



iVario[®] 2-XS iVario[®] Pro 2-S

Original installation manual



Unit handover

Dealer:	Installer:

Specify for all queries:

Unit type:	
Unit no.:	
Your unit was checked by (name):	

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1 Introduction

1.1 Information on this manual

This document is a preliminary version of the installation manual. Please note the relevant version and date.

This document is part of the unit. Read the manual prior to installation. The manual is there to ensure that you use the unit safely and install it properly.

The illustrations in this manual are examples only and may differ from the unit.

This manual applies to the following devices:

- iVario 2-XS
- iVario Pro 2-S

Storage

Keep the installation manual and operating instructions close to the unit. The installation manual must be accessible for professionals authorised by the manufacturer at any time during service calls.



Distribution.

This installation manual must be passed on to the owner of the unit.

Explanation of symbols

- ✓ A condition states all of the requirements that need to be met before the unit can be used.
 1. One action step describes an action to be performed by the reader.
 - > It expresses a successful interim result.
 2. Another action step.
- >> The result reflects the outcome of the action.

Explanation of the stickers on the unit

	Symbol for potential equalisation according to IEC 60417-5021
	Symbol for dangerous voltage according to IEC 60417-5036

1.2 Target group

- This document is intended for skilled technicians, who have been certified by the manufacturer after attending training and safety instructions.
- Installation, inspection, maintenance, and repair work must only be carried out by trained technicians.

- It is recommended that only technicians authorised by the manufacturer perform inspection, maintenance and repair work.
- The unit may not be used, cleaned, or maintained by children. The unit may not be used for play. This is prohibited even under supervision.
- The unit may not be used, cleaned, or maintained by people with limited physical, sensory, or mental capacity or those without the necessary experience or knowledge, unless such people are supervised by a person who is responsible for their safety and who has been informed of the hazards of the unit.
- In order to prevent accidents or damage, the manufacturer recommends that technicians attend training and safety instructions.

1.3 Copyrights

Forwarding product-specific information to third parties is prohibited. We reserve the right to make technical developments and changes in the interest of progress. All rights, including to translation and duplication, are reserved.

1.4 Conformity

Conformity refers to the unit as a whole at the time of delivery. The operator is responsible for ensuring extended conformity following any expansions, modification and connection of additional functions.

Observe the corresponding local and country-specific standards and regulations regarding the installation and operation of commercial cooking appliances.

Conformity Europe

- The electricity connection has been constructed and tested according to IEC 60335 in consideration of EN 60335 and VDE 0700.
- The water connection has been constructed and tested according to IEC 61770 in consideration of EN 1717, DIN EN 13076 and EN 13077.
- The drain connection meets the requirements of the applicable provisions pursuant to SVGW/SSIGE and has been tested and certified accordingly.
- The unit is approved for use at altitudes up to 4,000 m pursuant to IEC 60335.

Conformity USA and Canada

- The unit is tested and built according to UL-197 and NSF 51 standards.

1.5 Liability and warranty provisions

Liability

Installations and repairs not carried out by professionals authorised by the manufacturer or not using original service parts, and technical modifications to the unit, which are not approved by the manufacturer, may void the manufacturer's product liability.

The type plate contains the following information:

RATIONAL

RATIONAL Wittenheim SAS
 4 Rue de la Charente
 F-68271 Wittenheim Cedex
 www.rational-online.com

Marketing name

Modele Model number


Connection voltage

Frequency

Connected load


Pression d'eau approved flow pressure range

Serial no. Serial number



Produit assemble par

IPx5 CE



©2019
 Made in France

SERIALNUMMER

Unit type and model number

Take the classification from the table below.

The name of the unit type and the model number are different on the type plate. Depending on the unit option, the model number on the type plate expands to further areas.

Unit size type plate	Unit size
LMX.100AE ...	iVario 2-XS
LMX.100BE ...	iVario Pro 2-S
LMX.200BE ...	iVario Pro 2-S with pressure option

2 Safety

2.1 Warning symbols

 DANGER
Type and source of danger Non-compliance will lead to very serious injury or death. Preventative measures
 WARNING
Type and source of danger Non-compliance can lead to serious injury or death. Preventative measures
 CAUTION
Type and source of danger Non-compliance can lead to minor or moderate injuries. Preventative measures
NOTICE
Failure to heed the NOTICE can lead to damage to the unit.

