

# AccessOne

Door controllers

## Door controller TSG1/SDC



### Assembly and operating manual

 English

Version VA3

BRO2321

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# 1 About this manual

This manual contains information on the assembly and commissioning of a TSG door controller within the AccessOne access control system.

## Other applicable documents

Setup	BRO2316_EN_Manual_Set-Up-AccessOne
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This manual should be treated as a part of the product and must be kept for the entire service life of the product. The manual should be passed on to any subsequent user or owner of the product.

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BRO2321 -2      Version: VA3



Always use the most up-to-date version of this manual. You can obtain updated versions free of charge from [www.ces.eu](http://www.ces.eu).

## Notes on trademark protection

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## 1.1 Manufacturer and service

The manufacturer of the door control is ACcesstronic GmbH. Service and support are provided by C.Ed. Schulte GmbH, Velbert. For service assistance, please contact CES Service. CES Service can be contacted at +49(0)2051 204 222 or by e-mail: [hotline@ces.eu](mailto:hotline@ces.eu)

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## 1.2 Target groups of this manual

If a section of this manual is intended for a particular target group, this is stated at the start of the section. Sections that do not specify a particular group are relevant for all target groups.

Target group	Skills
<b>CEStronics partners</b>	<p>are trained experts in locking and security technology that have also worked with CES for many years and have a special level of product knowledge.</p> <p>Particular characteristics of the target group:</p> <ul style="list-style-type: none"> <li>• Detailed knowledge of CES products</li> <li>• Attend product training on a regular basis</li> </ul>
<b>Locking and security technology specialists</b>	<p>have many years of professional experience and/or relevant training in locking and security technology. For some tasks it may be necessary for specialists to have received training on the product beforehand.</p> <p>Particular characteristics of the target group:</p> <ul style="list-style-type: none"> <li>• Knowledge of specialist terminology from the field of locks and handles</li> <li>• Knowledge of specific risks when mounting electronic cylinders and handle sets, for example</li> <li>• Experience of working with tools (relevant to lock systems)</li> <li>• Knowledge of relevant standards and regulations, e.g. for fire safety or emergency and escape routes</li> <li>• Basic understanding of electronic locking systems</li> </ul>
<b>Electricians</b>	<p>have many years of professional experience and/or relevant training in electronics. For some tasks it may be necessary for specialists to have received training on the product beforehand.</p> <p>Particular characteristics of the target group:</p> <ul style="list-style-type: none"> <li>• Knowledge of specialist electrical terminology and its symbols</li> <li>• Knowledge of the risks associated with handling sensitive electronic components</li> </ul>
<b>Personnel with product training</b>	<p>have received training on the product by CES or a CESTronics partner. Here the personnel are given detailed and specific information to prepare them for the required task.</p> <p>Particular characteristics of the target group:</p> <ul style="list-style-type: none"> <li>• Knowledge of CESTronics products and experience in handling them (assembly, operation, etc.)</li> </ul>
<b>IT/administration specialists</b>	<p>have many years of professional experience in the fields of IT structures, administration and networks.</p> <p>Particular characteristics of the target group:</p> <ul style="list-style-type: none"> <li>• Knowledge of specialist IT terminology</li> <li>• Knowledge of the structure and maintenance of networks, particularly knowledge of the network that they maintain</li> </ul>
<b>System operators</b>	<p>have experience in the management of master key systems. This can be either a number of systems or a detailed knowledge of a single master key system.</p> <p>Particular characteristics of the target group:</p> <ul style="list-style-type: none"> <li>• Knowledge of the specialist terminology related to master key systems</li> <li>• Skilled in the use of PCs and software</li> </ul>
<b>End users</b>	<p>do not require specific skills.</p>

## 2 For your safety

### 2.1 EU Declaration of Conformity

The EU declaration of conformity can be obtained from the manufacturer.

### 2.2 Intended use

The TSG door controller is used for monitoring and controlling doors in an AccessOne access control system.

The product is intended solely for and may only be used for this purpose. Any other use is deemed to be improper use and could result in property damage or even personal injury.

The product may not be modified in any way without the written consent of C.Ed. Schulte GmbH Zylinderschlossfabrik.

## 2.3 Basic safety instructions

This device has been built using state-of-the-art technology and recognised safety rules. Nevertheless, its use may result in hazards for the user or third parties, or also have negative impacts on the device and other material assets.

