



GRASS MOVEMENT-SYSTEMS

SENSOMATIC OPENING SYSTEM
Assembly and operating instructions

G*GRASS®

SENSOMATIC

Assembly and operating instructions

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1.0 Introduction

GRASS Sensomatic compliments furniture's clear lines from the inside. The electro-mechanical opening system translates the outer beauty of furniture into the beauty of movement. Natural elegance is transformed into unique convenience, tangible in every movement. Combining GRASS Sensomatic with any of the GRASS full-extension slides means you will have convenient access to the full depth of the drawer. With this system, your furniture indeed becomes exceptional.



Please read the assembly and operating instructions carefully and act accordingly. Keep these assembly and operating instructions since you or a subsequent owner may require them later on.

English

1.1 Instructions for installers

The following assembly and operating instructions contain important tips, instructions and recommendations for assembly, initial start up and operation. Please read and adhere to the instructions to ensure safe and flawless operation of the electrically powered GRASS Sensomatic opening system.

1.2 Signs and symbols in this instruction manual

The signs and symbols in these assembly and operating instructions are intended to ensure quick and safe use of the manual and the system.



Note

This sign indicates additional information which may be helpful when using a GRASS Sensomatic system.



Warning of a general danger

This warning sign indicates actions which may for several reasons cause danger or impair functionality.



Warning of hazardous voltage

This warning sign indicates actions during which you will be exposed to danger due to electric shock possibly causing fatal injuries.



Action

This symbol indicates a call for an action. This action facilitates correct and safe use of the system.



Result

This sign indicates the description of the result of an action.

1.3 Designated purpose

The components of the „GRASS Sensomatic“ electromechanical opening system may only be used for their intended purpose. This means that they may only be connected and operated as described in the installation and operating instructions. The Sensomatic must be mounted without connection to the power supply and installed in an enclosed cabinet. No modifications or additions of any kind to the approved mechanical and electrical functions are permitted, as these.

2.0 Safety instructions

2.1 General information

The electro-mechanical GRASS Sensomatic drawer system is a state-of-the-art system complying with the applicable EU standards and general accident prevention regulations. Certain risks, however, remain in case of non-compliance with these operating instructions. GRASS GmbH does not accept any liability or claims under warranty for damage or subsequent damage resulting from noncompliance with these operating instructions.

The Sensomatic drive units are subject to the regulations of the Machinery Directive 2006/42/EC (MD for short). The Grass Sensomatic is a complete machine – see the Machinery Directive guidelines (edition 2.2.) The requirements of the Machinery Directive are fulfilled by the Grass Declaration of Conformity if the Sensomatic unit is installed in furniture in compliance with the current Grass specifications (catalogue, operating instructions, assembly instructions). If the furniture deviates from these specifications, the party placing the furniture on the market must ensure its conformity.

The scope of the Machinery Directive covers distribution within the European Economic Area (EEA), Switzerland, Turkey and Northern Macedonia. The requirements of other countries are covered by certifications.

2.2 Safety instructions for assembly

- GRASS Sensomatic opening systems may only be assembled by trained specialists with the help of these assembly instructions.
- All work must be performed whilst disconnected from the electrical supply.
- Adhere to national regulations and standards when assembling Sensomatic system.
- GRASS GmbH excludes all liability for unauthorised changes to GRASS Sensomatic opening systems and any resulting damage.
- GRASS GmbH provides a warranty only for the drawer and slide systems Nova Pro, DWD XP and Dynapro. However GRASS GmbH cannot accept any liability for combinations with products of other manufacturers.
- Use only genuine GRASS parts for repairs and maintenance.
- The system must be connected to the power supply by a qualified electrician.
- When sawing in the vicinity of GRASS Sensomatic systems, ensure that no sawdust gets into the drive unit or into the guide rails.
- It must be possible to isolate the opening system, e.g. using switchable sockets. Prior to changing the power supply unit or the opening unit, the system must be isolated.
- Do not squeeze cables or allow them to come into contact with moving parts.
- The power supply unit must be easily accessible.
- Ensure that no moisture can enter the power supply unit.
- Do not use damaged parts.
- When the power supply unit is connected, the extension arm moves to the home position.

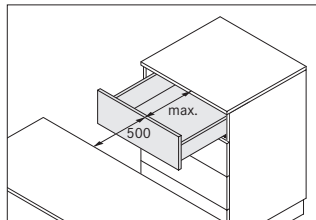
2.3 General safety instructions

- It is generally prohibited to reach in behind the rear wall of the drawer.
- Check the drawer system for visible damage.
- Ensure any damage to the drawer system is repaired by an authorised expert.
- Disconnect the drawer system from the power supply during longer periods of absence.



Automatically opening drawers! Risk of injury!

- Do not allow children to play within the movement range of drawers.
- Persons with a physical, sensory or mental impairment must not use this device.
- To secure GRASS Sensomatic systems against unintended opening, [isolate](#) the power supply unit.
- Children should never be left unattended in the drawer danger zone.
- Do not place any objects in the opening range of the drawers. Maintain a minimum distance of 500 mm from stationary objects when the drawer is fully open.