2.2 General safety instructions

This unit is designed in such a way that it presents no danger if installed according to instructions. This manual describes how to install the unit correctly.

- Adhere to the relevant local regulations and standards in your country.
- Use carrying aids such as carrying straps during transportation.
- Secure the unit against tipping during transport, after setting up at the installation location.

- Wear appropriate protective clothing, such as protective gloves and safety shoes, when transporting and installing the unit.
- The appliance must be installed in a frost-resistant, non-windy and protected environment.
- Do not expose the unit to weather conditions such as rain.
- Only connect the unit in accordance with the installation manual and the information on the nameplate.
- Switch the unit off before disconnecting the mains power or connecting to the mains.
- After use, only transport the unit at ambient temperatures above 0°C [32°F].
- Only store the unit at ambient temperatures above 0°C [32°F].
- Do not spray aerosols in the vicinity of this appliance while it is in operation.
- Check the unit for transport damage. If you suspect the device has been damaged in transit, contact your dealer/ freight forwarder immediately.

2.3 Intended use

This unit has been developed for the preparation of hot food. This unit may only be used commercially, such as in restaurant kitchens and large and commercial kitchens in hospitals, bakeries or butcheries. This unit may not be used outdoors. This unit may not be used for continuous industrial mass production of food.

All other uses are contrary to the intended purpose, and may be dangerous. The manufacturer assumes no liability for the consequences of using the unit contrary to the intended use.

3 Product description

3.1 Unit description

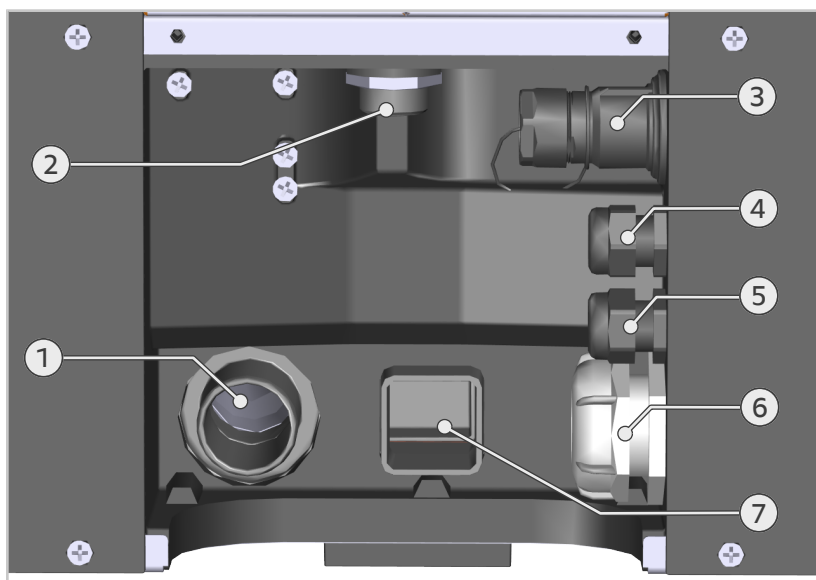
NOTICE

Never close or cover the safety overflow

Do not reduce the safety overflow in the cross section.

The safety overflow must always be accessible and free. This is used for ventilation and drainage as a drain.

The connections for the installation are located on the rear of the unit, behind the middle cover:



1	Waste water connection	5	PG connectors for optional connection
2	Water connection	6	Electrical connection
3	Ethernet network connection	7	Safety overflow (no connection)
4	PG connectors for optional connection		

3.2 Technical data

Protection class

The unit corresponds to spray water protection class IPX5.

Environmental conditions for operation

- Do not install the unit at ambient temperatures of below 5°C [41°F].
- Do not operate the unit at ambient temperatures of below 5°C [41°F].
- Only install the unit in a facility which is sufficiently ventilated with windows or an exhaust hood.

