iVario® Pro L
iVario® Pro XL

Original installation instructions

Device hand-over

Dealer:	Installer:

Include the following information with queries:

Device type:	
Device no.:	
Your device was tested by (name):	

⚠ WARNING

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

Table of contents

1 Introduction

1.1 Information on this manual

This document is a version of the installation instructions. Please note the respective version and date.

This document is part of the unit. Read this manual before carrying out the installation. The manual enables safe handling of the unit and correct installation.

The images in this manual are examples only and may differ from the device.

This manual is valid for the following devices:

- iVario Pro L
- iVario Pro XL

Storage

Keep the installation manual and operating manual with the unit. During service work, the installation manual must be accessible to specialist personnel authorized by the manufacturer at all times.

Transfer

Pass this installation manual on to the owner of the device.

Explanation of symbols

✔ A requirement lists all conditions that must be met before an action.

1. An action step describes an action to be carried out by the reader.

> Shows a successful interim result.

2. Further action step.

>> The results shows the result of the action.

1.2 Target audience

- This document is aimed at trained technicians, who have been certified by the manufacturer after taking part in trainings and safety trainings.
- The installation, as well as inspection, maintenance and repair work, may only be carried out by trained technicians.
- It is advisable to only have inspection, maintenance and repair work carried out by technicians authorized by the manufacturer.
- The unit must not be used, cleaned or maintained by children. The unit is not a toy. It must not be used as a toy even under supervision.
- The unit must not be used, cleaned or maintained by persons with limited physical, sensory or mental aptitude, or lack of experience or knowledge, unless they are supervised by a person responsible for their safety and have received instruction from this person in the risks associated with the unit.
- In order to avoid the risk of accidents or damage to property, the manufacturer advises that technicians attend regular training and safety training sessions.

1.3 Copyright

It is not permitted to pass on product-specific information to third parties. We reserve the right to implement technical developments and changes in the interest of progress. All rights are reserved, including those of translation and reproduction.

1.4 Conformity

The conformity applies to the complete device at the time of delivery. In the event of upgrades, modifications and connection of additional functions, the operator is responsible for obtaining an extended conformity.

Observe the relevant country-specific and local standards and regulations concerning the installation and operation of commercial cooking devices.

Conformity Europe

- The power connection is established and connected in accordance with IEC 60335, taking into account EN 60335 and VDE 0700.
- The water connection is established and connected in accordance with IEC 61770, taking into account EN 1717, DIN EN 13076 and DIN EN 13077.
- The wastewater connection corresponds to the current valid SVGW/ SSIGE regulations and is tested and certified accordingly.
- The device is approved for use up to 4000 m above NHN in accordance with IEC 60335.

Conformity USA and Canada

- The device is tested and built according to UL-197, CSA C22.2 no. 109 and NSF 51.

1.5 Liability and warranty conditions

Liability

Installations and repairs that are not carried out by specialist personnel authorized by the manufacturer or not using original service parts, as well as any technical changes to the unit that are not approved by the manufacturer, can render the manufacturer's product liability null and void.

Warranty

The warranty does not cover damage caused by failure to observe this installation manual.

The following are also excluded from the warranty:

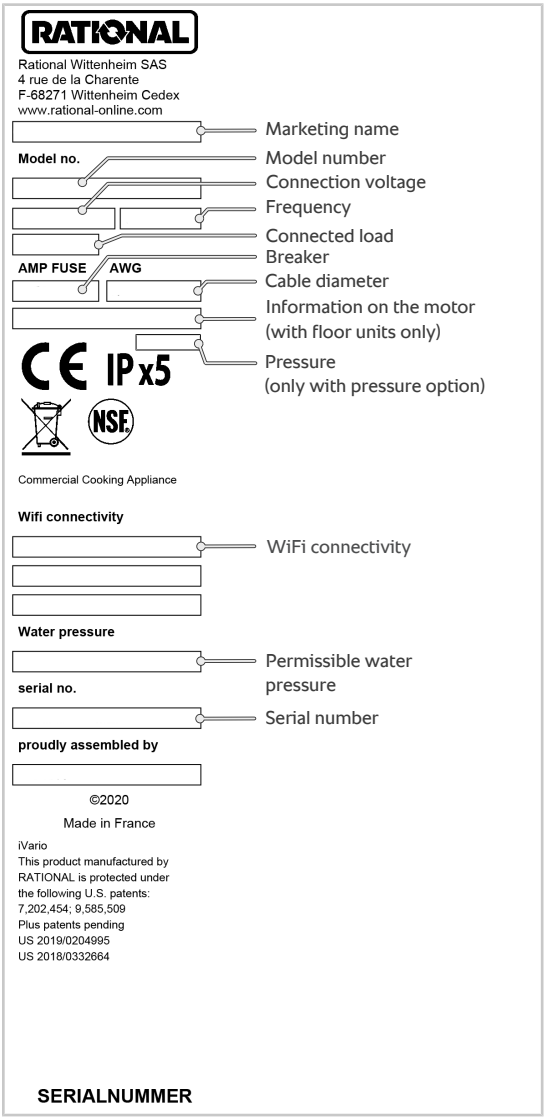
- Damage caused by incorrect use, installation, maintenance, repair
- Using the unit other than intended
- Modifications or technical changes to the unit that are not authorized by the manufacturer
- Failure to use genuine service parts from the manufacturer

1.6 Identification of the device

Type plate

The type plate is located on the device base frame between the pan and electrical compartment.

The type plate includes the following information:



Device type and model number

The assignment can be found in the table below.

The device type designation and the model number on the type plate are different. Depending on the device option, the following digits are added to the model number on the type plate.

Starting in 2021, the pressure cooking option will also be available in the USA.

Device size type plate	Unit size
LMX.100CE ...	iVario Pro L
LMX.200CE ...	iVario Pro L with print option
LMX.100DE ...	iVario Pro XL
LMX.200DE ...	iVario Pro XL with print option

2 Safety

2.1 Display of warning notices

⚠ DANGER

Type and source of danger
Failure to observe these warnings will result in severe injuries or death.
Measures to avoid the danger

⚠ WARNING

Type and source of danger
Failure to observe these warnings could result in severe injuries or death.
Measures to avoid the danger

⚠ CAUTION

Type and source of danger
Failure to observe these warnings could result in minor or moderate injuries.
Measures to avoid the danger

NOTE

Failure to observe these warnings could result in damage to property.

2.2 General safety information

The device is designed so that it does not pose a danger when installed correctly. This manual describes proper installation of the device.

- Observe the relevant country-specific and local regulations and standards in your country.
- Use lifting aids such as lifting straps when transporting.
- Secure the device against tipping when transporting and after setup.
- Wear suitable protective clothing, such as protective gloves and safety shoes, during transport and installation.

- The device should only be set up in a protected environment safe from frost and wind.
- Do not set up the device in adverse weather conditions, such as rain.
- The device should only be connected in accordance with the installation manual and the information on the type plate.
- Switch off the device when disconnecting it from or connecting it to the power supply.
- After use, only transport the device in ambient temperature of over 0 °C [32 °F].
- Only store the device in ambient temperatures of over 0 °C [32 °F].
- Do not spray aerosols in the area around the device while the device is in operation.
- Check the unit for transport damage. Inform your specialist dealer/shipping company immediately if you suspect transport damage.

2.3 Intended use

The device is designed for thermic food preparation. This device is only intended for commercial use, such as in restaurant kitchens or catering operations for schools, hospitals, or delis. Do not use this unit outdoors. This unit must not be used for continuous mass industrial food production.

All other usages of this device are considered improper and dangerous. The manufacturer accepts no liability for consequences arising from use other than intended.

3 Product description

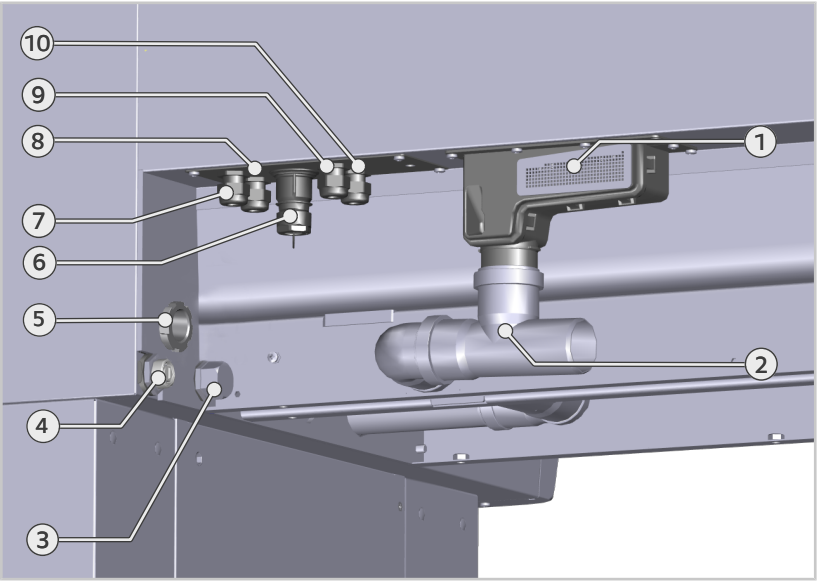
3.1 Device description

NOTE

Never seal or pipe the safety overflow

Do not reduce the cross-section of the safety overflow.

The safety overflow but be accessible and clear at all times. It is used for ventilation and as a drain in the event of blockages.



1	Safety overflow with sieve (no connection)	6	Ethernet network connection
2	Waste water connection	7	PG screw fittings for optional connections
3	Hot water connection (optional)	8	
4	Cold water connection	9	
5	Power cable guide	10	

3.2 Technical data

Protection class

The device corresponds to jet water connection class IPX5.

Ambient conditions for operation

- Do not set up the device in ambient temperatures below 5 °C [41 °F].

- Do not commission the device in ambient temperatures below 5 °C [41 °F].
- Only set up the device in rooms with adequate ventilation via windows or an extractor hood.

Sound emission value

The sound emission value is below 70 dB.

3.2.1 Device weight

Device with base

Unit size	Weight without packaging kg [lbs]	Weight with packaging kg [lbs]
iVario Pro L	216 [475]	251 [553]
iVario Pro L with print option	235 [517]	270 [595]
iVario Pro XL	256 [564]	296 [653]
iVario Pro XL with print option	283 [624]	323 [712]

Device with base and height adjustment

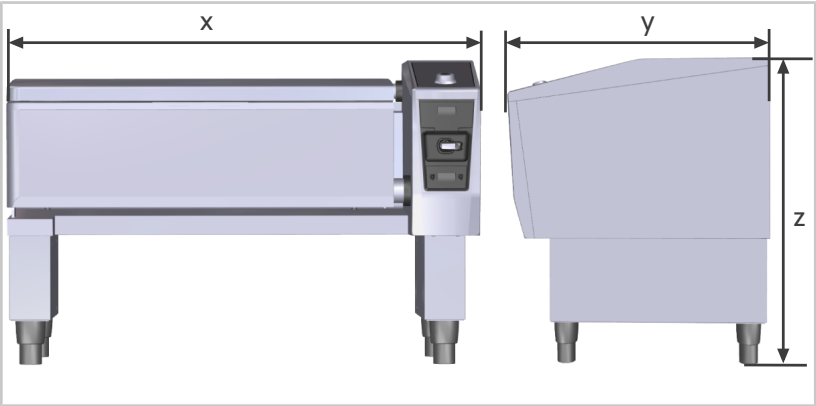
Unit size	Weight without packaging kg [lbs]	Weight with packaging kg [lbs]
iVario Pro L	238 [525]	273 [602]
iVario Pro L with print option	257 [567]	292 [644]
iVario Pro XL	279 [615]	319 [704]
iVario Pro XL with print option	307 [676]	347 [765]

Device without base

Unit size	Weight without packaging kg [lbs]	Weight with packaging kg [lbs]
iVario Pro L	196 [432]	231 [509]
iVario Pro L with print option	215 [474]	250 [551]
iVario Pro XL	236 [520]	276 [608]
iVario Pro XL with print option	263 [580]	303 [668]

3.2.2 Device dimensions

Device with base



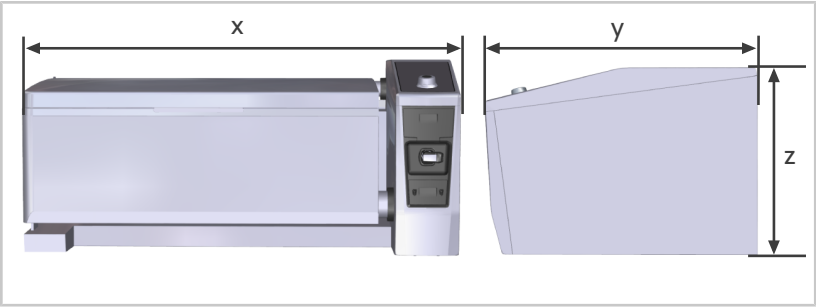
Device size L

Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1030 [40 1/2]	894 [35 1/4]	1078 [42 1/2]

Device size XL

Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1365 [53 3/4]	894 [35 1/4]	1078 [42 1/2]