Live components! Electric shock!

- Disconnect the power supply unit before cleaning the drawers.



Incorrect loading, assembly or overload of drawers!

Drive fault!

- Do not overload drawers (for max. loading refer to the product catalogue of the relevant drawer system).
- Do not obstruct the space between the back of the drawer and the rear wall and do not cover the power supply unit.
- Ensure that cables and the opening unit do not come into contact with moving parts.
- Cables must be re-centred after processing.



Indoor use only

2.4 Repairs and modifications

Repairs and structural changes to the „GRASS Sensomatic“ opening system may only be carried out by an authorised specialist. The declaration of conformity issued by Grass is based on a risk assessment of standard kitchen units. If furniture is not manufactured in accordance with the Grass catalogue, operating instructions and assembly instruction specifications, conformity must be certified by the party placing the furniture on the market. This means that the furniture manufacturer is therefore obliged to prepare a risk assessment for the installed furniture, to prepare and keep the technical documentation, to fill in and sign a declaration of conformity, to ensure CE marking on the furniture (fill in and affix the type plate) and to forward a user manual and a copy of the declaration of conformity to the customer in the customer's national language.



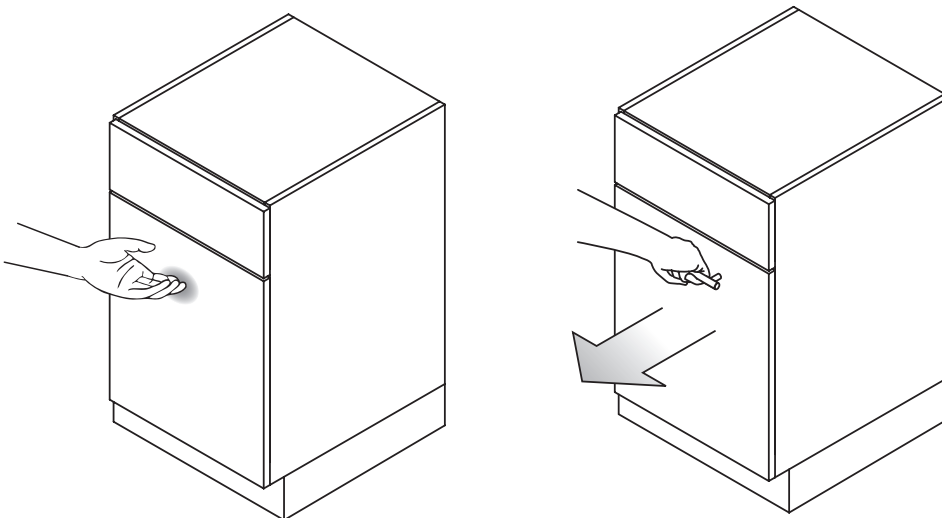
Live components!
Never open the power supply unit or an opening unit!

3.0 Functional description

A drawer can be opened by tapping or by pulling the handle (if applicable). The opening unit supports opening the drawer as the opening lever pushes the drawer forward. When leaning against the drawer, it cannot be opened! GRASS Sensomatic facilitates a smooth and gentle action when closing the drawer.

