User manual
SPEEDCORD

automatic door systems - this is record!

record
your global partner for entrance solutions

Translation of the original manual

record.group

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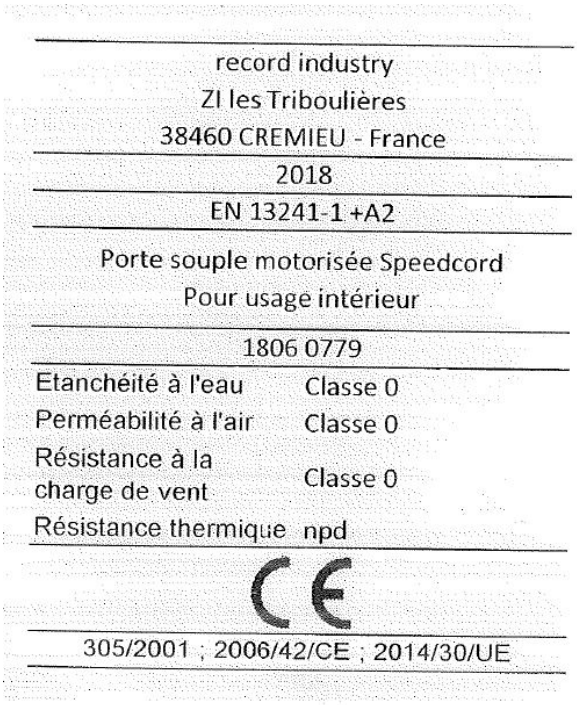
1 General information

1.1 Product identification SPEEDCORD

For an exact identification please read the following data on the type plate, which is located on the rear side of the product:

(example)

Serial number:



1.2 Manufacturer record Industry SA

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1.3 Document identification

Name:	BAL_SPEED_EN_3V0_REC_102-020401093
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1.4 Important Information

1.4.1 Copyright

The copyright of the instructions remains at:
record Industry SA
It is prohibited to reproduce, distribute or use the manuals for purpose of competition without the written authorisation of agtatec ag.
Violation of the here stated copyrights will be prosecuted and fined with compensation of damage.
This product is subject to technical modifications, which could lead to differences between product and instructions.

1.4.2 Target group User

For better readability only the masculine form of pronouns is used in these documents. Nevertheless, these instructions also apply for feminine specialists.
This user manual is intended for following target group:

- Operators of high speed doors SPEEDCORD:
  This means, persons responsible for the technical maintenance of this door system
- Users of high speed doors SPEEDCORD:
  This means, persons who operate the door daily and who must therefore be acquainted with its function

This user's manual describes the handling of the high speed door SPEEDCORD. It serves as a basis for the impeccable function and provides information on the action to be taken in the case of a fault and the correction of any malfunction. Some extracts of this document can also be handed over to persons responsible for operating the door on a daily basis.
Before placing the door in service the user must read this user's manual and comply with the safety instructions!
It is recommended that this manual is kept near to hand in the vicinity of the installation.

1.4.3 Cleaning advice

The whole door system including the sensors and the safety devices can be cleaned with a damp cloth and a standard detergent (do not use abrasive cleaners or solvents). Test your detergent beforehand on a non-visible part. Clean regularly with a cloth the transmitter and the receiver of the light barrier which are located in the lateral slide ways, also the reflector at the left hand end of the fabric.

NOTICE

For carrying out these tasks it is recommended to leave the door in the raised position and activate the emergency stop in order to avoid any injuries due to uncontrolled movements of the door.

1.4.4 Maintenance and regular inspection

Prior to carrying out the first commissioning and if required as well as in accordance with the applicable regulations - however at least **twice a year** – a technical inspection by a skilled service technician or an authorised partner must take place. We recommend performing maintenance at the same time. Any due maintenance is indicated on the display of the BDE-D control unit. The interval for the edition of this message is determined by the number of opening cycles and/or the expiry of a defined operating period.

Regular maintenance and inspection of the automatic door by trained personnel authorised by the manufacturer provides the best guarantee for a long service life and an error-free operation.
We recommend the conclusion of a service contract with the respective service department in your region.

