



Ropox VertiElectric

User manual Mounting instruction

Keep this folder with product at all times!

PDF 6167 / Rev 002



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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

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 accesseble to the user and keept 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.

Technical data

Product name: Ropox VertiElectric

Item numbers: Item numbers:

Width 40cm/15.75in: 30-40604 Width 50cm/19.68in: 30-40605 Width 60cm/23.62in: 30-40606 Width 70cm/27.56in: 30-40607 Width 80cm/31.50in: 30-40608 Width 90cm/35.43in: 30-40609 Width 100cm/39.37in: 30-40610 Width 110cm/43.31in: 30-40611 120cm/47.24in: Width 30-40612 Width 130cm/51.18in: 30-40613 Width 140cm/55.12in: 30-40614 150cm/59.10in: Width 30-40615 Width 160cm/62.99in: 30-40616 170cm/66.93in: Width 30-40617 Width 180cm/70.87in: 30-40618

Material: Welded steel tubes St. 37 and various plastic components.

Surface treatment: Blue chromate, powder coating.

Power supply: 110VAC / 5A / 60Hz

Standby primary: 0,3W

Control voltage: 24VDC

Duty circle.: Max. 4 min. active then 18 min. pause

Max. load of frame: The width 15.75in – 47.24in, 80 kg/176 lbs evenly distributed

over the frame

The width 51.18in - 70.87in, 120 kg/264 lbs evenly distributed

over the frame

Speed: Approx. 33 mm/_{sec} - Approx. 9 sec for a complete stroke

Temperature: 5-45° C / 41-113° F

Air humidity: 5-85% (non-condensing)

Complaints: See Complaints, page 32

Producer: Ropox A/S, DK-4700 Naestved, Tlf.: +45 55 75 05 00

E-mail: info@ropox.dk - www.ropox.com

5. Schematic diagram of frame

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

Conditions for schematic diagram:



Height of wall units = <u>704 mm/</u> <u>27.72 in</u> – (with another height of wall unit regulate diagram accordingly)

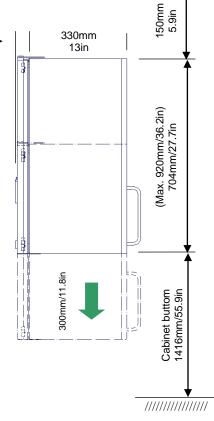
Height of upper edge of wall unit = <u>2120 mm/</u> <u>83.46</u> (if another height required, regulate diagram accordingly)

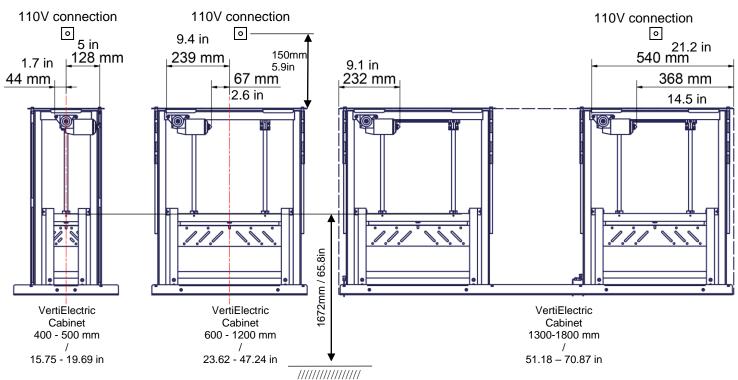
50mm ± 1 1.97in ± 0.04

Note!

Motor and control box are placed inside the cabinet. Motor to be mounted as per specific meassurements, 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 / 15.75 - 47.24 in

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

130 - 180 cm / 51.18 - 70.87 in

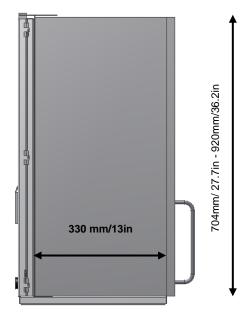
Max. load 120kg evenly distributed, according to DS/EN 12182, based on 22 screws/bolts.

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!