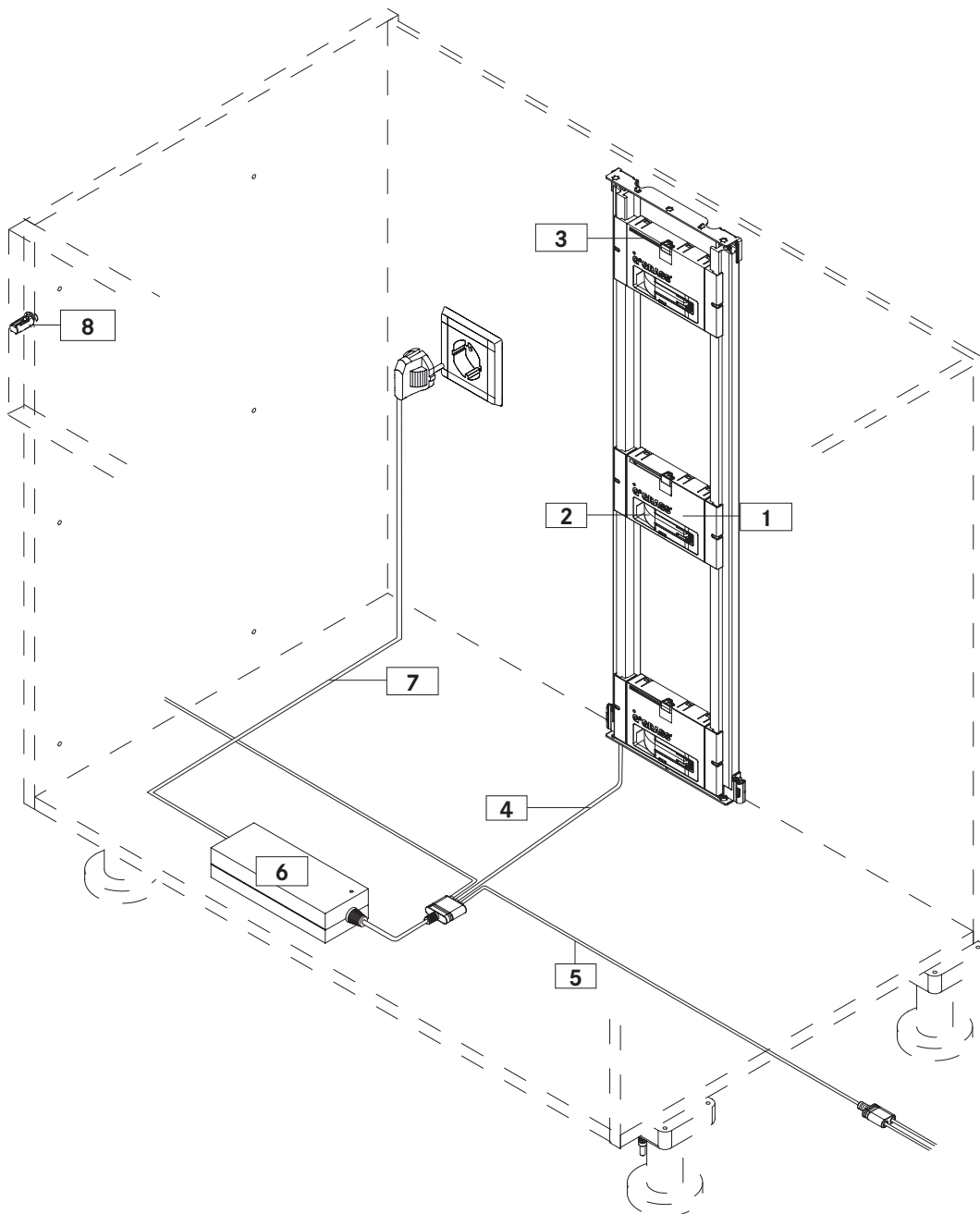


Note: It is not permitted to install the Sensomatic in conjunction with an internal drawer driver. When installed with an inset drawer, do not use an internal drawer driver.



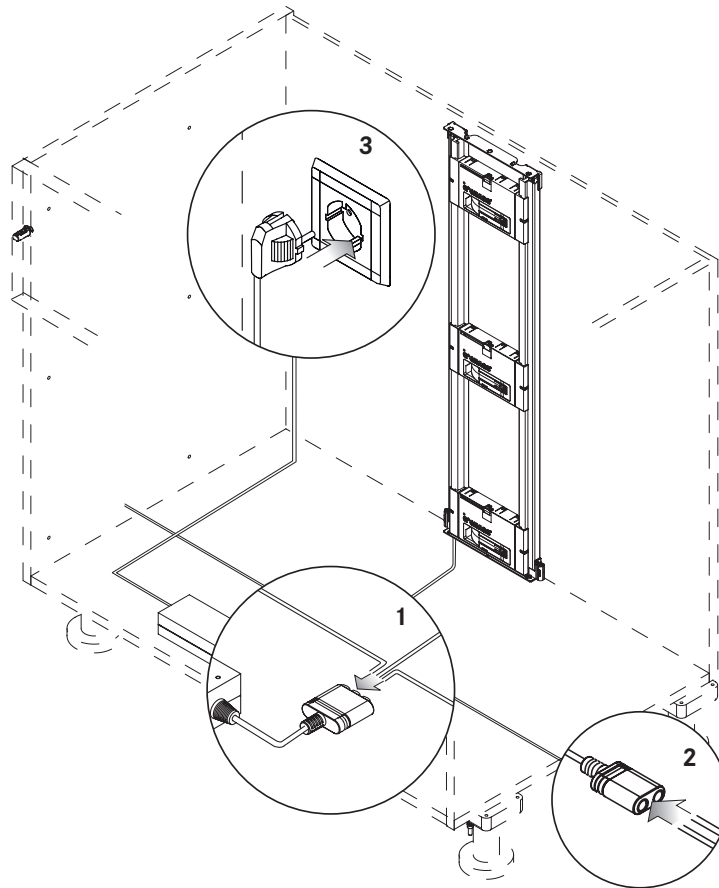
4.0 System overview

- | | | | |
|----|---------------|----|-----------------------------|
| 1. | Drive unit | 5. | Connection cable |
| 2. | Opening lever | 6. | Power supply unit |
| 3. | Locking lever | 7. | Power supply cable |
| 4. | Frame cable | 8. | Spring-loaded front buffers |



