

## **EN** User manual Diago 504



### **EN** Products

**Height adjustable frames for wall cabinets**  
Wall Cabinet Lift - DIAGO

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# 1. Introduction

We have the pleasure to deliver a Granberg Interior wall cabinet lift series Diago 504. This is an electrically operated lifting and lowering system for installation of new or existing wall cabinets. It can be used separately, or together with the Granberg work top units, and it becomes then a total adaptation of the kitchen. The lift is suitable for all wall cabinets of various makes, which are made according the standards EN 1116 and EN 1153.

## **Only authorized persons may use the 504 wall cabinet lift!**

Authorization means obligation to read and follow the instructions.

It is very important that you read and understands the instructions before you use the device.  
If you have any questions - contact your supplier.

This Instruction manual shall be available for all concerned persons, be kept in a protected place and shall follow the product, if it is moved to another installation site or another house or apartment owner.

**Correct use, operation, inspections and maintenance are decisive for efficient and safe work.**

# 2. Declaration of Conformity with EU-directive

This product is CE-marked and is granted to conform to the basic safety and operation requirements, in accordance with the actual Machinery, EMC- and Low voltage Directives. A separate "CE-Declaration of Conformity" is available in a separate document.

# 3. Intended use

The wall cabinet lift series 504 is intended to achieve a convenient location to put or pick of normal kitchen cabinet items, e.g. dry groceries and household objects, by means of manoeuvring the shelf system along an arc-shaped path down to the worktop level below it. The operation shall be indoors, under normal housing conditions regarding temperature, humidity and lighting.

The Diagonal lift is not intended for use in moist environments.

It is assumed that the wall cabinet is made according the standards EN 1116 and EN 1153.

## 4. Technical data

	550 mm width	1150 mm width
<b>Cabinet width</b>	600 - 1100 mm	1200 - 1800 mm
<b>Cabinet height</b>	700 - 1100 mm	700 - 1100 mm
<b>Cabinet depth, max</b>	400 mm	400 mm
<b>Vertical stroke, max</b>	435 mm	435 mm
<b>Horizontal stroke, max</b>	147 mm	147 mm
<b>Time for a lift or lowering stroke, approx.</b>	26 s	26 s
<b>Mains voltage</b>	230 V	230 V
<b>Power consumption</b>	230 W	230 W
<b>Max number of full work cycles/ hour</b>	6	6
<b>Control and lighting voltage</b>	24 V DC	24 V DC
<b>Weight excl. cabinet</b>	22 kg	31 kg
<b>Weight incl cabinet, maximum size</b>	66 kg	115 kg
<b>Max load in the cabinet</b>	95 kg	50 kg
<b>Noise pressure less than</b>	70 dB(A)	70 dB(A)

## 5. Safe use

In order to utilise the properties of the Diagonal lift 504 and to prevent and avoid damages it is important that you carefully read the instructions and operates it in the right way.

The lift is a diagonal lift that lowers the cabinet along an arc-shaped path down to the worktop level below it.

The travel can be stopped at any height.

It is provided with safety arrangements in order to prevent and avoid damages and accidents.

It is however still very important that the operator is well instructed in how to install and operate the Diagonal lift.

In the following the Diagonal Lift means the lifting machine and the fitted wall cabinet.

- Only use the Diagonal lift for its intended purpose
- The operation and use must be made in such way that there is no risk for damages on persons and property.
- The Diagonal lift may only be operated by persons who have read and understood these instructions, and are authorized to use it.
- Be aware of that you as an operator are responsible for that nobody is damaged.
- The lift and the work area must be in proper condition. The Diagonal lift must not be used if any fault has appeared which influences the functions or the operation safety. It shall also not be used if it has been repaired, altered or adjusted without permission of a responsible person.
- Make sure that the Diagonal lift is installed on a firm, flat and fully vertical wall, with sufficient attachment devices for the total weight. Only competent persons shall make the installation.
- The Control devices shall be placed so that the operator has got full view over Diagonal lift and its work area when operations are made.
- Do not touch any part of the lift when operating it. Only press the button for desired motion direction.
- Do not put hands, arms, or any other part of the body or any object into the Diagonal lift unit when it is brought from the parking position. The parking position means when the Diagonal lift is fully raised and brought to the wall, i.e. at the top level.
- Do not operate with open cabinet doors.
- Keep in mind that when the Diagonal lift has left the parking position the risk increases to get damaged by the cabinet and the doors.
- Do not lower the wall cabinet lift unless the space below it is free of persons or objects. In particular if the Diagonal lift unit is installed above a workbench with adjustable height there is an imminent risk that you do not notice objects or equipment that might be trapped.
- Observe the risk for collision between the Diagonal lift unit and the Workbench. Turn the water tap and its lever towards the wall before operating the Diagonal lift, otherwise there is a risk that the cabinet will jam the spout of the water tap and the control lever
- Notice the jamming risk between the Diagonal lift and adjacent cabinets and behind the Diagonal lift
- Only stable and securely loaded items may be handled. Mind the tilting risk for objects in the cabinet, which are unstable, e.g. carelessly piled.
- Never let the Diagonal lift come in contact with adjacent objects.
- Safety devices must not be taken out of service or removed.
- Alterations of the Diagonal lift that influence the operational safety or the functions are not allowed.
- Decals and markings must not be removed or made illegible.
- Do not overload the Diagonal lift.
- Always distribute the load within the cabinet, to avoid cantilevered loading. Consider the risk that the load can roll, slide or fall over.
- If the cabinet have no doors the risk is even bigger that objects may fall out of the cabinet.
- Use safe and sufficient lifting methods when handling load to and from the Diagonal lift. In particular beware when handling heavy items, and goods with hazardous content or with sharp corners and edges.
- The Diagonal lift unit shall regularly, once a year, be inspected in order to prevent accidents.
- The lift may not be operated when there are saucepans/frying pans in use on the cooker, nearby or under the Diagonal lift. There is a risk that these will fall over if they are hit by the Diagonal lift.
- Applicable Building and Safe use Regulations must be complied with.
- It is forbidden to stay in wall the cabinet, to hang in the cabinet shelves or to use the lift for lifting of persons.
- Do not use the Diagonal lift as a lifting jack, e.g. for lifting things from the floor.
- The machine must not come in direct contact with food
- Do not use the Diagonal lift in a potentially explosive environment.
- When the operation is in a public location, particularly when children can enter the work area, the operator shall make satisfactory arrangements to prevent persons from entering the hazardous area when the lift is being operated, or it has been lowered from the parking position, e.g. by means of blocking the work area or by means of adding protection devices.
- During inspections, service and repair work there shall be no load in the cabinet. It can be necessary to demount the shelves from the lift to carry out service or repair.
- Competent persons only must carry out installation, service and repair works.
- Only Granberg original spare parts shall be used when replacing any parts. Our warranty commitment can otherwise be invalidated.