Use the product only while it is in proper working order and only for its intended purpose, taking due account of safety and potential hazards, and in accordance with the operating manual. In particular, faults that affect the safety must be remedied immediately.

### 2.3.1 Danger to life

#### Particular dangers for children

Children playing with packaging films or plastic bags are at risk of suffocation. If children swallow small parts such as screws, they are at risk of suffocation or poisoning.

- ✓ Do not allow children to play with the device or its packaging.
- ✓ Keep the device and its packaging out of reach of children.

### 2.3.2 Risk of injury

#### Explosion hazard

Parts of the device that carry electric currents can produce electrical sparks even at low voltages (e.g. when electric circuits are switched on or off) and can thus act as sources of ignition. In areas with a risk of explosions, this can cause an explosion and cause injury to persons.

- ✓ Do not use the device in potentially explosive areas.

### 2.3.3 Danger of material damage

#### Hard shocks

Hard shocks can damage mechanical and electronic components of the device. Under some circumstances, damaged devices do not function correctly or do not function at all.

- ✓ Do not allow the device to fall onto the ground, onto hard surfaces or hard objects.

#### Electrostatic discharges

The electronic components are highly sensitive and can be damaged by electrostatic discharges or excessive voltage. In some circumstances, damaged devices do not function correctly or do not function at all.

- ✓ Do not assemble the device in areas affected by electrostatic charges.
- ✓ Do not touch any electronic components.

#### Liquids

Water and other liquids can damage the electronic components of the device. Under some circumstances, damaged devices do not function correctly or do not function at all.

- ✓ Protect the electronic components from water and other liquids.

#### Climatic influences

Climatic influences such as heat, cold and moisture can damage the device. Under some circumstances, damaged devices do not function correctly or do not function at all.

- ✓ Do not use the device in a corrosive atmosphere (chlorine, ammonia or lime water).
- ✓ Do not use the device in areas with high levels of dust.

- ✓ Do not use the device in the vicinity of heat sources.

### **Incorrect maintenance or repair**

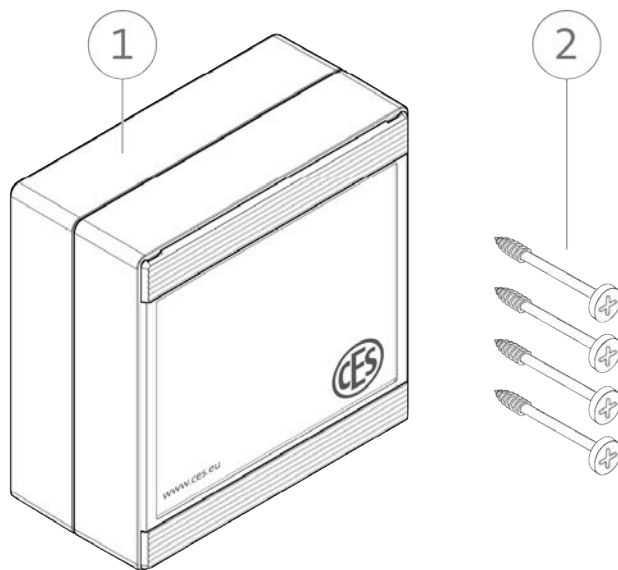
Incorrect or neglected maintenance and repair can result in the device not functioning correctly or not functioning at all.

- ✓ Have the device maintained and checked for proper functioning every six months by CES or a CESTronics partner.
- ✓ Always have repairs performed by qualified personnel.
- ✓ Use only accessories and spare parts recommended by CES.
- ✓ Before working on or in the device, ensure that it is isolated from the power supply.  
(fehlender oder ungültiger Codeausschnitt)

### 3 About door controller TSG

The door controller TSG1/SDC monitors and controls the entrance and exit readers of a door. Each TSG1 can be connected to a total of four readers or wall terminals. If only one output is required per door in order to open it, two doors can be controlled in the same direction, with one reader each.