IMPORTANT

A listing of recommended spare parts is supplied in the annex and is also available on request at your service department.

1.5 General terms and definitions

For better readability of this manual, the following terms are used:

Term:	Explanation:
Manufacturer	The manufacturer of the high speed door is record Industry SA in F-38460 Crémieu.
End-user	End-user of the high speed door refers to the owner, regardless whether he operates it himself or supplies it to a third party.
Staff	All the people who carry out any sort of activity on or with a high speed door at any of its life phases, and who qualify for these activities according to the manufacturer's criteria, which implies they are authorised.
Specialist	All the persons who are authorised to carry out some specific activity on a high speed door installation, on the basis of their training. For example, an electrician specialised in connecting the high speed door to the mains is considered as a specialist.
Phases of life	All the condition and use stages of the high speed door, from leaving the factory until disposal.
Authority person	He takes from the manufacturer certain parts of its obligations in compliance with the requirements of the machinery directive. In particular, the authority person can put the installation on the market and/or sign EU declarations of incorporation.
Installation	Independent and stationary or stationary used functional unit, consisting of one or more machines. In this document also used as shorthand for high speed door SPEEDCORD.
EN ISO 12100-1/-2	Safety of machinery – Basic concepts, general principles for design, Part 1: Basic terminology, methodology Part 2: Technical principles and specifications
Failure	Termination of the ability of an item to perform a required function (according to EN ISO 13849)

Term:	Explanation:
Functional safety	Absence of unacceptable risk due to hazards caused by incorrect behaviour of electrical, electronic and programmable electronic systems
Hazard	Potential source of damage (according to DIN EN ISO 12100)
Hazard assessment	The term “risk assessment” must be differentiated from the “hazard assessment” which the employer must conduct according to the Swiss work protection act (ArbSchG) and business safety regulation (BetrSichV) as applies, for example, to machines and facilities / installations which are evaluated, once completed, for residual risks, considering also the work environment and interactions with other work equipment.
Risk analysis	In the new Machinery Directive 2006/42/EG, “risk assessment” has replaced “risk analysis”.
Inherently safe construction	Intrinsically safe construction which remains effective and is not dependent on other security measures. Protective measure that either eliminates hazards or reduces the risks related to the hazards, by modifying the construction or the behaviour of the machine without using guards or protective devices (according to DIN EN ISO 12100)
Category	Classification of the safety-related parts of a control system, in respect of their resistance to faults and their subsequent behaviour in the fault condition, and which is achieved by the structural arrangement of the parts, fault detection and/or by their reliability (according to EN ISO 13849)
Machine	An assembly consisting of linked parts or components, at least one of which moves.
Residual risk	Remaining risk after application of safeguards (according to DIN EN ISO 12100).
Risk	Combination of the probability of occurrence of harm and the extent of damage (according to DIN EN ISO 12100).
Risk assessment	In the new Machinery Directive 2006/42/EG, “risk assessment” has replaced “risk analysis”.
Damage	Physical injury or harm to health (according to DIN EN ISO 12100).
Safeguards	Guards or protective devices (according to DIN EN ISO 12100).

Term:	Explanation:
Protective measures	Combination of the measures implemented by the designer and the user and aiming at reducing the risk(s) (according to DIN EN ISO 12100).
Safety function	Function of a machine, whose failure can result in an immediate increase of the risk(s) (according to DIN EN ISO 12100).
SRP/CS	Safety Related Parts of Control System: Part of a controller responding to safety-related input signals and emitting safety-related output signals (according to EN ISO 13849).
Opening command	Contact on the opening input of the electronic card. This command can be manual (pushbutton, lever, etc.) or automatic (radar, magnetic loop, etc.).
Closing command	Contact on the closing input of the electronic card. This command can be manual or automatic.
Manual command	Opening or closing command activated intentionally by the user (pushbutton, lever, etc.)
Automatic command	Opening or closing command activated automatically by a detector or an automatic system (radar, automatic controller, sensor, etc.)
Zone accessible to the public	An aperture giving on to a road open to the public or a public open space or to rooms classed as establishments receiving public.

