

CS 80 MAGNEO SYNC

Installation manual

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EN

dormakaba 

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1 About this manual

1.1 Content and purpose

This manual is part of the product. The manual contains important instructions for safe installation and operation. Therefore this manual must be carefully read before using the product. This manual must be kept during the service life of the product and must be passed on with the product. This manual describes the installation and operation of the CS 80 MAGNEO. This manual is only valid in conjunction with the installation and operation manual for CS 80 MAGNEO.

1.2 Target group

Installation, commissioning, maintenance and dismantling of the CS 80 MAGNEO SYNC must only be carried out by qualified technical personnel. The acceptance inspection must only be carried out by qualified technical personnel authorized for this by dormakaba.

The operation of the CS 80 MAGNEO SYNC may be carried out by any person who is mentally and physically capable of doing so.

1.3 Other applicable documents

The following technical document for the product must be observed:

- Installation and operation manual CS 80 MAGNEO

1.4 Symbols used

1.4.1 Hazard categories

Safety instructions are marked with symbols. The safety instructions are introduced by signal words that express the extent of the hazard, e.g.:



WARNING

This signal word indicates a possible hazardous situation which may result in death or serious injury if ignored.



ATTENTION

This signal word indicates a situation of potential risk, which could lead to damage to property or the environment if not averted.

1.4.2 More symbols

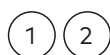


TIPS AND RECOMMENDATIONS

This signal word indicates useful information for efficient and trouble-free operation.



Step-by-step diagrams



Position numbers for parts in diagrams



Reference to another manual

2 Safety

2.1 Safety instructions



WARNING

Danger to life through electric current!

Works on electrical systems must only be carried out by qualified electricians.

- Before starting work on electrical systems and equipment, establish a voltage-free state and maintain this state while carrying out the work.



WARNING

Danger to life through electric current!

Live elements in the drive

- Avoid bringing the drive into contact with water or other liquids.
- Never put your hand into the drive.
- Never insert metal objects into the openings on the drive.
- To disconnect the power cord, remove the plug from the wall outlet. Do not pull the cable itself.
- Do not use the drive if the power cord is damaged.
- The mains connection housing should only be opened by qualified technical personnel.



WARNING

Danger of injury from falling objects.

Falling parts or tools can cause injury.

- Secure workplace against unauthorized entry.

2.2 Intended use

The CS 80 MAGNEO SYNC is a sliding door drive and is used for opening and closing 2-leaf sliding doors in indoor areas with a permissible door leaf weight of 20 to 80 kg each.

2.3 Limitations on use

The CS 80 MAGNEO SYNC is not suitable for use in escape routes, on fire doors (fire/smoke protection doors) or in outdoor areas. Do not allow children to play with the CS 80 MAGNEO SYNC or its regulating and control equipment, including the remote controls.

2.4 Danger zones at closing edges

Automatic doors carry a risk of injury from crushing, shearing, bumping and pulling at the closing edges.

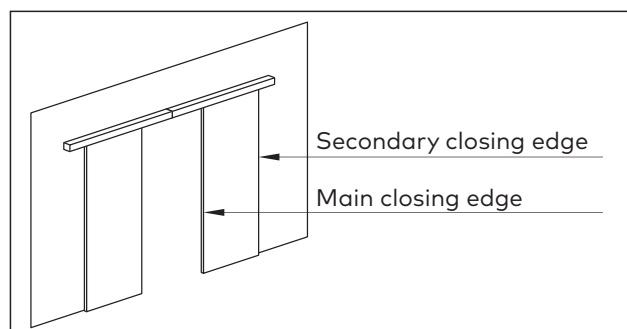


Fig. 1 Closing edges

2.5 Risk assessment by installer

Depending on the door's space limitations and user group, the use of safety sensors is recommended even for low energy operation. This must be assessed in the planning and by the manufacturer, i.e. the person carrying out the installation, as part of an individual risk assessment. During planning, the installer assesses the use of safety sensors as part of an individual risk assessment.

3 Product description

3.1 General

The CS 80 MAGNEO SYNC consists of 2 single CS 80 MAGNEO, which are connected via a synchronization cable. The drives open and close in synchronization. This does not affect the function of single-leaf units. All you have to do is connect a program switch. The functions of the unit are set via the DIP switch.

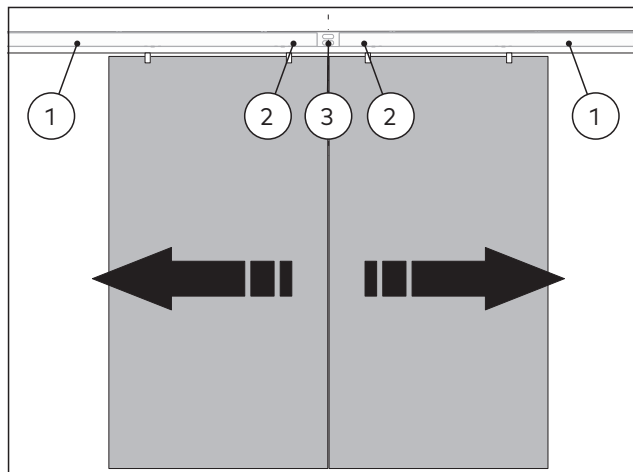


Fig. 2 Overview

- (1) CS 80 MAGNEO
- (2) Control unit and connection terminals for external loads
- (3) Mains connection and synchronization cable