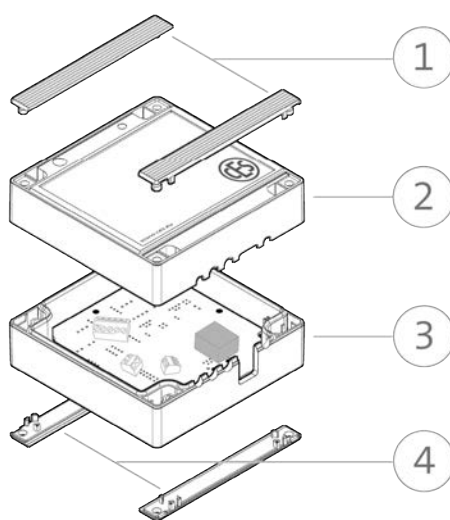
#### 3.1 Scope of delivery



1	Door controller housing
2	Fixing screws upper part of housing

#### 3.2 Parts designations

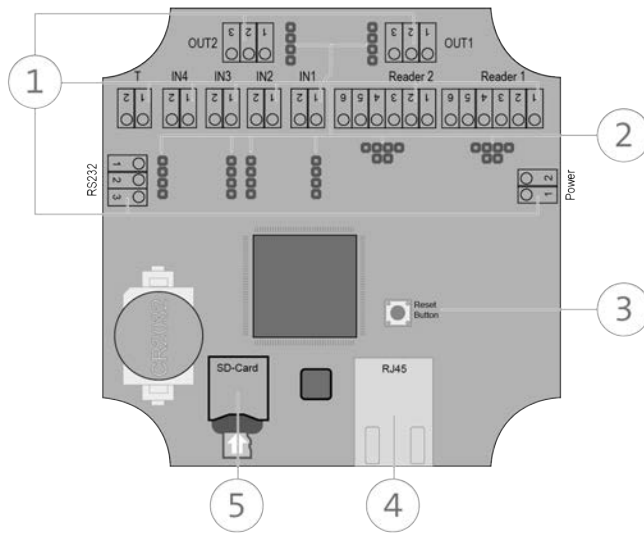
##### 3.2.1 Housing



1	Cover strip front
2	Upper part of housing
3	Lower part of housing
4	Cover strip back



### 3.2.2 Circuit board






1	Connection terminals
2	Jumpers
3	Reset button
4	RJ45 connector
5	SD card slot

## 4 Assembly

### Target group of this section::

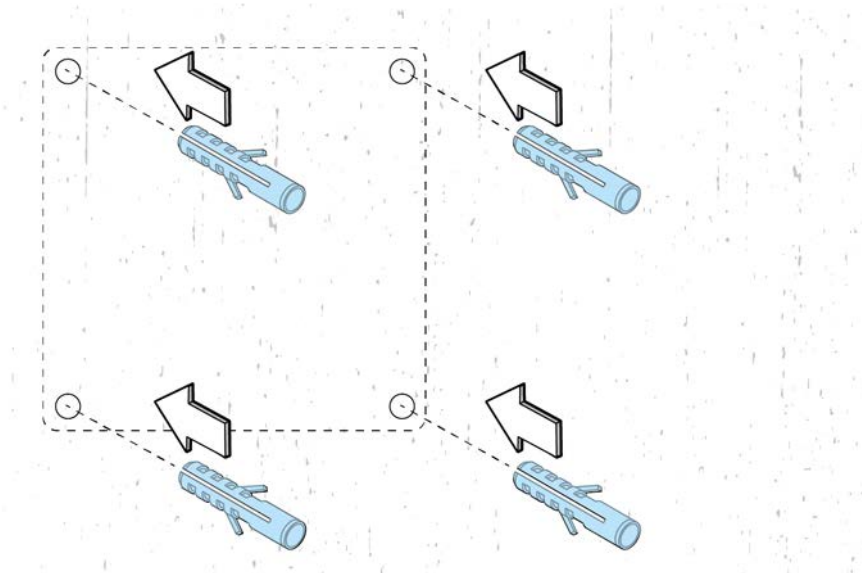
- CESTronics partners
- Electricians
- Electricians with product training
- IT/administration specialists

### Tools required:

Tool		Required for
	6 mm drill bit	Drill holes for fixing screws
	PZ2 Cross-head screwdriver	Fixing screws
	Slotted screwdriver	Cover strip removal

