

QR code to  
mounting  
video

# Ropox VertiElectric

User manual

Mounting instruction

Keep this folder with product at all times!

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## 1. Introduction

VertiElectric is a electric height adjustable frame for wall units.

VertiElectric is especially suitable for wheelchair users or persons who normally have difficulties reaching upper shelves in wall units.



This document must ALWAYS accompany the product and be read by and available to users



This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

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

All users must follow these instructions. It is very important that the instructions have been read and understood prior to operation of the product.

This instruction must be accessible to the user and kept with the product if it is moved to another place.



If this product is electrically adjustable in height there is a risk of trapping. The product must therefore always be operated by or under the guidance of an experienced adult, who has read and understood the importance of section 12 "Safety in use"

The correct use, operation and inspection are decisive factors for efficient and safe performance.

## 2. Compliance with EU-Directives

This product has CE-marking according to the current Machinery, EMC and Low Voltage Directives and thus complies with the basic safety requirements.

If these frames are assembled or otherwise connected with other electrical components, this will be considered a new unit. Consequently, the assembled unit must be subject to a risk assessment, after which the CE mark may be awarded.

## 3. Application

VertiElectric is designed to obtain optimum working height for the user. VertiElectric has been designed for height adjustment of wall units. VertiElectric must NOT be used as a lifting table or person lifter.

The product must be used indoor, under normal room temperatures and humidity as stated in section 4.



The control unit complies with IP32/II and must always be installed in accordance with the national Heavy Current Regulations or corresponding national or international standards.

## 4. Technical data

<b>Product name:</b>	<b>Ropox VertiElectric</b>
<b>Item numbers:</b>	<b>Item numbers:</b> VertiElectric width 40cm : 30-40604 VertiElectric width 50cm : 30-40605 VertiElectric width 60cm : 30-40606 VertiElectric width 70cm : 30-40607 VertiElectric width 80cm : 30-40608 VertiElectric width 90cm : 30-40609 VertiElectric width 100cm: 30-40610 VertiElectric width 110cm: 30-40611 VertiElectric width 120cm: 30-40612 VertiElectric width 130cm : 30-40613 VertiElectric width 140cm : 30-40614 VertiElectric width 150cm : 30-40615 VertiElectric width 160cm : 30-40616 VertiElectric width 170cm : 30-40617 VertiElectric width 180cm : 30-40618
<b>Material:</b>	Welded steel tubes St. 37 and various plastic components.
<b>Surface treatment:</b>	Blue chromate, powder coating.
<b>Power supply:</b>	220-230V~ / 50-60Hz, 5,0A
<b>Standby primary:</b>	0,3W
<b>Control voltage:</b>	24VDC
<b>Duty circle.:</b>	Max. 2 min. active then 18 min. pause
<b>Max. load of frame:</b>	The width 40 – 120 cm, 80 kg evenly distributed over the frame The width 130 – 180 cm, 120 kg evenly distributed over the frame
<b>Speed:</b>	Approx. 33 <sup>mm</sup> / <sub>sec</sub> - Approx. 9 sec for a complete stroke
<b>Temperature:</b>	5-45° C
<b>Air humidity:</b>	5-85% (non-condensing)
<b>Complaints:</b>	See Complaints, page 32
<b>Producer:</b>	Ropox A/S, DK-4700 Naestved, Tlf.: +45 55 75 05 00 E-mail: info@ropox.dk - <a href="http://www.ropox.com">www.ropox.com</a>

## 5. Schematic diagram of frame

Its important that electrical connections to control unit are flexible and can move freely within the range of adjustment of frame.

### Conditions for schematic diagram:



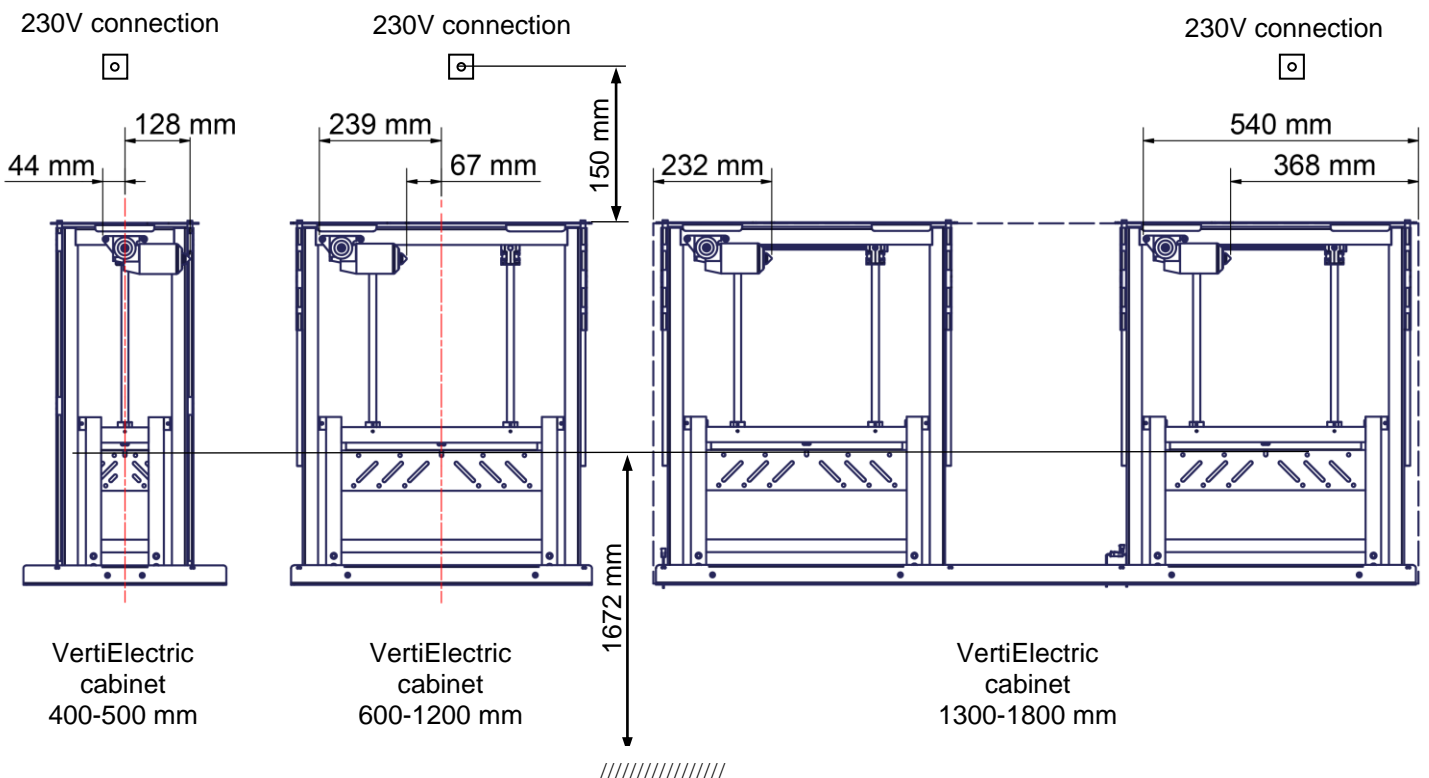
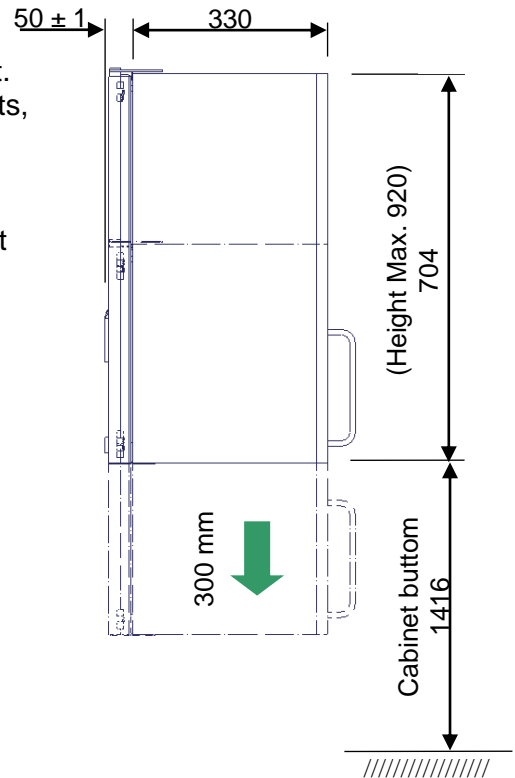
Height of wall units = **704 mm** – (with another height of wall unit regulate diagram accordingly)

Height of upper edge of wall unit = **2120 mm** (if another height required, regulate diagram accordingly)




### Note!

Motor and control box are placed inside the cabinet.  
Motor to be mounted as per specific measurements, see drawing below.

For double unit 1300-1800 mm, it is not possible to Mount cabinet sizes smaller than 60 cm on the right Side, due to motor placement inside the cabinet.



**Construction – see dimensions on the following page**

-  Minimum area for reinforcement of wall. Wall material must be suitable for screw mounting.
-  Area for electric installation.
-  Area for conduit.

**40 – 120 cm**

Max. load 80kg evenly distributed, according to DS/EN 12182, based on 11 screws/bolts.

**130 – 180 cm**

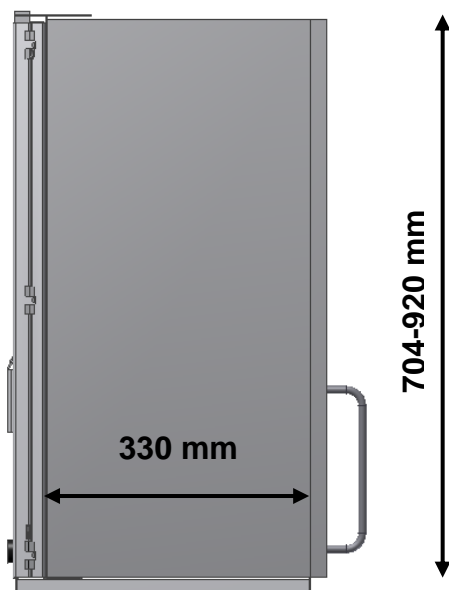
Max. load 120kg evenly distributed, according to DS/EN 12182, based on 22 screws/bolts.

**Minimum load capacity per screw/bolt:**

22.5kg

The fitter should always consider the material, condition and strength of the wall and use screws and rawlplugs suitable for the specific wall type.