1.6 Storage of the manual

After the installation of the system, the instructions should be stored in an accessible and dry place.

2 Presentation of warning signs

Various symbols are used in this guide for easier understanding:

NOTICE

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

IMPORTANT

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

IMPORTANT

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

⚠ CAUTION

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

⚠ WARNING

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

⚠ DANGER

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

⚠ DANGER

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

3 General safety and accident prevention regulations

NOTICE

This device was not intended to be used by persons (including children) with limited physical, sensory or mental abilities, or with the absence of experience and/or lack of knowledge, unless they are being supervised by a person responsible for their safety or received instruction on how to use the device.

Children should be supervised to ensure that they do not play with the device.

IMPORTANT

Do not allow children to play with the device or its regulating and/or control devices, including remote controls.

IMPORTANT

When using motion detectors, make sure that no moving objects such as flags, plants, etc. enter the detection areas of the motion detectors

IMPORTANT

In order to avoid malfunctions, the system must *NOT* be disconnected from the mains overnight!

IMPORTANT

If malfunctions that endanger the safety of individuals occur, the system must be turned off. It may not be turned back on until the problem has been resolved by a professional and the danger no long exists.

IMPORTANT

Safety devices (e.g. sensors, protective wings) must not be dismantled or put out of operation.

⚠ CAUTION

Malfunctions and risk of falling from debris gathering under the floor mat!

- Door breakdown, bruises, broken bones

➢ The floor mat or floor covering must be even and securely installed.
➢ Debris that gathers under the floor mat must be removed regularly.

⚠ CAUTION

Unexpected OPENING / CLOSING / ROTATION

- Bruises and contusions from the door wings/apron

➢ No persons or objects are allowed in the opening area of the door.
➢ No safety devices (sensors) should be removed or disabled.
➢ Do not rush through a door that is already closing.

DANGER

Electric shock

- Electric shock, burns, death.

➢ Disconnect the drive from the power supply during cleaning, maintenance and replacement of parts.

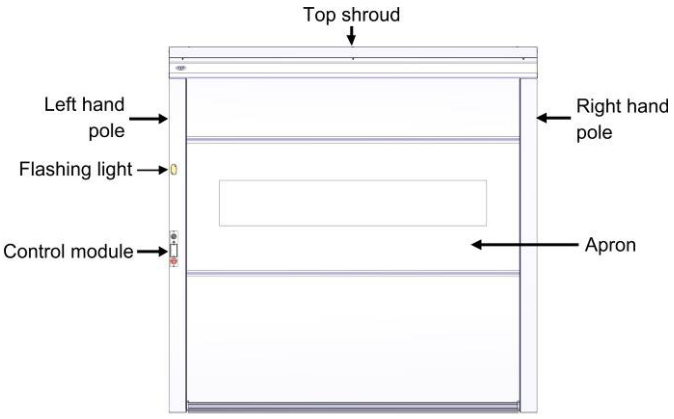
4 Product description

The SPEEDCORD high speed doors are meant for insulating openings and allow at the same time intensive traffic of persons and vehicles. The SPEEDCORD high speed doors are intended for industrial and commercial premises.
The opening occurs via a command given by a device, such as:

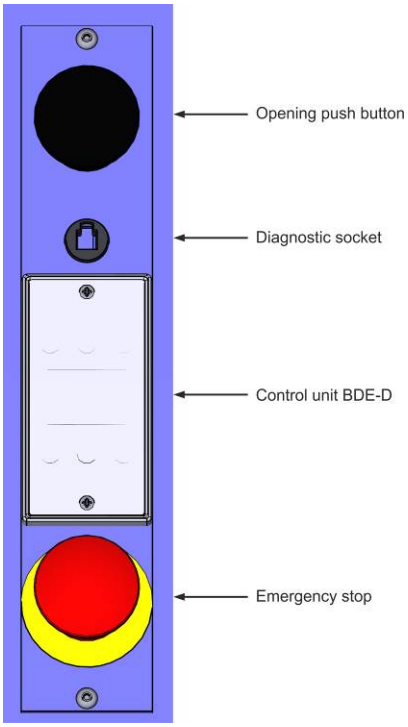
- sensor
- key switch
- push-button
- remote control
- pull knob

The opening command causes the flexible PVC roller blind to roll up. An electric motor actuates the door tarp. The safety of the door is ensured by a photo cell which monitors the movement area. The whole system is controlled via electronic card.