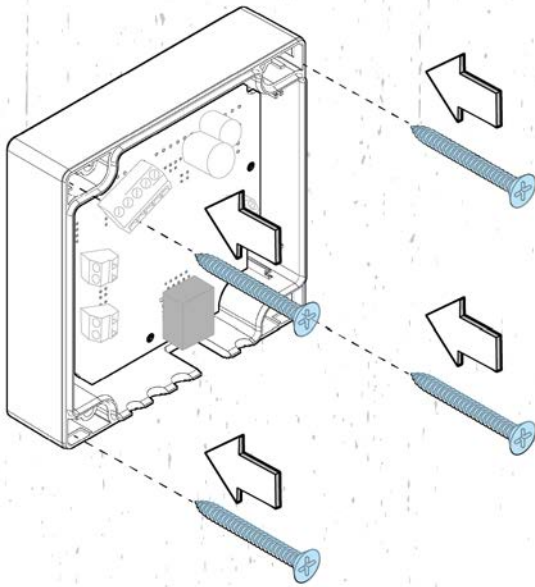
 Use appropriate fixing material. You can obtain WALL PLUGS and FIXING SCREWS from your partner for fixing technology.

### 4.1 Mounting preparation

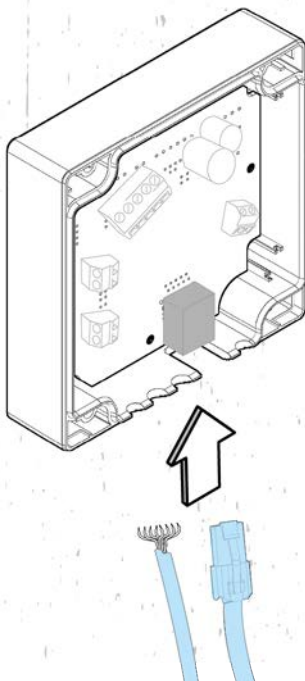


1. Drill the holes for the fixing screws.
2. Mount wall plugs matched to the substrate (not included in the scope of delivery).


## 4.2 Assembly



1. Secure the housing with screws (not included in included in the scope of delivery).

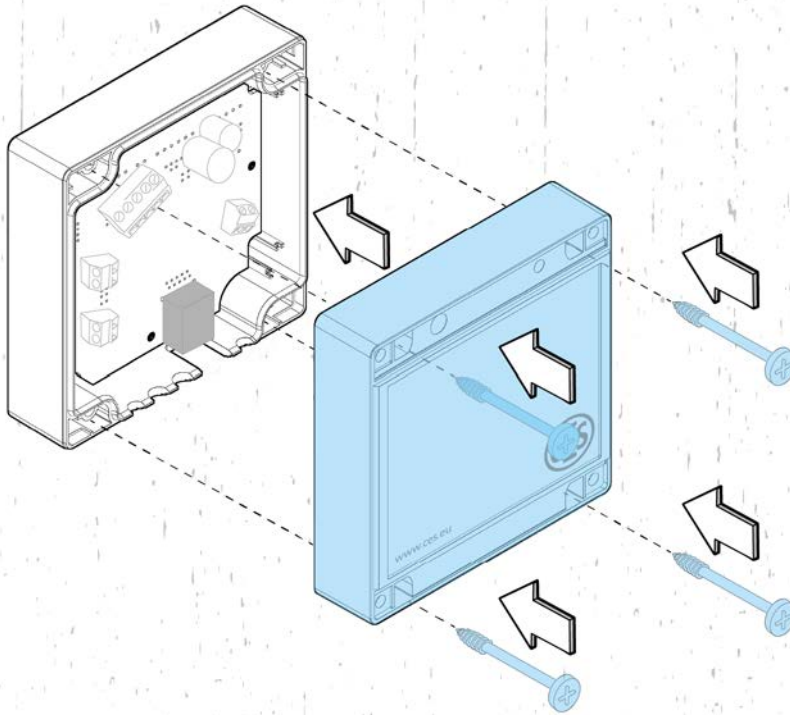


2. Feed the wiring from below.

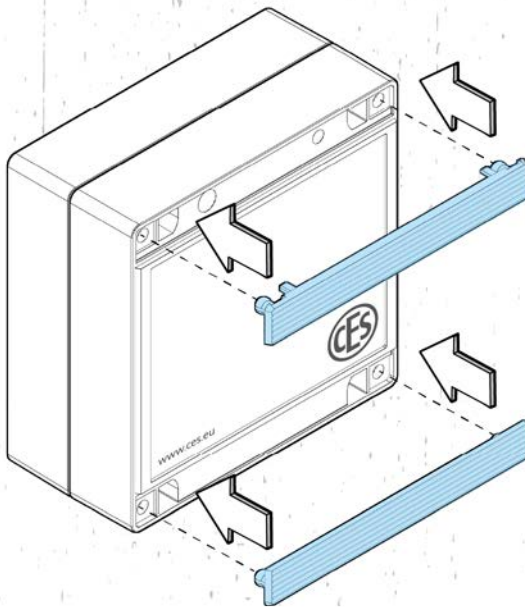
 Ensure that there is sufficient strain relief (e.g. with a cable tie).