**5.1.2 Wall unit sizes**



**Obs! – If Safety stop plate is not being used, wall units with less depth can be used!**

### 5.1.3 Wiring to control switch

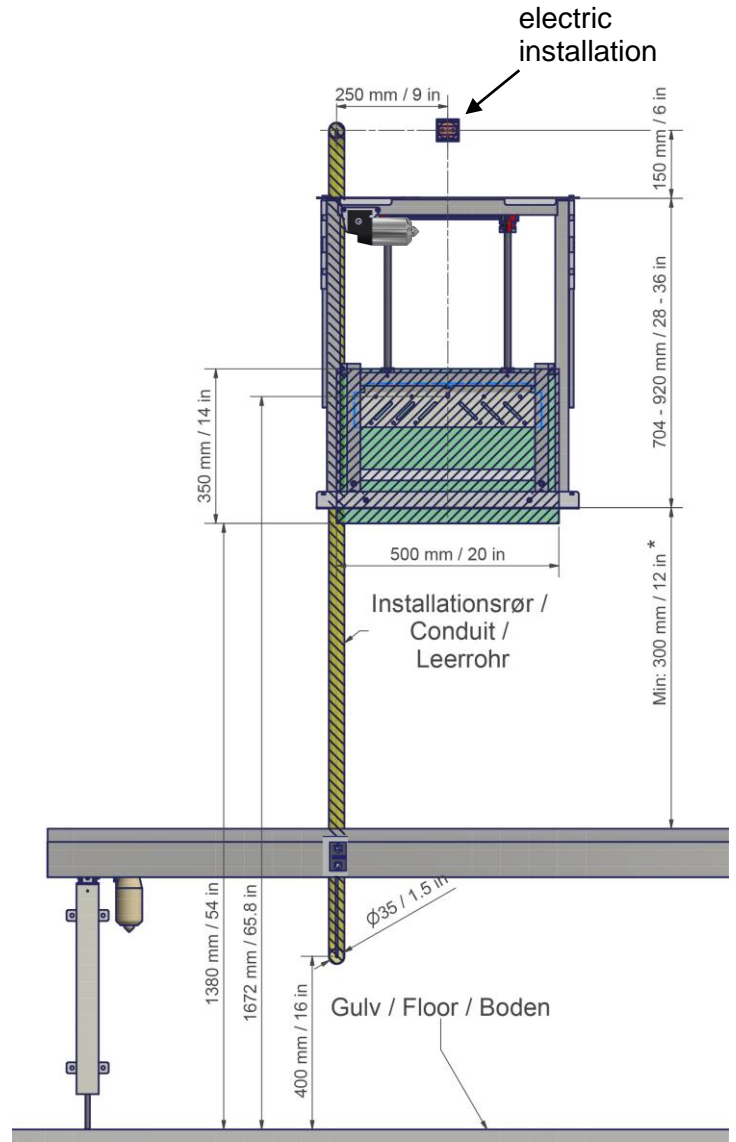
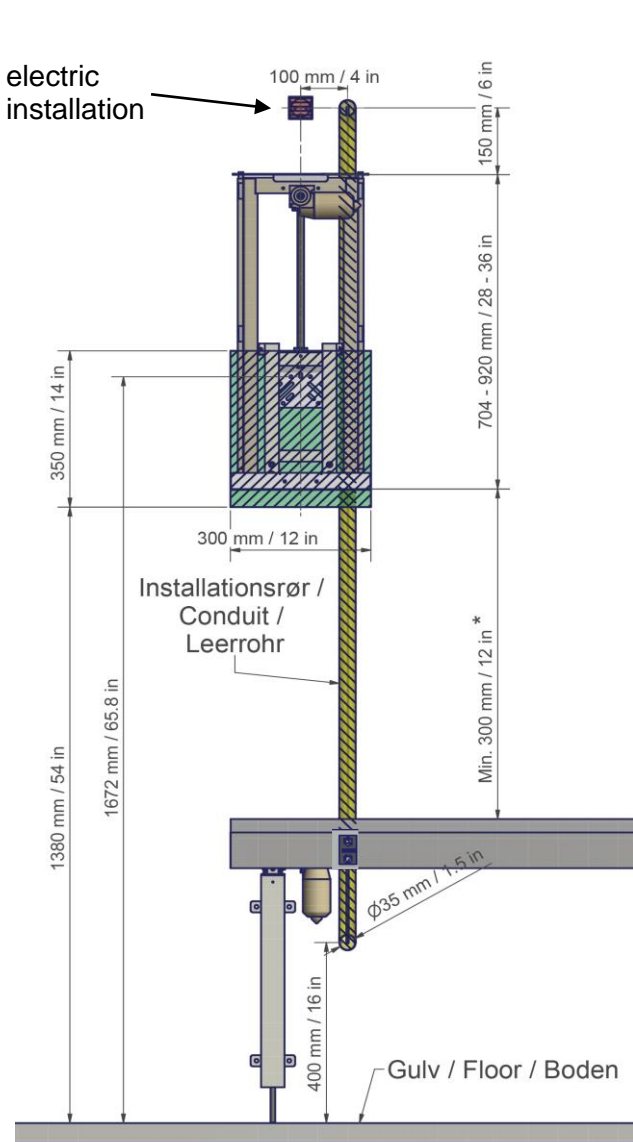
Pull down cable from wall units to edge of worktop for placement of control.

We recommend a build-in pipe in wall where the cable can be pulled through (ø3cm).

If a high wall unit is placed right next to a VertiElectric, it is an advantage to pull the cable for the control trough wall unit then a pipe in wall can be avoided.

**Cabinet width 40-50 cm  
(30-40604 to 30-40605)**

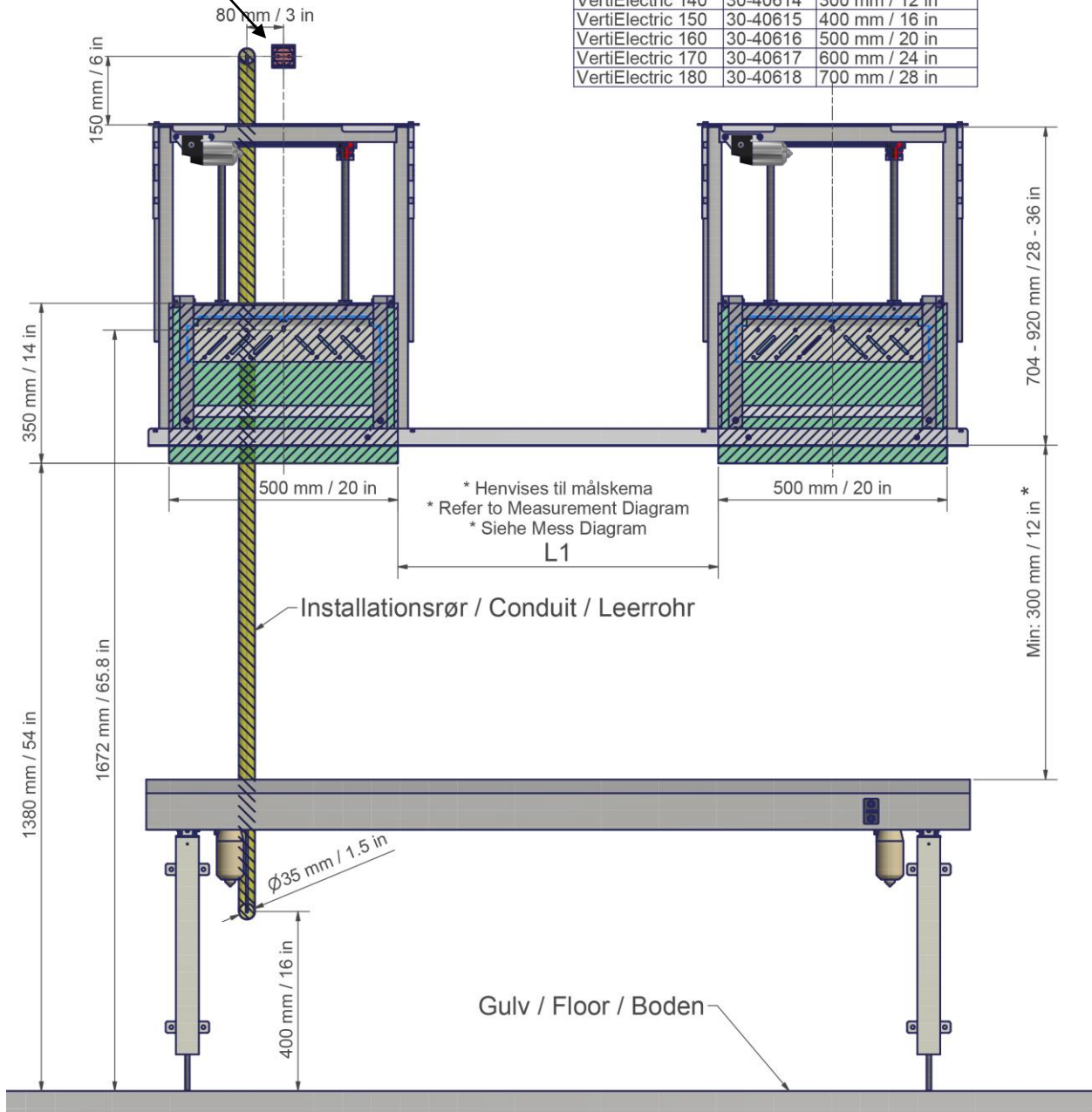
**Cabinet width 60-120 cm  
(30-40606 to 30-40612)**



**Cabinet width 130-180 cm  
(30-40613 to 30-40618)**

electric installation

L	Part no.	L1
VertiElectric 130	30-40613	200 mm / 8 in
VertiElectric 140	30-40614	300 mm / 12 in
VertiElectric 150	30-40615	400 mm / 16 in
VertiElectric 160	30-40616	500 mm / 20 in
VertiElectric 170	30-40617	600 mm / 24 in
VertiElectric 180	30-40618	700 mm / 28 in





## 6. Mounting instructions



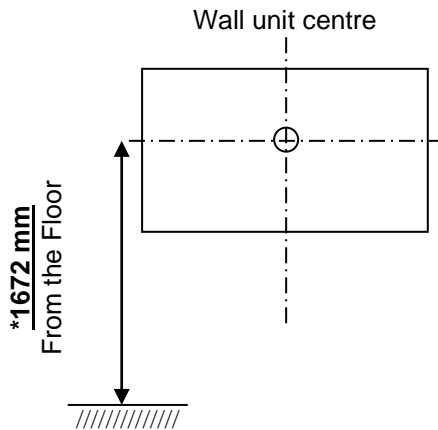
Assembly must always be carried out by competent personnel

Prior to assembly check that all parts have been provided. See list of components, section 9

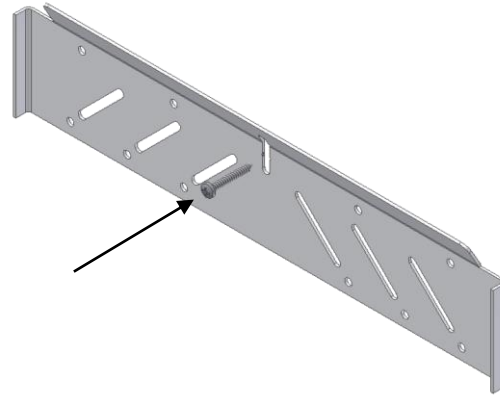


**Height of top wall unit (edge) = 2120 mm – see schematic diagram page 5**

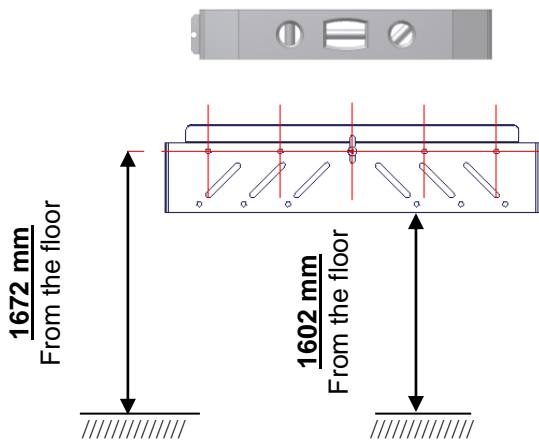
### 6.1 Marking of wall



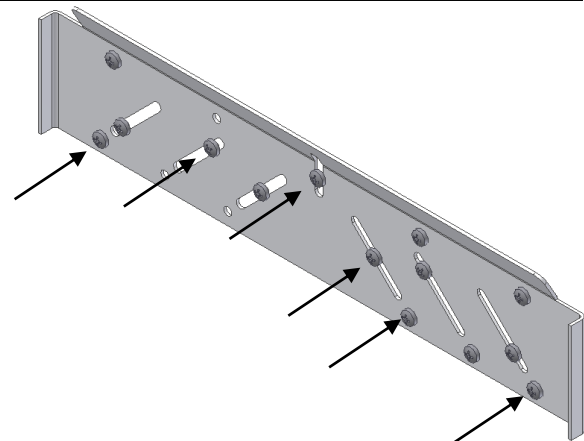
6.1.1 A wall unit height of 704mm – mark centre measurement of wall unit on wall in a height of 1672mm from floor. See schematic diagram page 5 for correct marking! Drill hole and insert raw plug.