3.2 SYNC-KIT

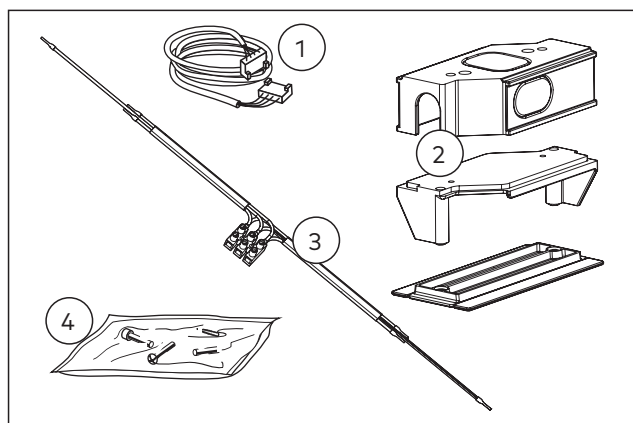


Fig. 3 The SYNC-KIT includes

- (1) Synchronization cable
- (2) Finger guard
- (3) Y-cable
- (4) Fixing material

3.3 Technical information

max. Area of movement	Drive length (without cladding)
1750 mm	3600 mm
2000 mm	4100 mm
2250 mm	4600 mm

4 Installation

The procedure described here is an example. Structural or local conditions, existing aids or other circumstances may make a different approach sensible.

4.1 Safety during installation



WARNING

Danger to life through electric current

Works on electrical systems must only be carried out by qualified electricians.

- Before starting work on electrical systems and equipment, establish a voltage-free state and maintain this state while carrying out the work.



WARNING

Danger of injury from falling objects.

Falling parts or tools can cause injury.

- Secure workplace against unauthorized entry.

4.2 Mains connection



ATTENTION

Risk of damage to cables

Drill holes that are sharp-edged or too small may damage the cables.

- Ensure that the drill holes allow plenty of space for the cables and that they do not have sharp edges!

The 230 V connection cable needs to emerge from the wall above the doorway area and centrally (Fig. 4).

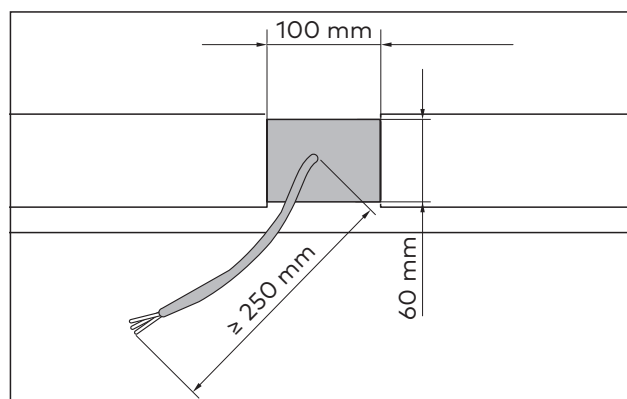


Fig. 4 Installation with fixed connection

4.3 Mounting on/in the wall

4.3.1 Mounting on the wall

If there is a door frame, the bracket needs to be underlaid. Dimension L (length of both drives and fixing bracket) is measured without end caps.