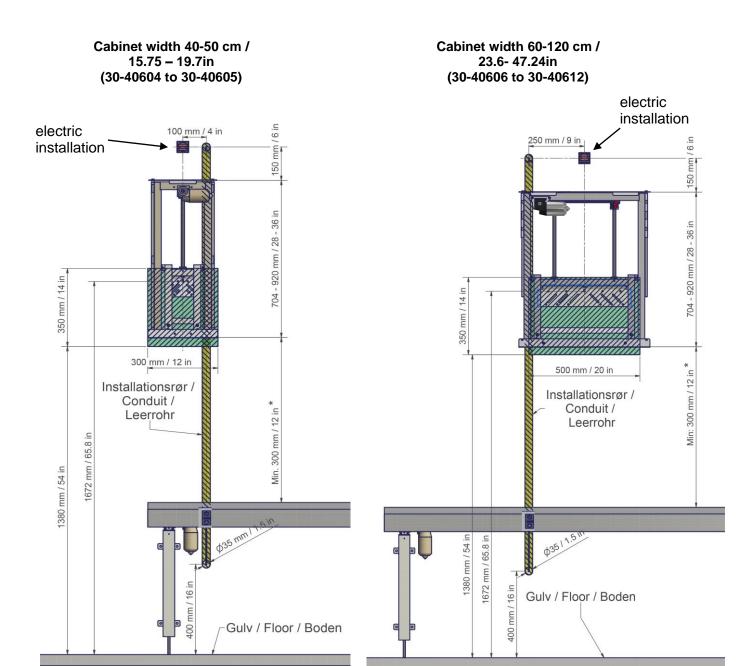
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5.1.3 Wiring to control switch

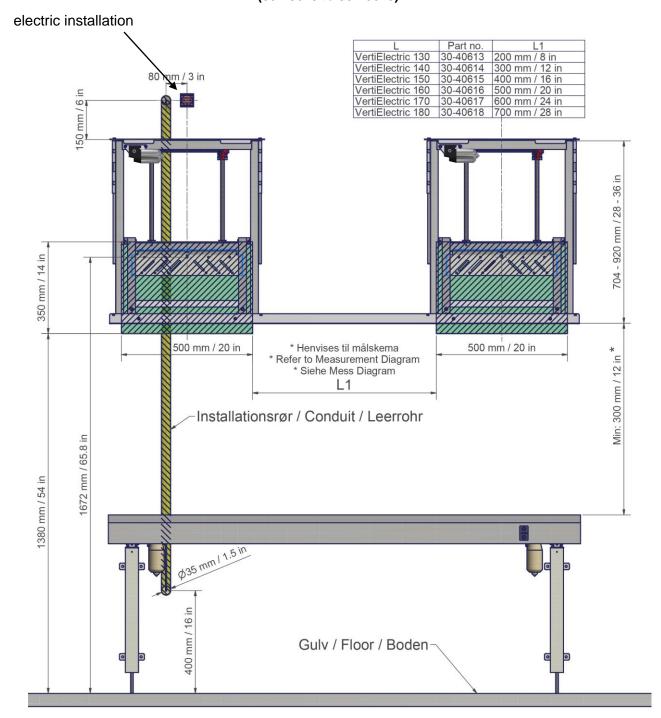
Pull down cable from wall units to edge of worktop for placement of control.

We recommend a build-in pipe in wall where the cable can be pulled through (ø3cm/1.2in).

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 130-180 cm / 51.18 - 70.87 in (30-40613 to 30-40618)



6. Mounting instructions



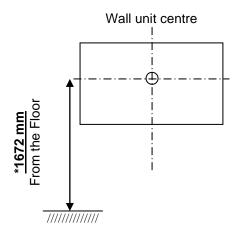
Assembly must always be carried out by competent personnel

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

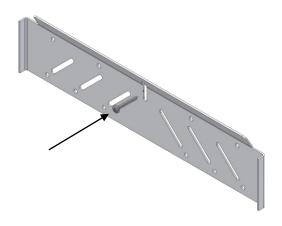


Height of top wall unit (edge) = 2120 mm / 83.47in – see schematic diagram page 5

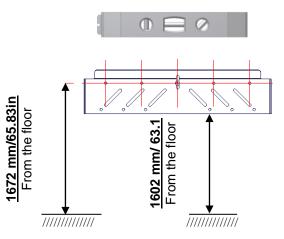
6.1 Marking of wall



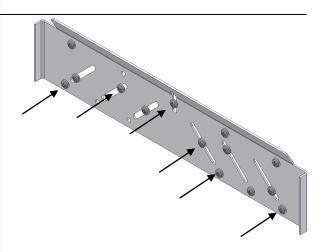
6.1.1 A wall unit height of 704mm/27.71in – mark centre measurement of wall unit on wall in a height of 1672mm/65.83in from floor. Se schematic diagram page 5 for correct marking! Drill hole and insert raw plug.