6.1.2 Fasten mounting plate with a screw in the middle.

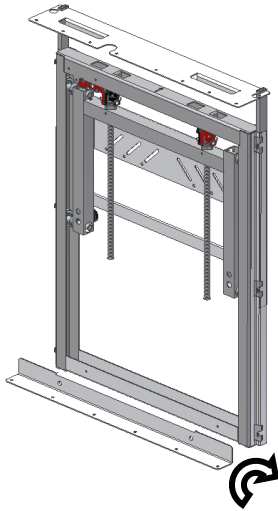


6.1.3 Level mounting plate in correct height whereupon marking for remaining screws is carried out.

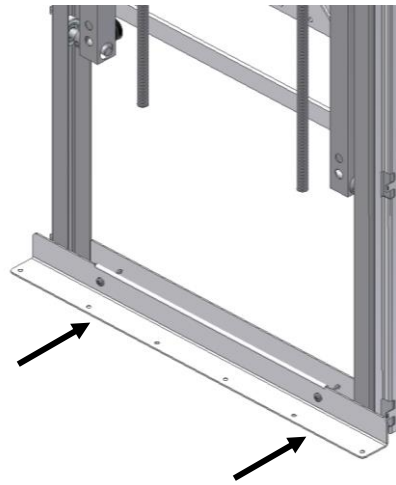


6.1.4 Secure mounting plate with remaining screws which are necessary.

## 6.2 Reinforcement of wall units

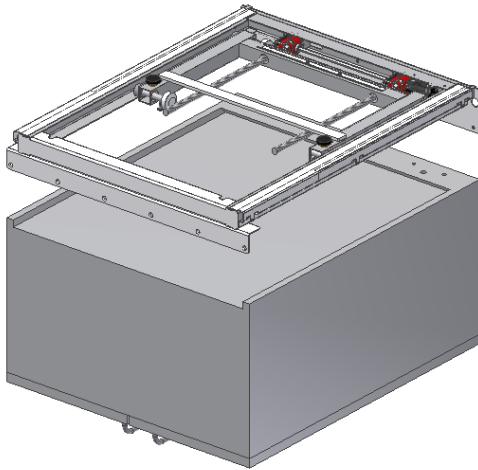


6.2.1 Bottom profile to be hooked onto the frame.

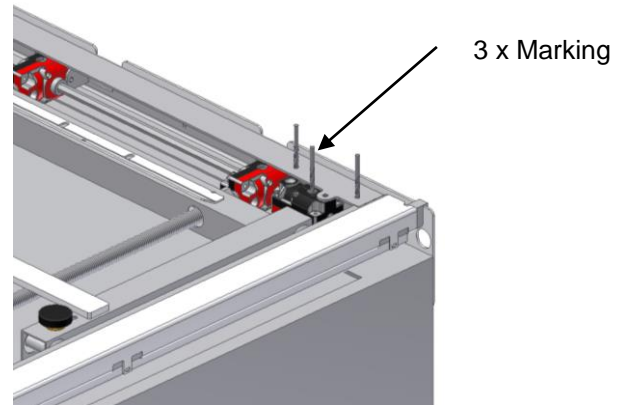


6.2.2 Mount the bottom profile with the two screws.

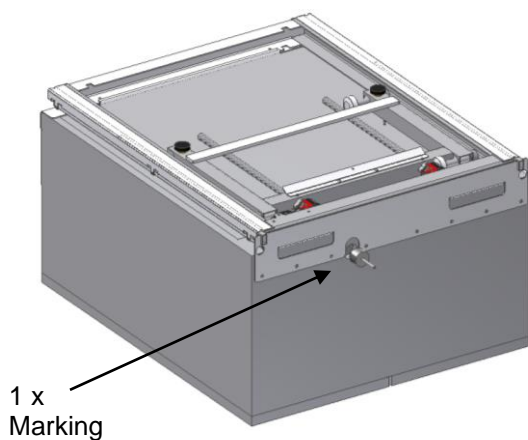
## 6.3 Marking of holes in wall unit



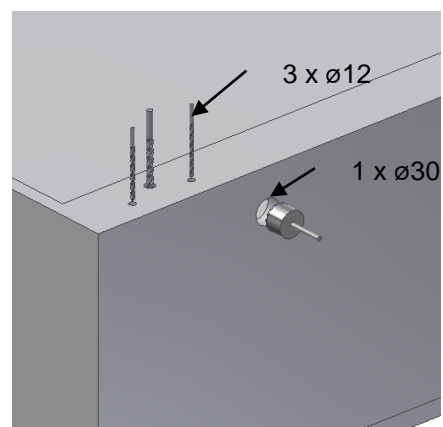
6.3.1 Place wall unit on the floor with the backside turned upwards, position VertiElectric on top of the wall unit in the centre.



6.3.2 Mark 3 holes trough the frame and gear box, be careful not to damage any parts of VertiElectric.

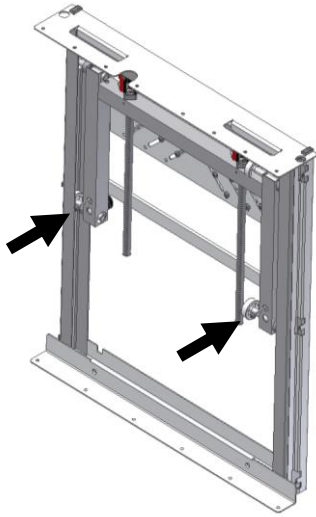


6.3.3 Mark one hole in the top of wall unit.

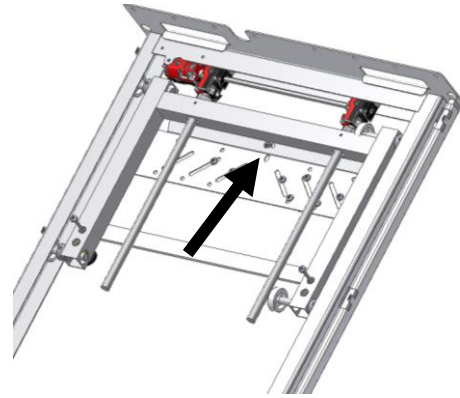


6.3.4 Finally drill all 4 holes (3 x ø12) - (1 x ø30).

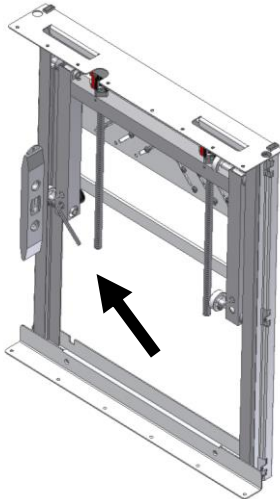
## 6.4 Mounting of Verti unit



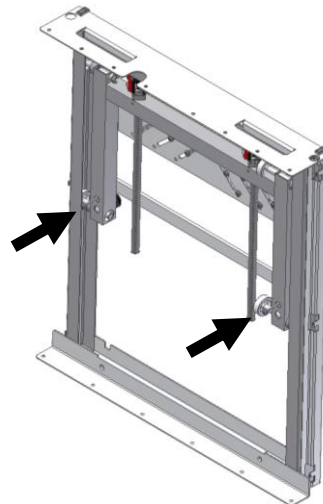
6.4.1 Lift VertiElectric onto mounting plate and adjust that it is placed in the centre of the wall unit, Mark additional 2 mounting holes. Remove VertiElectric before drilling and inserting of raw plugs.



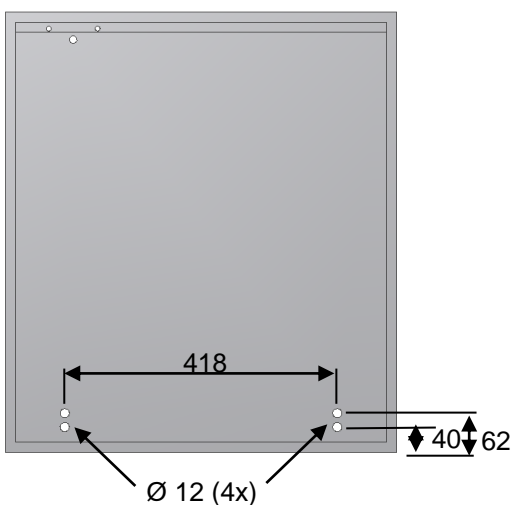
6.4.2 Once more lift VertiElectric onto mounting plate, place and adjust in centre of wall unit. Secure the frame with mounting one screw in centre.



6.4.3 Adjust the frame plumb with the 2 adjustment screws which are placed at bottom coil/cylinder. Use 1 in each side.

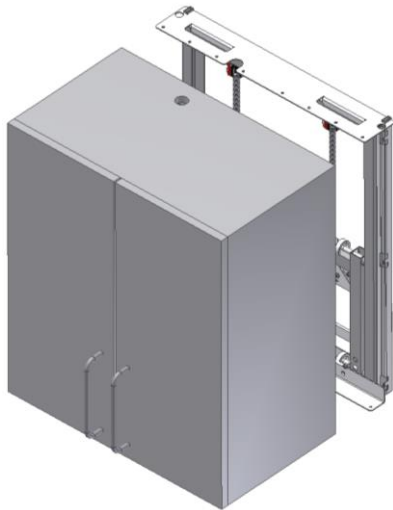


6.4.4 Insert and fasten remaining 2 adjustment screws.

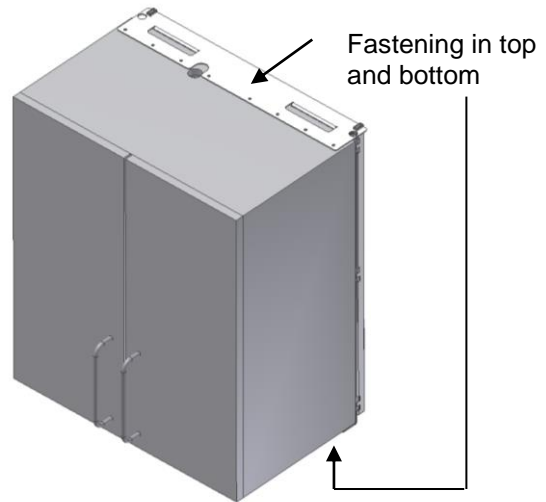


6.4.5 Mark up the Four holes in the back panel of the wall unit for later adjustment according to 6.5.3 & 6.5.4

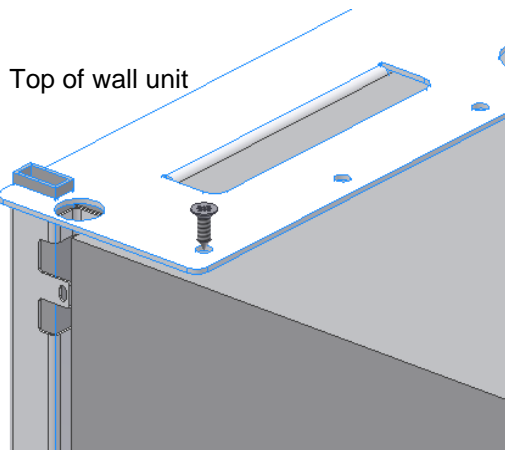
## 6.5 Mounting of wall units



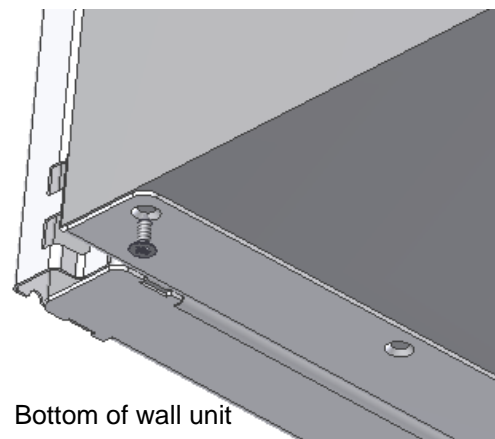
6.5.1 Lift wall unit onto frame and place in centre.