3. Wire the connections according to the respective terminal assignment (see installation instructions of the connected units).

4. Fasten the upper part of the housing with screws (included in the scope of delivery).

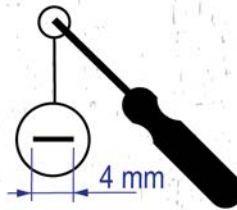
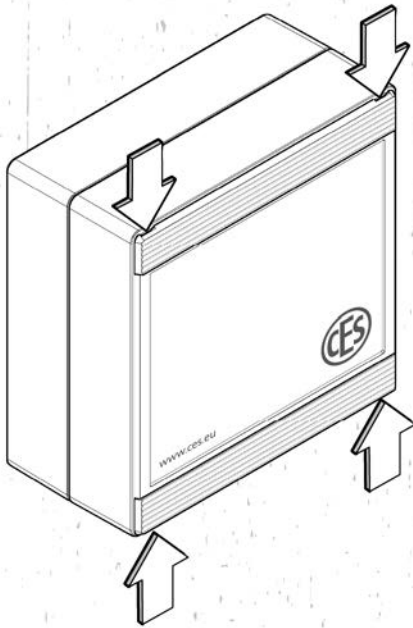


5. Secure the front cover strips.

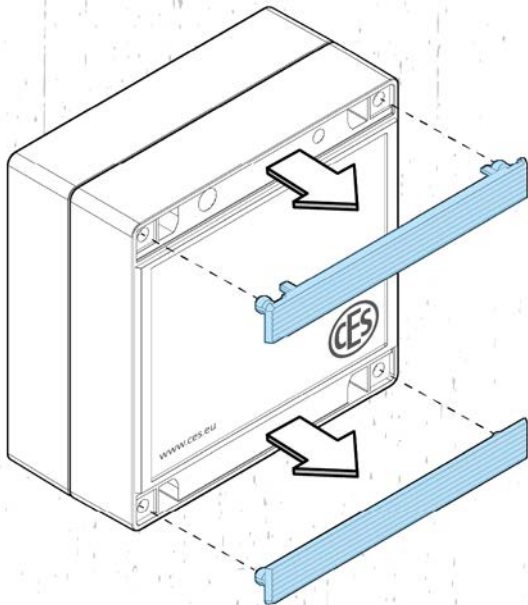


*The door control is mounted.*

### 4.3 Disassembly

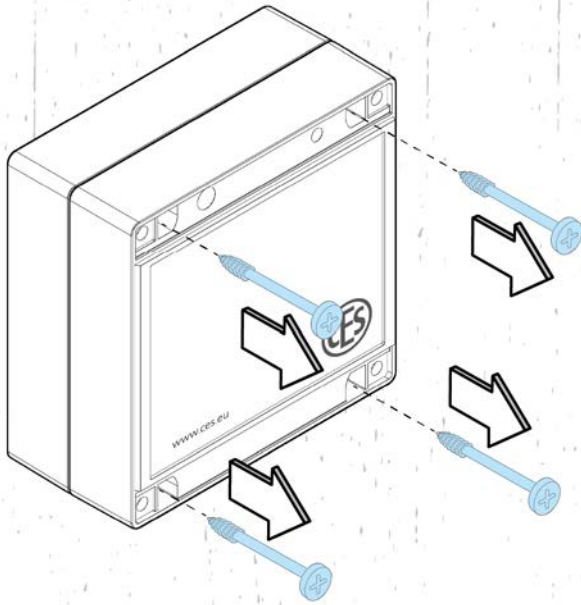


1. Carefully lever out the front cover strips with a suitable tool.

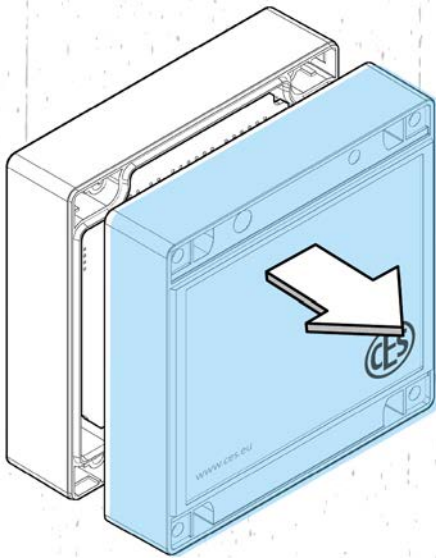


2. Remove the front cover strips.

3. Remove the fastening screws of the upper part of the housing.



4. Remove the upper part of the housing.



*The housing is open.*

## 5 Connections and wiring

### Target group of this section::

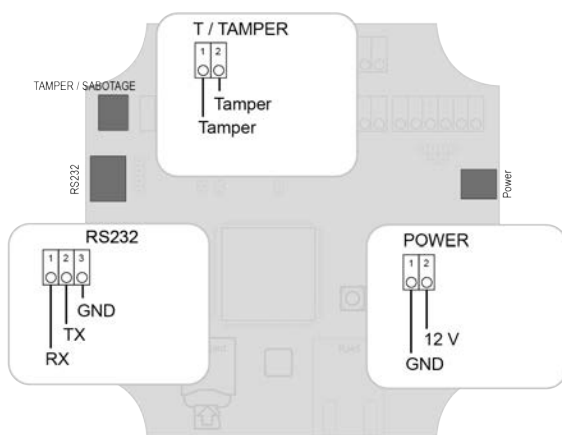