6.1.2 Fasten mounting plate with a screw in the middle.

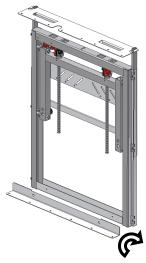


6.1.3 Level mounting plate in correct height whereupon marking for remaining screws is carried out.



6.1.4 Secure mounting plate with remaining screws which are necessary.

6.2 Reinforcement of wall units

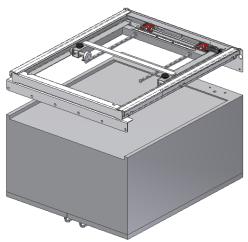


6.2.1 Bottom profile to be hooked onto the frame.

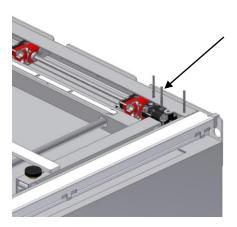


6.2.2 Mount the bottom profile with the two screws.

6.3 Marking of holes in wall unit

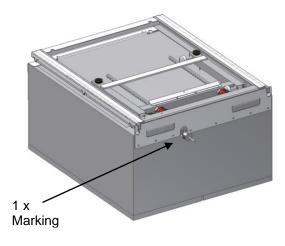


6.3.1 Place wall unit on the floor with the backside turned upwards, position VertiElectric on top of the wall unit in the centre.

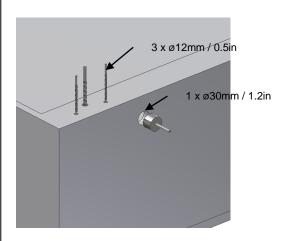


3 x Marking

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.

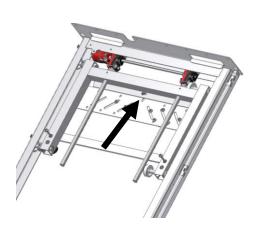


6.3.4 Finally drill all 4 holes (3 x Ø12) - (1 x Ø30).

6.4 Mounting of Vertiunit



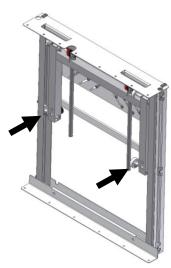
6.4.1 Lift VertiElectric onto mounting plate and adjust that it is placed in the centre of the wall unit, Mark additional 2 mounting holes. Remove VertiElectric before drilling and inserting of raw plugs.



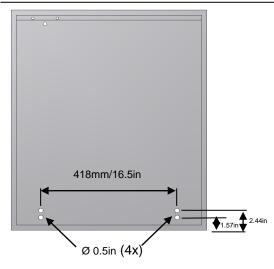
6.4.2 Once more lift VertiElectric onto mounting plate, place and adjust in centre of wall unit. Secure the frame with mounting one screw in centre.



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.



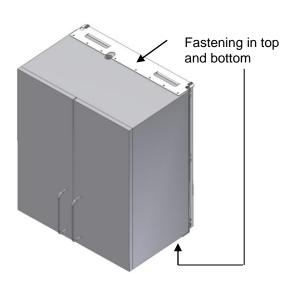
6.4.5 Mark up the Four holes in the back panel of the wall unit for later adjustment according to



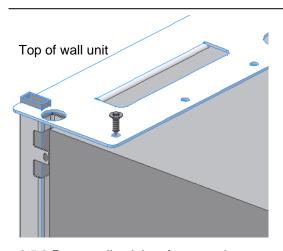
6.5 Mounting of wall units



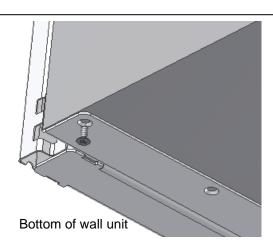
6.5.1 Lift wall unit onto frame and place in centre.