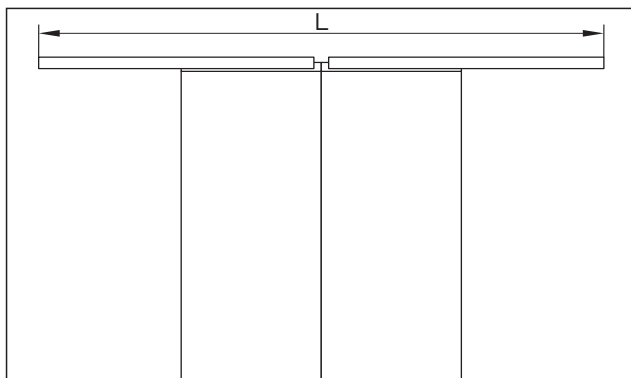


Fig. 5 Overview of mounting on the wall

Max. Area of movement	1750 mm	2000 mm	2250 mm
L	3600 mm	4100 mm	4600 mm

4.3.1.1 Marking the reference lines for positioning

1. Mark the center of the doorway on the wall (Fig. 6).

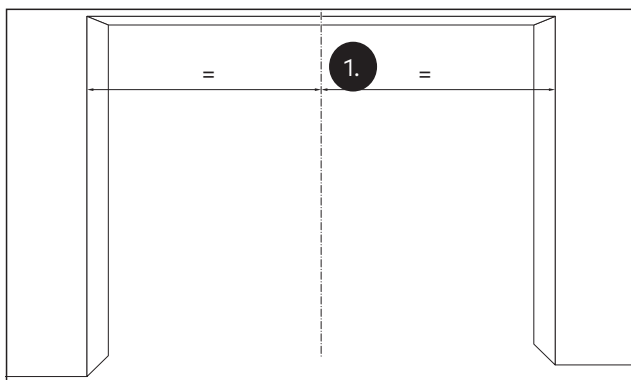


Fig. 6 Marking the center of the doorway

2. Determine the highest point of the floor in the area of movement of the leaves using a leveling device (Fig. 7).

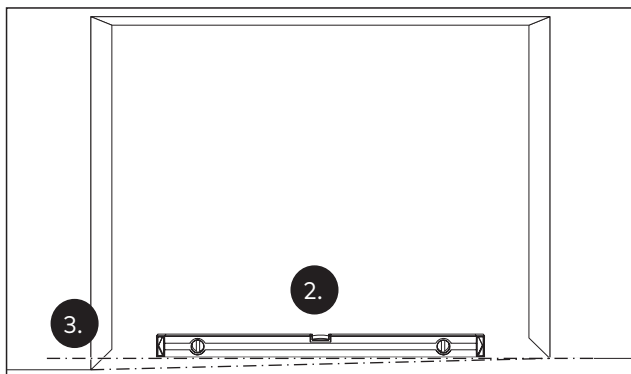


Fig. 7 Determining the highest point in the area of movement

3. Transfer the highest point of the floor to the wall (Fig. 7).

4. Mark the top edge of the fixing bracket with the distance X from the highest point of the floor in the area of movement on the wall (Fig. 8).

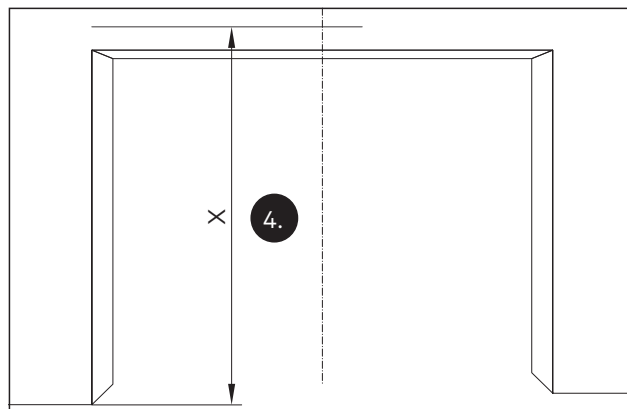


Fig. 8 Mark the distance X on the wall

Door leaf version	Dimension X
Solid door	Door leaf height + 80 mm
Glass clamping rail	Glass pane height + 87 mm
MANET single-point fixings	Glass pane height + 76 mm

4.3.1.2 Mounting the fixing bracket



ATTENTION

Before starting work, make sure that there are no pipes or cables in the drill hole area.



ATTENTION

Use dowels and screws suitable for the substrate to attach the fixing bracket. The fixing bracket must have a load-bearing capacity of at least 240 kg.



TIPS AND RECOMMENDATIONS

If there is a door frame, the fixing bracket must be underlaid to ensure that the fixing bracket sits flush to the frame.

1. Trim the fixing bracket on both sides so that it is equal to the drive length L (Fig. 5).

- Position the fixing bracket on the center line (Fig. 9).

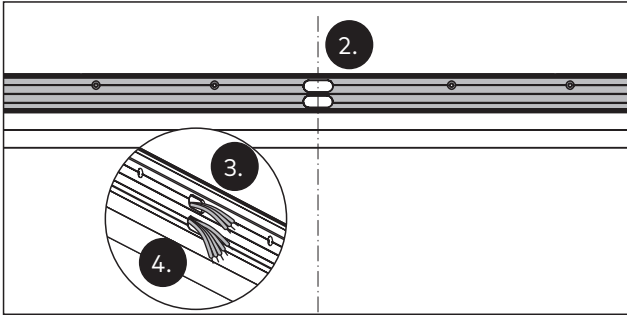


Fig. 9 Positioning the fixing bracket

- The 230 V connection cable needs to pass through the upper hole in the fixing bracket (Fig. 9).
- Insert the cables for external devices through the lower hole in the fixing bracket (Fig. 9).
- Align the fixing bracket horizontally (Fig. 10).

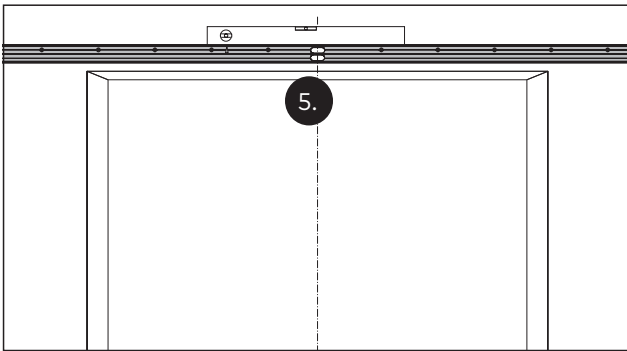


Fig. 10 Aligning the fixing bracket

- Attach the fixing bracket.
- Use the pre-drilled holes in the fixing bracket as a template for drilling the holes.
- Tighten the screws on the fixing bracket (Fig. 11).