Noise emissions value

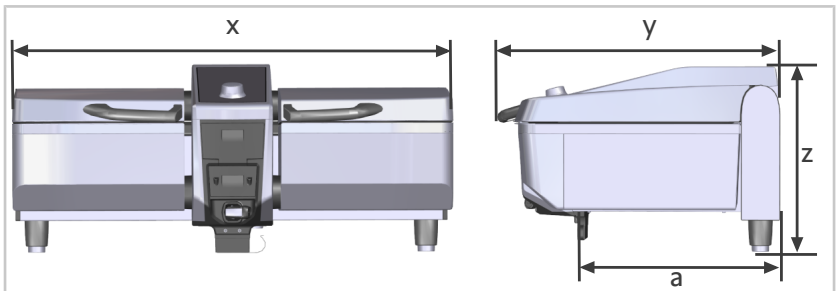
The noise emissions value is below 70 dB.

3.2.1 Unit weight

Unit size	Weight without packaging kg [lbs]	Weight with packaging kg [lbs]
iVario 2-XS	117 [258]	147 [324]
iVario Pro 2-S	134 [295]	174 [384]
iVario Pro 2-S with pressure option	157 [364]	187 [412]

3.2.2 Unit dimensions

The unit dimensions refer to a unit foot length of 90 mm [3 35/64 inches].



Unit size 2-XS

Width mm [inches] x	Depth mm [inches] y	Depth mm [inches] a	Height mm [inches] z
1100 [43 2/8]	756 [29 6/8]	547 [21 17/32]	437 [17 2/8]

Unit size 2-S

Width mm [inches] x	Depth mm [inches] y	Depth mm [inches] a	Height mm [inches] z
1100 [43 2/8]	938 [36 7/8]	730 [28 47/64]	437 [17 2/8]

Packaging dimensions

Unit size 2-XS

Width mm [inches] x	Depth mm [inches] y	Height mm [inches] z
1250 [49 2/8]	1100 [43 2/8]	675 [26 5/8]

Unit size 2-S

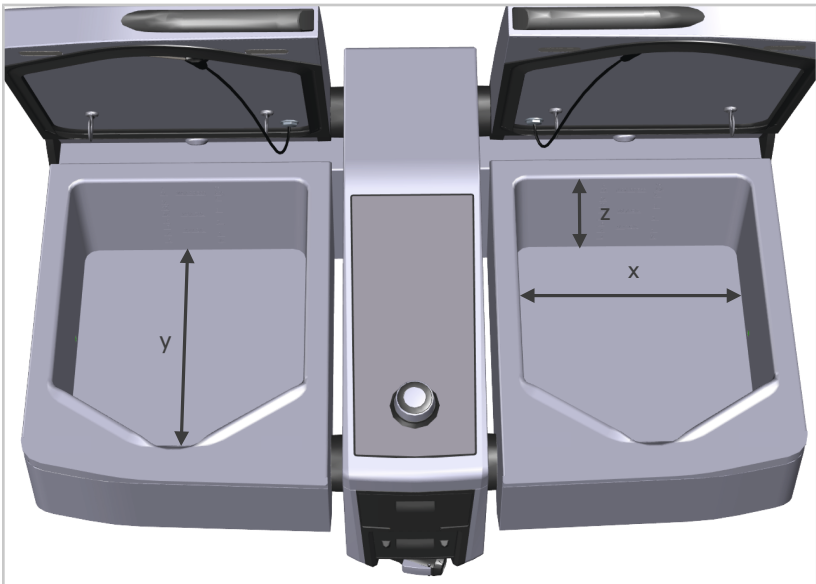
Width mm [inches] x	Depth mm [inches] y	Height mm [inches] z
1250 [49 2/8]	1100 [43 2/8]	675 [26 5/8]

3.2.3 Pan measurements

effective volume

Unit size	Effective volume l [gal]
iVario 2-XS	17 [4,5]
iVario Pro 2-S	25 [6,5]

Pan internal dimensions



Unit size	Width mm [inches] x	Depth mm [inches] y	Height mm [inches] z
iVario 2-XS	341 [3/8]	370 [14 5/8]	155 [6 1/8]
iVario Pro 2-S		553 [21 6/8]	

3.2.4 Thermal load

Unit size	Thermal load latent (kJ/h)	Thermal load sensitive (kJ/h)
iVario 2-XS	14364	2873
iVario Pro 2-S	20866	4309

We reserve the right to make technical developments/modifications.

4 Transport

CAUTION

Risk of crushing due to the weight of the unit

Hands, fingers and feet can be crushed.

- Use appropriate protective clothing during transport.
- Use carrying aids, e.g. a carrying strap.