6.5.2 Secure wall unit in top and bottom.



6.5.3 Press wall unit into frame and fasten the top first.

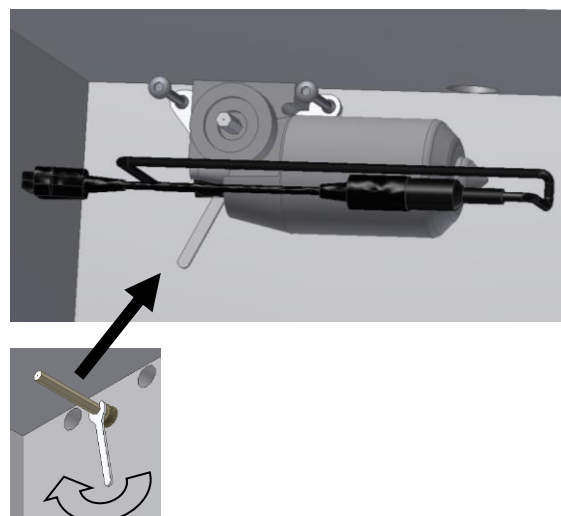


6.5.4 Press wall unit into frame at the bottom and fasten.

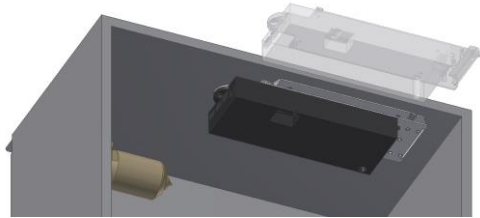
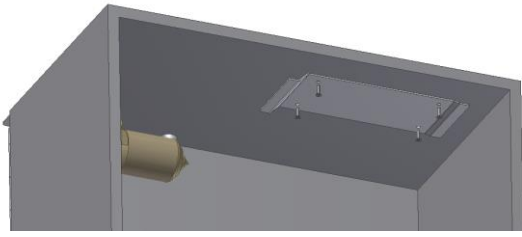
## 6.6 Mounting of motor



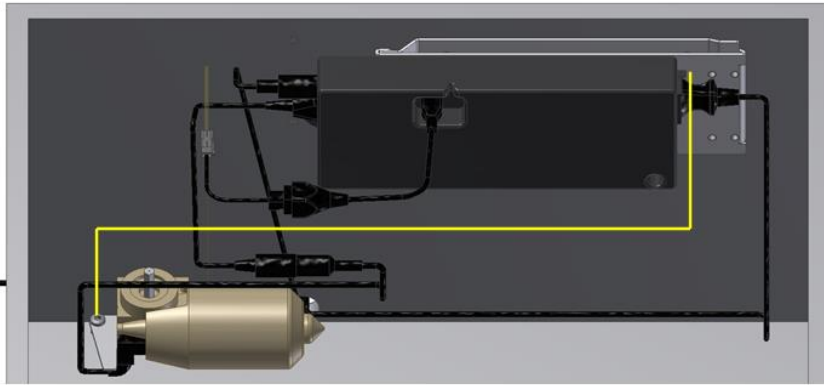
6.6.1 Motor, with spindle, is mounted through back plate and into gearbox



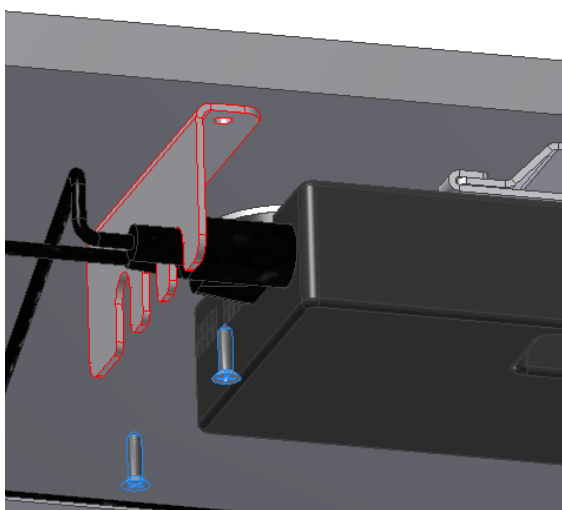
6.6.2 Safely turn the shaft for correct mounting of motor. Tighten the two screws. The eye on the yellow/green earth wire should be mounted on one of the screws.



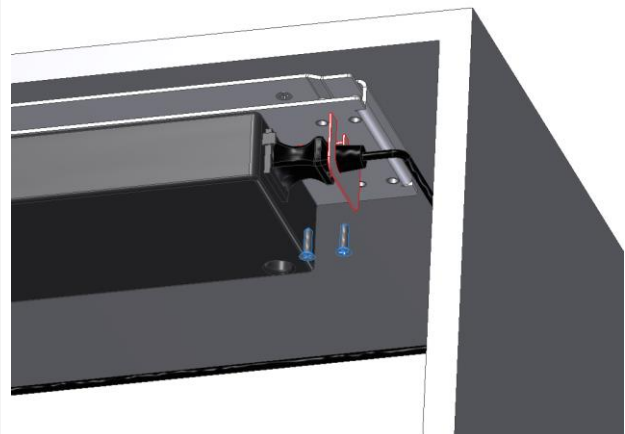
6.6.3 Control box hooked onto the bracket that is screwed to the top of the cabinet.