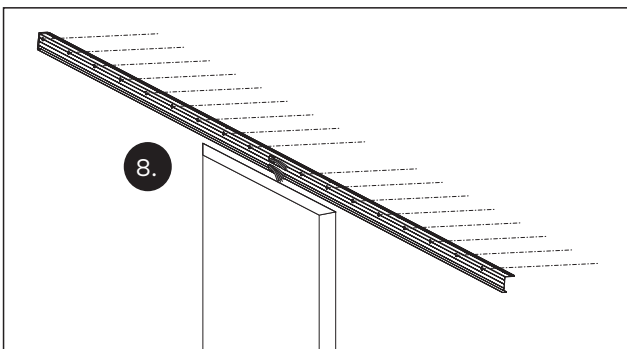


Fig. 11 Tightening the screws on the fixing bracket

4.3.2 Mounting in the wall

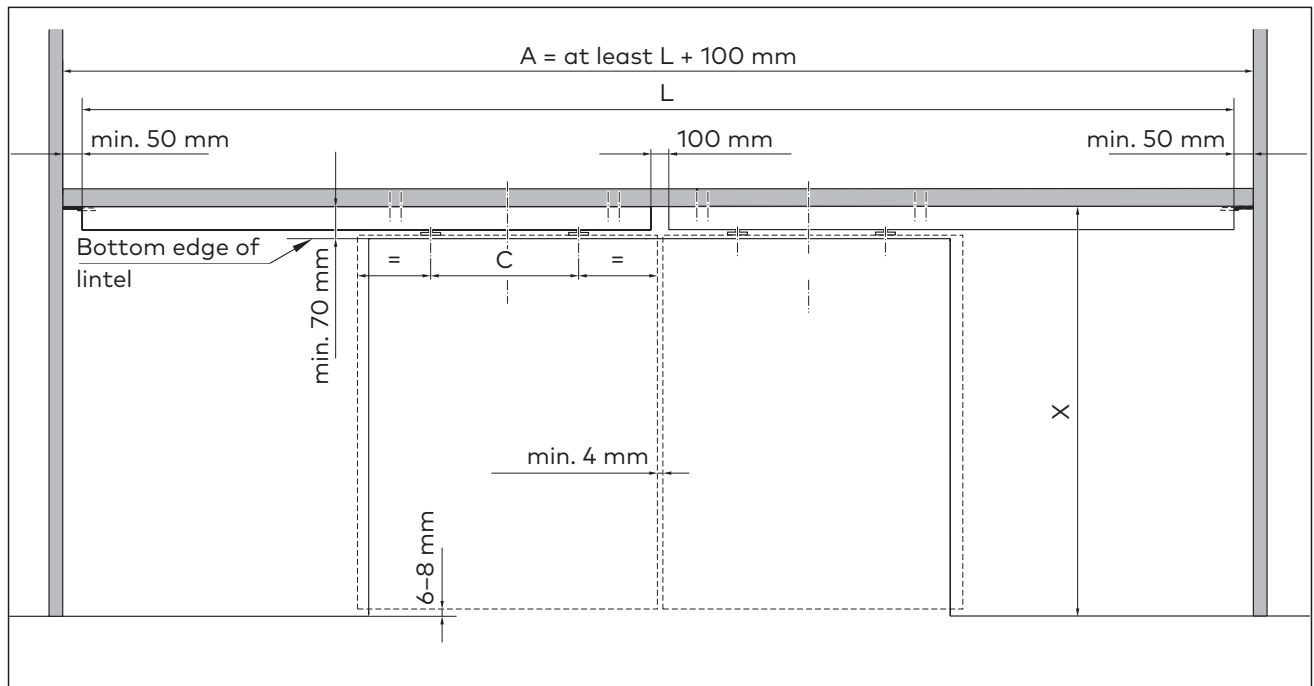


Fig. 12 Overview of mounting in the wall

1. The dimensions for the drive can be taken from the drawing and the table.

Max. Area of movement	1750 mm	2000 mm	2250 mm
L	3600 mm	4100 mm	4600 mm
A	≥ 3700 mm	≥ 4200 mm	≥ 4700 mm
C	575 mm	700 mm	825 mm

2. Determine the highest point of the floor in the area of movement of the leaves using a leveling device (Fig. 14).

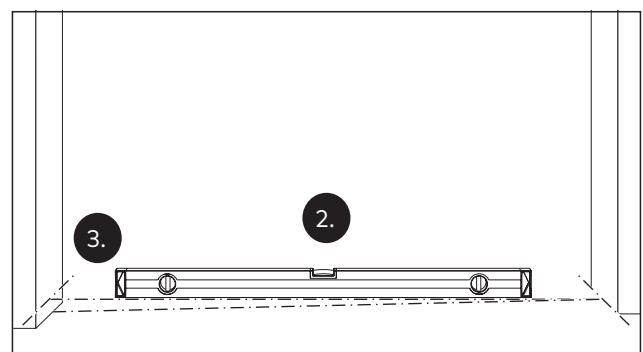


Fig. 14 Determining the highest point in the area of movement

4.3.2.1 Marking the reference lines for positioning

The measurement L is taken without end caps.