CAUTION

Risk of tipping during transport

Risk of crushing if the unit tips onto persons.

- Note the centre of mass of the unit.
- Make sure that the unit does not tip over during transport or lifting.

CAUTION

Inclinations when transporting with a transport aid

Risk of crushing and injury during transport with a transport aid over inclinations or uneven floors.

- Do not go over an incline of more than 10°.
- Transport the unit carefully.

NOTICE

Unit damage due to narrow points

Note the width and height of entrances during transport.

Only transport the unit with the unit top cover closed. If you transport the unit vertically on the back of the unit, secure the unit covers with a strap.

Do not transport and store the unit on its back for extended periods.

NOTICE

Improper transport

Do not push the unit to the intended installation location.

The unit feet may be damaged.

Transport the unit according to this manual.

- ✓ The unit is on the shipping pallet.

- ✓ The unit feet are positioned in the feet guides in the box of the transport pallet.
 - ✓ The intended installation surface is level.
 - ✓ The unit top covers are closed.
 - ✓ At least 2 persons are required for transportation.
1. Remove the packaging material.

4.1 Lifting points on the unit

NOTICE

Risk of damage if lifted incorrectly

Only lift the unit at the lifting points provided.

Centre of mass

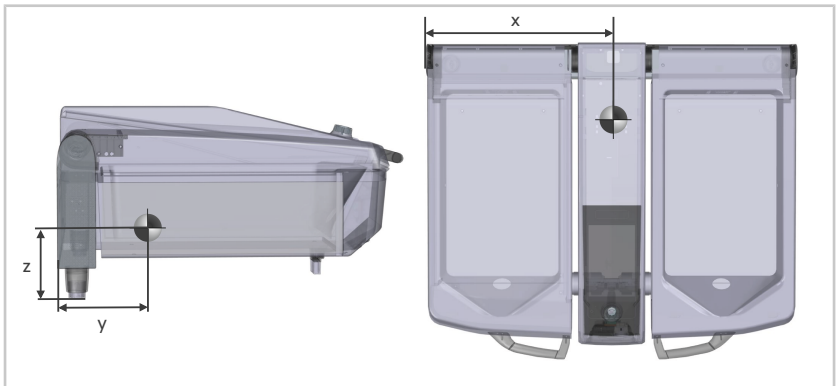
The following diagram shows the centre of mass of the unit. The measures to the centre of mass are approximate indications that serve the orientation.

⚠ CAUTION

Risk of crushing and injury if centre of mass not adhered to

If the centre of mass is not adhered to, the unit can tilt when lifted and transported.

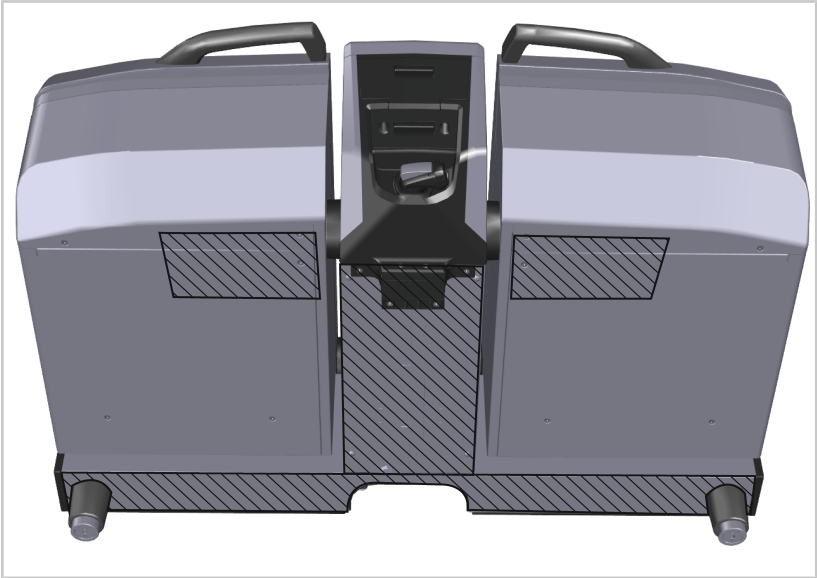
- Ensure an even weight distribution of the unit.
- Note the centre of mass of the unit.