Device without base



Device size L

Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1030 [40 1/2]	894 [35 1/4]	608 [23 7/8]

Device size XL

Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1365 [53 3/4]	894 [35 1/4]	608 [23 7/8]

Packaging dimensions

Device with base Device size L

Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1250 [49 1/4]	1100 [43 1/4]	1240 [48 7/8]

Device with base Device size XL

Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1580 [62 1/4]	1100 [43 1/4]	1240 [48 7/8]

Device without base Device size L

Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1250 [49 1/4]	1100 [43 1/4]	932 [36 3/4]

Device without base Device size XL

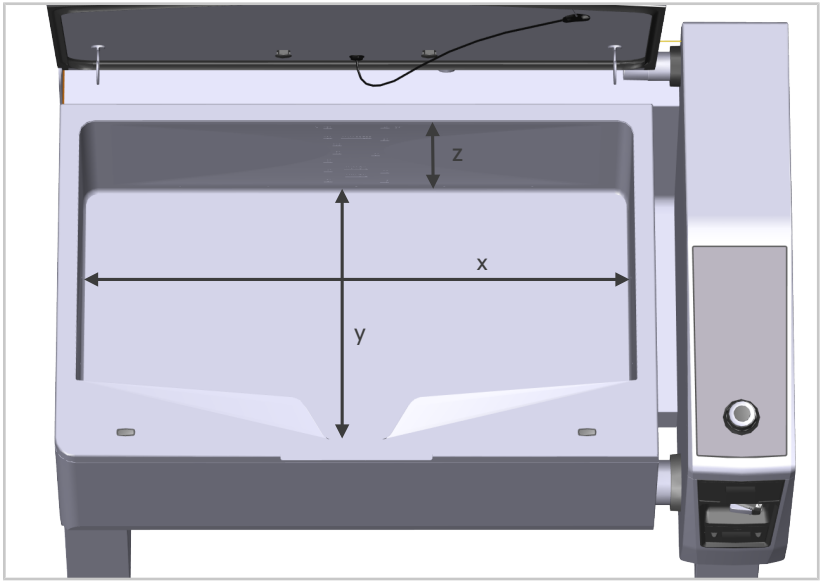
Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
1580 [62 1/4]	1100 [43 1/4]	932 [36 3/4]

3.2.3 Pan dimensions

Usable capacity

Unit size	Useful volume l [gal]
L	100 [26]
XL	150 [40]

Pan internal dimensions



	Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
L	692 [27 2/8]	570 [22 4/8]	280 [11]
XL	1026 [40 3/8]		

3.2.4 Thermal load

Unit size	Thermal load latent (kJ/h)	Thermal load sensitive (kJ/h)
iVario Pro L	26827	5540
iVario Pro XL	37343	8413

We reserve the right to implement technical developments and changes.

4 Transport

⚠ CAUTION

Risk of crushing due to the weight of the device

Hands, fingers and feet may be crushed.

- Wear suitable protective clothing during transport.
- Use lifting aids such as lifting straps.

⚠ CAUTION

Risk of tipping during transport

Risk of crushing if the device tips over onto a person.

- Note the center of mass of the device.
- Ensure that the device does not tip over during transport or lifting.

⚠ CAUTION

Inclined plane during transport using transport aid

Risk of crushing and injury during transport using a transport aid over an incline or uneven floor.

- Do not run over an incline of more than 10°.
- Take care when transporting the device.

NOTE

Damage to the device due to narrow areas

Note the width and height of the accesses during transport.

Only transport the device with the device cover closed.

NOTE

Incorrect transport

Do not push the unit to the designated installation site.

The unit feet may be damaged.

Transport the device correctly as outlined in this manual.

- ✔ The device is on the transport pallet.
- ✔ The device feet are positioned in the foot guides in the transport pallet box.
- ✔ The designated installation surface is horizontal.
- ✔ The device cover is closed.

✔ At least 2 people are required for the transport.

1. Remove the packaging material.

4.1 Lifting points on the unit

NOTE

Damage due to lifting incorrectly

Only lift the unit via the designated lifting points.

Do not lift the unit on the side wall of the electrical compartment.

Center of mass

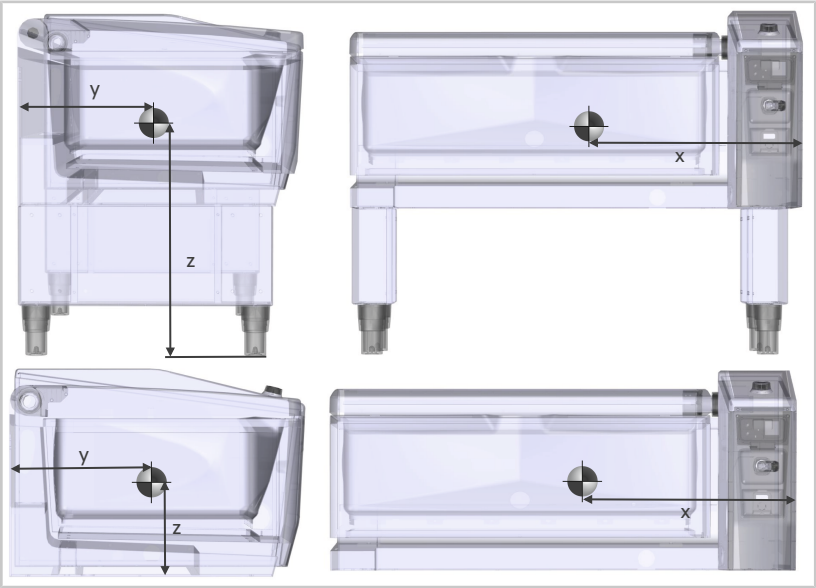
The following graphic shows the center of mass of the device. The dimensions for the center of mass shown are approximate for orientation.

⚠ CAUTION

Risk of crushing and injury if the center of mass is not observed

Failure to observe the center of mass can result in the device tipping over during lifting and transportation.

- Ensure that the weight of the device is distributed evenly.
- Note the center of gravity of the device.

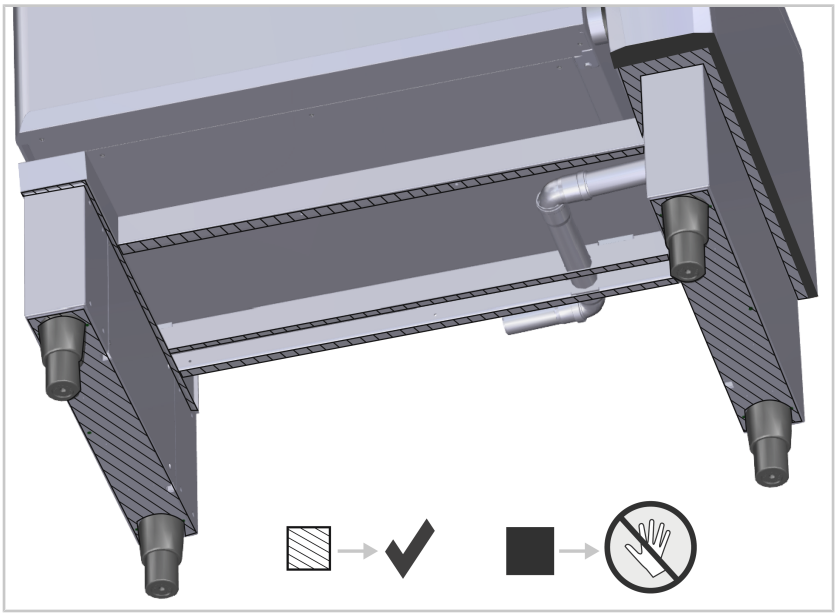


	Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
iVario Pro L	490 [19 19/64]	406 [16]	685 [26 31/32]
iVario Pro L Without base	484 [19 1/16]	410 [16 9/64]	275 [10 53/64]
iVario Pro XL	640 [25 13/64]	400 [15 3/4]	690 [27 11/64]
iVario Pro XL Without base	635 [25]	405 [15 15/16]	275 [10 53/64]

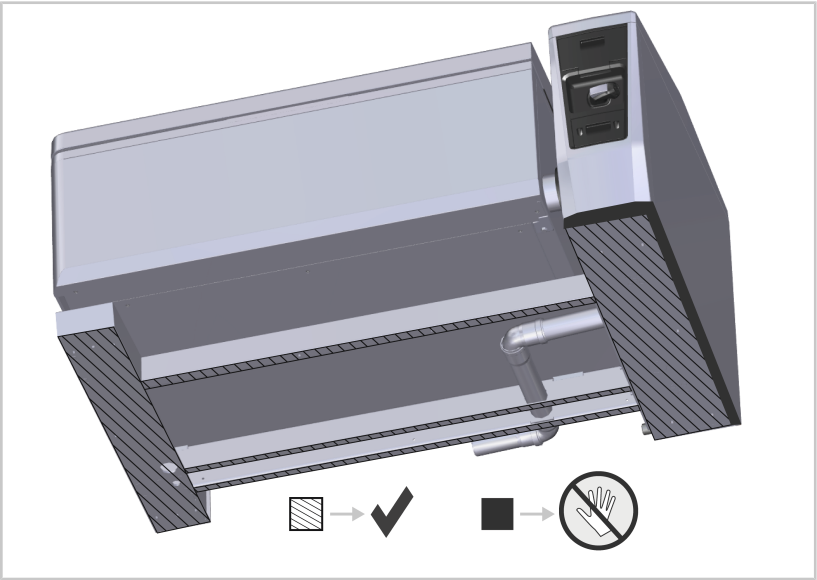
Lifting points on the unit

1. Lift the unit on the base frame marked in the figure and on the marked pan paneling.

Device with base



Device without base



4.2 Transport without pallet

NOTE

Incorrect transport

Do not push the unit to the designated installation site.

The unit feet may be damaged.

Transport the device correctly as outlined in this manual.

NOTE

Damage due to lifting incorrectly

Only lift the unit via the designated lifting points.

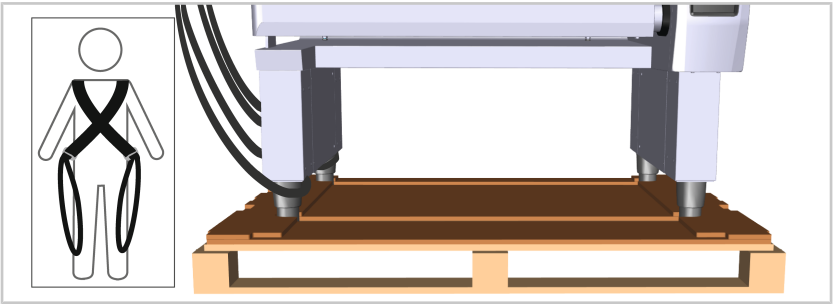
Do not lift the unit on the side wall of the electrical compartment.

The manufacturer recommends transporting the device with cross straps.

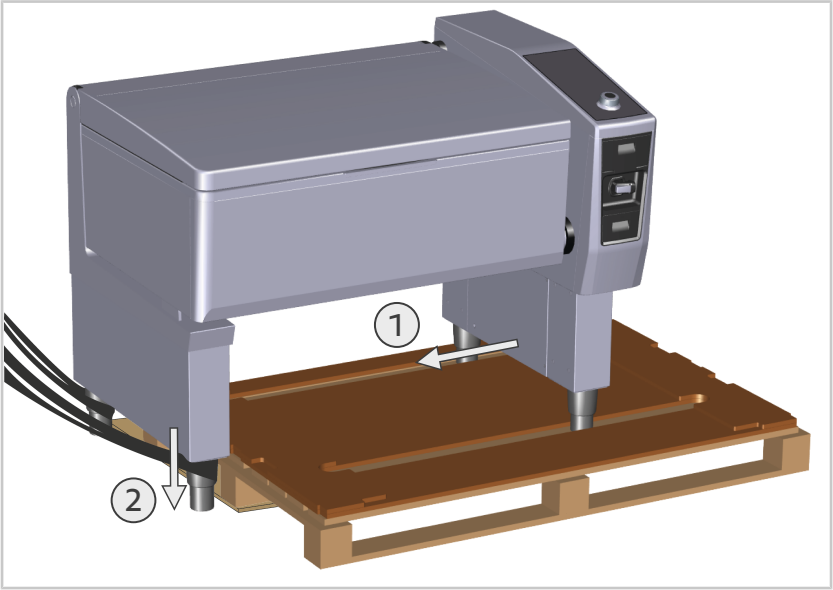
- ✔ The packaging material is removed.
- ✔ The lifting / cross straps are on hand.

1. Place the straps around the unit feet.

2. If necessary, cut out perforated points in the box to enable the device to be pushed off the pallet.



3. Lift the unit on the left side.
4. Pull the unit along the foot guides in the box to the end and set down the left side of the unit.