- CESTronics partners
- Electricians
- Electricians with product training
- IT/administration specialists



**Risk of damage.** Only complete work on and in the device when it is fully deenergised.

### 5.1 Tamper – RS232 – power

For connecting additional contacts, e.g. tamper, and connecting the power supply.



#### 5.1.1 Tamper

No.	Connection
1	Tamper
2	Tamper

#### 5.1.2 RS232

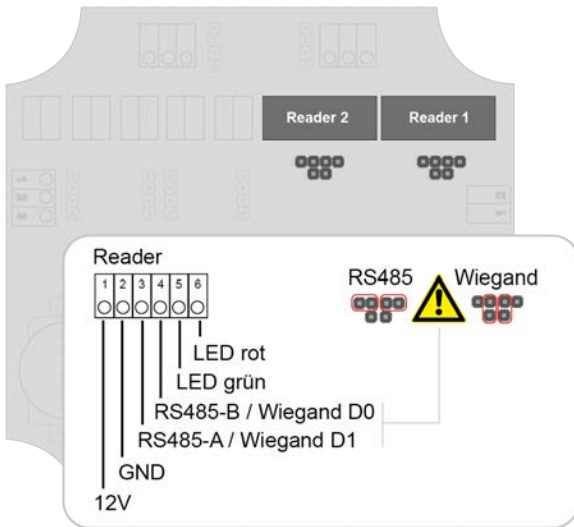
No.	Connection	Function
1	RX	Receive Data: cable for outgoing data (negative logic)
2	TX	Transmit Data: cable for outgoing data (negative logic)
3	GND	Ground. Signal voltages are measured against this cable.

#### 5.1.3 Power

No.	Connection	Function
1	GND	Ground. Signal voltages are measured against this cable.
2	+12 V DC	Power supply