4.1 Door in closed position



4.2 Detail of the control module

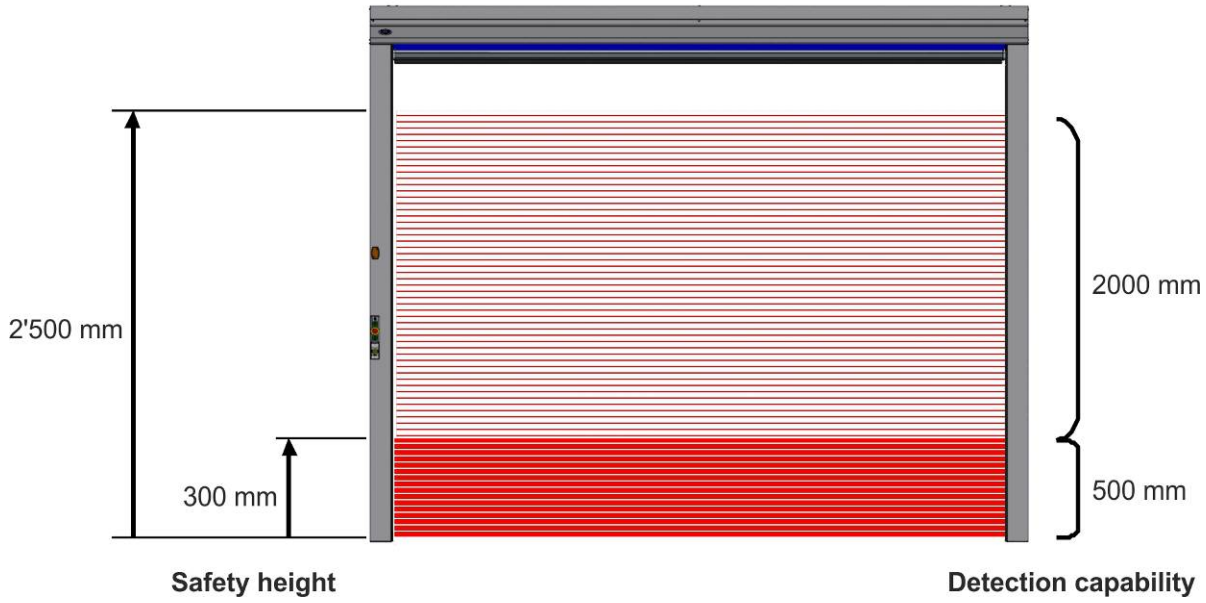


4.3 Obstacle detection system

For maximum users safety the high speed door SPEEDCORD is fitted with a Gridscan, an obstacle detection system in the axis of the apron, and/or with sensors like RIC290 / AIR290, which will be used on both sides of the installation.

Gridscan

The detection capabilities according to height are shown in the schematic diagram below:



5 Operating modes

The operating mode can only be configured by a technician with the aid of the FPC 902.

5.1 Automatic mode

5.1.1 Operation

The door is at rest in the closed position.
The door opens completely on initiating an opening command. The door is lowered automatically by means of an adjustable opening timer.

5.1.2 Obstacle detection

In the case of a person or a vehicle being present in the axis of the apron at the time it is lowered, the logic system restarts an opening order. The opening timer is then restarted.

5.2 Deadman mode or maintained button pressure to lower

IMPORTANT

The use of the deadman mode is used only by trained users!
The installer is to take steps to prevent the use of the deadman mode by untrained persons.