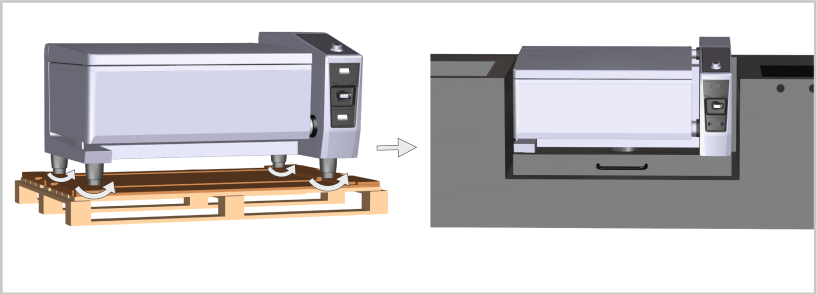


5. Lift the unit on the right side and remove the pallet.

> The transport pallet is removed.

6. Lift the unit on the lifting points and transport it to the designated installation surface.

7. When setting up the unit without a base, remove the transport feet before setup.



>> The unit is set down on the designated installation surface and ready for setup and installation.

4.3 Transport with pallet

⚠ CAUTION

Inclined plane during transport using transport aid

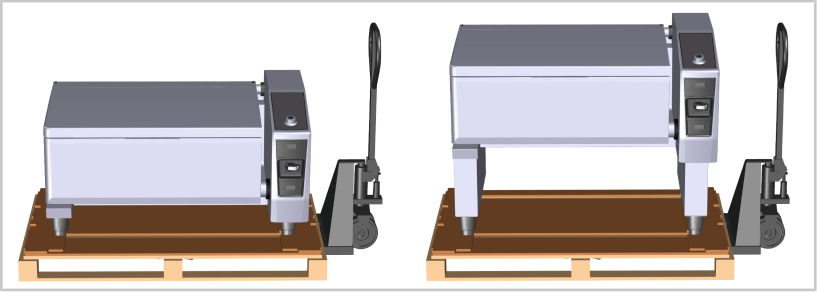
Risk of crushing and injury during transport using a transport aid over an incline or uneven floor.

- Do not run over an incline of more than 10°.
- Take care when transporting the device.

✔ The packaging material is removed.

✔ The lift truck is in the lowest position.

1. Place the transport aid on the electrical compartment side.



2. Transport the device to the installation site with the transport aid.
3. Lift the device on the lifting points and place it on the designated installation surface.

>> The device is set down on the designated installation surface and ready for setup and installation.

4.4 Transport without pallet with lift truck

NOTE

Transport with transport aid without protection

Transport the device on the pallet for as long as possible. Do not transport the device with a transport aid or similar transport equipment without protection. Use a wooden board for protection, for example.

- ✔ The packaging material is removed.
- ✔ The protection from damage (e.g. a wooden board) is on hand.
- ✔ The lift truck is in the lowest position.

1. Place the protection from damage on the transport aid.
2. Position the lift truck under the device from the front or from the electrical compartment side.

> The lift truck and the protection from damage are positioned so that only the lifting points are put under stress during transport.

3. Transport the device to the designated installation surface with the lift truck.
4. When setting up the device without a base, unscrew the transport feet before setup.

>> The device is set down on the designated installation surface and ready for setup and installation.

5 Setup

⚠ CAUTION

Risk of crushing during setup

Fingers, hands and feet may be crushed under the device.

- Wear suitable protective clothing during setup.
- Only lift the device via the designated lifting points.

Requirements

- If you are not setting up the device on plastic feet as standard, observe the instructions and steps in the Setup options section.

5.1 Minimum distance to the device

NOTE

Minimum distance is not observed

To avoid damage to the unit or malfunctions, the unit should be set up with the specified minimum distance from heat sources or open flames.

NOTE

Damage to the wall at the rear of the device

Water or steam may escape from the safety overflow. Remember this during setup and check the properties of the wall at the rear of the device.

5.1.1 Distance from walls

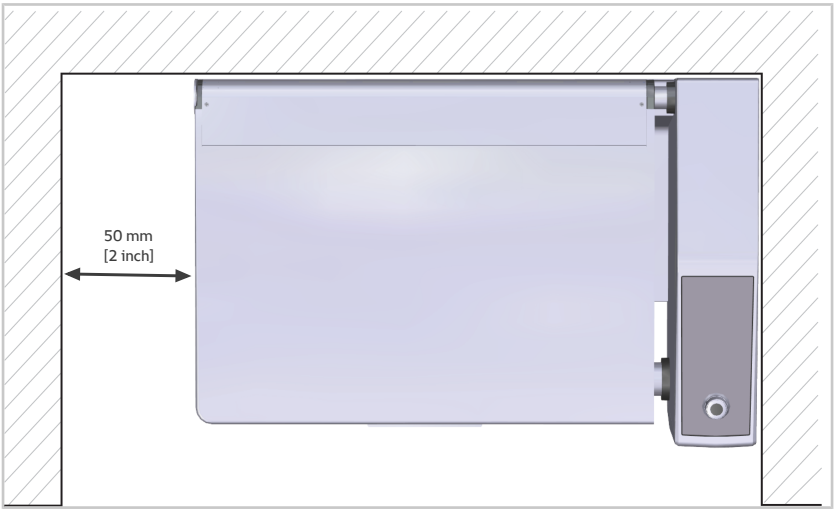
No minimum distance is required at the rear of the device.

✔ The walls at the installation site are built in accordance with the local fire safety regulations and are resistant to heat sources.

1. Observe a minimum distance from walls to the left.

Manufacturer recommendation

1. Set up the device with a minimum distance of 50 mm [2 inch] from the wall at the left to enable ideal cleaning of the device.



5.1.2 Distance from heat sources

NOTE

High ambient temperatures

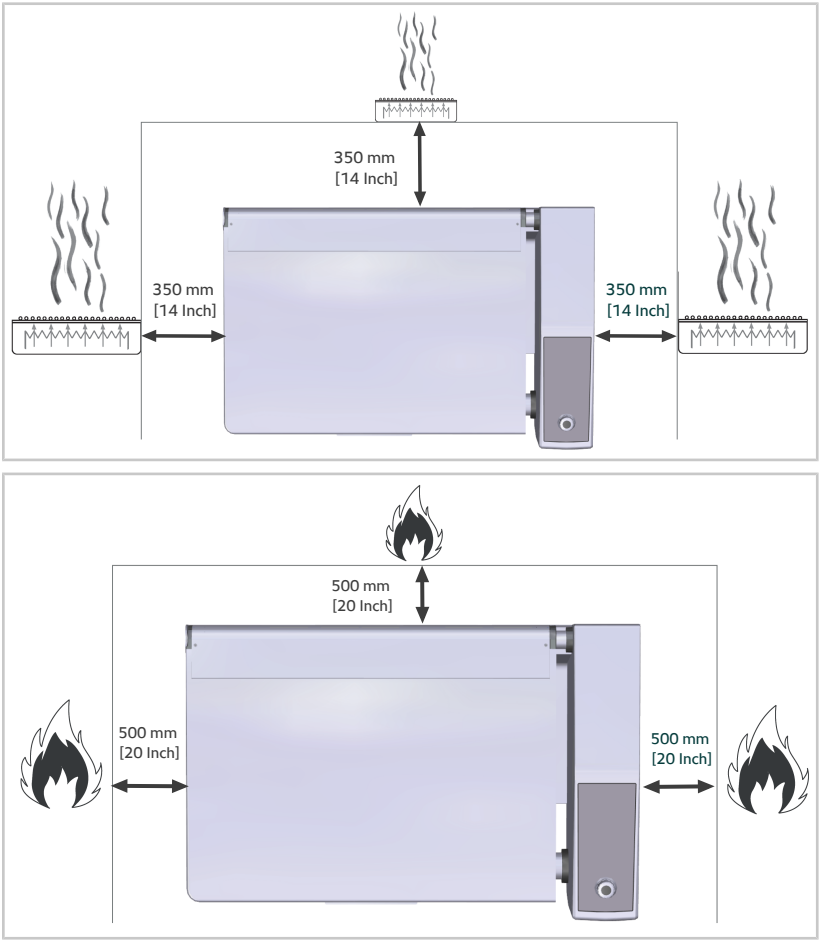
Do not place deep fryers or other heat sources at the sides of the device.

NOTE

Open flames close to the device

When setting up the device at a distance of less than 500 mm [20 inch] from an open flame, always install a heat shield.

1. Set up the device with a minimum distance of 350 mm [14 inch] from heat sources on all sides.
2. Set up the device with a minimum distance of 500 mm [20 inch] from open flames on all sides.



5.1.3 Distance from water sources

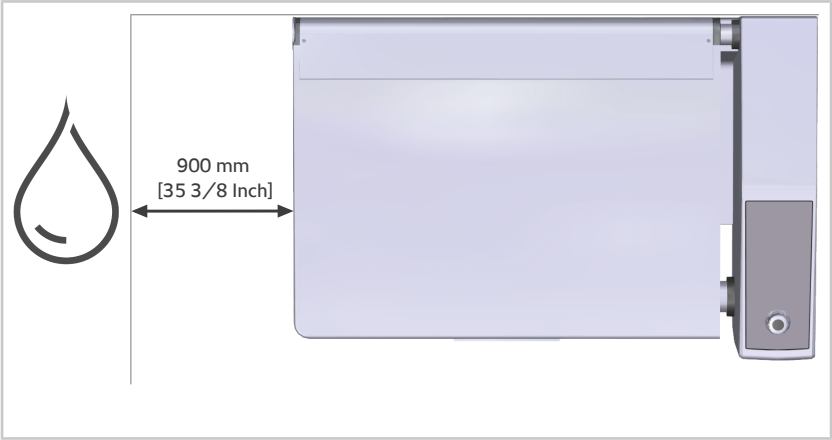
⚠ WARNING

Risk of burning if the minimum distances from open water sources is not observed

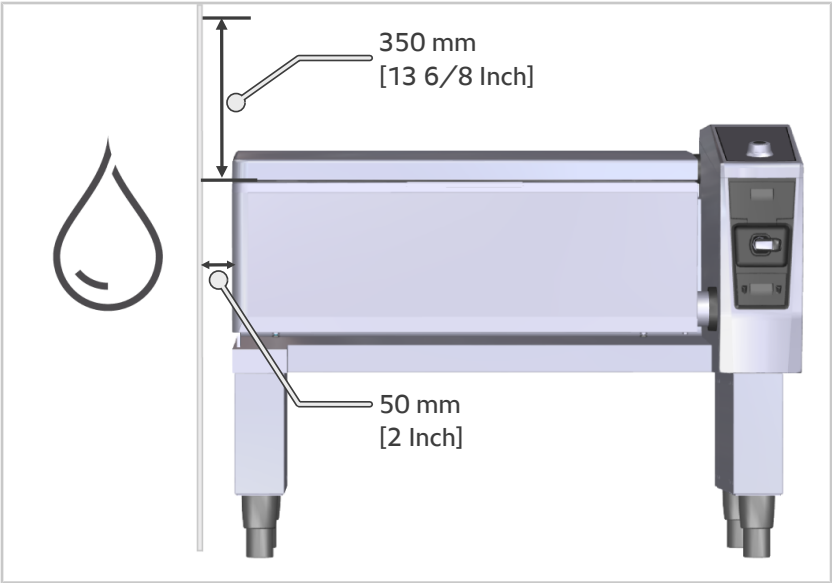
Water can spray into the hot pan, in hot liquids or in hot fat.

- Set up the device with a minimum distance of 900 mm [35 3/8 inch].
- If you can not observe the distance, install the non-flammable divider as described in this manual.

1. Set up the device with a minimum distance of 900 mm [35 3/8 inch] from open water sources.



1. If you can not observe the distance, install a non-flammable 350 mm [13 6/8 inch] high divider between the device and the water source.
2. Observe the recommended minimum distance from walls for easier cleaning of the device.



5.2 Setting up the device

⚠ CAUTION

Risk of tipping when setting up on the installation surface

Risk of crushing if the device tips over onto a person.

- Note the center of mass of the device.
- Ensure that the device does not tip over during lifting.

✔ The installation surface is horizontal.

✔ The minimum distances are observed.

1. Position the device on the designated installation surface.

>> The device is positioned on the installation surface and ready for horizontal alignment.

Setting up the device without base

✔ The installation surface is horizontal.

✔ The minimum distances are observed.

✔ The transport feet have been removed.

1. Position the device on the designated installation surface.

>> The device is positioned on the installation surface and ready for horizontal alignment.

5.3 Device alignment

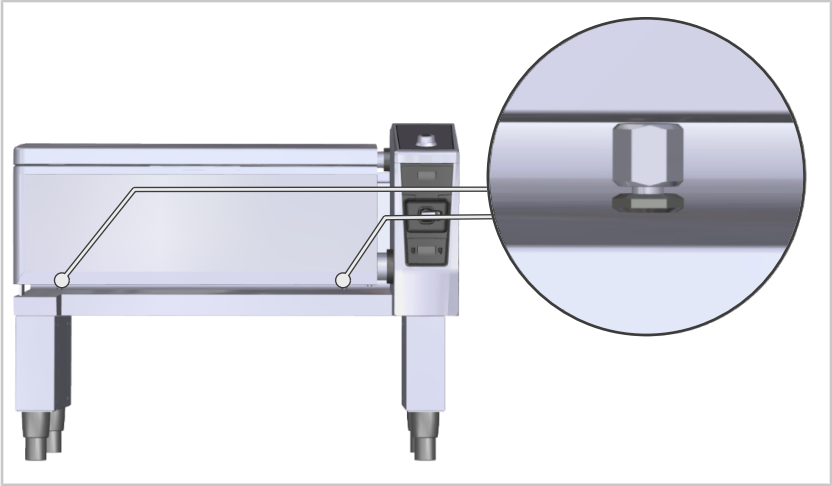
The horizontal alignment of the device takes place via the device feet.