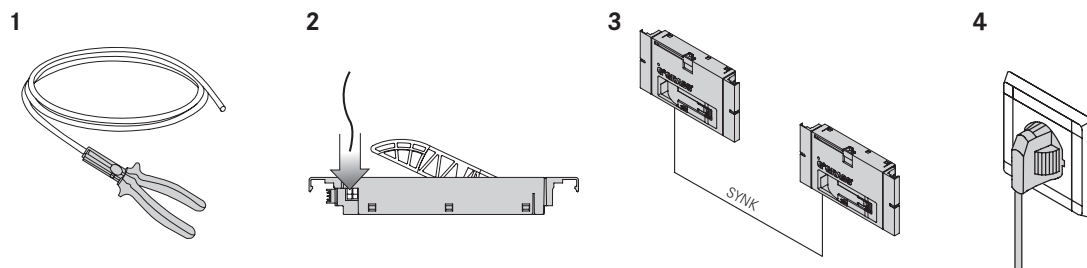
5.0 Initial start up

1. Plug frame and connection cable into the power supply unit
2. Connect adjacent cabinets with the connection cables
3. Connect power supply unit to sock



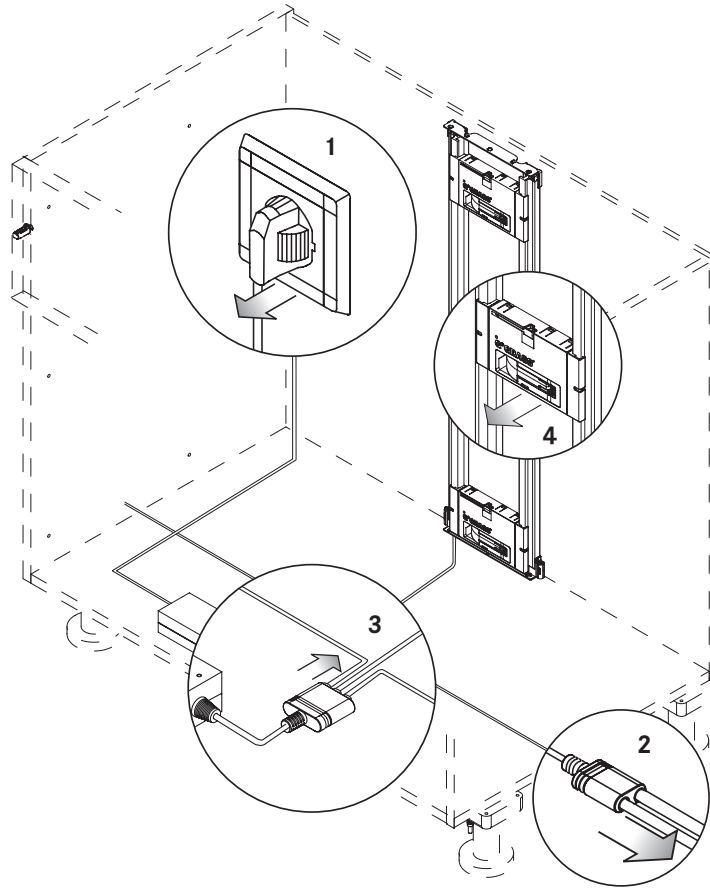
5.1 Synchronisation of drive units by means of a synchronisation cable

1. Strip the synchronisation cable
2. Connect the synchronisation cable to the unit
3. Connect the drive units together
4. Connect the power supply unit to the socket



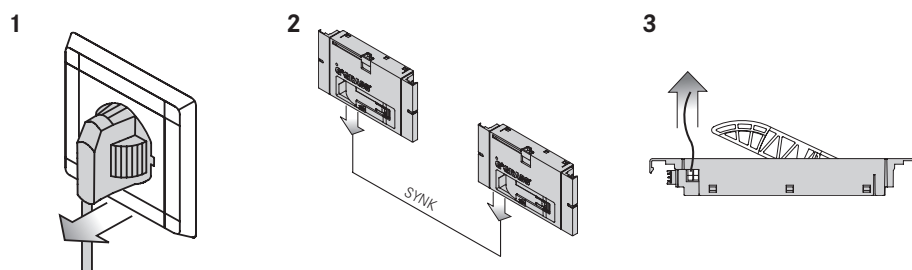
5.2 Disassembly

1. Unplug the power supply unit
2. Disconnect secondary cabinets from the connecting cable accordingly
3. Disconnect the cross bar and connection cables from the power supply unit
4. For disassembly of the drive unit see 8.1



5.3 Disassembly of synchronisation cable






















1. Disconnect the power supply unit from the socket
2. Disconnect units from one another
3. Disconnect the synchronisation cable from the unit



6.0 Troubleshooting



The drawers can always be opened manually like conventional drawers, even when isolated. It is often helpful to disconnect the system from the mains. Wait 10 seconds before switching the system on again.