5.2.1 Operation

The door is at rest in the closed position.
In the event of an opening command, the door opens fully. The door then remains in the open position waiting for a command.
Closing takes place by using a closing command. The use is to maintain the closing command during the entire descent. If the user releases the closing command during the entire descent, the door stops in its position and remains waiting.

5.2.2 Obstacle detection

When a person or a vehicle is present in the axis of the door apron during its descent the door only stops when the trained user releases the closing command.

5.3 Semi-automatic mode

With this mode it is possible to choose, if the opening and closing can be done (sequentially) with either one or two keys.

5.3.1 Operation

The door is at rest in the closed position.
In the case of an opening command the door opens fully. The door then remains in the open position waiting for a command.
Closing takes place automatically when a closing command is given.

5.3.2 Obstacle detection

When a person or a vehicle is present in the axis of the door apron during its descent, the door reopens automatically. The door then remains in the open position and awaits a command order.

5.4 One-Way mode

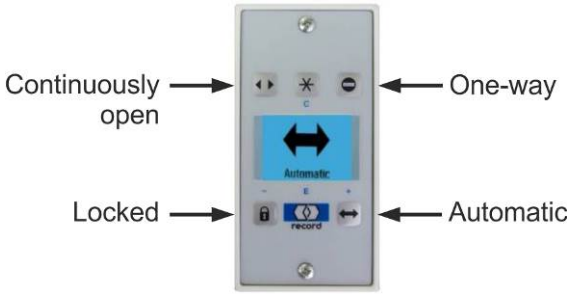
5.4.1 Operation

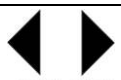
In this mode a distinction is made between opening commands situated facing the door (AKI) and opening commands situated on the other side (AKA).
In the case of an AKI command the door opens and carries out its automatic cycle. On the other hand an AKA command has no effect.

6 Selecting the operating mode using the BDE-D

6.1 Selecting the operating mode

The operating mode can be selected by means of the BDE-D located on the control circuit board. The function of each mode is explained below.



Key	Operating mode	Displayed symbol	Function
	Automatic	 Automatic	▪ Door opens unhindered from the inside or outside ▪ Maximum opening height (summer opening)
	Continuously open	 Cont. open	▪ Door remains open until another operating mode is selected
	One-way	 One-Way	▪ Door opens only in one direction (e.g. for shop closing time)
	Locked	 Locked	▪ Door is closed and locked (if locking system has been installed) ▪ Door remains locked even in the case of power failure

6.2 Locking the control unit with a key (option)

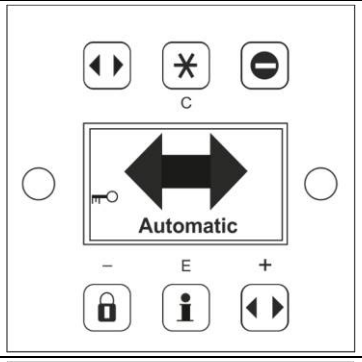
IMPORTANT

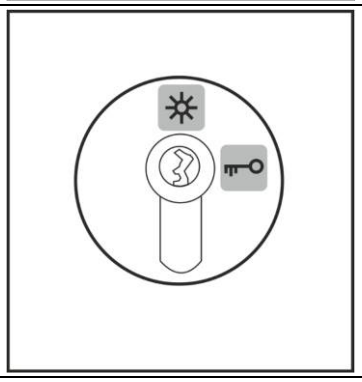
Standard EN 16005 requires protection, for the mode selection of operation of pedestrian automatic doors, used as emergency exits so that they may not be inadvertently locked when the building is in use.

If a "locked" mode of operation is available, the mode of operation must be protected, e.g. by an access code or a key, so that changes can only be made by authorised personnel.

It is the responsibility of the operator of the pedestrian automatic door used as an emergency exit to lock the control panel into "automatic" position when the facility is being used.

The control panel BDE-D can be efficiently protected against unauthorised changes of operating mode by an additional key switch. This one is usually placed near the BDE-D.





7 Behaviour in event of faults within a SPEEDCORD

In case the installation fails, a message is displayed on the control unit.