1. Mark the center of the doorway on the wall (Fig. 13).

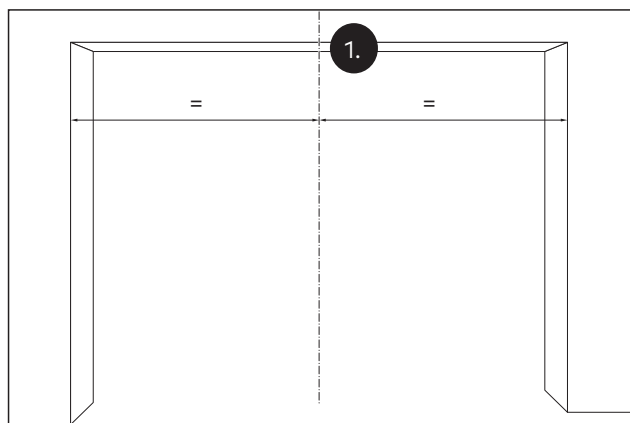


Fig. 13 Marking the center of the doorway

3. Transfer the highest point of the floor to the wall (Fig. 14).

4. Measure and mark dimension X from the highest point of the floor in the area of movement (Fig. 15).

Door leaf version	Dimension X
Solid door	Door leaf height + 75 mm
Glass clamping rail	Glass pane height + 81 mm

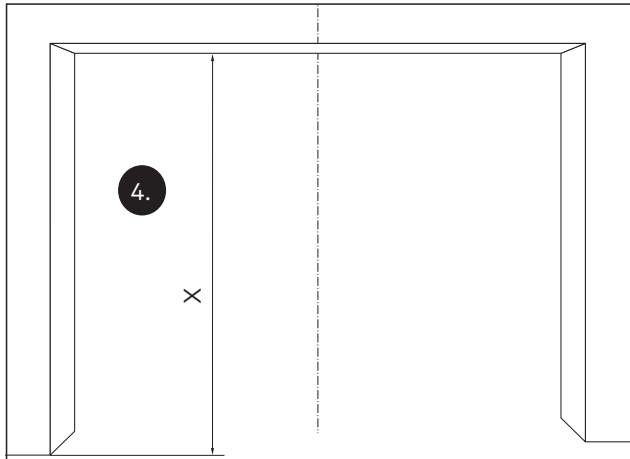


Fig. 15 Mark the distance X on the wall

4.4 Mounting the drives



See installation and operation manual for CS 80 MAGNEO

4.5 Mounting the door leaves



See installation and operation manual for CS 80 MAGNEO

4.6 Setting the end stops



See installation and operation manual for CS 80 MAGNEO

5 Connecting to the mains

1. **Warning!** Disconnect the power supply before installation!



2. **Warning!** Turn the power switch to OFF!



3. Mark the position of the end stops on the connection side of both drives.
4. Loosen the screws on the end stops on the connection side of both drives (Fig. 16).

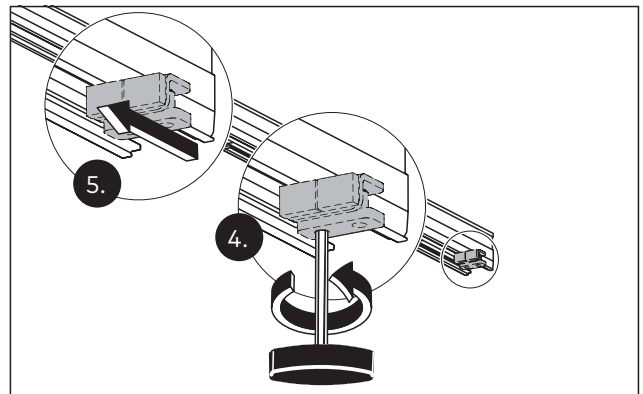


Fig. 16 Slide the end stops along

5. Push the end stop towards the center of the drive (Fig. 16).
6. Press out the appropriate lug to create an opening for the mains connection cable.
7. Pass the mains connection cable through the press-out in the finger guard.
8. Insert the upper finger guard (Fig. 17).

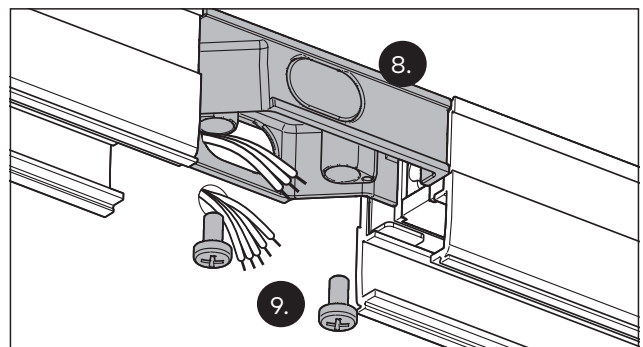


Fig. 17 Mounting the upper finger guard

9. Tighten the screws on the upper finger guard (Fig. 17).

- 10.** Unscrew the screw from the cover on the connection side of both drives (Fig. 18). Keep the cover and screw, as both will be needed later.