Fault	Cause	Remedy
The drawer does not open - neither by pulling nor by pushing	The spring-loaded front buffer facilitating the activation path  is missing or defective.	 Fit the spring-loaded front buffer. Front height up to 300 mm: 1 per side, front height > 300 mm: 2 per side  Replace the spring-loaded front buffer
	Drawer is blocked, e.g. by stowed items.	 Remove the blocking item
	The drawer back is bent to the rear.	 Straighten the back of the drawer
	The opening unit is temporarily or permanently de-energised or defective.  Check the LED ✓ Green: Power supply OK a) Flashing in red: Opening unit is temporarily out of order b) Red: Opening unit is defective c) No indication: Power supply is interrupted or opening unit is defective	 a) Wait 3 min  b) Switch the system on and off or replace the opening unit (see chapter 8.0)  c) Slightly shift the opening unit and mount it again, or replace it (see chapter 8.0)
	Cross beam cable is not mounted correctly. The operation indicator on the power supply unit is lit.	 Check that the frame cable is correctly fitted into the cross beam and make any necessary corrections
The operation indicator on the power supply unit is not lit.	The power cable is not correctly connected to the power supply unit or defective.	 Check that the power cable is seated firmly, or replace it
	There is no voltage present at the power socket used.	 Switch on the switchable power socket  Use another power socket
	The power supply unit is defective.	 Check the fuses  Replace the power supply unit
When the drawer is opened it slides against the end stop too quickly.	Rack is not aligned horizontally.	 Align the rack
	Switch for the opening force is not set correctly.	 Shift the switch to the left (see chapter 10.0)
Drawer does not open wide enough.	Rack is not aligned horizontally.	 Align the rack
	Switch for the opening force is not set correctly.	 Shift the switch to the right (see chapter 10.0)
	Opening unit is defective.	 Replace the opening unit (see chapter 8.0)
The drawers of the entire cabinet do not open	Connection cable is not plugged in or is defective	 Check that the power cable is seated firmly, or have it replaced by an authorised expert

**When contacting an authorised expert,
have the following information ready:**

- Part number of the power supply unit (see fig. 1 and fig. 2)
- Serial number and part number at the rear side of the opening unit (see fig. 3)
- Conditions under which the problem occurred.
- Use the table to make sure that the range of required tasks can be narrowed down and the required spare part can be ordered

Part number F121 ...



Fig. 1: Part number
Power supply unit for
up to 30 opening units

Part number 112 ...



Fig. 2: Part number
Power supply unit for 1
opening unit

Serial number SN ...
Part number F121 ...



Fig. 3: Serial number and
part number of the opening
unit

7.0 Maintenance and care instructions

7.1 Maintenance

The GRASS Sensomatic drawer system does not require maintenance.

7.2 Care instructions



Live components! Electric shock!

- Defect of the opening unit
- Disconnect the drawer system from the mains before cleaning the drawers!

Liquids or other substances in the power supply unit! Electric shock!

- Defect in the drive
- Do not pour liquids or other substances over or into the power supply unit!
- If liquids or other substances penetrate the rack, immediately disconnect the drawer system from the mains!



Liquid-free cleaning

- Use a dry cloth, dry feather duster or vacuum cleaner for cleaning

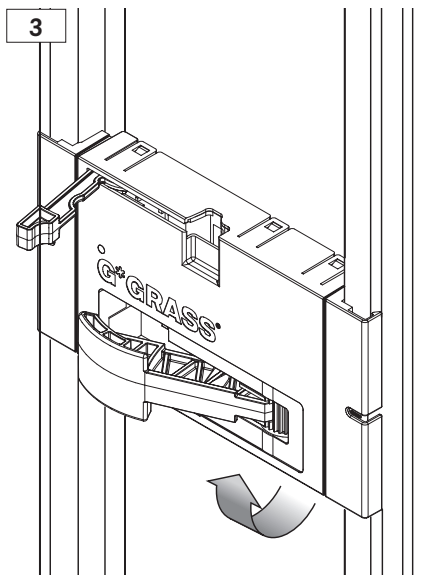
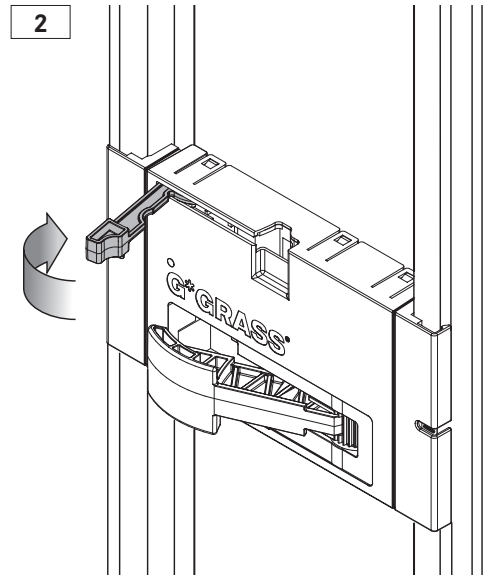
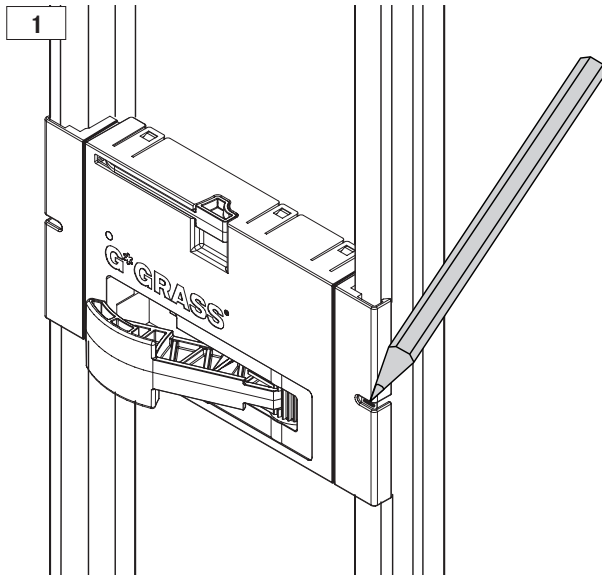
8.0 Exchange/disassembly of the drive unit