NOTE

The pan is not on the pan stops

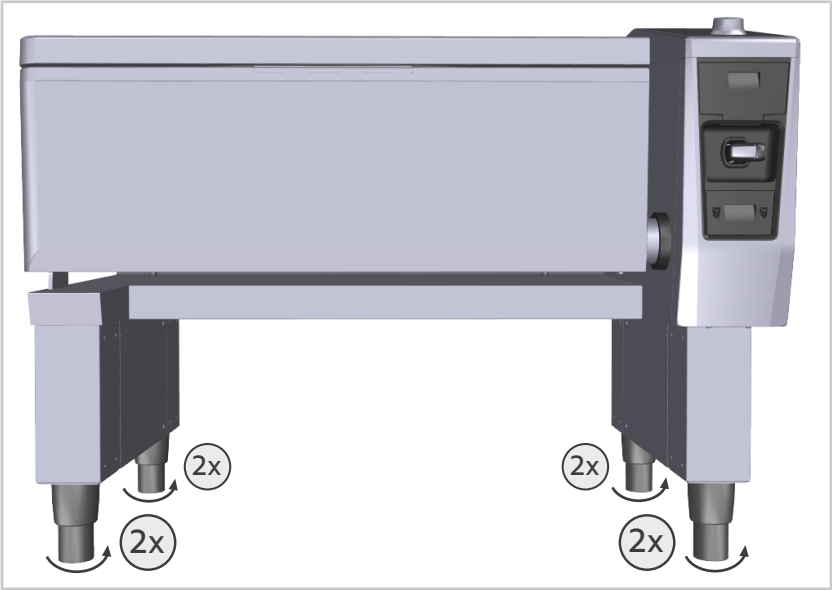
On leaving the factory, the plan is on the pan stops. Do not adjust these screws.

If the pan is not on the pan stops in the position below after the horizontal alignment, contact the manufacturer.

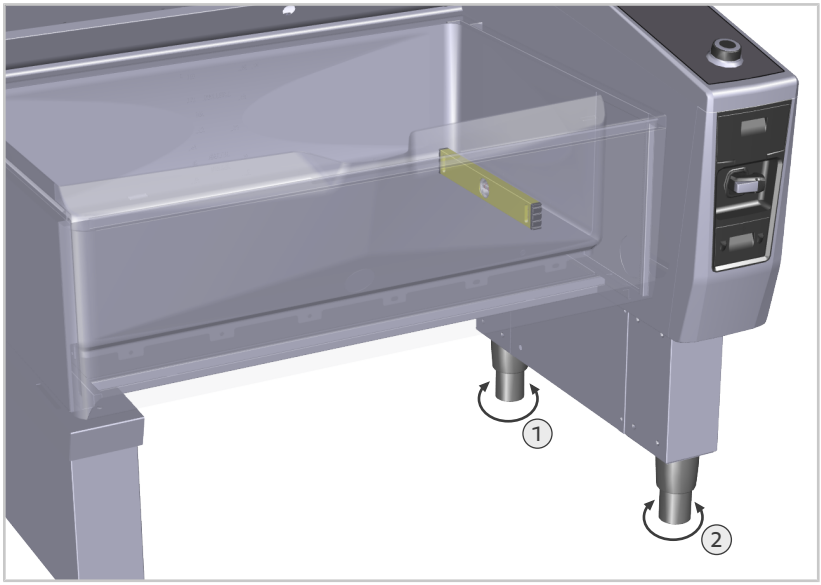


- ✔ The pan is not on the stops.
- ✔ The unit is positioned on the designated installation surface.
- ✔ The minimum distances are observed.

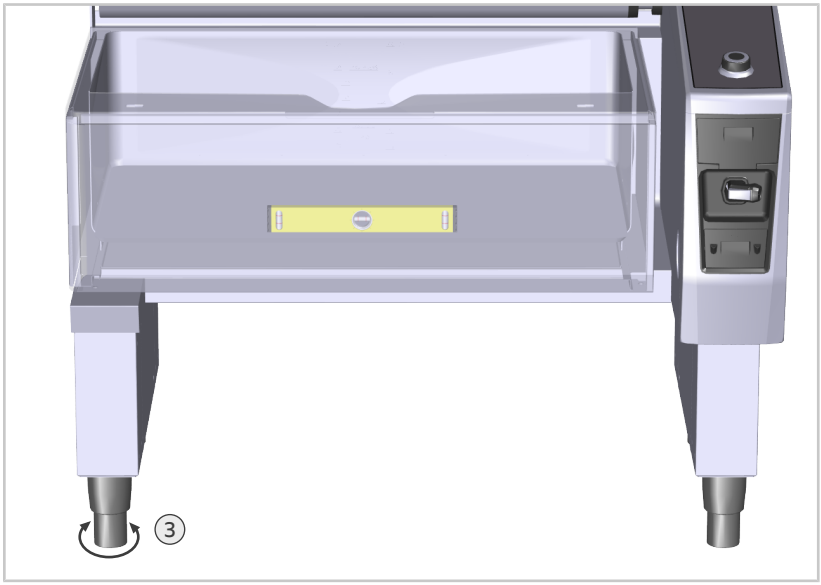
1. Turn the device feet out by approximately 2 turns to ensure that there is sufficient play for the device alignment.



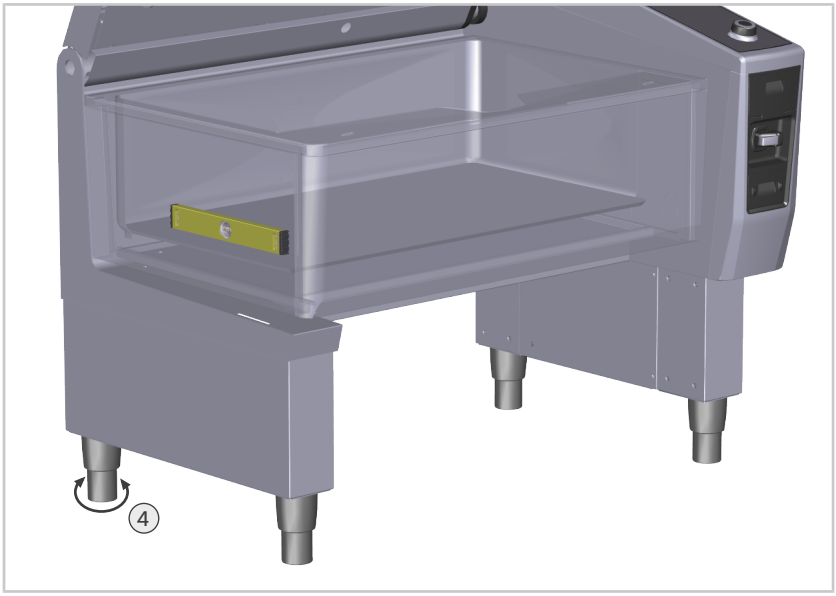
2. Place the spirit level on the right side of the pan and align the device horizontally using the device feet (1) and (2).



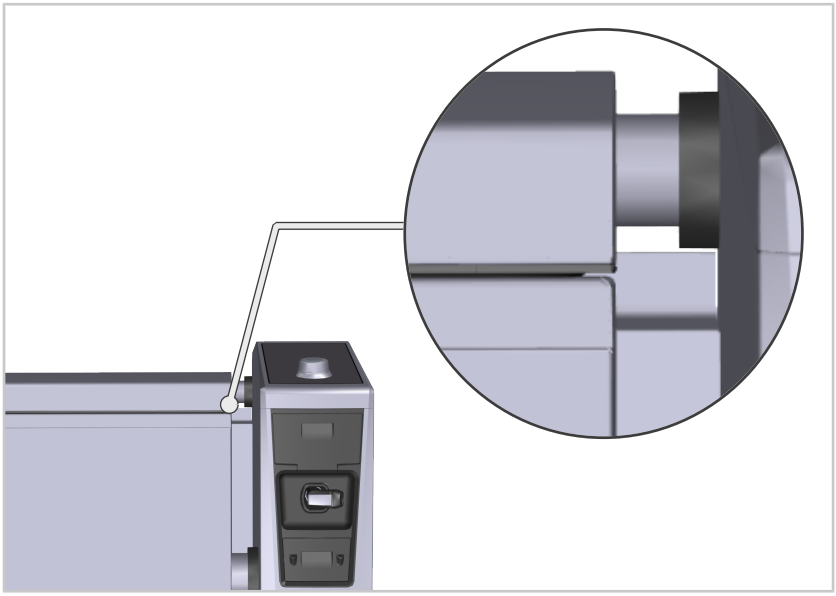
3. Place the spirit level on the front edge of the pan and align the device horizontally using the device foot (3).



4. Place the spirit level on the left side of the pan and align the unit horizontally using the unit foot (4).



5. Close the device cover and check that the device cover and the pan seal flush.



6. If there is an offset between the unit cover and the pan, adjust the unit using the unit foot (4).

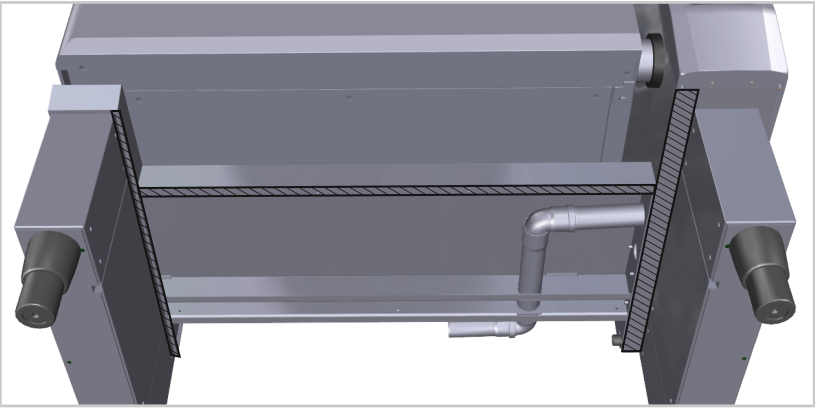
5.4 Aligning the device without electrical current

If the unit is not connected to the power grid, align it on the unit base frame at the bottom.

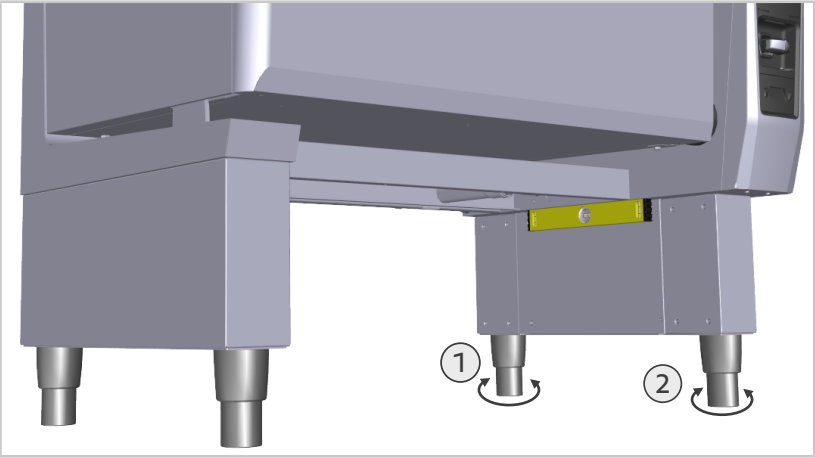
NOTE

Incorrect positioning of the spirit level

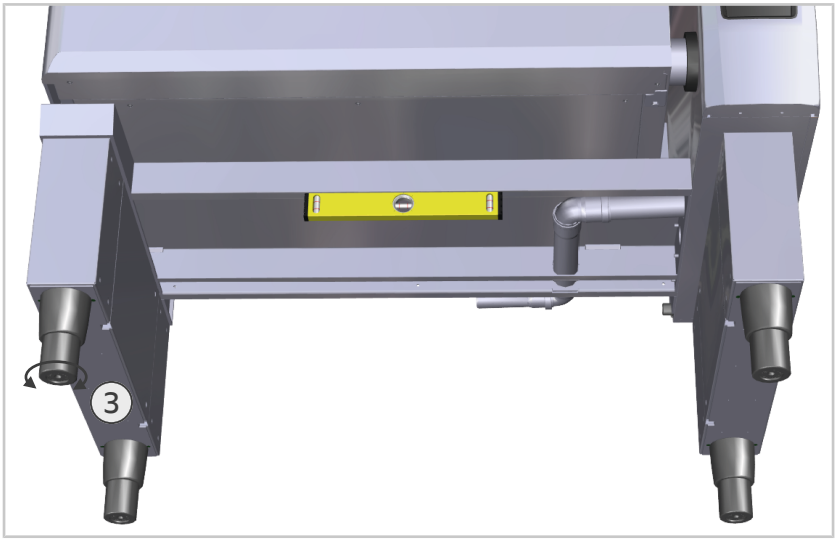
Do not place the spirit level on the pan when aligning the unit at the bottom. Place the spirit level on the base frame of the unit.