6.6.4 Plug cables to motor. For order of connection look on page 18, point 8 (start-up procedure).



6.6.5 The cables are secured by mounting on safety plate.

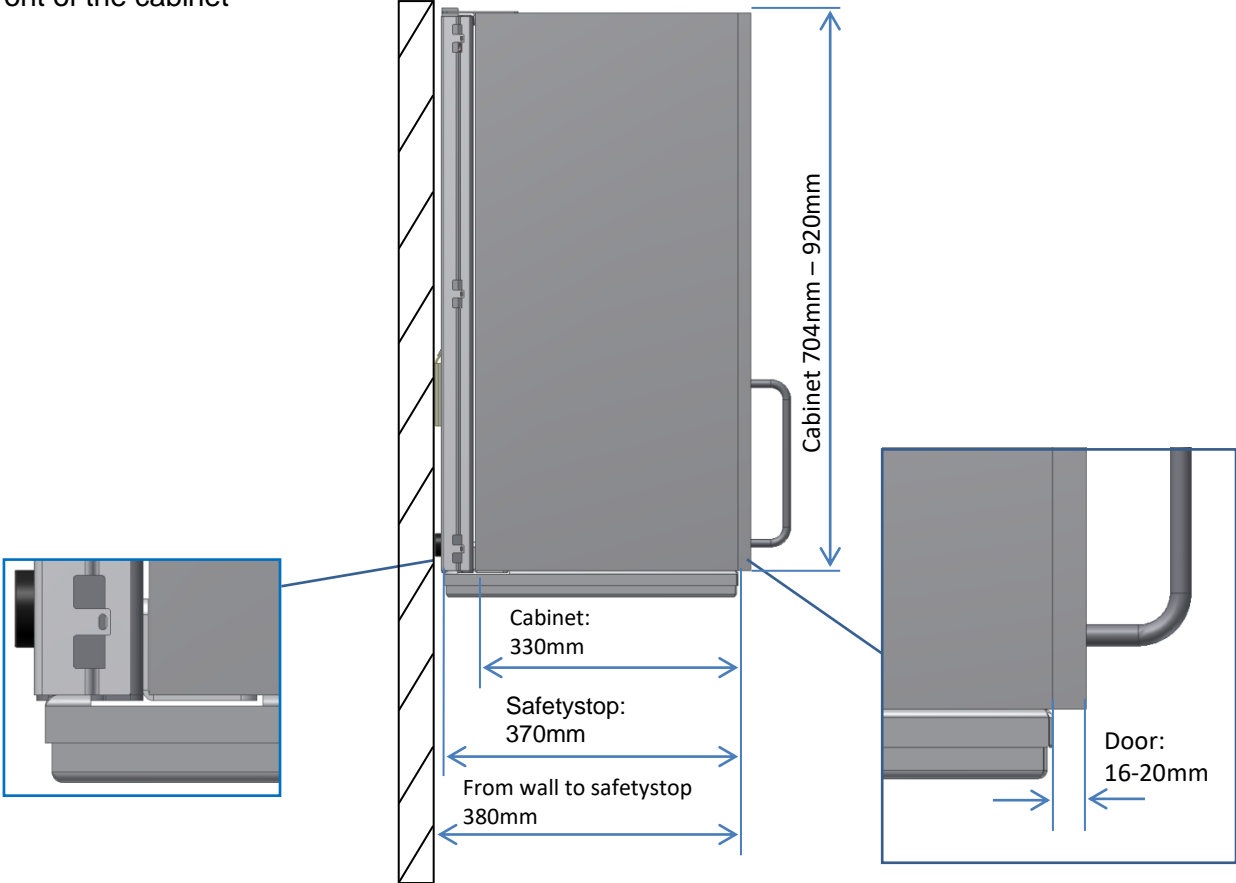


6.6.6 The power cable from control box is secured by mounting of safety plate.

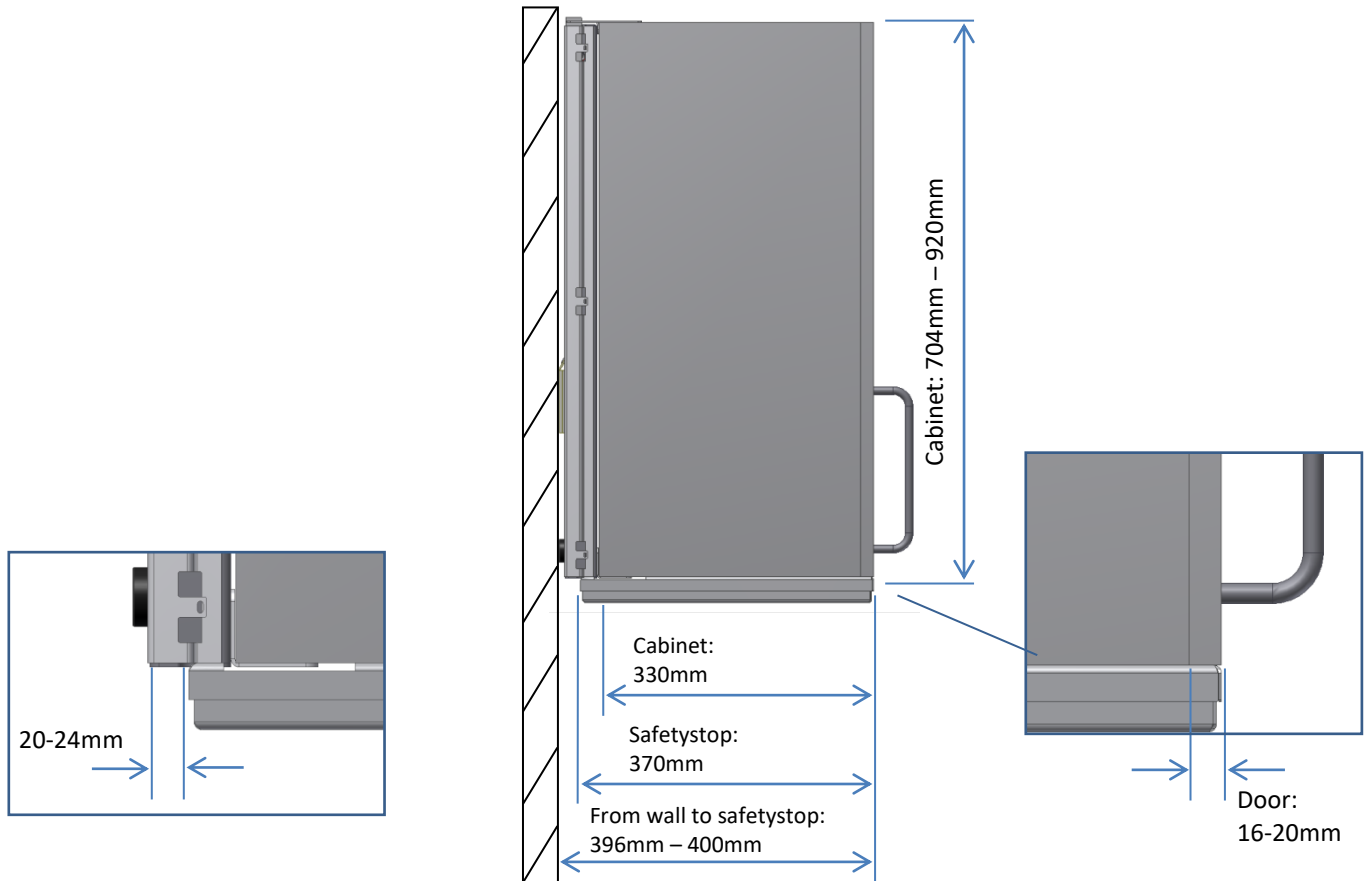
**6.7 Mounting of safetystop**

Placement possibilities

1: The safetystop is mounted flush with the front of the cabinet

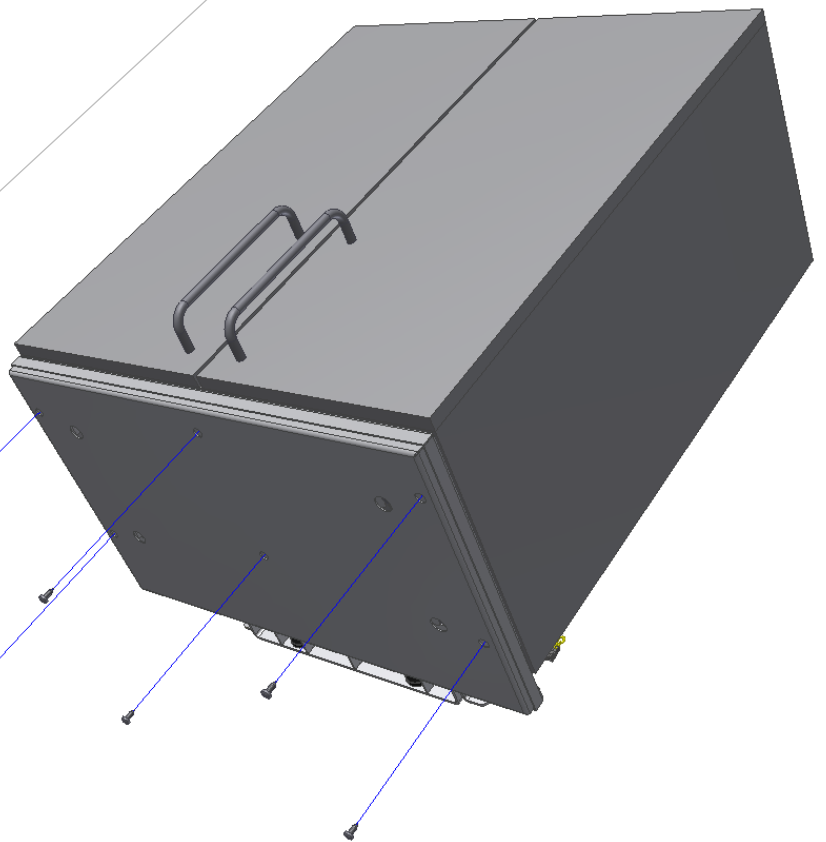
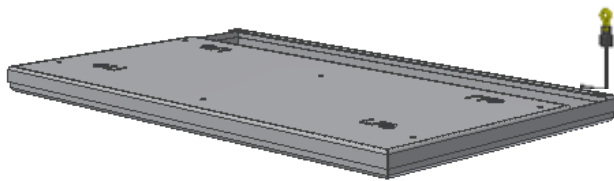


2: The safetystop is mounted flush with the front of the cabinet door





6.7.1 Place the safetystop in center, under the cabinet. The safetystop can be mounted flush with cabinet or cabinet door. Hold the safetystop in place with a clamp.



6.7.2 Screw the safetystop to cabinet with included wood screws.



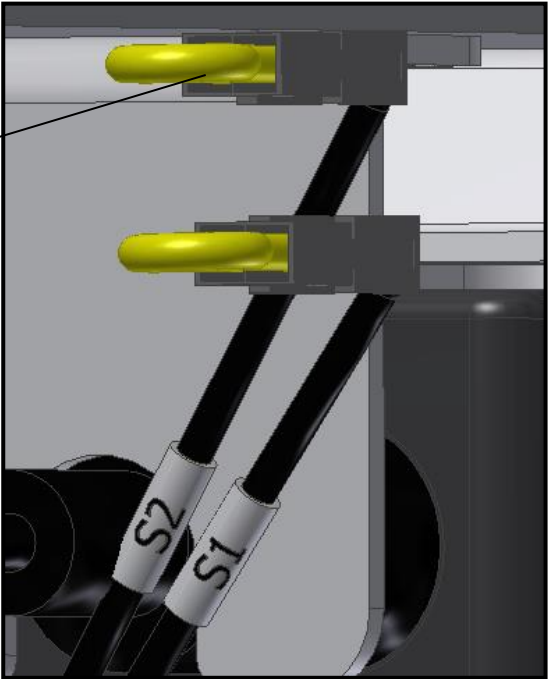
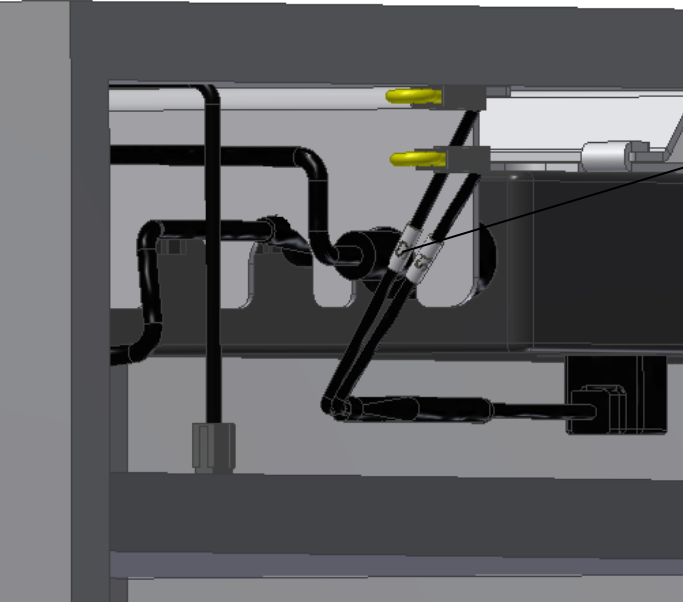
**6.8 Placing of cables for safety stop**



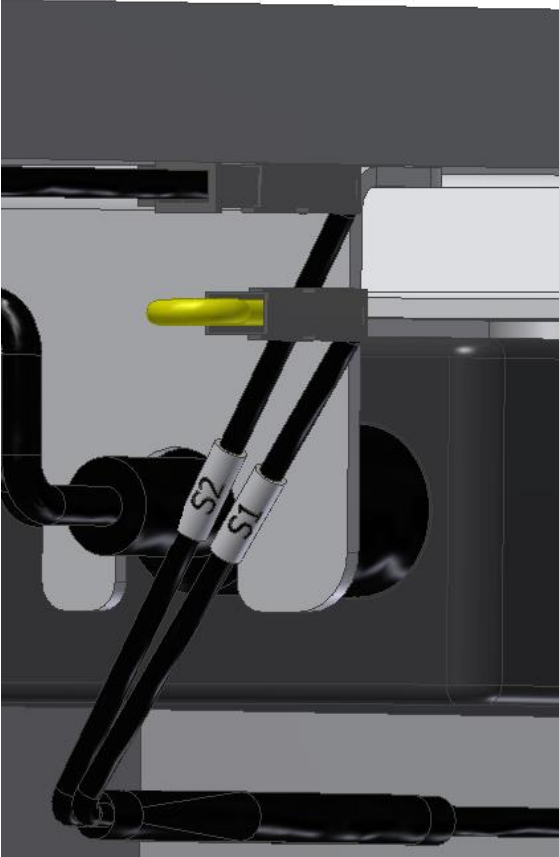
Placement of extension cable to Safety stop

6.8.1 Cable for safety stop is drawn from control box through the hole at the top of the cabinet. The cable is placed long the left side of the cabinet and connected to the wire from the safety stop frame.