8.1 Dismounting the opening unit

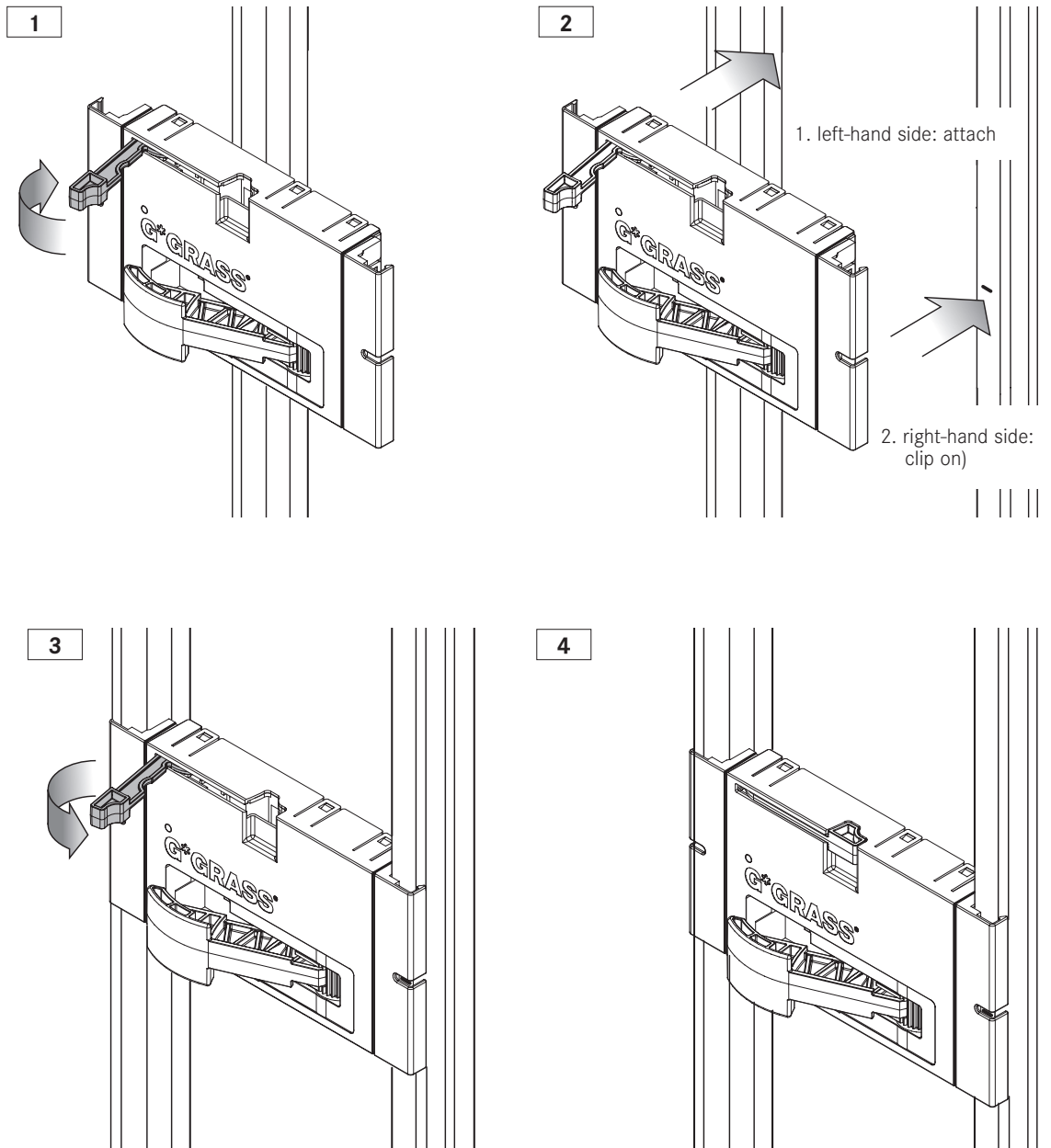


Live components! Electric shock!

- Disconnect the power supply unit from the mains before opening the locking lever!