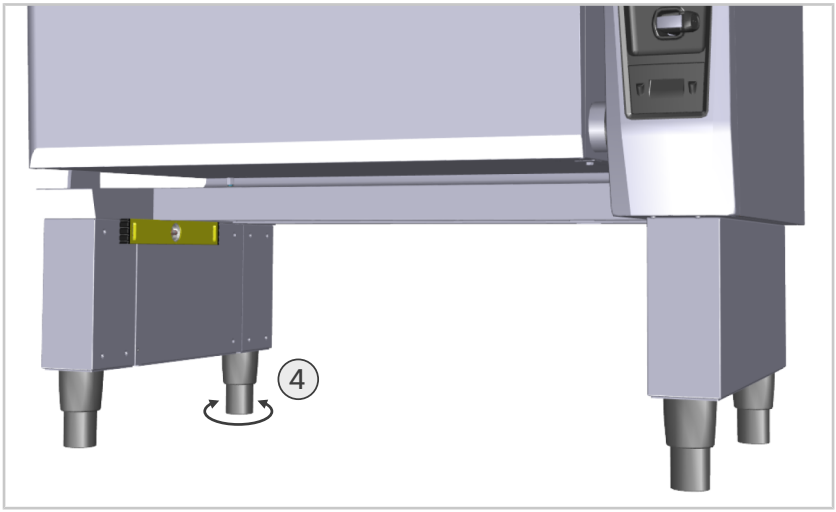
1. Place the spirit level on the right bottom side of the device and align the device horizontally using the device feet 1 and 2.



2. Place the spirit level on the bottom of the device and align the device horizontally using the device foot 3.



3. Place the spirit level on the bottom of the device and align the device horizontally using the device foot 4.



4. Check that the device cover and the pan seal flush.
5. If there is an offset between the device cover and the pan, adjust the device using the device foot 4.

>> The device is aligned horizontally.

>> The unit cover and the pan close without an offset.

5.5 Fixing the device in place

The manufacturer recommends fixing the device to the installation surface.

The kit for fixing the device, including special adhesive, screws and dowels, is **not** included in the scope of supply for the device and can be ordered separately from the manufacturer under item number 60.72.905.

6 Electrical connection

⚠ DANGER

High voltages during connection to the power grid

Danger to life when working with high voltage.

- Disconnect the connection from the power supply.
- Ensure that the unit is de-energized.

⚠ DANGER

Electric shock due to incorrect connection

There is a danger to life if the cable conductors are connected incorrectly.

Connect the wires correctly according to their color coding.

⚠ CAUTION

Risk of injury due to incorrect installation

Use an all-pole disconnecting device accessible on-site with a contact distance of at least 3 mm [0.12 inch].

NOTE

Supply voltage does not correspond to the device voltage

Before connecting, check that the supply voltage corresponds to the required voltage on the type plate of the device.

6.1 Regulations for the electrical connection

- Connect the device in accordance with the valid regulations in your country.
- Connect the device to a standardized power grid.
- The power consumption, fuses and cable cross-sections depend on the following factors:
  - Local regulations
  - Cable length
  - Cable quality
  - Power supply
- Adapt the connected loads to the local conditions and requirements for a correct power connection.
- Observe the NFPA 70/NEC, UL 197 and CSA C22.2 regulations.
- Only use power cables in accordance with NEC/NEMA regulations.

Notes

- The cross-sections of the connection cables are based on the power consumption and local regulations.

Color coding of the conductors

Observe the color coding of the conductors and country-specific deviations.

Color of the conductor	Function of the conductor
Green	Protective conductor
Black, red and beige	Phase L1, L2, L3

RCD fault-current circuit breaker

All devices are installed with a protective conductor terminal. It may also be necessary to include a fault-current circuit breaker type A or type B (RCD type A, RCD type B) when installing the device to comply with country-specific standards and regulations.

6.2 Opening the electrical compartment

⚠ CAUTION

Sharp edges on the housing

Risk of cuts on the housing when working in the electrical compartment.

Wear protective gloves.

NOTE

Use of unsuitable objects to open the control panel

Do not use pointed or sharp objects to push the control panel upwards. The housing and the seal may be damaged.

NOTE

Damage to the cable trunk and control panel when removing the control panel

The control panel is connected with the installation compartment by a cable trunk.

Take care when removing the control panel to avoid damaging the cable trunk.

Set down the control panel carefully and protect it from scratches.

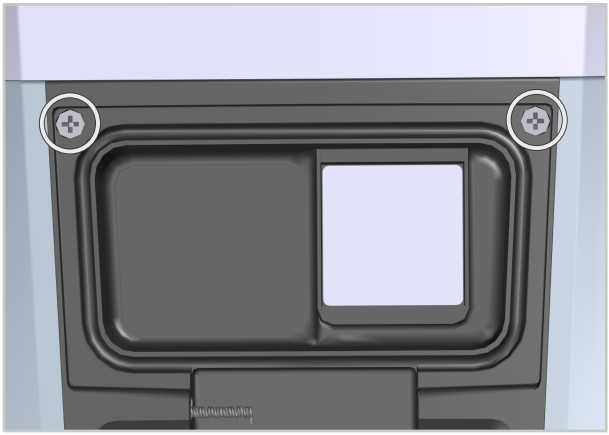
The electrical compartment is located under the control panel.

✔ The device is positioned on the designated installation surface.

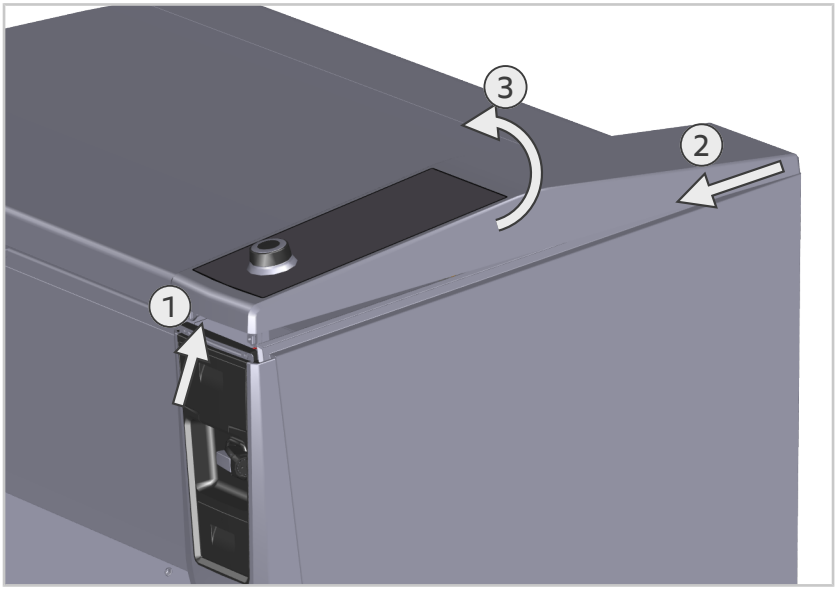
✔ The device cover is closed.

- ✔ A cross-headed screwdriver is on hand.
- ✔ All voltage sources are switched off via an external circuit breaker.
- ✔ In order to protect the control panel from scratches and damage, a guard is fitted on the pan cover, e.g. cardboard or bubble wrap.

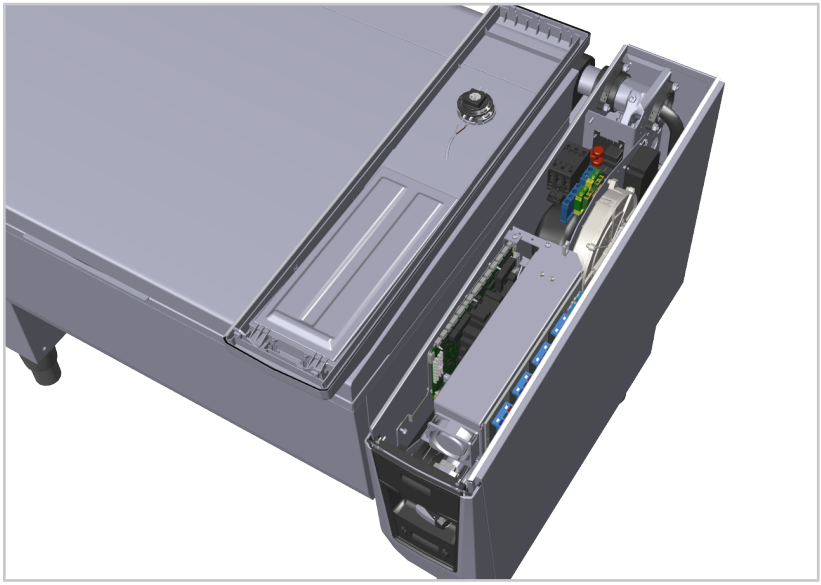
1. Open the cover on the front of the device and remove the 2 screws with the cross-headed screwdriver.



1. Release the control panel from the electrical compartment frame (1) at the front and pull the control panel gently forwards (2). Turn and place the control panel on the pan cover (3).

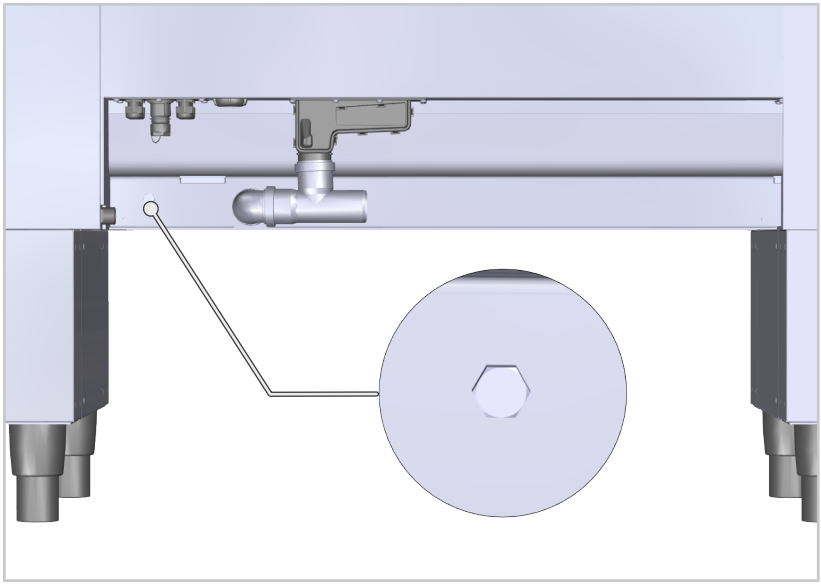


>> The electrical compartment is open.



6.3 Connecting the equipotential bonding

1. Connect the equipotential bonding before installing the connections.



6.4 Connecting the device to the power grid

Notes on the power cable and connection point

- The manufacturer recommends using a flexible power cable. A rigid power cable makes the connection more difficult and can impact the position of the device.
- The flexible power cable is at least type SOOW 90 °C.
- The devices are supplied without a power cable. The connection point of the power cable is on the main contactor in the electrical compartment.
- You have your own supply cable on hand for the device.

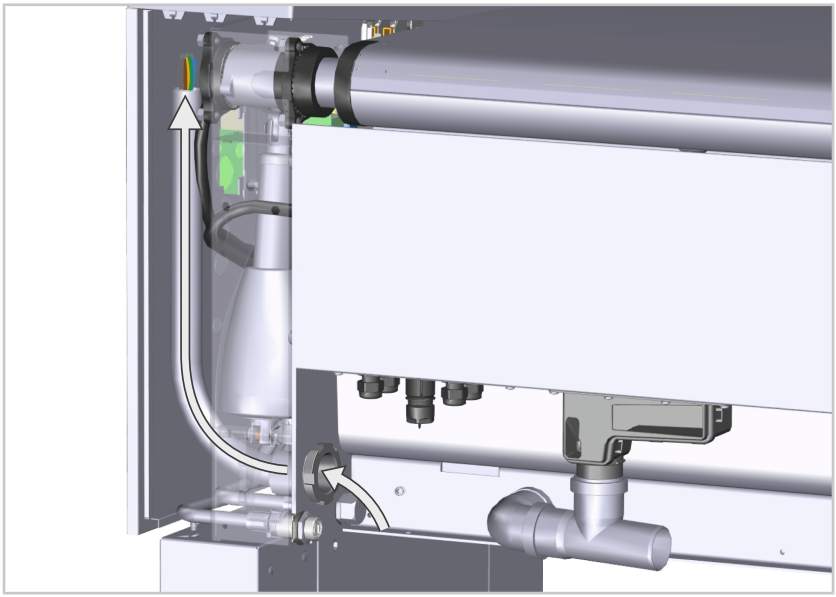
Carrying out the connection

The wires are pushed through a conduit pipe into the electrical compartment.

✔ A fault-current circuit breaker type A or B is present.

✔ The electrical compartment is open.

1. Mount a pipe adapter with a diameter of 1 1/4 inch (not included in the scope of supply).
2. Feed the wires through the pipe adapter into the electrical compartment to the connection point. Take care not to damage the conductors.