6.5.2 Secure wall unit in top and bottom.



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

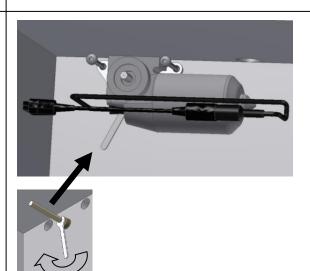


6.5.4 Press wall unit into frame at the bottom and fasten.

6.6 Mounting of motor

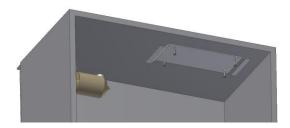


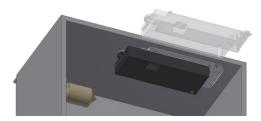
6.6.1 Motor, with spindle, is mounted through back plate and into gearbox



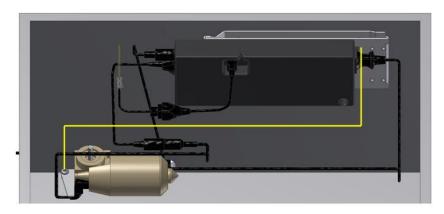
6.6.2 Safely turn the shaft for correct mounting of motor. Tighten the two screws. The eye on the yellow/green earth wire should be mounted on one of the screws.

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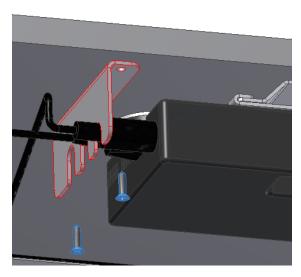




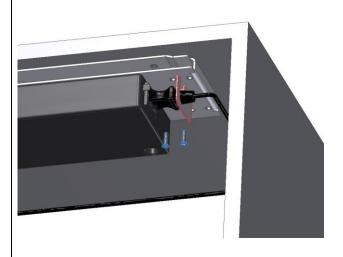
6.6.3 Control box hooked onto the bracket that is screwed to the top of the cabinet.



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



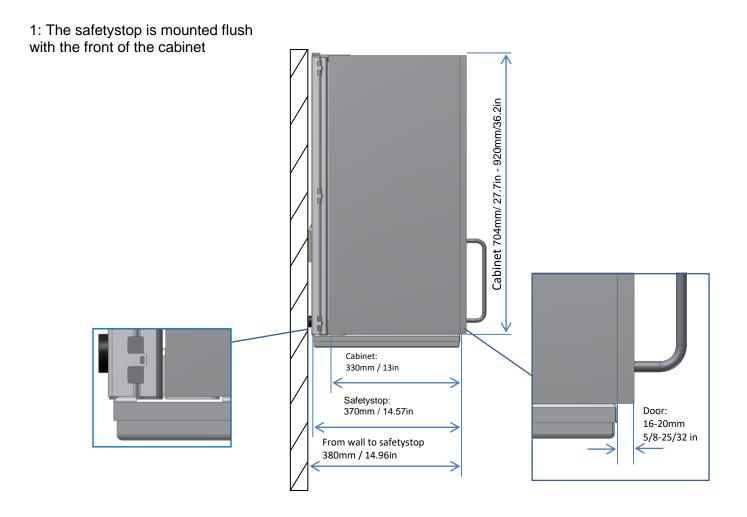
6.6.5 The cables are secured by mounting on safety plate.



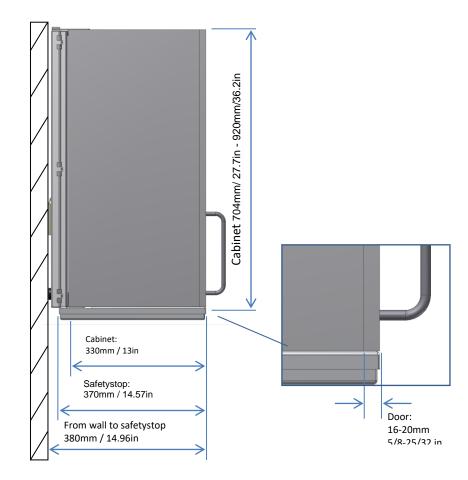
6.6.6 The power cable from control box is secured by mounting of safety plate.