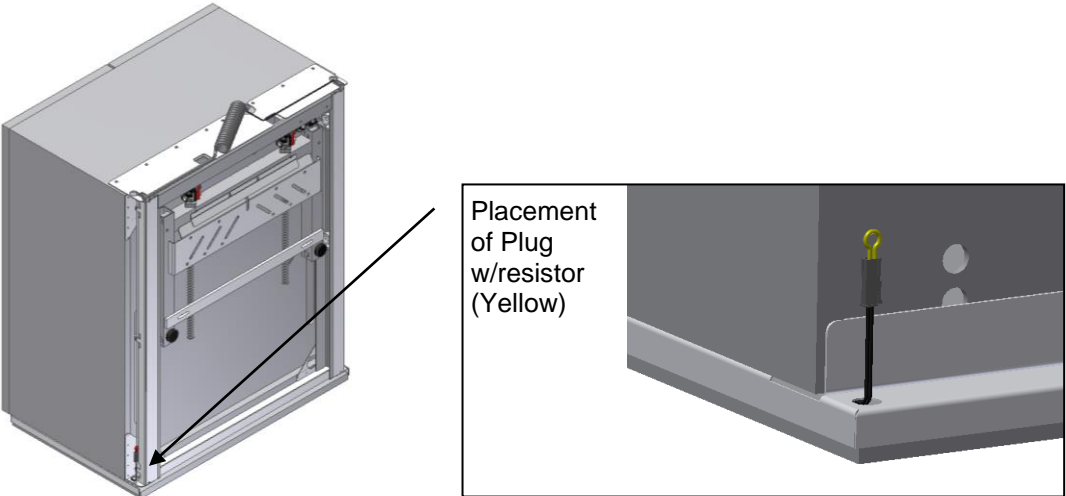
Remove yellow 2,2kΩ resistor from the cord marked S2



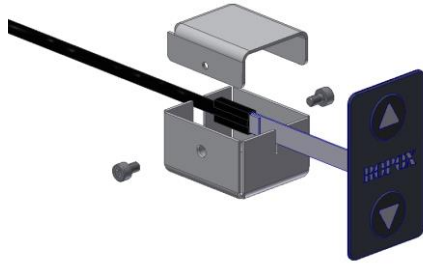
Connect extension cable to the cord marked S2.



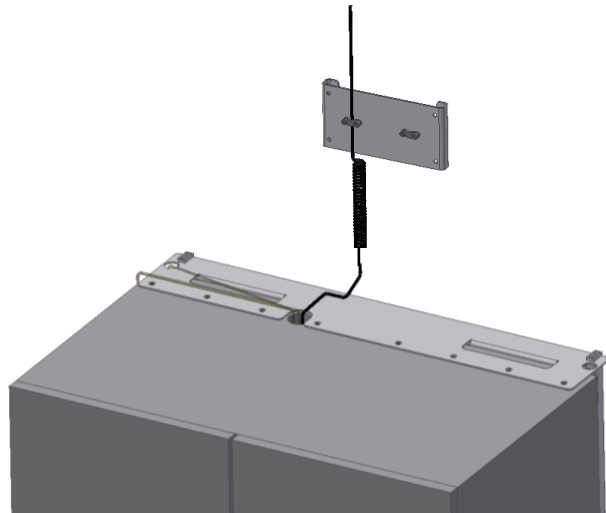
6.8.2 Secure other end of cable for safety stop with strip in the right side. Note that a "yellow" short-circuit plug has to be mounted.



## 6.9 Connection of cables

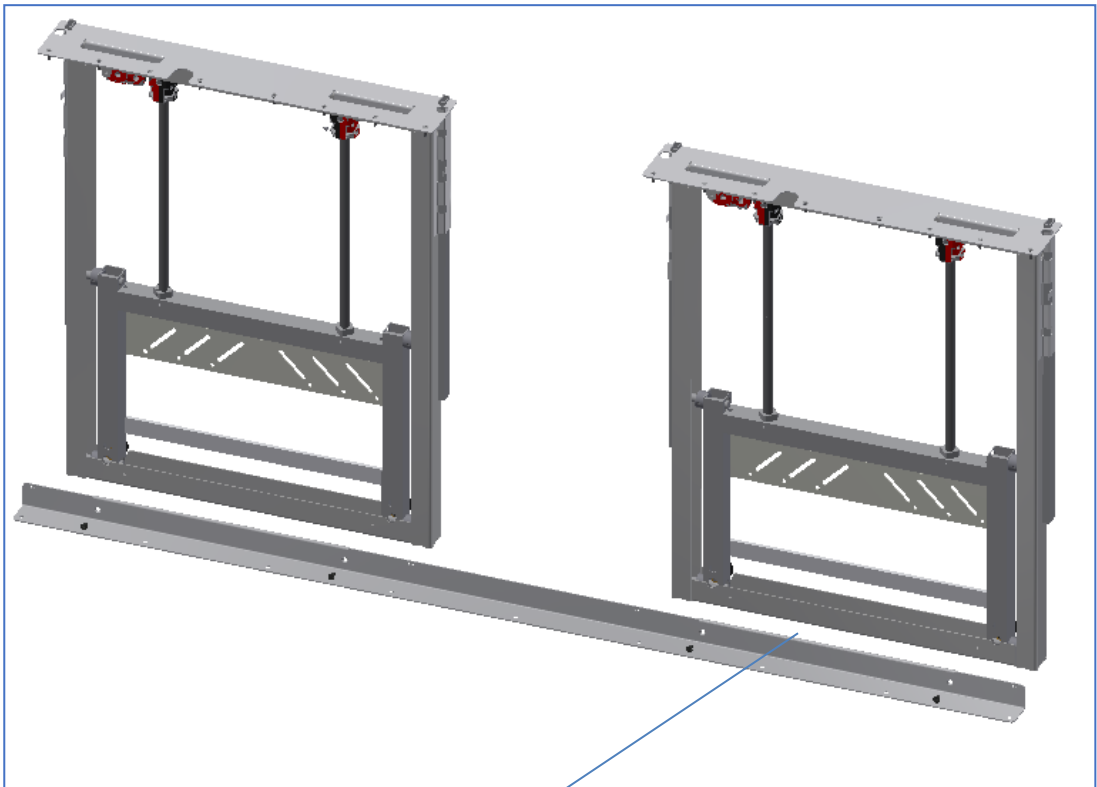


6.9.1 After mounting of switch (for example into front fascia of tabletop) the connection of cables is secured with enclosed safety covers as shown.



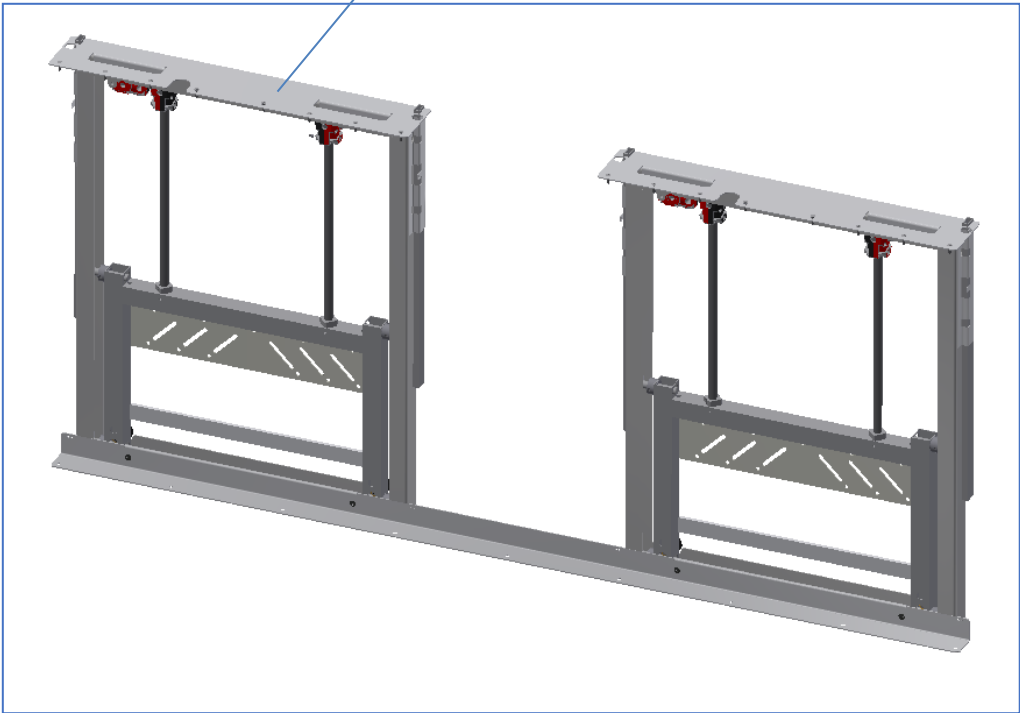
6.9.2 Mounting of cable support for net cable to the wall. Secure 230V cable to the cable support on wall.

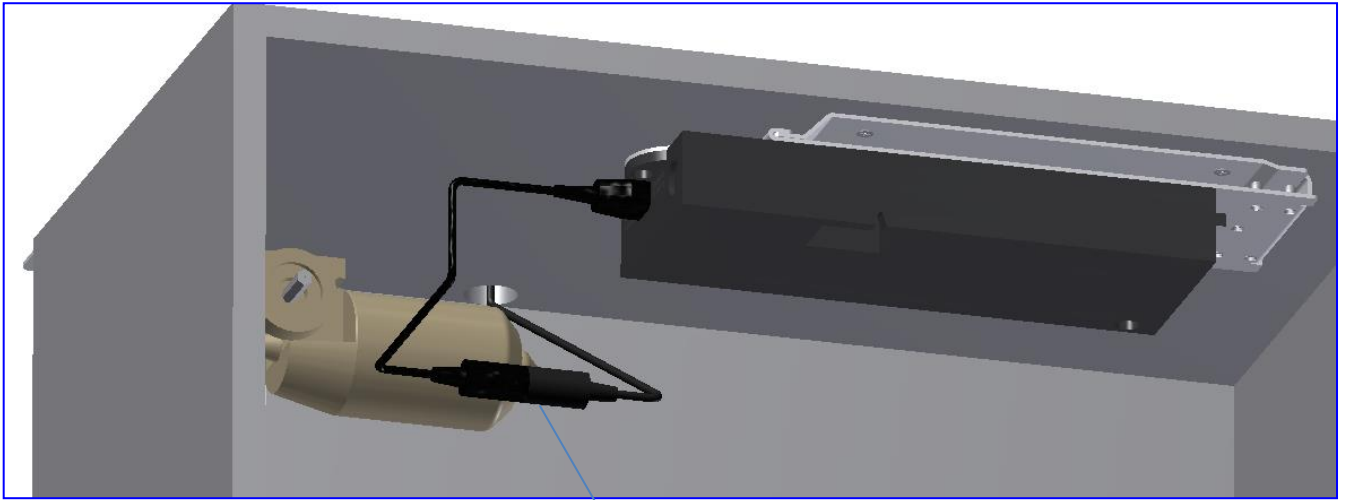
7. Mounting instructions for 2 units



The 2 units should be mounted on the following bottom rail.