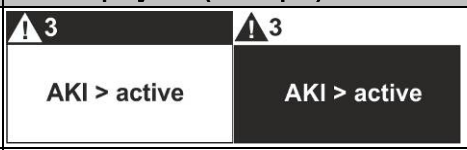
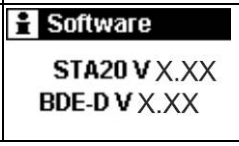
7.1 Display on the control unit

- Status messages are displayed with status number and text.
- The display changes alternately from white to black.
- After 10 seconds, the telephone number of the relevant service center is alternately displayed.

7.2 Possible troubleshooting

- Based on the status display some errors can sometimes be eliminated
- If you are not sure, please contact the relevant service center
- Before you call, write down the data displayed on the BDE-D. This information provides the technician with important information for troubleshooting
- If several status messages are active at the same time, they are numbered: e.g. error 1 / 2
- Pressing the E-button permits to navigate from one error message to the next one

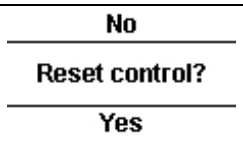
Example:

Which information?	Procedure	How displayed? (Example)
Status text and number	▪ It is automatically displayed on the BDE-D	
Software-Versions	▪ Press the following button on the BDE-D for 2 seconds 	

7.3 Resetting the control module

In some cases, the malfunction may be remedied by restarting the control unit. Please proceed as described below.

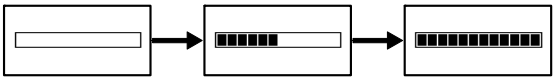
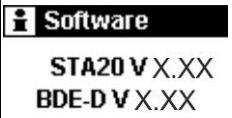
- Make sure that the drive cladding is closed and that nobody is obstructing the system or approaching it, thereby triggering an opening of the system.

		Press > 5 seconds
	No	
	Yes	

- The system will reset
- The first movement after a reset occurs at reduced speed
- If a fault is still displayed on the control unit after resetting, please contact our service centre, **stating the error message.**

7.4 Control unit BDE-D does not react

If the control panel does not react when the keys are pressed or if no message appears on the display, a reset of the control panel could eliminate the problem.
Proceed as follows:

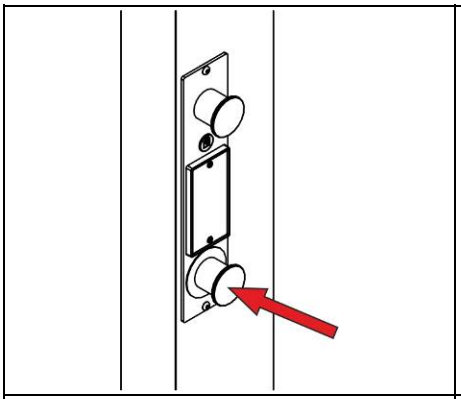
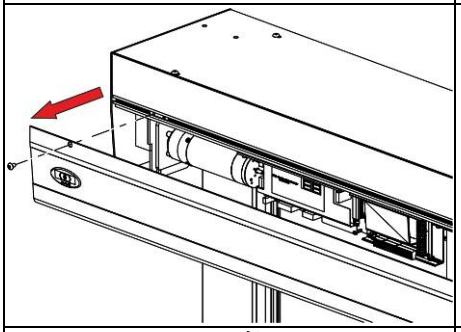
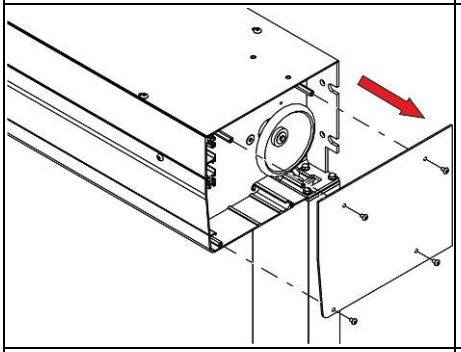
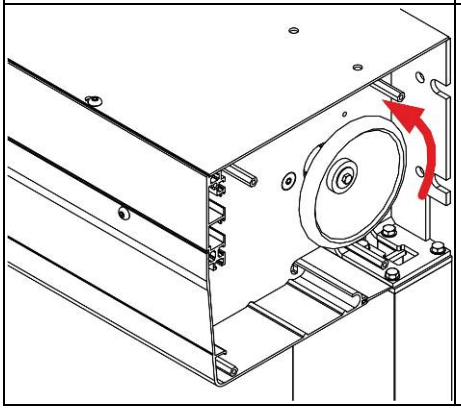
RESET HARDWARE BDE-D	
	**Press E key > 12 seconds**
	Display without any message
	Connecting to control unit....  Connection has been established (example) 