3. Pull the adapter tight in the opening.
4. Connect the protective conductor to the yellow- green terminal.
5. Connect the red, beige and black conductor directly to contactor K1.
6. Check that the conductors are connected correctly.

7. Screw the pipe adapter closed.
8. Connect the wires to the power supply.

>> The grid connection is complete.

Color coding of the terminals

Connection	Conductor color	Terminal	Tool
Phase	Black, red and beige	L1, L2, L3	Hex key
Protective conductor	Green	PE	Slotted screwdriver

6.5 Connect the device for demo mode to the power grid

The demo mode is used for demonstration purposes for the basic functions of the device.

Observe the following table with the color codings for the connection.

Color coding of the terminals for demo mode

NOTE

Power supply for demo mode

A power supply of at least 190 V – 240 V AC 50 / 60 Hz is required to run demo mode.

Connection	Conductor color	Terminal	Tool
Phase	Black	L1	Hex key
Neutral conductor	White	L2	Hex key
Protective conductor	Green	PE	Slotted screwdriver

The following functions are activated or deactivated in demo mode:

- Cooking processes are simulated (processes are speeded up)
- Movement of the pan and device cover is active
- Heating is deactivated

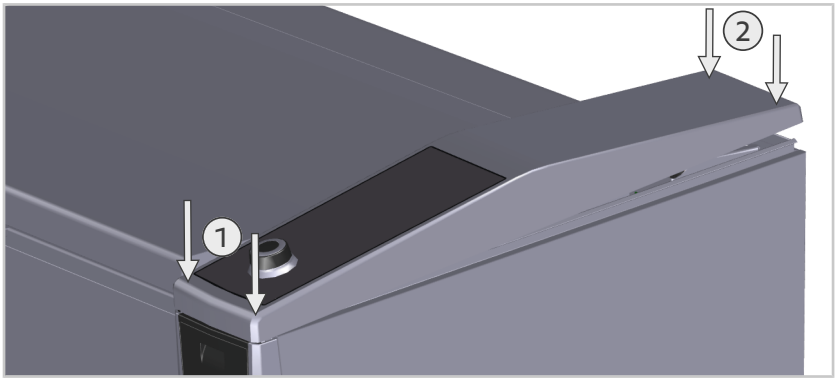
If the device is connected in demo mode, the following connections are sufficient:

- One phase
- One neutral conductor
- One protective conductor
- Equipotential bonding

6.6 Closing the electrical compartment

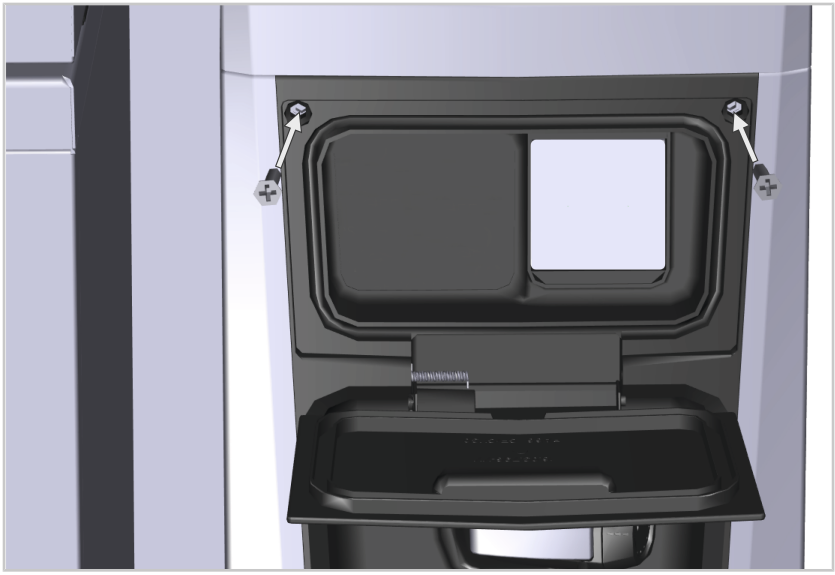
✔ The power cable is connected to the device.

1. Insert the control panel at the front (1) and press in the control panel at the back (2) until it engages.



> The cover is fitted flush on the electrical compartment frame at all points.

2. Screw in the 2 screws behind the cover of the front of the device.



>> The electrical compartment is closed and protected against water and moisture penetration.

6.7 Connected loads of different voltage types

Maximum connection voltage

- Maximum permissible tolerance for the input voltage: - 10% to 10%

- The device can be used with frequencies of 50 Hz and 60 Hz without technical modifications.

3 AC 440 V	Power kW	Power consumption A	Fuse A	Conductor cross-section AWG
iVario Pro L	25	33	45	8
iVario Pro XL	38	50	70	6

3 AC 208 V	Power kW	Power consumption A	Fuse A	Conductor cross-section AWG
iVario Pro L	23	64	70	6
iVario Pro XL	34	96	125	2

3 AC 240 V	Power kW	Power consumption A	Fuse A	Conductor cross-section AWG
iVario Pro L	22	53	70	6
iVario Pro XL	37	88	125	2

3 AC 480 V	Power kW	Power consumption A	Fuse A	Conductor cross-section AWG
iVario Pro L	29	35	45	8
iVario Pro XL	44	53	70	6

3 AC 440 V / 480 V	Power kW	Power consumption A	Fuse A	Conductor cross-section AWG
iVario Pro L	25 / 29	33 / 35	45 / 45	8 / 8
iVario Pro XL	38 / 44	50 / 53	70 / 70	6 / 6

3 AC 208 V / 240 V	Power kW	Power consumption A	Fuse A	Conductor cross-section AWG
iVario Pro L	23 / 22	64 / 53	70 / 70	6 / 6
iVario Pro XL	34 / 37	96 / 88	125 / 125	2 / 2

6.8 Switch the supply voltage 208 V / 240 V

NOTE

Note that the switching of the supply voltage is only possible on devices with this option.

NOTE

Note that, when the switch position 208 V / 240 V is changed, the options in the service level also have to be changed.

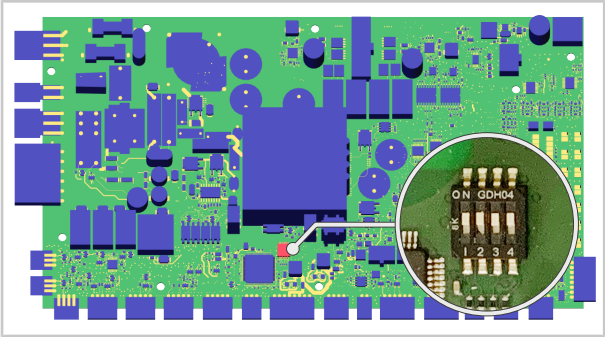
✔ The device is switched off.

✔ All voltage sources are switched off via an external circuit breaker.

✔ The electrical compartment is open.

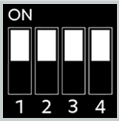
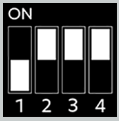
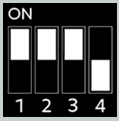
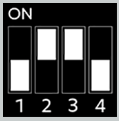
1. Check the supply voltage at the connection.
2. Set the voltage at the dip switch in accordance with the supply voltage.

> The dip switch is located on the I/O board A10 close to the transformer.



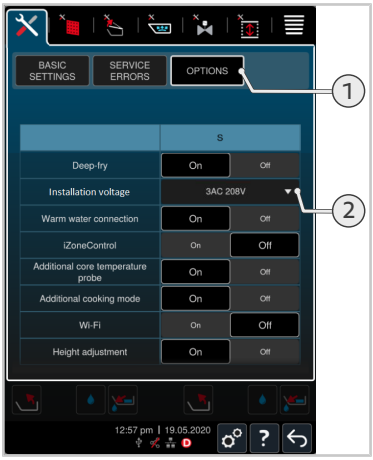
3. The switch position according to the supply voltage can be found in the table below.

> The dip switch is set to the supply voltage 3 AC 208 V as standard in the basic settings.

Unit type	Supply voltage	Switch position
L	3 AC 208 V	
L	3 AC 240 V	
XL	3 AC 208 V	
XL	3 AC 240 V	

1. Close the electrical compartment.
2. Connect the unit to mains power.

3. Switch the unit on.
4. Use the control panel to select the service level. Navigate to Options (1) and switch to the relevant supply voltage (2).



5. Switch the unit off and on again. The changes will now be applied.
6. Run a performance check. Verify that the measured performance data matches the setting.

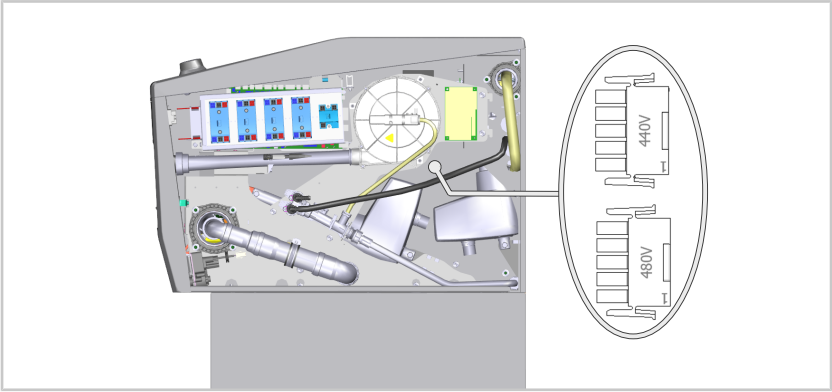
>> The power supply has been successfully switched.

6.9 Switch the supply voltage 440 V / 480 V

- ✔ The device is switched off.
- ✔ All voltage sources are switched off via an external circuit breaker.
- ✔ The electrical compartment is open.

1. Check the voltage type at the connection.
2. Set the voltage at the 5-pin connector in accordance with the supply voltage.

The connectors are in the electrical compartment next to the toroidal transformer. The power supply is set to 3 AC 440 V as standard.



1. Close the electrical compartment.
2. Connect the unit to mains power.
3. Switch the unit on.
4. Run a performance check. Verify that the measured performance data matches the setting.

>> The power supply has been successfully switched.

6.10 Device options

Base with height-adjustable feet

If the device is equipped with height-adjustable feet, the connected loads do not change.

7 Network connection

7.1 Notes on the network connection

Via the network connection, you can connect the device to your network in order to connect the device to ConnectedCooking.

Ethernet connection (Local Area Network)

- The device may be equipped or retrofitted with an optional Ethernet connection.
- The retrofit kit is available from the manufacturer under item number 87.01.643S.
- Use a network cable of at least category 6 for connection to the network, specification: CAT-6.
- The network connection is located on the rear side of the device.
- A detailed description of the connection to the network can be found in the original operating manual.

WLAN (Wireless Local Area Network)

The WLAN adapter integrated in the device is a market-dependent option that is not available in every country.

- The devices from the iVario Pro L and iVario Pro XL series have WLAN as standard.

7.2 Connecting the device to the network

Connecting the Ethernet cable (LAN)

1. Unscrew the LAN connection.
2. Unscrew the cap.
3. Remove the sealing plug.
4. Push the Ethernet cable through the union nut.
5. Push the Ethernet cable through the rubber grommet.
6. Push the rubber grommet back into the clamp ring.
7. Connect the Ethernet cable to the connector.
8. Screw on the connection.
9. Tighten the cap.

>> The Ethernet cable is connected and can be used.

8 Water connection

8.1 Regulations for water connection

NOTE

Connection to soft water

When connecting the device to soft water, ensure that the water has a residual hardness of at least 4 °dH. A soft water connection is not required.

Water pipe

- Use a separate tap for each device on-site.
- Do not use used water hoses.
- The water pipe used must at least meet the requirements of NSF51 or equivalent quality.
- A water hose in accordance with NSF51 is included with the device. The materials used for this water pipe comply with the KTW, DVGW W270, FDA regulations.

Drinking water protection

Observe the country-specific standards and regulations for the drinking water network, including hygiene requirements (e.g. International Plumbing Code (IPC) regulations).

Water pressure

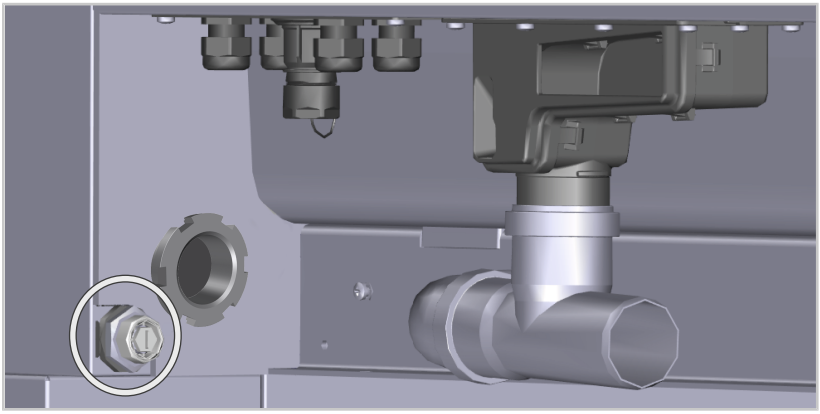
- The water pressure (flow pressure) in the supply line is 1,5 bar to 6 bar [22 psi to 87 psi].
- A water pressure of 3 bar [43 psi] is recommended.