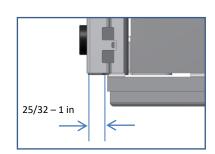
6.7 Mounting of safetystop

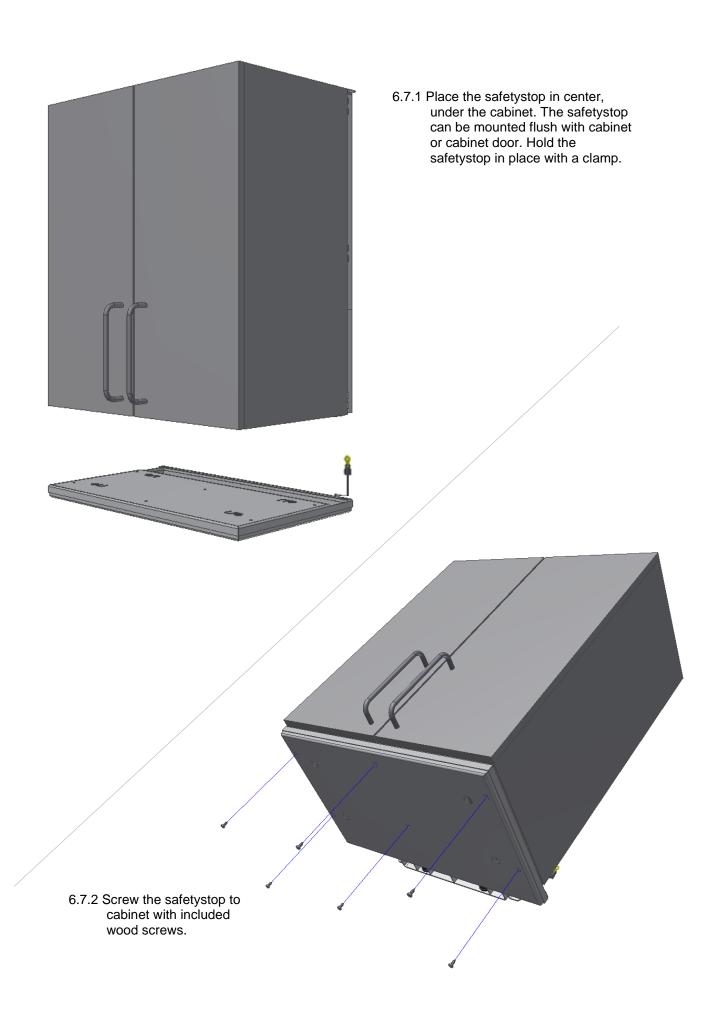
Placement possibilities



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







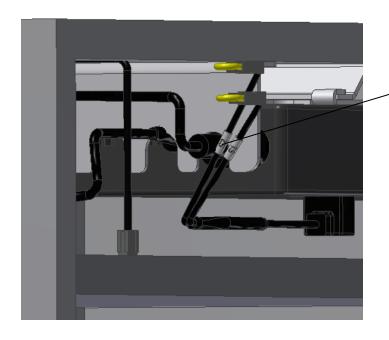
6.8 Placing of cables for safety stop

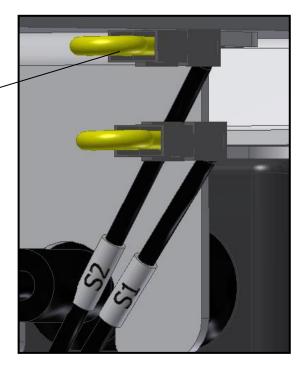


Placement of extension cable to Safety stop

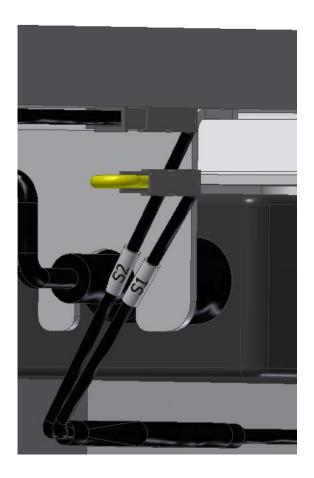
6.8.1 Cable for safety stop is drawn from control box through the hole at the top of the cabinet. The cable is placed long the left side of the cabinet and connected to the wire from the safety stop frame.

Remove yellow 2,2k Ω resistor from the cord marked S2

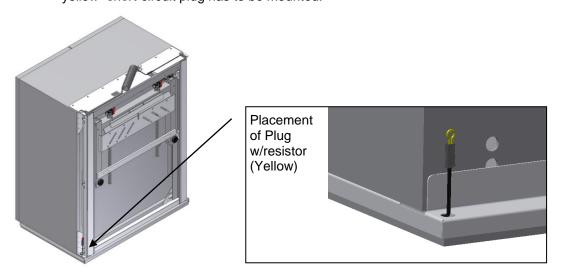




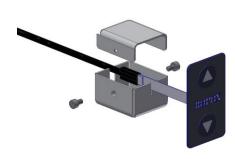
Connect extension cable to the cord marked S2.