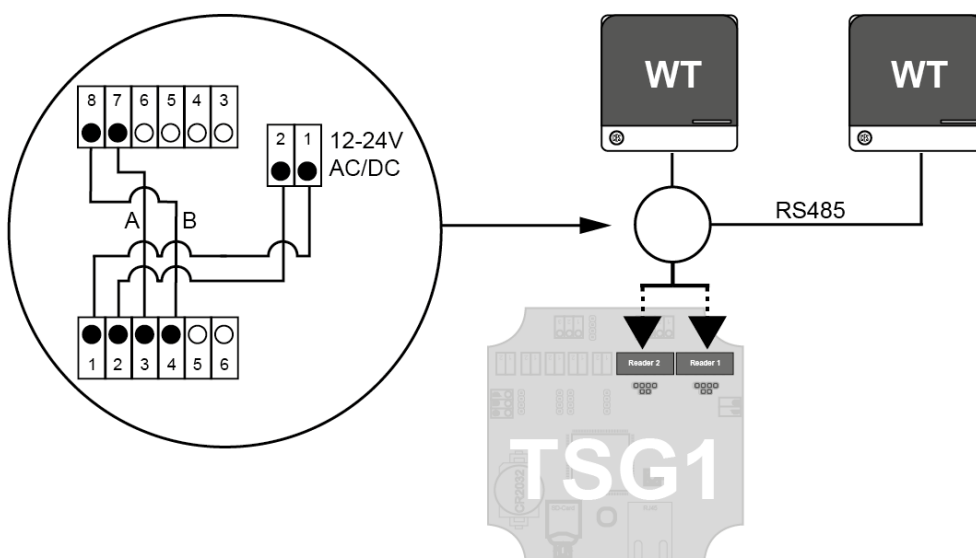
### 5.1.4 Reader 1–2

For connecting readers and wall terminals.



No.	Connection	Function
1	12 V	Power supply
2	GND	Ground. Signal voltages are measured against this cable.
3	RS485-A / Wiegand D1	
4	RS485-B / Wiegand D0	
5	LED green	Ground. Signal voltages are measured against this cable.
6	LED red	Ground. Signal voltages are measured against this cable.


Connection of the door controller to the wall terminal:

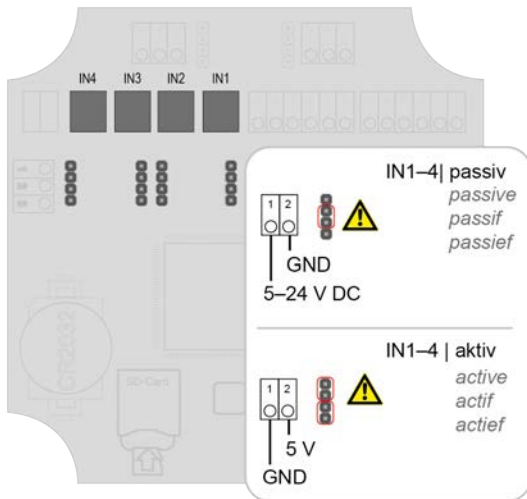




### 5.1.5 IN1–4

For connecting the door contact, release buttons, ground wiring, burglar alarm ready to arm, burglar alarm armed, motion detector triggered, etc.

 Set the jumper settings to suit the interface configuration (active/passive).



#### Passive

No.	Connection	Function
1	5–24 V DC	Power supply
2	GND	Ground. Signal voltages are measured against this cable.

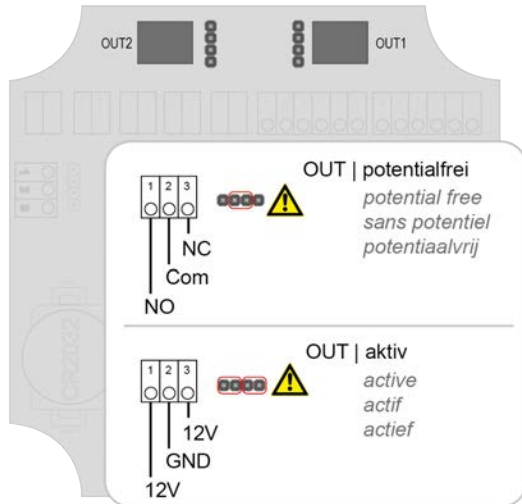
#### Active

No.	Connection	Function
1	GND	Ground. Signal voltages are measured against this cable.
2	5 V	Power supply

### 5.1.6 OUT1–2

For connecting actuators (door openers\*, motorised lock, etc.), burglar alarm arming, door alarm, silent alarm, start video recording, etc.