Water temperature

- Cold water max: 30 °C [86 °F]

8.2 Connecting the water inlet

The water connection is located on the rear side of the device.



- ✔ The water hose fulfills the hygiene requirements for drinking water hoses in your country.
- ✔ Safety devices, such as check valves or CA system separators are installed in the feed line on the tap.
- ✔ Line for shared cold water connection: 3/4 Inch
- ✔ Water hardness: at least 4°dH

1. Connect the supplied water hose to the water inlet for the device.
2. Open the tap.

>> The water inlet is connected.

9 Waste water connection

9.1 Regulations for the wastewater connection

NOTE

Drain pipe does not comply with the regulations

Use a steam temperature resistant drain pipe that at least corresponds to a pipe of type PP. Do not use a hose.

NOTE

Contaminated wastewater and wastewater containing grease

Ensure that a grease separator is installed on-site to treat the wastewater.

NOTE

Never seal or pipe the safety overflow

Do not reduce the cross-section of the safety overflow.

The safety overflow but be accessible and clear at all times. It is used for ventilation and as a drain in the event of blockages.

NOTE

Incorrect installation of the drain pipe

Do not glue or weld the drain pipe on to the drain of the device.

Do not connect the drain pipe to the device drain with a reducer.

- A wall drain or floor drain may be used for all devices.
- Use a siphon to avoid rising odors.
- Keep a free drain section of at least 20 mm [3/4 Inch] when using a floor drain without a siphon.
- Connect the drain pipe with a constant incline of at least 5 % or 3°.

Requirements

- Each device must have its own wastewater connection.
- The unit connection kit for drain water type L,XL is **not** included with the device. The kit is available from the manufacturer under item number 87.00.746.
- When installing a device with the height adjustment option, a flexible device drain is required. The kit with the flexible device drain is not included with the device.

9.2 Connecting the wastewater drain

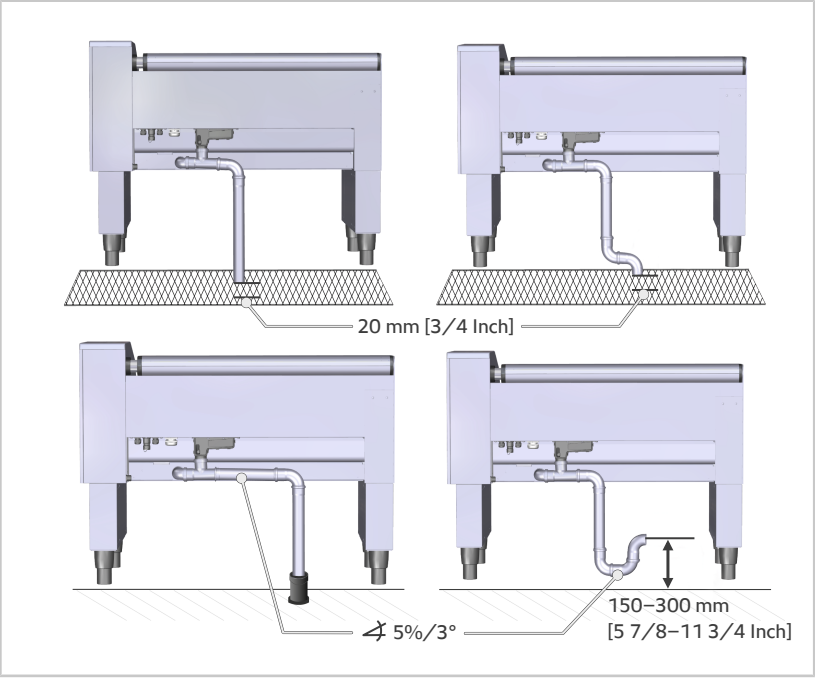
- The wastewater connection is located on the rear side of the device.
- Diameter on the device drain: DN 50 mm

Installing the drain to the rear side of the device

✔ The drain pipe is designed for a DN 50 mm device drain.

✔ The drain pipe corresponds at least to type PP and is steam temperature resistant.

1. Use a 90° elbow as the first and T-piece as the second pipe piece for the drain pipe.
2. Avoid unnecessary 90° angles in the pipework to ensure optimal water drainage.
3. Connect the drain pipe to the side or leading downwards.
4. Observe a minimum distance of 20 mm [3/4 Inch] between the drain channel and waste water drain. The manufacturer recommends a minimum distance of 50 mm [2 Inch] to make cleaning easier.
5. When connecting the drain pipe in the wall, the installation altitude must be between 150–300 mm [5 7/8–11 3/4 inch].



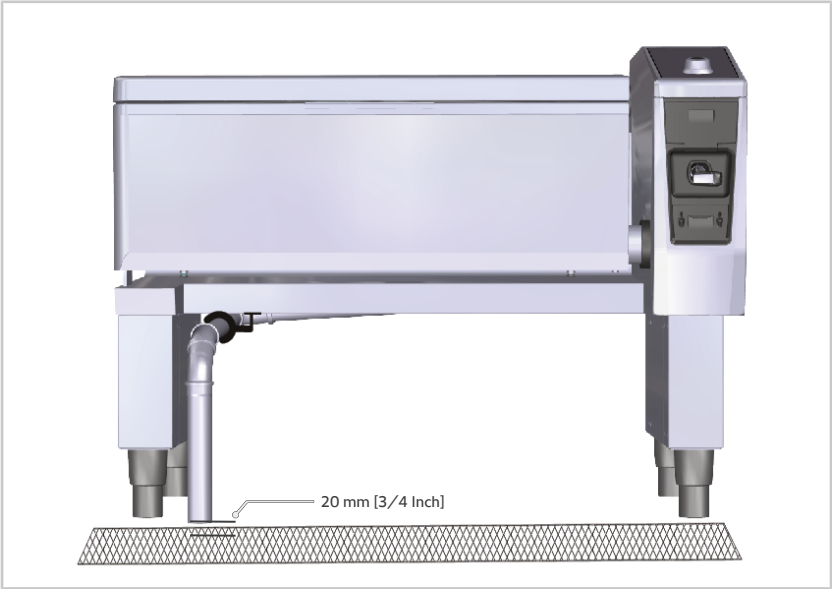
>> The drain pipe is installed with an incline of at least 5 % or 3°.

Installing the drain to the front side of the device

When installing the wastewater drain to the front side of the device, a bracket is required on the side of the device.

✔ There is a drainage channel with a waste grating in front of the device.

1. Screw the bracket on to the bottom of the device.
2. Connect the drain pipe and route it through the bracket to the front side of the device.
3. Observe a minimum distance of 20 mm [3/4 Inch] between the drain channel and waste water drain. The manufacturer recommends a minimum distance of 50 mm [2 Inch] to make cleaning easier.



>> The drain pipe is installed with an incline of at least 5 % or 3° with the drain to the front.

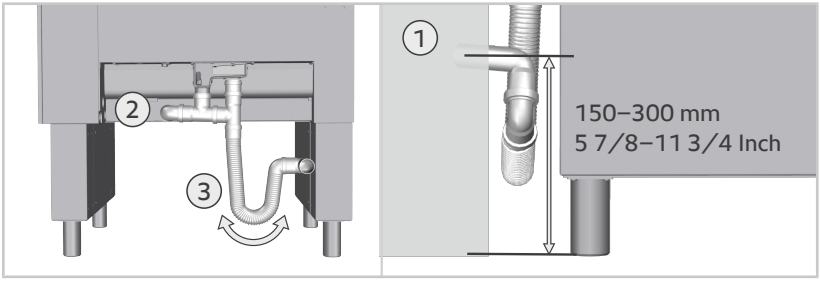
Recommendation of the manufacturer for the installation of devices with substructure with electric height adjustment

✔ The unit connection kit for drain water type L, XL is on hand.

✔ The installation altitude on the wall is between 150 mm and max. 300 mm (1).

1. Connect an additional ventilation pipe for connections with a flexible hose (2).

2. Connect the flexible hose in a U-shape (3).



10 Decommissioning

10.1 Notes on decommissioning

Observe the following when decommissioning the device:

- Ensure that the device is disconnected from the power supply and is de-energized.
- Remove all water and wastewater connections from the device.
- If the device is to be transported, remove the device from the foot locking mechanisms and from any wall mountings (mounting chain).
- Note that water remains in the device after decommissioning. Frozen water expands and can damage the device. Observe the general safety information in this manual.

10.2 Disposal

Electrical and electronic devices such as the iVario and iVario Pro must be disposed of separately.

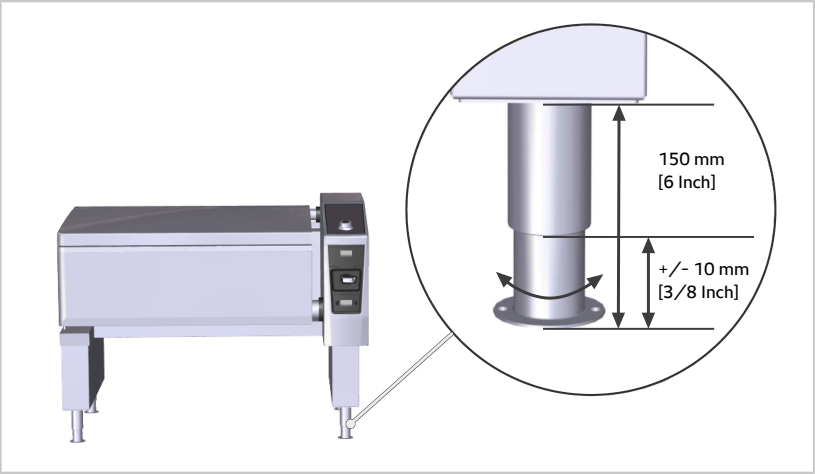
1. Do not dispose of the device as household waste or in the old equipment container at municipal connection points.
2. Observe the country-specific regulations for device disposal.
3. Where necessary, contact the manufacturer for further information on disposal.

11 Options

11.1 Setup options

Unit with stainless steel feet

The stainless steel feet can be raised by rotating them and fixed to the ground through the holes. The adjustment range is +/- 10 mm [3/8 inch].



Item number: Kit with 4 stainless steel feet	60.74.500

Fixing the device with stainless steel feet

The device can be fixed to the ground with dowels and screws or by gluing with a special adhesive.

Device with rollers

The device is delivered with plastic feet.

⚠ CAUTION

Device rolls away due to uneven ground

Risk of crushing and injury if the device rolls away.

- Apply the locking brake.
- Do not set up the device on uneven ground.

NOTE

Damage to the connections can occur during movement

Disconnect all connections when moving the device.

Connect the connections in accordance with the specifications again once the work is complete.

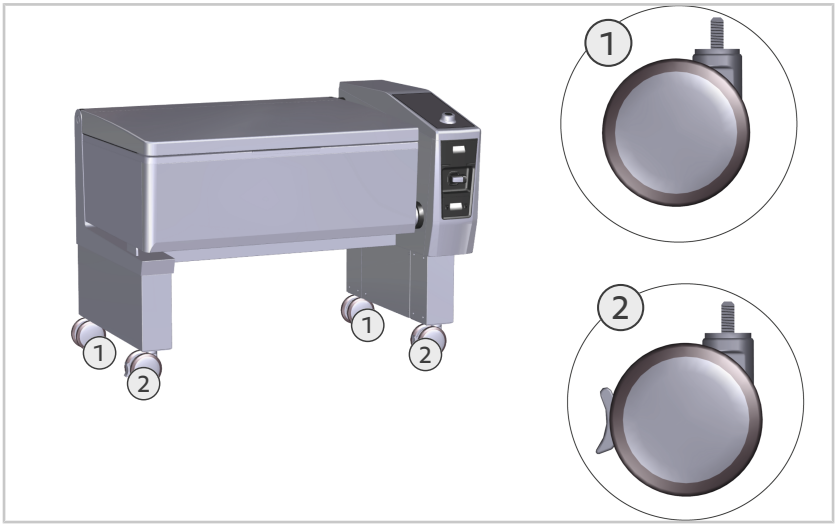
When the device is in its original position again, ensure that it is horizontal.

Apply the locking brake.

✔ The roller kit is on hand.

1. Unscrew the plastic feet on the relevant side.
2. Lift the device on one side each time.
3. Screw the roller with the locking brake on to the front side of the device and the roller without the locking brake on the rear side of the device.

>> The rollers are screwed on to the device.



Item number: Kit with 4 rollers	60.71.267

Securing the device with rollers against slipping

NOTE

Damage to the connections can occur during movement

Secure the unit additionally against movement with a chain on the rear panel. The chain is not included in the scope of supply.

1. There are holes for fixing the chain or rope on the rear side of the device.
2. Hook the chain into the holes and a fitting on the wall.
3. Also apply the locking brake.

>> The device is secured against rolling away and fixed in place.