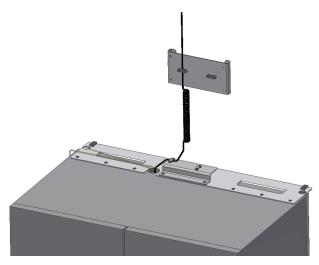
6.8.2 Secure other end of cable for safety stop with strip in the right side. Note that a "yellow" short-circuit plug has to be mounted.



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 110V cable to top of the cabinet and cable support on wall.

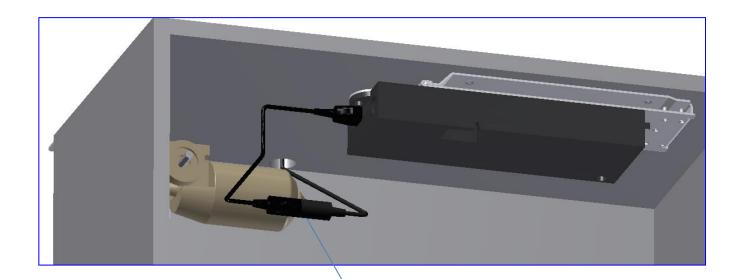
7. Mounting instructions for 2 units



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

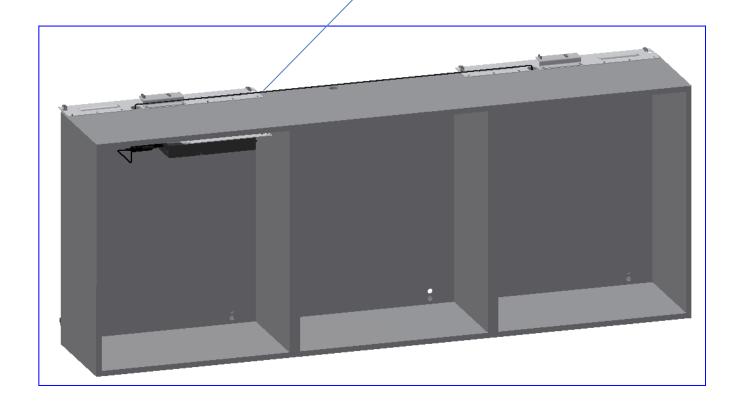
The mounted unit should be mounted on the wall as described on page 11



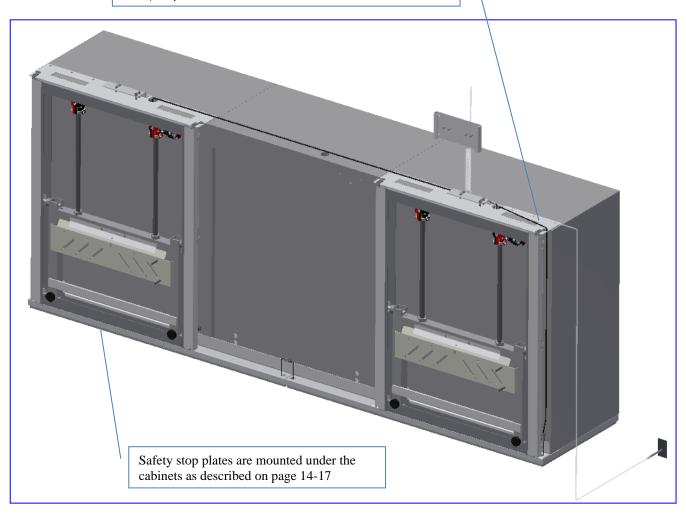


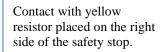
In addition to the cables, which are mounted on page 10, then connect the second motor cable in M2 on the control box

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

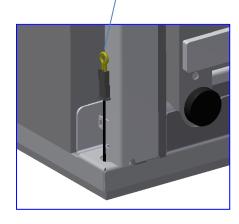


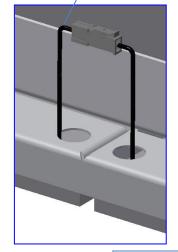
Cable for safety stop is drawn from control box through the hole at the top of the cabinet. The cable is placed long the left side of the cabinet and connected to the wire from the safety stop frame.