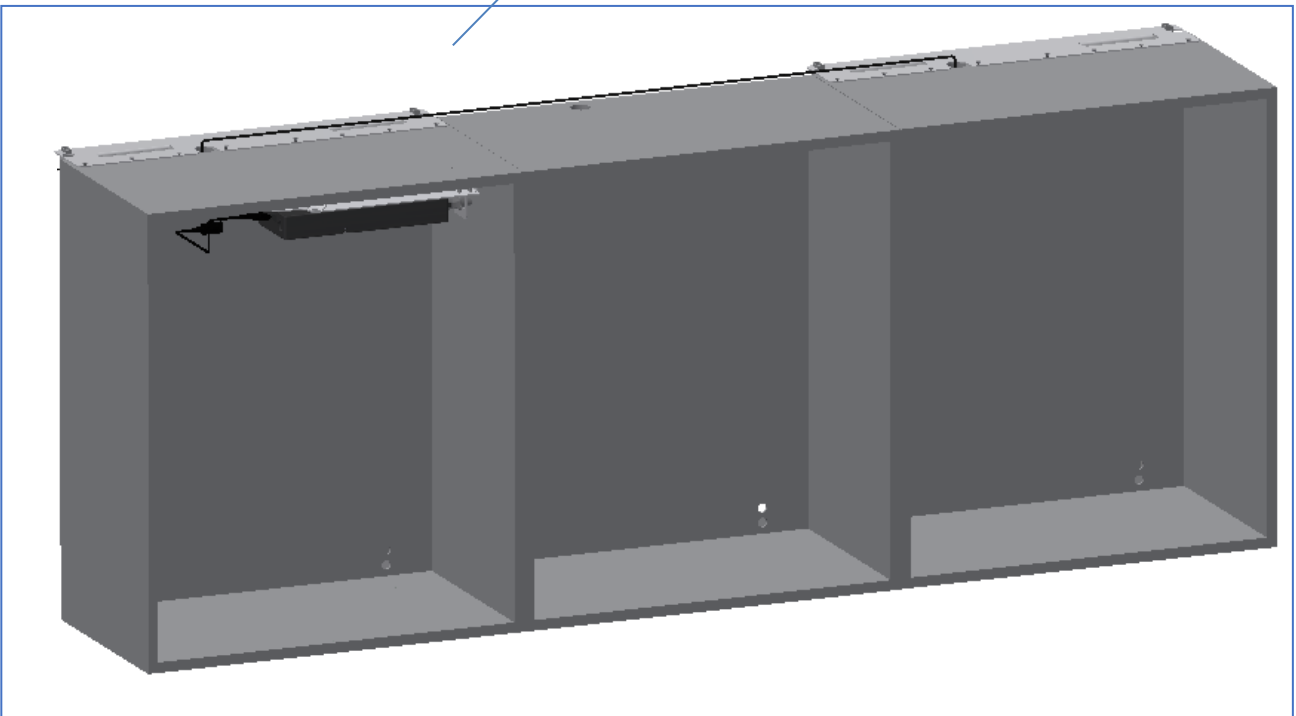
The mounted unit should be mounted on the wall as described on page 11



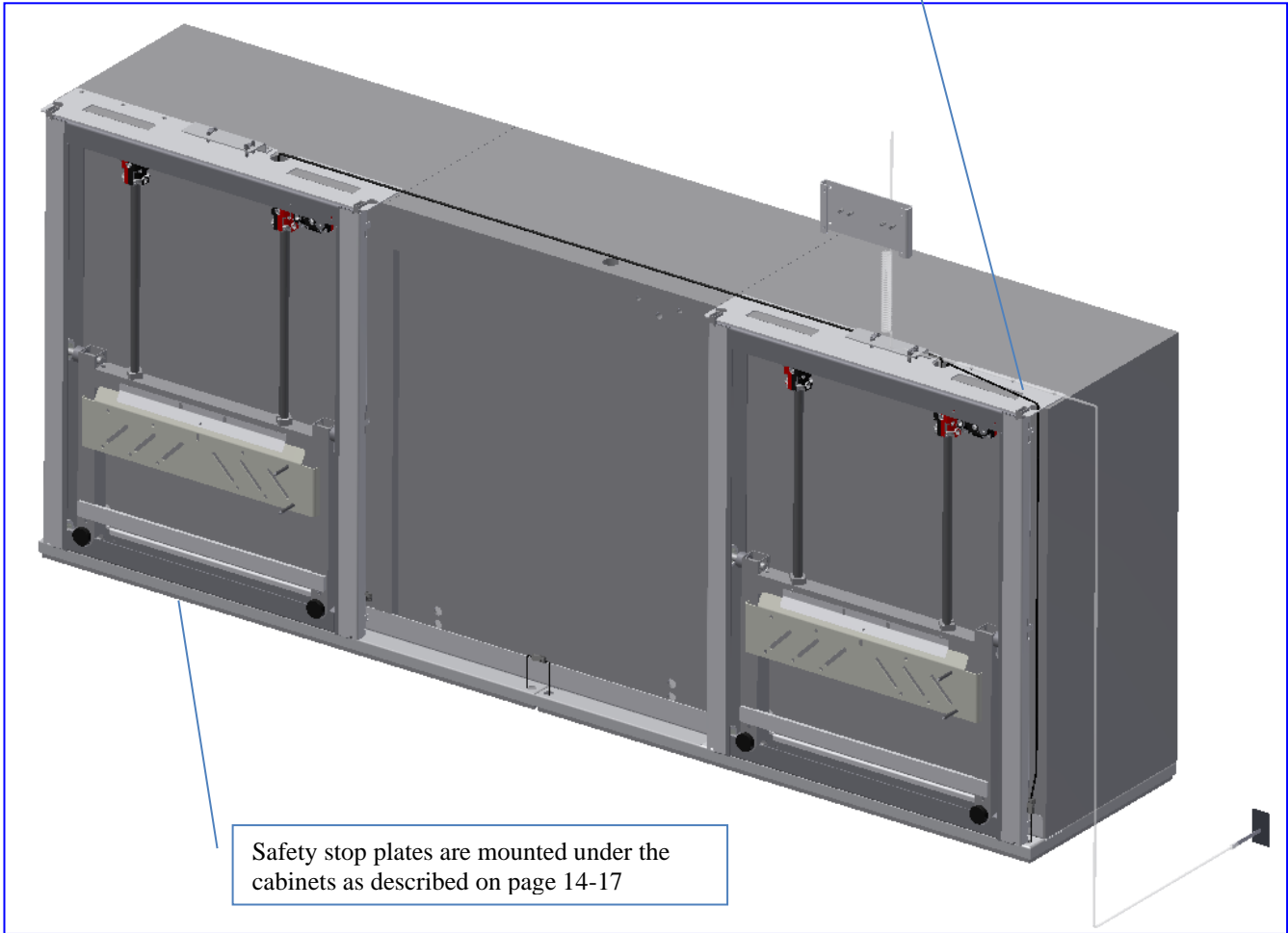


In addition to the cables, which are mounted on page 10, then connect the second motor cable in M2 on the control box

The new motor cable, should be drawn from the control box to the motor 2



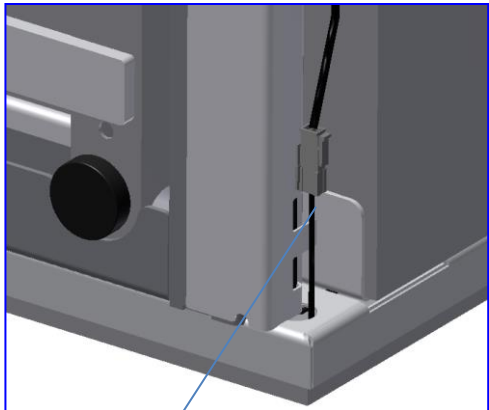
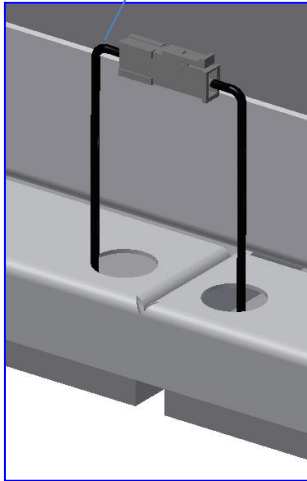
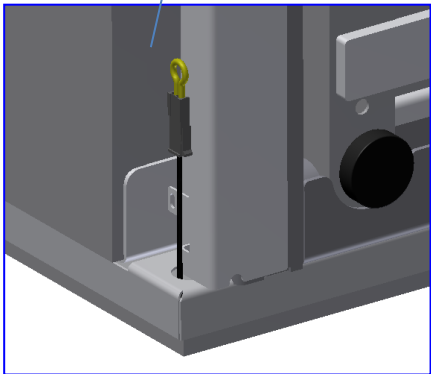
Cable for safety stop is drawn from control box through the hole at the top of the cabinet. The cable is placed long the left side of the cabinet and connected to the wire from the safety stop frame.



Safety stop plates are mounted under the cabinets as described on page 14-17

Contact with yellow resistor placed on the right side of the safety stop.

The two safety stop must be connected in the middle



The cable connected to the safety stop on the left side

## 8. Performance test

After installation and prior to use all functions of unit must be tested. The test must be carried out by competent personnel. Subsequently the test shall be carried out once a year.

### Testing prior to connection to mains voltage:

1. Check that mounting instructions have been observed
2. Check that all bolts have been tightened.
3. Check that all cables have been connected correctly and that the plugs have been pressed home.
4. Check that there is no load on the frame.
5. Check that there is nothing preventing the frame from moving freely within the heightadjustment range.

### Start-up Procedure

1. Connect the net cable and turn on the power
2. Connect the motor cables to M1 and M2
3. Connect the control switch to HS
4. Press DOWN on the control switch, move the frame to bottom position, check that the movement is even and smooth. Make sure that the cable connections follow the movement of the frame and that they do not get squeezed. The frame is now reset.
5. Press UP on the control switch, move the frame to top position and check that the movement is even and smooth. Make sure that the cable connections follow the movement of the frame and that they do not get squeezed.

### If safety stop has been mounted under the wall unit it must be tested as follows:

Press DOWN on control switch and let frame move 2-5 cm downwards together with safety stop. The frame must stop downwards movement and move 1-2 cm upwards and stop.

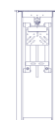
If a smart box has been mounted – (is used if a FlexiElectric has been mounted below this unit) follow additional instructions for smart box.

If all test are ok, the frame is ready for use. See section “Safety in use”.

## 9. List of components for VertiElectric

### **VertiElectric unit 30-40604 til 30-40605:**

1 pc.



*The VertiElectric comprises:*

30\*40601-079 Mounting parts, VertiElectric 1 set  
 30\*40601-096 Mounting plate 1 pc.



*Bottom profile:*

30-40040 Bottom profile width 40cm 1 pc.  
 30-40050 Bottom profile width 50cm 1 pc.

### **Motor for VertiElectric incl. fitting 30-40675:**

1 pc.



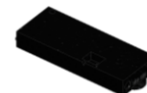
*The motor comprises:*

96000573 Cable for motor 1 pc..  
 10098-453 Fitting for motor 1 pc.  
 98000-555 Stop ring 1 pc.  
 96000582 Spindle 7mm, Hex7, L=0,14cm 1 pc.  
 95170508 Facet washer M8 1 pc.  
 95010510 Insex screw M5x10 3 pcs.  
 95091050 Screw ø4,8x50 Torx 2 pcs.  
 95000009 Allen key Hex2 1 pcs.

### **Control box (26,5x10,5x3,7 cm) 30-40650:**

Incl. hose connection (300 cm)

1 pc.



*The control box comprises:*

96000592 Main cable 1 pc.

93000161 Extension cord 300 cm + spiral 1 pc.  
 For mains cable, white

93000162 Extension cord 350 cm + spiral 1 pc.  
 For control switch, white

30-67840 Standard switch, (3x6 cm) 1 pc.  
 Incl. 150 cm cable



### **VertiElectric additional parts 30\*40601-098:**

1 set.