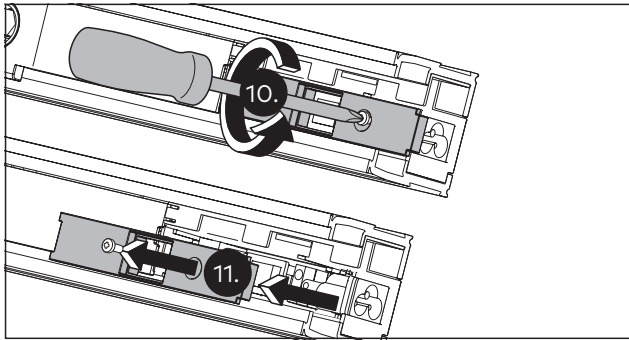


Fig. 18 Remove the cover

- 11.** Remove the cover (Fig. 18).
- 12.** Carefully open the cover from the control housing with the tip of a flat-bladed screwdriver (Fig. 19).

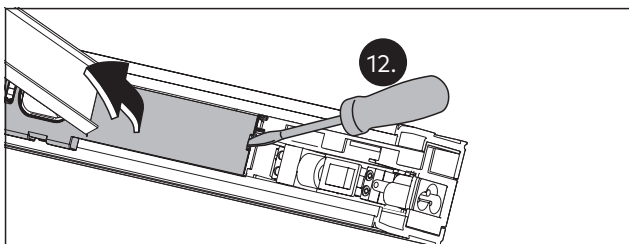


Fig. 19 Open the cover

- 13.** Loosen the screws on the terminals (Fig. 20).

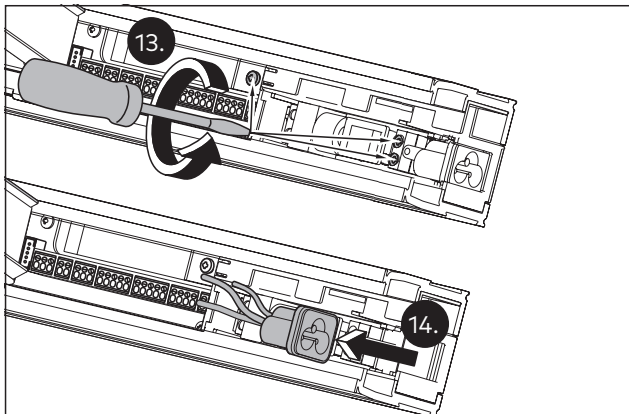


Fig. 20 Pull out the connection socket

- 14.** Pull out the internal connection socket (Fig. 20).
- 15.** Connect wires L1 and N of the Y-cable to the mains terminals of both drives (Fig. 21).

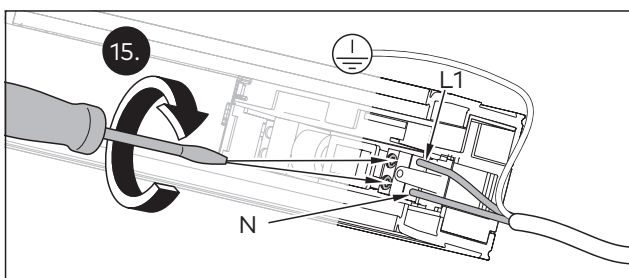


Fig. 21 Connect wires L1 and N.

- 16.**



Warning!

Pass the ground wire through the control housing and connect it to the ground terminal on both drives (Fig. 22)!

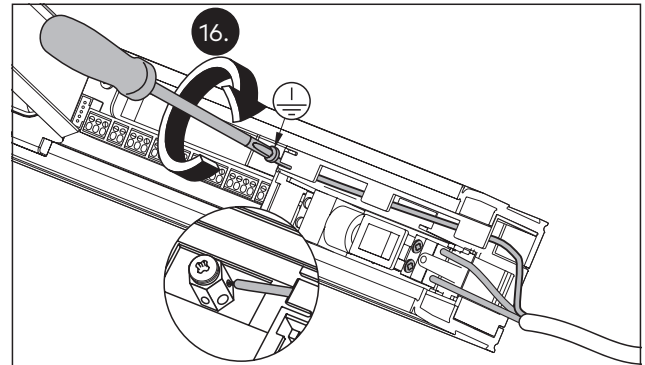


Fig. 22 Connect the ground terminal

- 17.** Connect the Y-cable to the mains connection cable and route it so that it cannot become trapped (Fig. 23).