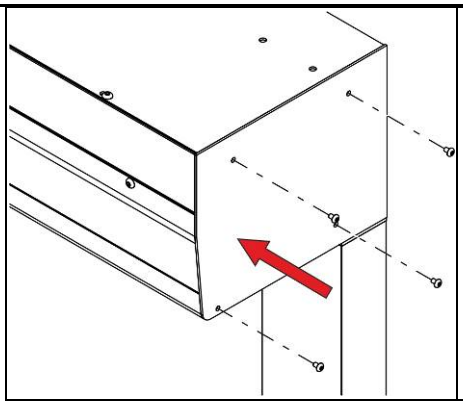
- After resetting, the control panel is again operational
- If this is not the case, please inform our service centre

8 Manual opening in case of a breakdown

8.1 Manual wheel raising control

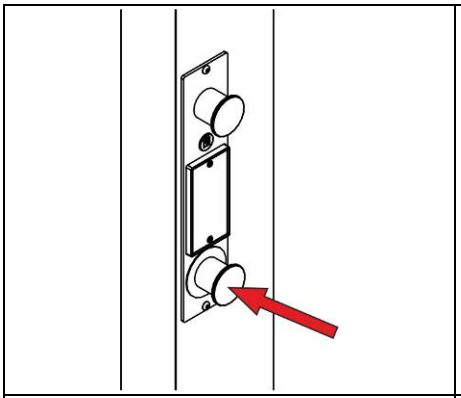
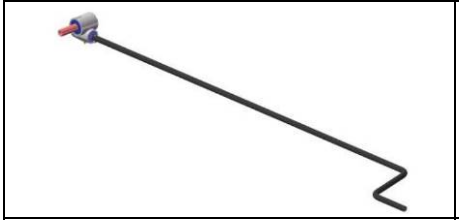
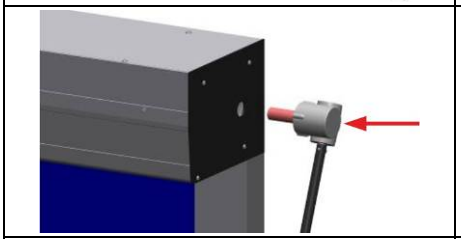
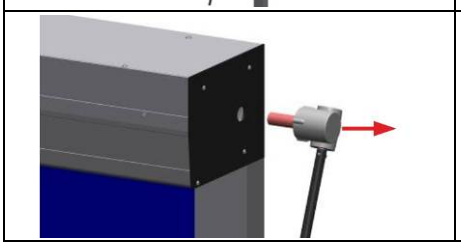
8.1.1 Initial situation: Door is in the closed position

	▪ Activate the emergency stop
	▪ Open the cross-member shroud by unscrewing the fixing screws
	▪ For better access you can remove the right hand lateral cheek using a No. 3 Allen key
	▪ Turn the wheel to raise the door to its high position

	▪ Remount the main cover and the right hand side cover

8.2 Lifting crank (optional)

8.2.1 Initial situation: Door is in the closed position

	▪ Activate the emergency stop
	▪ Mount the lift crank
	▪ Insert the lifting crank into the aperture in the middle of the right hand lateral cheek
	▪ Turn the crank and raise the door to its high position
	▪ Remove the crank

Contact

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