*Additional part for VertiElectric comprise:*

95000044 Bits 1 pc.  
 95000004 Allen key NV 4mm 1 pc.  
 95134017 Chip board screw 14 pcs.  
 95170508 Facet washer M8 1 pc.  
 10098-498 Support angle 4 pcs. / 8 pcs.  
 30\*40601-116 Nails for support angle 40 pcs. / 75 pcs.  
 97701-838  
 97701-839  
 97701-841  
 97701-842



**VertiElectric unit 30-40606 til 30-40612:** 1 pc.

*VertiElectric comprises:*

30\*40601-079 Mounting parts, VertiElectric 1 set

30\*40601-099 Mounting plate 1 pc.

*Bottom profile:*

30-40060 Bottom profile width 60cm 1 pc

30-40070 Bottom profile width 70cm 1 pc

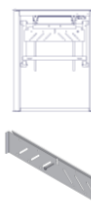
30-40080 Bottom profile width 80cm 1 pc

30-40090 Bottom profile width 90cm 1 pc

30-40100 Bottom profile width 100cm 1 pc

30-40110 Bottom profile width 110cm 1 pc

30-40120 Bottom profile width 120cm 1 pc



*Parts supplied as above.*

**VertiElectric unit 30-40613 til 30-40618:** 2 pcs.

*VertiElectric comprises:*

30\*40601-079 Mounting parts, VertiElectric 2 set

30\*40601-099 Mounting plate 2 pcs.

*Bottom profile:*

30-40130 Bottom profile width 130cm 1 pc

30-40140 Bottom profile width 140cm 1 pc

30-40150 Bottom profile width 150cm 1 pc

30-40160 Bottom profile width 160cm 1 pc

30-40170 Bottom profile width 170cm 1 pc

30-40180 Bottom profile width 180cm 1 pc



*Parts supplied as above.*

## 10. Options for VertiElectric

**Split cable 96000629:** 1 pc.

To be used if more than one control



**Infra-red control 30-67847:**

Remote control via infra-red receiver (cable 250 cm)

Range 150-200 cm

1 pc.



**Large press pad (14x7 cm) 30-67841:**

For disabled people, incl. 150 cm cable

1 pc.



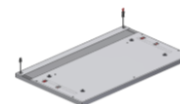
**Safety stop plate 30-416xx:**

Safety circle with extension cable (cable 250 cm)

Steel plate with mounting parts and plate.

cm

1 pc.



**Smartbox 30-69002:**

*Option for safety stop plate*

*To be ordered if VertiElectric is mounted above a FlexiElectric*

1 pc.



**Extension cord 30-67870:**

250 cm (black) for safety stop

1 pc.



**Spiral extension 30-67871:**

L =25-100 cm (black) for safety stop

1 pc.



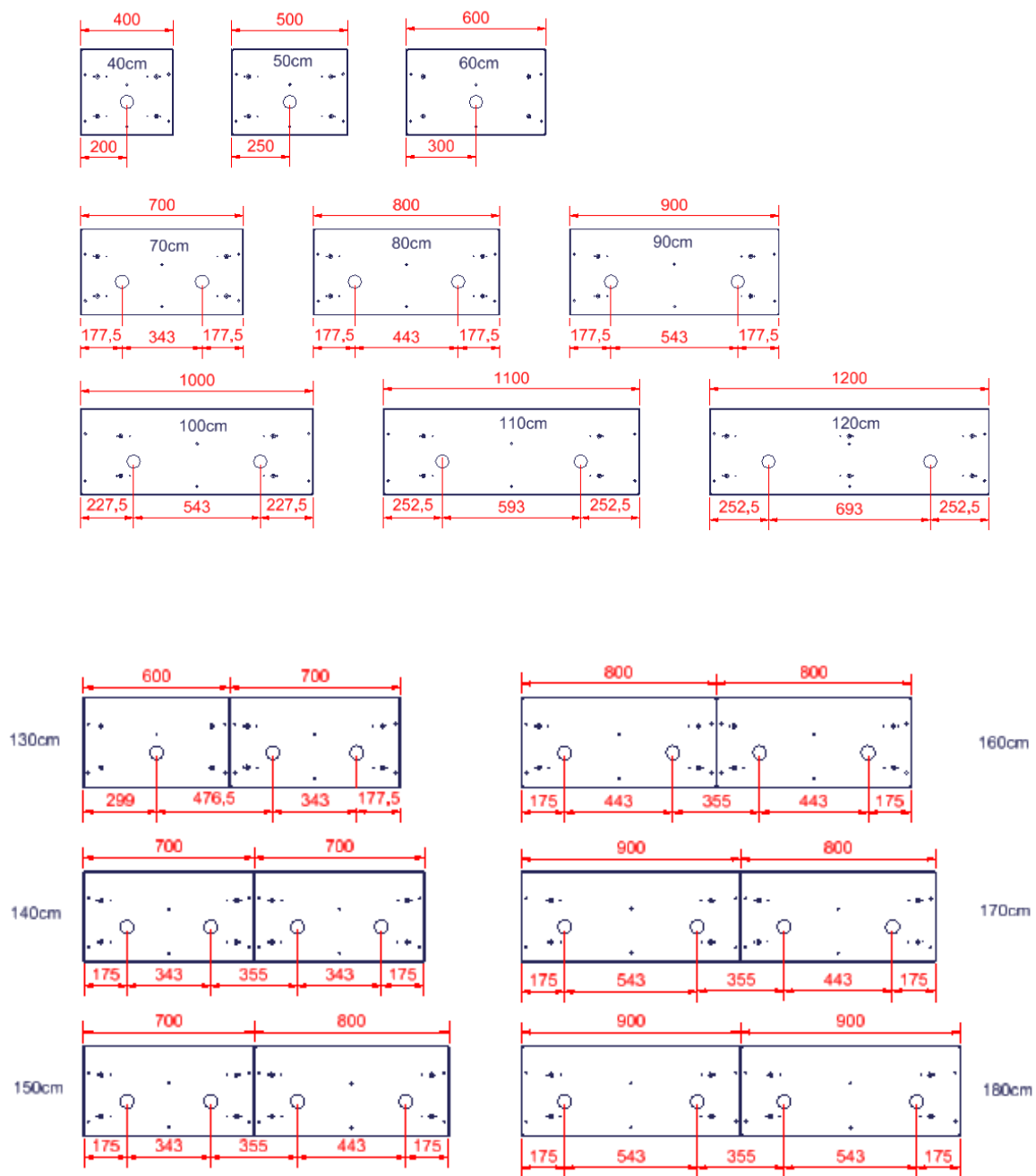
**Safety stop with LED spot 1W Inkl. transformer.**

Incl. cables

30-42604 Led for 40cm Safetystop	1pc	
30-42605 Led for 50cm Safetystop	1pc	
30-42606 Led for 60cm Safetystop	1pc	
30-42607 Led for 70cm Safetystop	2pc	
30-42608 Led for 80cm Safetystop	2pc	
30-42609 Led for 90cm Safetystop	2pc	
30-42610 Led for 100cm Safetystop	2pc	
30-42611 Led for 110cm Safetystop	2pc	
30-42612 Led for 120cm Safetystop	2pc	
30-42613 Led for 130cm Safetystop	3pc	
30-42614 Led for 140cm Safetystop	4pc	
30-42615 Led for 150cm Safetystop	4pc	
30-42616 Led for 160cm Safetystop	4pc	
30-42617 Led for 170cm Safetystop	4pc	
30-42618 Led for 180cm Safetystop	4pc	

## 11. Placing of LED spot

If LED spots are purchased, they will be positioned as shown on drawing below.





## 12. Safety in use

- The VertiElectric should only be used by people who have read and understood these instructions..
- VertiElectric is a height-adjustable frame, and we recommend the fitting of a safety stop beneath in order to guard against trapping. Even though a safety stop plate has been mounted always make sure that there are no people, animals or objects under the frame during height adjustment.
- VertiElectric is a wall unit and must not be used as lifting equipment or person lifter.
- Always use the frame so there is no risk of damage to people or property. The person, who operates the frame, is responsible for avoiding damage or injury.
- Children and people with reduced observation must only operate the frame under surveillance.
- If the frame is used in publicly accessible locations where children or people with reduced observation ability may get close to the frame, the person operating the frame must pay sufficient attention in order to prevent dangerous situations.
- Make sure that there is free space above and below the frame to allow height adjustment.
- Do not overload the frame and make sure that the load distribution is correct.
- Do not operate the frame in case of errors or damage.
- Do not use the frame in an explosive environment.
- In case of inspections, service and repairs make sure the frame is not loaded, and that main power is disconnected
- Any modification to the frame, which may influence its operation or construction, is forbidden
- Installation, service and repairs must only be carried out by competent personnel.
- If the frame has not been installed in accordance with these mounting instructions, the guarantee may become void.
- Only use Ropox original spare parts as replacement parts. If other spare parts are used, the guarantee may become void.

## 13. Cleaning and maintenance


### 13.1 Cleaning of frame

	The frame must not be connected to the mains voltage during cleaning. Do not flush electrical components with water	
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Clean the frame with a damp cloth using lukewarm water and ordinary cleaning agents. Do not use Corrosive/abrasive liquids or abrasive cloths, brushes or sponges.

After cleaning dry the frame.

### 13.2 Maintenance

	Inspections, service and repairs must be carried out by competent personnel
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The frame is maintenance-free and moving parts have been lubricated for life. For reasons of safety and reliability we recommend inspection of the frame once a year:

- Check that all bolts have been tightened.
- Check that the frame moves freely from bottom to top position without problems.
- **Resetting the frame:** Press DOWN on the control switch and move the frame to the bottom position. Press DOWN once more and keep the switch pressed for 5 sec. to reset the control unit. Check that the movement is even and smooth. Make sure that the mains cable moves freely.
- Check that all cables have been fitted correctly and are undamaged..

After each inspection the service schedule shall be filled in.

Only use Ropox original spare parts as replacement parts. If other parts are used, the guarantee may become void

### **13.3 Service schedule, operation and maintenance**

<b>Service and maintenance No.:</b>	<b>Serial</b>
<b>Date:</b>	
<b>Sign:</b>	
<b>Remarks:</b>	

<b>Service and maintenance No.:</b>	<b>Serial</b>
<b>Date:</b>	
<b>Sign:</b>	
<b>Remarks:</b>	

<b>Service and maintenance No.:</b>	<b>Serial</b>
<b>Date:</b>	
<b>Sign:</b>	
<b>Remarks:</b>	

<b>Service and maintenance No.:</b>	<b>Serial</b>
<b>Date:</b>	
<b>Sign:</b>	
<b>Remarks:</b>	

## 14. Trouble shooting

### **14.1 The height of the frame cannot be adjusted**

1. Check mains and voltage to the control unit and that the power is switched on.
2. Check cables and plug-in connections between control box and motors.
3. Check cables and plug-in connections between control box and control switch.
4. Check cable connections between safety stop plate, and control box. (see mounting instructions).
5. Check that safety stop has not been activated.

#### **Reset procedure**

- 6 If none of the above has helped reset the unit:
  - Disconnect motorcables
  - Disconnect mains cable and wait 5 sec
  - Connect mains cable
  - Connect motor cable
  - Move the unit to bottom position for reset.

## 15. Complaints

We refer to our general Terms of sale and delivery on our homepage [www.ropox.com](http://www.ropox.com)

**Keep this folder with product at all times**