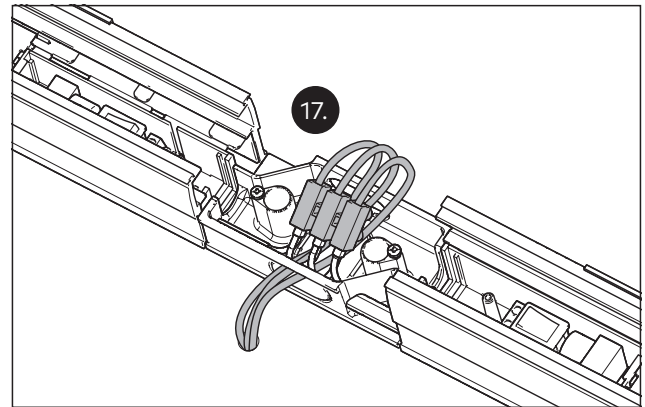


Fig. 23 Connect the connection cable to the Y-cable

- 18.** Insert the middle finger guard (Fig. 24).

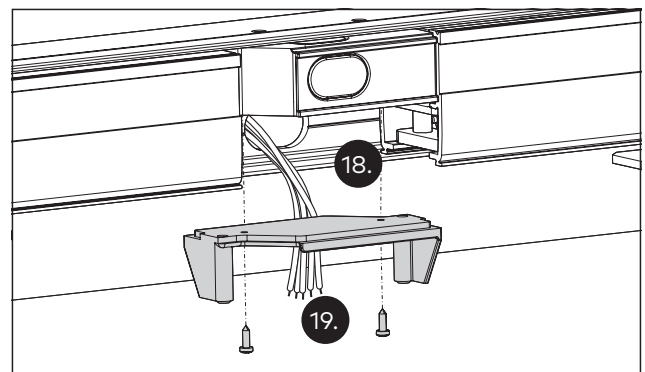


Fig. 24 Mounting the middle finger guard

- 19.** Tighten the screws (Fig. 24).

20. Connect the synchronization cable (Fig. 25).

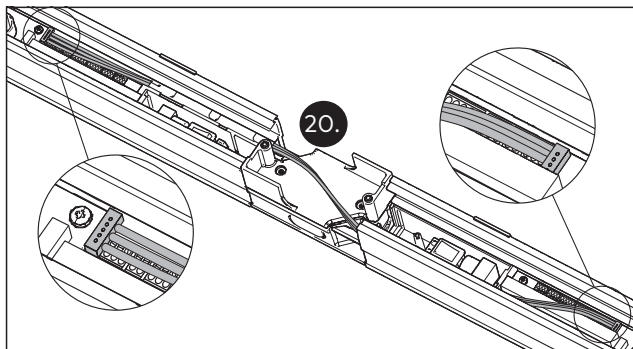


Fig. 25 Connecting the synchronization cable

21. Close the cover of the control housing on both drives (Fig. 26).

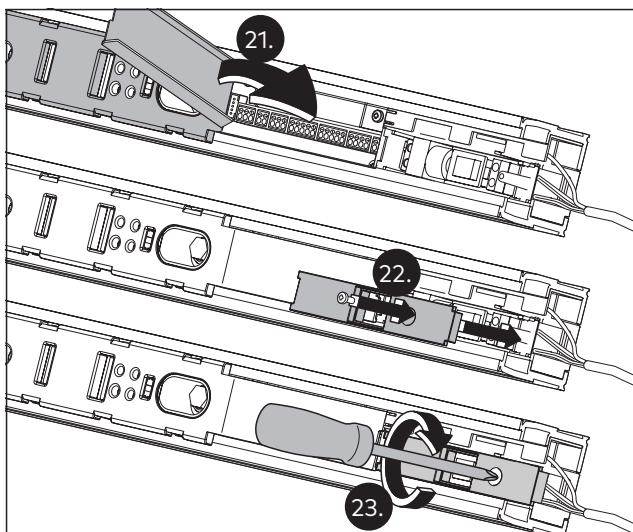


Fig. 26 Closing the cover

22. Put the cover of the mains connection in position (Fig. 26).

23. Tighten the screws on the mains connection cover (Fig. 26).

24. Slide the end stop to the position mark (Fig. 27).

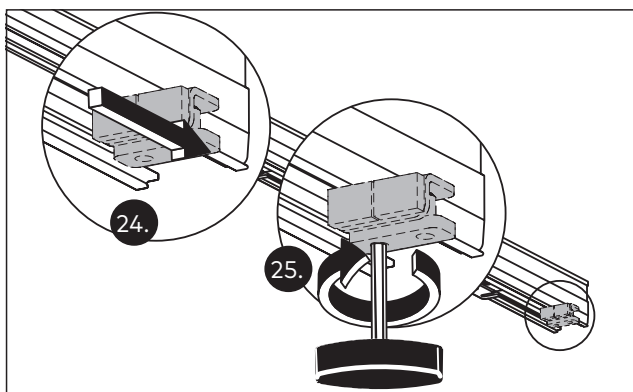


Fig. 27 Tightening the screws on the end stop

25. Tighten the screws on the end stop (Fig. 27).

6 Commissioning

The visual feedback is shown on the LED operation indicator.

6.1 Requirements

- The CS 80 MAGNEO is fully installed.
- The doors can be moved freely over the entire area of movement.

6.2 Carrying out a learning cycle

The learning cycle must be carried out independently on each drive. The values saved during the learning cycle are overwritten on a new learning cycle.



TIPS AND RECOMMENDATIONS

Do not interrupt the learning cycle as all required values are being determined.