## 6. Safety arrangements

Below the bottom shelf there is a fully covering safety trip plate with reversal operation. If the trip plate is pressed the Diagonal lift will lift until the obstacle that activated the movement does not actuate the trip plate any longer. Check the safety trip plate function often.



## 7. Load distribution and side forces

Note that the max. rated load means that the load is distributed over the entire cabinet volume. Horizontal forces are not allowed.

**Basic loading requirements:**

- **100 % of the rated load distributed over the entire cabinet volume.**
- **The Centre of Gravity of the load is assumed to be in or under the cabinet centre.**
- **Horizontal forces are not allowed.**

**Horizontal forces can appear, for example, when pressing onto the shelves or the load. It is difficult to estimate the size of the actual horizontal force, so utmost care must always be taken.**

Further to the incorporated safety arrangements additional can safety actions may be required on or at the Diagonal lift. Discuss suitable actions with your Granberg representative or with the health and safety inspection.

We recommend that a Risk assessment in accordance with the Machinery Directive shall be made for the actual working conditions.

If the owner fits accessories, contact Granberg to get approval for the loading conditions.



Incorrect load distribution!



Correct load distribution!

## 8. Actions after use

The Diagonal lift unit shall after use be left fully raised to the top level, the parking position.

Switch off the main switch and lock it in closed position, if unauthorized use can occur.

To prevent unauthorized use can it is also possible to furnish the control panel with a key switch, by means of which the control circuit is disconnected. It can also be placed inside a lockable cabinet.

## 9. Instructions for recycling

When the Diagonal lift is reused make sure that safety trip panel is the right size.

When the Diagonal lift unit shall be re-used shall it must be cleaned, inspected and go through a full operation test before it is installed on the new site.

We recommend the machine to be sent to Granberg or to the Granberg distributor to get this done.

The machine is manufactured from re-usable materials or from materials that can be recycled.

## 10. Spare parts list

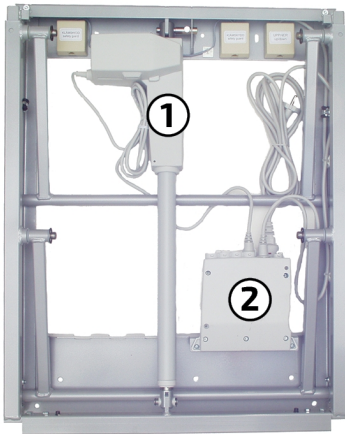
If any component does not work or has broken, contact your supplier. Only Granberg original spare parts must be used when replacing any parts. Our warranty commitment may otherwise be invalidated.

### Return of spare parts:

Contact Granberg prior to any return of parts.

Do not return any parts that have been worn out during normal operation or accidentally damaged. Only return worn or damaged parts if it is considered that the fault is covered by our warranty conditions. In such cases, return the parts without delay, otherwise the right to replacement may be lost.

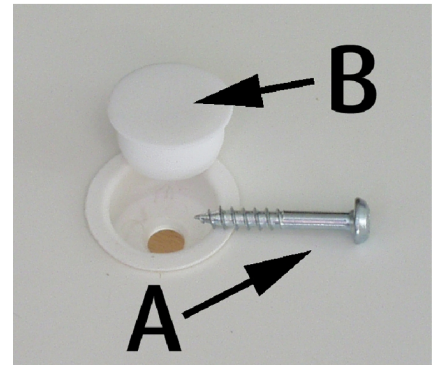
When ordering spare parts always quote the manufacturing number and type.



- 1. Motor
- 2. Control unit



Safety trip panel



Cover plugs (A) and screws (B) for trip panel



Control button, aluminium



Remote control (Only Europe)

## 11. Electric system / Electric circuit diagram

A control unit, containing contactor and a transformer for 24 V DC control voltage shall be connected to 230 V, 50 Hz or 120 V 60 Hz (Depends on model) wall socket. The power consumption is only 345 W (230 V) or 324 W (120 V). Also the drive motor, operating on 24 V DC is connected to the control unit.

The control boxes and the safety trip panel are connected to the junction boxes in the upper part of the wall frame. These are then connected to the control box.

The picture shows a double wall socket, to which the control unit as well as the transformer for the lighting are connected.



### Electric diagram