	Width mm [inches] x	Depth mm [inches] y	Height mm [inches] z
iVario 2-XS	544 [21 7/16]	176 [6 31/32]	155 [6-1/8]
iVario Pro 2-S	544 [21 7/16]	182 [7 5/32]	161 [6 11/32]

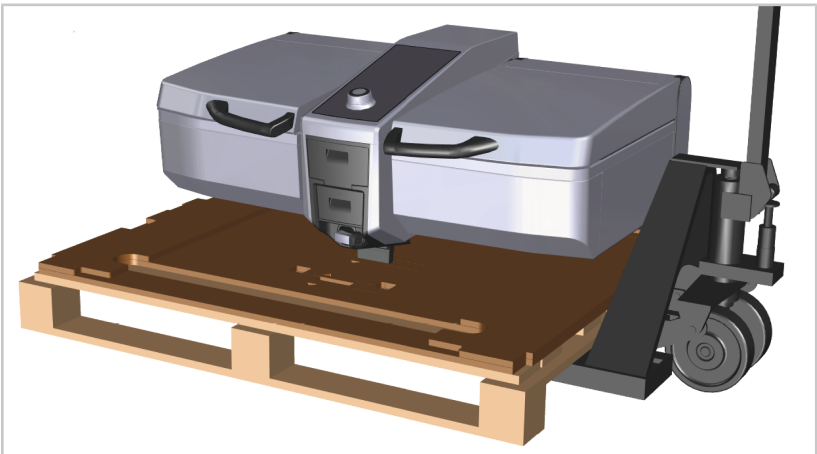
Lifting points on the unit

1. Lift the unit by the base frame marked in the image and the marked pan covering.



4.2 Transport with pallet

- ✓ The packaging material is removed.
 - ✓ The unit is on the shipping pallet.
1. Transport the unit to its place of installation with the transport pallet.



2. Lift the unit at the lifting points from the transport pallet and place it on its intended installation surface.
- >> The unit is standing on its intended installation surface and is ready for assembly and installation.

4.3 Transporting without a pallet with a pallet truck

NOTICE

Transporting with a transport aid without protection

Transport the unit as far as you can on the pallet. Do not transport the unit without protection with a transport aid or a similar transport tool. For protection, you can use a wooden pallet.

NOTICE

Damage from fixation strap

Be careful not to scratch or damage the unit when attaching the straps.

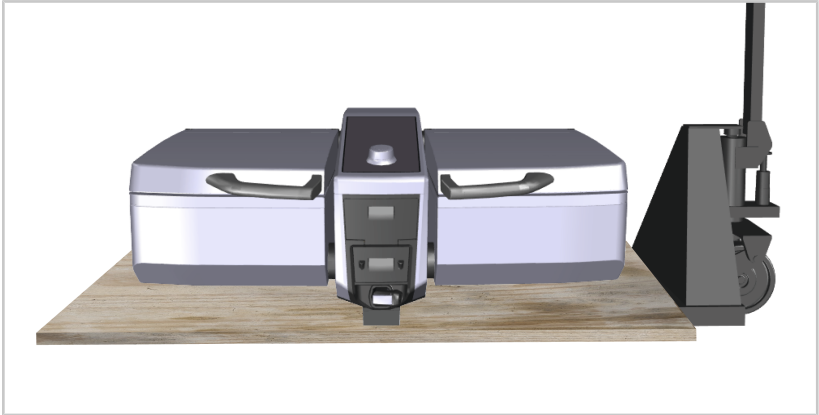
NOTICE

Damage to the unit feet when tilting the unit

When tilting the back of the unit and tilting it from the back of the unit to the normal position, ensure that the unit feet are not damaged.

- ✓ The packaging material is removed.
 - ✓ A protective layer against damage to the unit, for example a wood panel, is available.
1. Place the damage protection on the pallet truck.

2. Lift the unit off the pallet at the lifting points and place it on the pallet truck.



>> The unit is standing on its intended installation surface and is ready for assembly and installation.

4.4 Vertical transport without pallet with pallet truck

To transport the unit through a bottleneck, you can temporarily transport it in a vertical position on its back.

1. Secure the pans and lids with a strap.

2. Slowly transport the unit to the site with the pallet truck. Hold on to the unit during transport.



3. Lift the unit at the lifting points and place it on its intended installation surface.
 4. Remove the straps.
- >> The unit is standing on its intended installation surface and is ready for assembly and installation.