1. Open the door.
2. Switch on the drive.
 - ▶ LED flashes green (Fig. 28) (1).

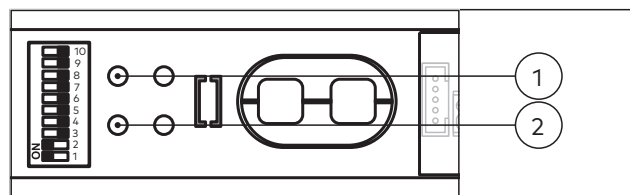


Fig. 28 Starting the learning cycle

3. Press the reset button on the drive for more than 3 seconds (Fig. 28) (2).
 - ▶ The door opens and closes twice, the LED flashes green.
 - ▶ After that the LED lights up green permanently.
 - ▶ Once the learning cycle has been carried out for both drives, the CS 80 MAGNEO SYNC is ready for operation.
4. Check both drives after the learning cycle to establish whether both drives open as a result of a start impulse.

6.3 Setting speed and hold-open time



ATTENTION

Risk of damage to the potentiometer

The potentiometers can be damaged by excessive forces.

- Please only use the enclosed red screwdriver to set up!

1. Set the speed on the speed potentiometer (Fig. 29) (1). Set the speed to the same value for both drives so that travel is synchronized.

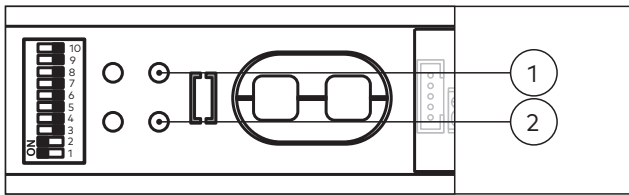


Fig. 29 Set the speed and the hold-open time

2. Set the required hold-open time on the potentiometer on one of the drives (Fig. 29) (2).
3. Set the hold-open time to the minimum setting on the other drive.

6.4 Positioning cycle

The positioning cycle starts at the same time for both drives, as soon as both drives are activated. If only 1 drive is activated, the other drive waits until it has established communication with the 2nd drive. The LED on drive 1 flashes red 7 times, after which both drives are ready for operation.

7 Connecting optional accessories

- The sensors for the secondary closing edge have to be connected to the drive for which the door leaf is protected by the sensor.
- If no sensors are connected, the terminals on both drives must be bridged.
- Only one program switch may be connected. The terminals on the second drive must not be live.



See chapter on Terminal assignment in the installation and operation manual for CS 80 MAGNEO

- The optional accessories may be connected to both drives. The other drive receives the signals via the synchronization cable.
- The position of the DIP switch is not transferred. The settings of switches 4-10 must be identical on both drives. DIP switches 1-3 must be set individually depending on the control unit for the sensor connected to each switch.



See installation and operation manual for CS 80 MAGNEO

8 Final installation steps

1. Snap off lugs on both sides of end cap if installed on wall or glass (Fig. 30).

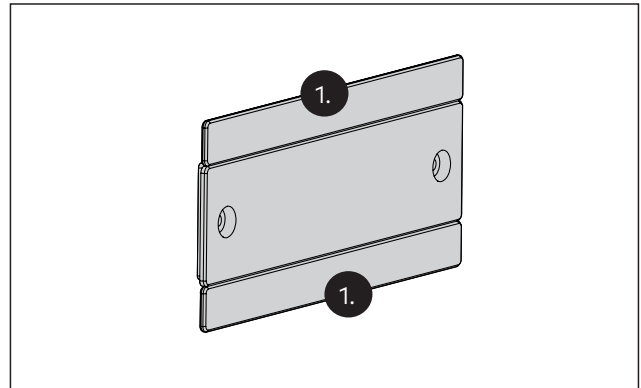


Fig. 30 Snapping off the end cap lugs

2. Position end cap (Fig. 31).
3. Tighten the screws (Fig. 31).

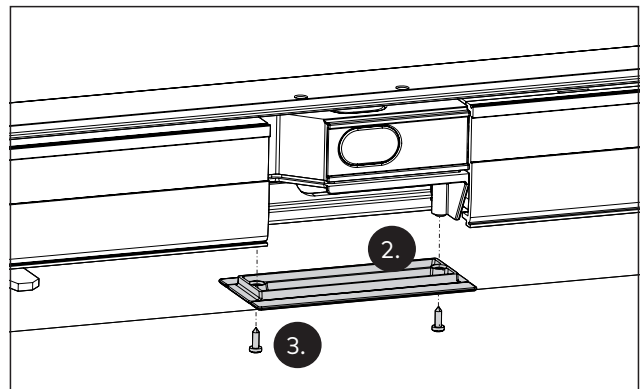


Fig. 31 Mounting the end cap

9 Operation



See installation and operation manual for CS 80 MAGNEO

Translation of the original manual, subject to change without notice

www.dormakaba.com

dormakaba Deutschland GmbH
DORMA Platz 1
58256 Ennepetal
Germany
T: +49 2333 793-0
F: +49 2333 793-4950