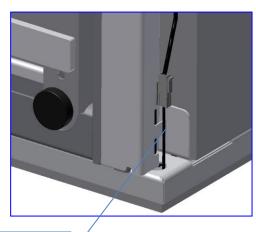




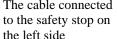
The two safety stop must be connected in the middle







The cable connected 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 2-5cm / 1-2in downwards together with safety stop. The frame must stop downwards movement and move 1-2 cm/ 1in 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

0. 2.0. 0. 0.						
<u>VertiElectric unit 30-40604 til 30-40605:</u> 1 pc.						
The VertiElectric of						
	Mounting parts, VertiElectric	1 set				
30*40601-096	Mounting plate	1 pc.				
Bottom profile:	D (1) (1 10 /45.75)	4				
30-40040	Bottom profile width 40cm/15.75in	1 pc.				
30-40050	Bottom profile width 50cm/19.69in	1 pc.				
Motor for VertiEl	ectric incl. fitting 30-40675:	1 pc.				
The motor compri	ses:					
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 (26,5)	5x10,5x3,7 cm) 30-40650: tion (300 cm)	1 pc.				
The control box co	omprises:					
96000592	Main cable	1 pc.				
0000002	Main Gabie					
93000161	Extension cord 300 cm + spiral For mains cable, white	1 pc.				
93000162	Extension cord 350 cm + spiral For control switch, white	1 pc.				
30-67840	Standard switch, (3x6 cm) Incl. 150 cm cable	1 pc.	ROPOX			
VertiElectric add	itional parts 30*40601-098:	1 set.				
Additional part for 95000044 95000004 95134017 95170508 10098-498 30*40601-116 97701-838 97701-841 97701-842	Bits Allen key NV 4mm Chip board screw Facet washer M8 Support angle Nails for support angle	1 pc. 1 pc. 14 pcs. 1 pc. 4 pcs. / 8 pcs. 40 pcs. / 75 pcs.				

VertiElectric unit 30-40606 til 30-40612:			<u> </u>				
VertiElectric comp 30*40601-079 30*40601-099	orises: Mounting parts, VertiElectric Mounting plate	1 set 1 pc.					
Bottom profile: 30-40060 30-40070 30-40080 30-40090 30-40100 30-40110 30-40120	Bottom profile width 60cm/23.62in Bottom profile width 70cm/27.56in Bottom profile width 80cm/31.50in Bottom profile width 90cm/35.43in Bottom profile width 100cm/39.37in Bottom profile width 110cm/43.31in Bottom profile width 120cm/47.24in	1 pc 1 pc 1 pc 1 pc 1 pc 1 pc 1 pc 1 pc					
Parts supplied as	Parts supplied as above.						
VertiElectric unit	t 30-40613 til 30-40618:	2 pcs.	27/55				
30*40601-099	orises: Mounting parts, VertiElectric Mounting plate	2 set 2 pcs.	8 18				
30-40130 30-40140 30-40150 30-40160 30-40170 30-40180	Bottom profile width 130cm/51.18in Bottom profile width 140cm/55.12in Bottom profile width 150cm/59.10in Bottom profile width 160cm/62.99in Bottom profile width 170cm/66.93in Bottom profile width 180cm70.87in	1 pc 1 pc 1 pc 1 pc 1 pc 1 pc 1 pc					
Parts supplied as	above.						
10. Options for VertiElectric							
Split cable 96000629: To be used if more than one control							
Infra-red control 30-67847: Remote control via infra-red receiver (cable 250cm/98in) Range 150-200cm/59-78in							
Large press pad (14x7 cm) 30-67841: For disabled people, incl. 150cm/59in cable							
Safety stop plate 30-416xx: Safety circle with extension cable (cable 250cm/98in) Steel plate with mounting parts and plate. cm							
Smartbox 30-69002: Option for safety stop plate To be ordered if VertiElectric is mounted above a FlexiElectric							
Extension cord 30-67870: 250cm/98in (black) for safety stop							
Spiral extension L =25-100cm/10-4	30-67871: 40in (black) for safety stop	1 pc.					

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 filling 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



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

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

Service and maintenance Serial No.: Date:	Service and maintenance Serial No.: Date:
Sign:	Sign:
Remarks:	Remarks:
Service and maintenance Serial No.:	Service and maintenance Serial No.:
Date:	Date:
Sign:	Sign:
Remarks:	Remarks:

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 buttom position for reset.

15. Complaints

We refer to our general Terms of sale and delivery on our homepage www.ropox.com

Keep this folder with product at all times

