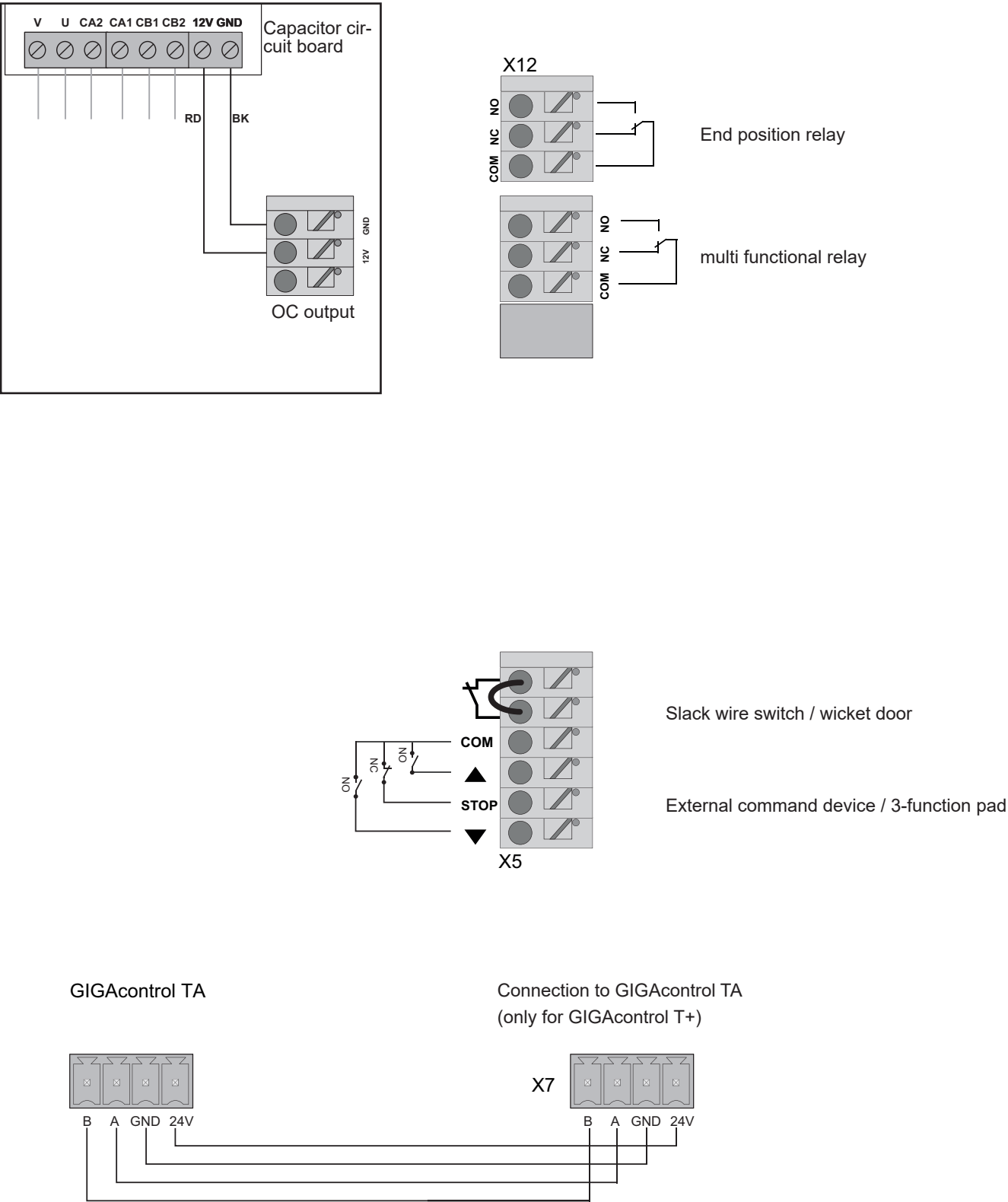
## 9.1 Reset

### Resetting to factory settings



1. Press and hold the OPEN button, STOP button and CLOSE button simultaneously for 30 seconds  
⇒ The message LED lights up continuously and goes out when the 30 seconds have expired.
2. Release buttons  
⇒ All saved information on end positions, motor direction and error messages are deleted

# 10. Connection diagram GIGAcontrol T / GIGAcontrol T+



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