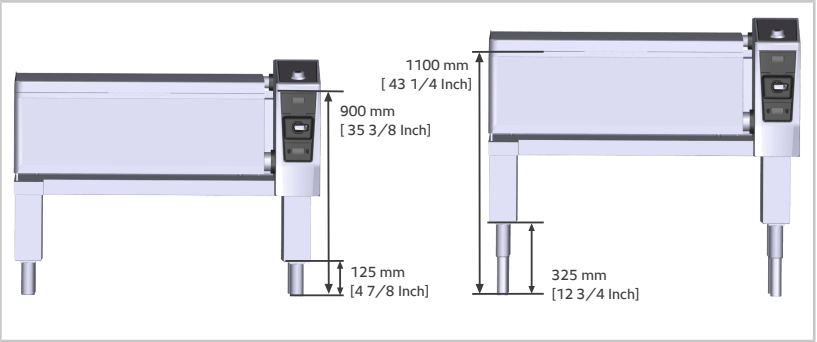
Base with height-adjustable feet

The base with height-adjustable feet has two motors on each side. The device feet can extend to the standard height 150 mm [5 7/8 inch], plus 175 mm [6 57/64 inch] and retracted 25 mm [63/64 inch].

NOTE

Damage to the connections during height adjustment

When installing a device or stand with height-adjustable feet, ensure that all connections are sufficiently long and can move along with the height adjustment.



11.2 Storage space

The storage space is delivered assembled and is fixed on the device and on the substructure with screws.

NOTE

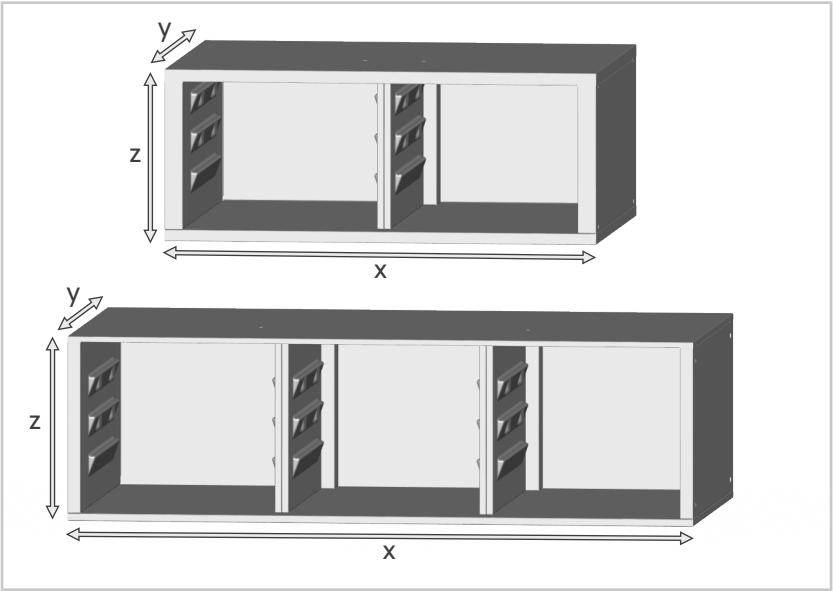
Storage space is overloaded

Observe the maximum load bearing capacity of 30 kg per storage compartment.

Weight

Unit size	L	XL
kg [lbs]	20 [44,1]	26,8 [59,1]

Measurements



Unit size	Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
L	744 [29 3/8]	600 [23 5/8]	320 [12 5/8]
XL	1077 [42 3/8]	600 [23 5/8]	320 [12 5/8]

11.2.1 Dismantling the storage space

CAUTION

Risk of crushing when dismantling the storage space

Fingers, hands and feet may be crushed under the storage space.

- 2 people are required to remove the storage space from the substructure.

NOTE

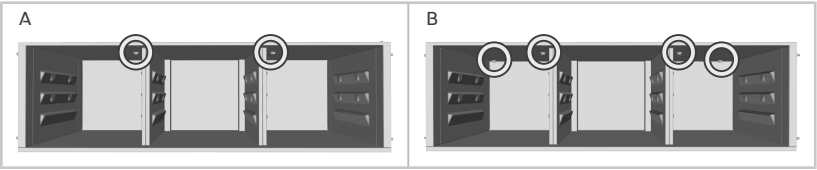
2 versions of the storage space are possible

Note that there are 2 versions of the storage space.

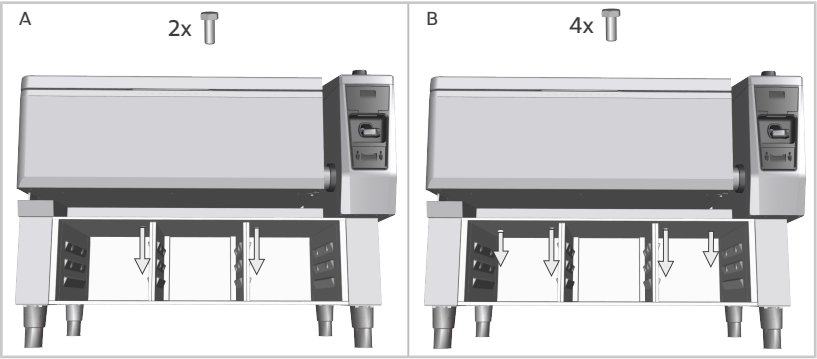
- Check the version of the storage space.
- Remove the storage space according to the descriptions.

Version A has 2 screws at the top on the inside of the storage space.

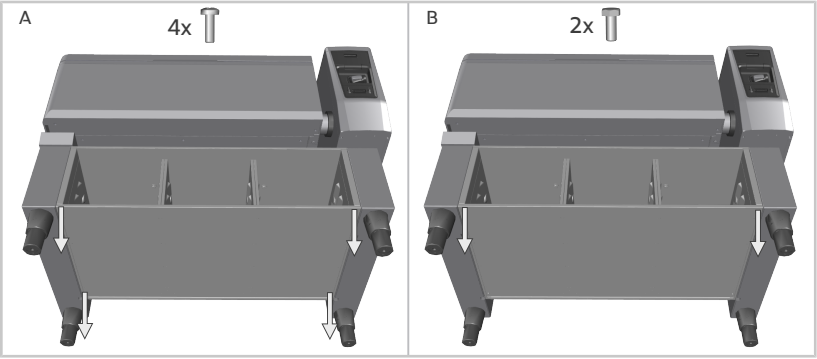
Version B has 4 screws at the top on the inside of the storage space.



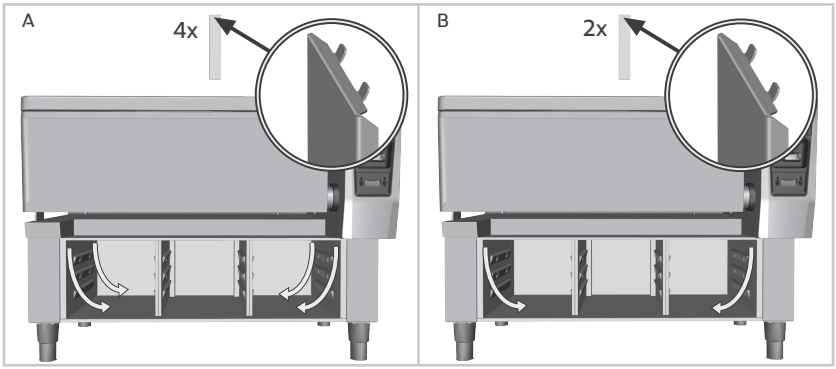
1. Remove the screws at the top on the inside of the storage space.



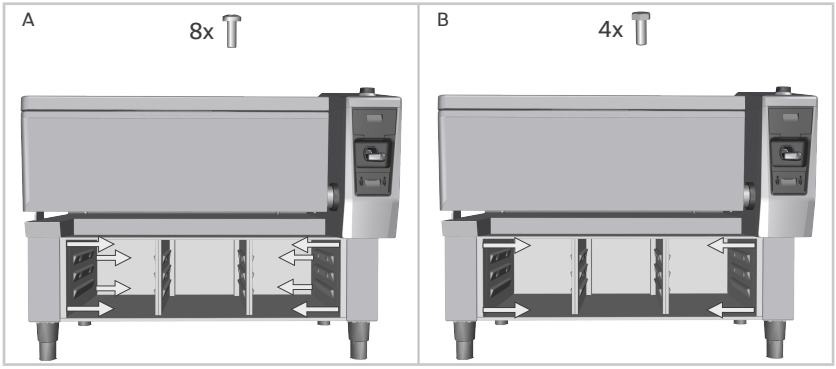
2. Remove the screws on the bottom of the storage space.



3. Remove the covers on the inside of the storage space. Remove the bottom first to avoid damage to the lugs on the top.



4. Remove the screws connecting the storage space to the substructure. 2 people are required for this step. Take care that the storage space does not fall down and lift it carefully out of the substructure.



>> The storage space is removed.

1. For the installation, carry out the steps in reverse order.

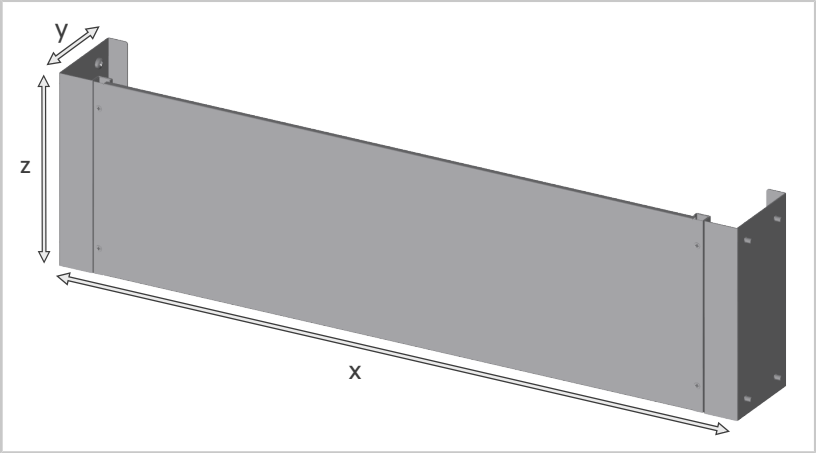
11.3 Paneling for substructure

The paneling is delivered assembled and is fixed on the substructure of the device with screws.

Weight

Unit size	L	XL
kg [lbs]	4,4 [9,1]	5,1 [11,2]

Measurements



Unit size	Width mm [inch] x	Depth mm [inch] y	Height mm [inch] z
L	744 [29 3/8]	140 [5 1/4]	320 [12 5/8]
XL	1077 [42 3/8]	140 [5 1/4]	320 [12 5/8]

11.3.1 Removing the paneling

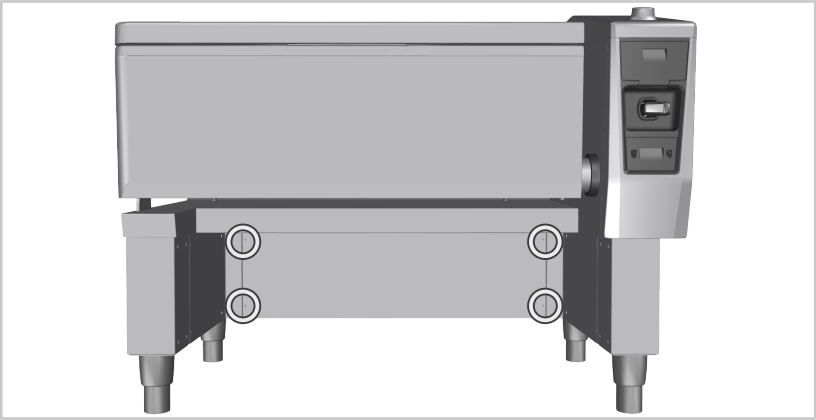
⚠ CAUTION

Risk of crushing when dismantling the paneling

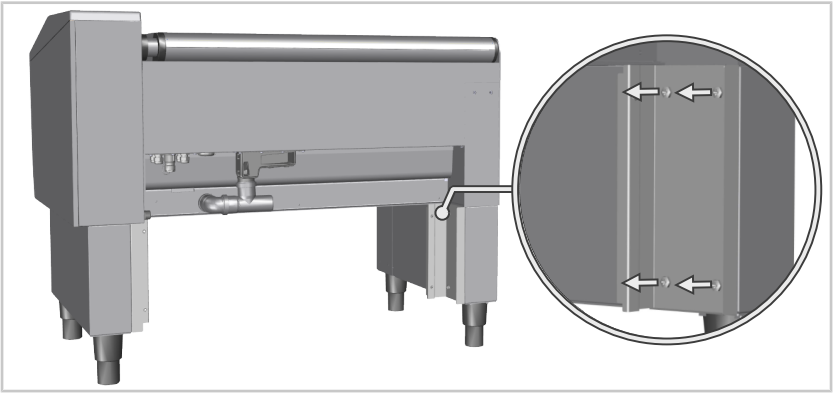
Fingers, hands and feet may be crushed under the paneling.

- 2 people are required to remove the paneling from the substructure.

1. Remove the 4 screws and remove the center piece of the paneling.



2. Remove the 4 screws on each side to remove the side sections.



>> The paneling is removed.

1. For the installation, carry out the steps in reverse order.

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