\*For door openers, preferably that can be supplied constantly by free-wheeling diode



#### OUT potential-free

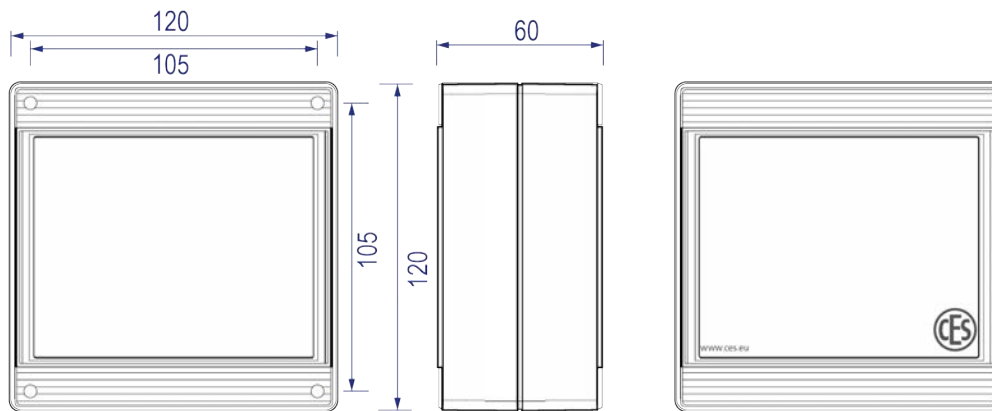
No.	Connection
1	Normally open contact (NO)
2	Changeover/Com
3	Normally closed contact (NC)

#### OUT active

No.	Connection	Function
1	12 V	Power supply
2	GND	Ground. Signal voltages are measured against this cable.
3	12 V	Power supply

## 6 Technical data

### 6.1 Dimensions



All dimensions in mm

### 6.2 Equipment features

<b>Item designation</b>	Door controller TSG1 (Art.-Nr. 348008V)
<b>Interfaces</b>	2x RS485, 2x Wiegand
<b>Input / Output</b>	4 x IN / 2 x OUT
<b>Max. current consumption at 12V</b>	80 mA
<b>Operating output, outputs 1–2 at 12V</b>	$\Sigma$ 2.0 A $\pm$ 20% (active)
<b>Operating output, readers 1 and 2 at 12 V</b>	$\Sigma$ 2.0 A $\pm$ 20%
<b>Communication</b>	UDP port 10001
<b>Prohibited atmospheres</b>	Not suitable for use in corrosive atmospheres (chlorine, ammonia, lime water)
<b>Protection class</b>	IP30
<b>Operating voltage</b>	+12 V DC / PoE (IEEE 802.3af-2003– Power at terminal (PD) max. 12.95 W)

<b>Relay outputs capacity, potential-free</b>	
<b>Max. switching power</b>	60 W
<b>Max. switching voltage</b>	30 V DC
<b>Max. switching current</b>	2 A

## 7 Maintenance

### Target group of this section::

- CESTronics partners
- Electricians
- Electricians with product training
- IT/administration specialists

### 7.1 Routine maintenance work

#### Device

Have the device maintained and checked for proper functioning every six months by CES or a CESTronics partner.

### 7.2 Care for your devices

You can clean the external, accessible parts of your devices (housing, labelling, etc.) with a soft, slightly damp cloth.



Do not use oils or lubricants to maintain the locking devices.



Solvent-based cleaning agents may damage the surfaces, you should therefore avoid the use of such solvent-based agents.

### 7.3 Service

For service assistance, please contact your CESTronics partner.

## 8 Disposal

### 8.1 Notes on disposal

#### Device

In accordance with the Waste Electrical and Electronic Equipment (WEEE) Directive, all consumers have a duty to dispose of old electronic appliances separately from household waste. Disposal of electronic devices in household waste is prohibited. Unwanted equipment can be disposed of at local municipal collection points. You can also return the equipment to C.Ed. Schulte GmbH Zylinderschlossfabrik. Please ensure that the correct carriage costs are paid for the return.



The crossed-out bin symbol means: do not dispose of old electronic equipment in household waste.

Electronic equipment contains a wide variety of substances and materials. If waste electrical and electronic equipment (WEEE) is not disposed of correctly, environmental and health risks may arise due to any pollutants still present. Additionally, proper disposal enables recyclable materials to be recovered and recycled, which makes a significant contribution to the conservation of natural resources.

#### Packaging

The packaging of the components is made from environmentally friendly and recyclable materials. Specifically, these are:

- Outer packaging and inlays made of cardboard
- Inlays and protective films made of polyethylene (PE)



Please dispose of the packaging in an environmentally friendly way by separating the waste types.

Teaming up for security  
*since 1840*



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