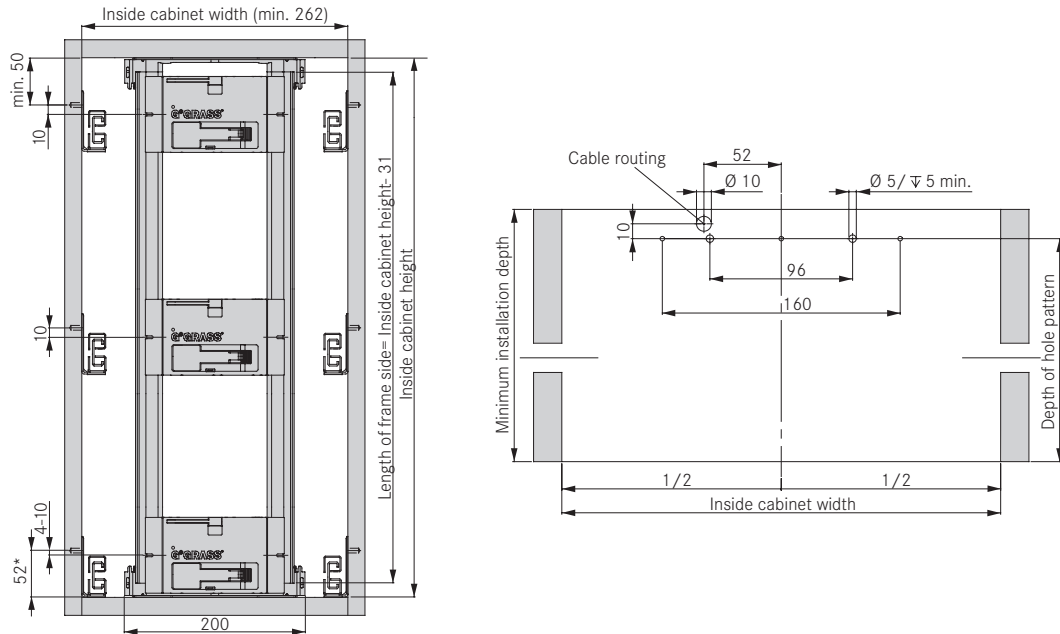


8.2 Mounting the opening unit

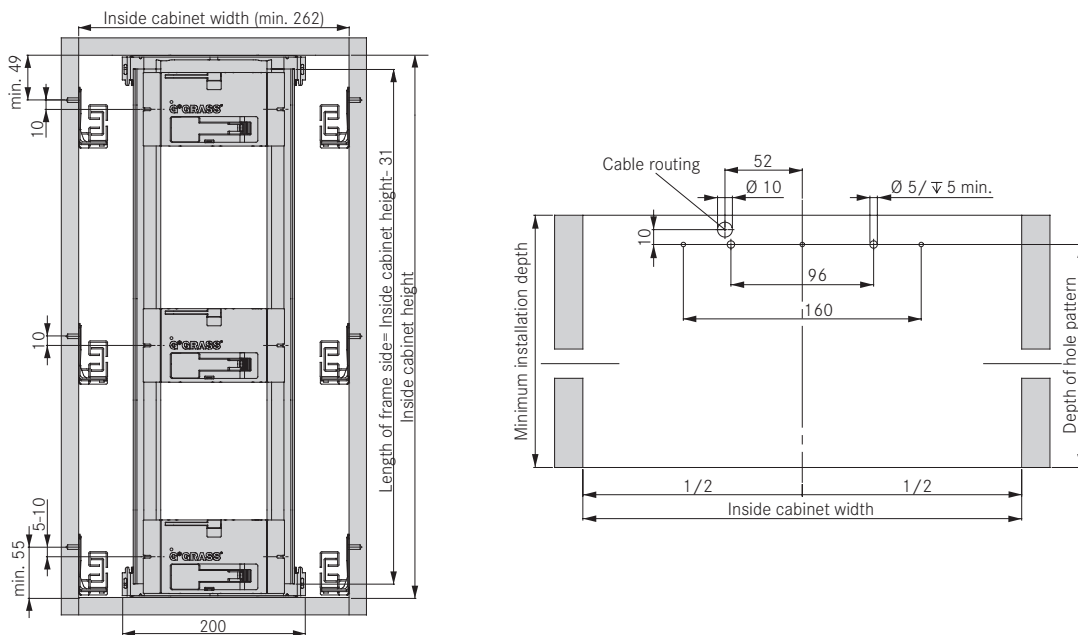


9.0 Installation dimensions

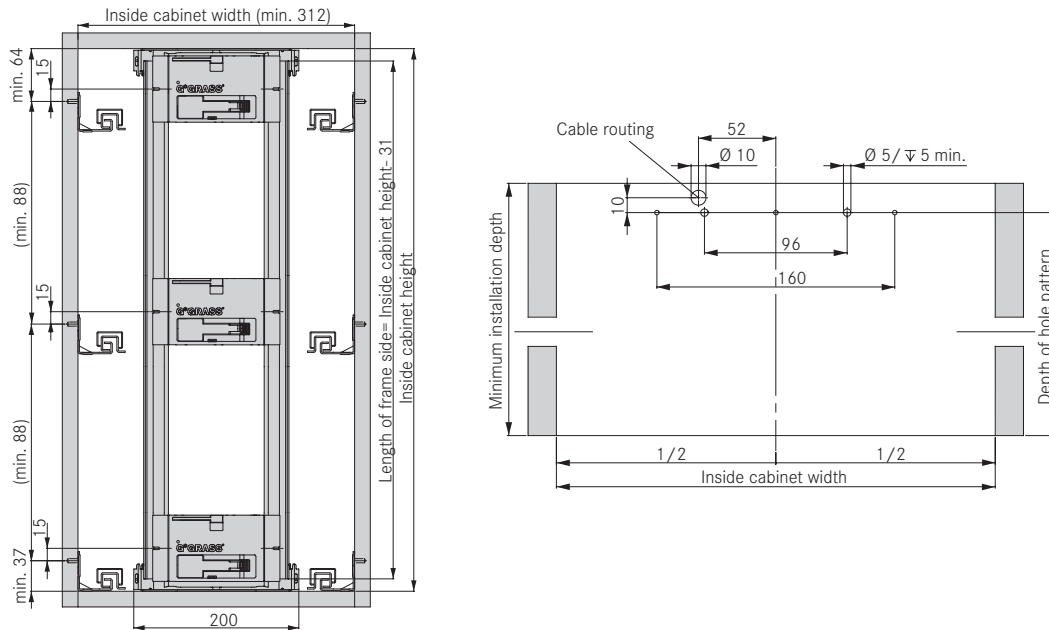
9.1 Nova Pro installation dimensions



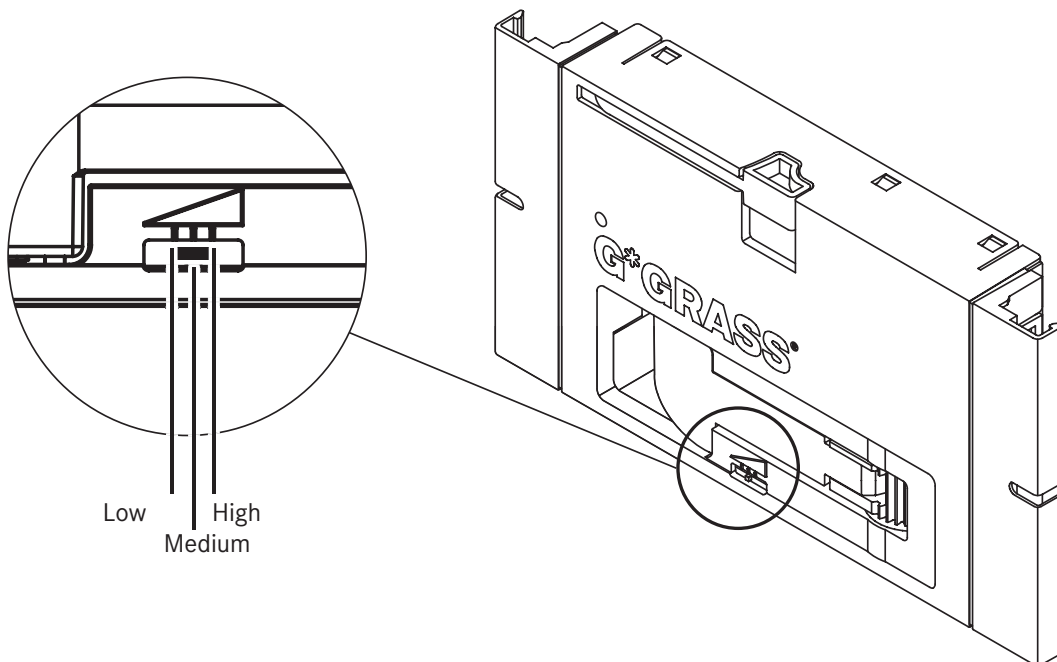
9.2 DWD XP installation dimensions



9.3 Dynapro installation dimensions



10.0 Adjusting the opening force



11.0 Technical data

11.1 Power supply unit for up to 30 opening units

Scope of application	Movement Systems	Nova Pro, Dynapro, DWD XP
	Range of application	Only in dry indoor environments
Power supply unit	Power supply	100 to 240 V
	Mains frequency	50 to 60 Hz
	Max. power output	230 W
Drive unit	Supply voltage	24 V
Operating conditions	Temperature	0 to 50
	Relative humidity	15 to 90 % non-condensing

English

11.2 Power supply unit for 1 opening unit

Scope of application	Movement Systems	Nova Pro, Dynapro, DWD XP
	Range of application	nur in trockenen, geschlossenen Räumen
Power supply unit	Power supply	100 to 240 V
	Mains frequency	50 to 60 Hz
	Max. continuous power rating	16 W
Drive unit	Supply voltage	24 V
Operating conditions	Temperature	0 to 50
	Relative humidity	15 to 90 % non-condensing

12.0 Disposal



All national and local regulations must be observed when disposing of or recycling the product or its components! If you have any questions regarding the disposal of the product, please ask an authorised expert.

Observe disassembly instructions for disposal.