5 Placement

CAUTION

Risk of crushing when positioning the unit

Fingers, hands and feet could be crushed beneath the unit.

- Wear appropriate protective clothing when positioning the unit.
- Only lift the unit at the intended lifting points.

Pre-requisites

- When placing the unit on a base frame, be sure to only use the original base frame of the unit manufacturer.

5.1 Minimum clearance to unit

NOTICE

Minimum clearance not adhered to

Place the unit with the minimum clearance to heat sources or open fire required to prevent any damage to the unit or malfunctions.

NOTICE

Damage to the wall on the rear side of the unit

Water or steam can escape from the safety overflow. Observe this note during installation and check the condition of the wall on the rear side of the unit.

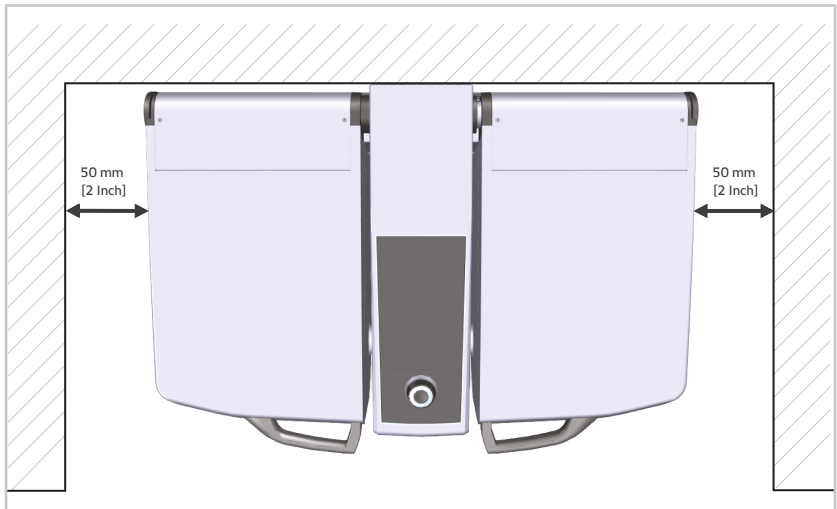
5.1.1 Distance to walls

There is no minimum clearance on the unit rear.

- ✓ The walls at the place of installation must be built according to local fire protection regulations and must be resistant to heat sources.
1. Keep a minimum distance to walls to both the left and right.

Manufacturer's recommendation

1. Place the unit on the left and right sides with a minimum distance of 50 mm. [2 inches] to the wall to allow ideal cleaning of the unit.

**5.1.2 Distance to heat sources**

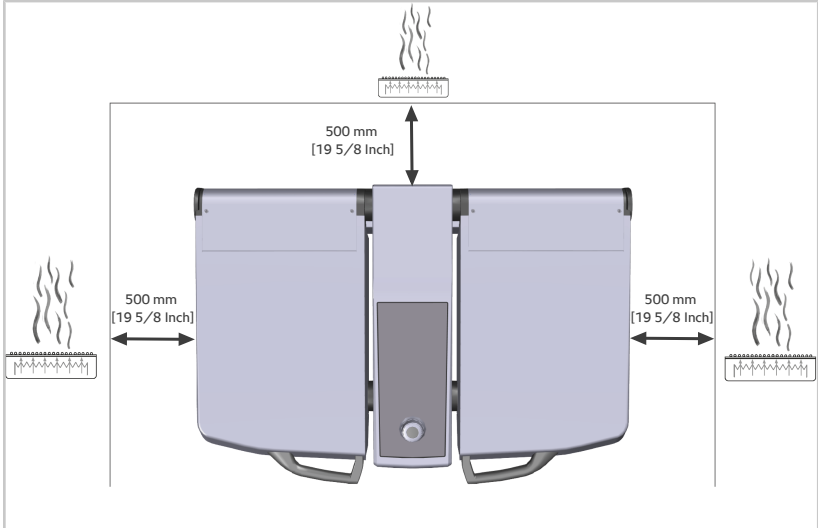
1. Position the unit with a minimum clearance of 350 mm. [14 inches] to heat sources.

NOTICE**High ambient temperatures**

Do not place any deep-fat fryers or other heat sources on the sides of the unit.

NOTICE**Open flame near the unit**

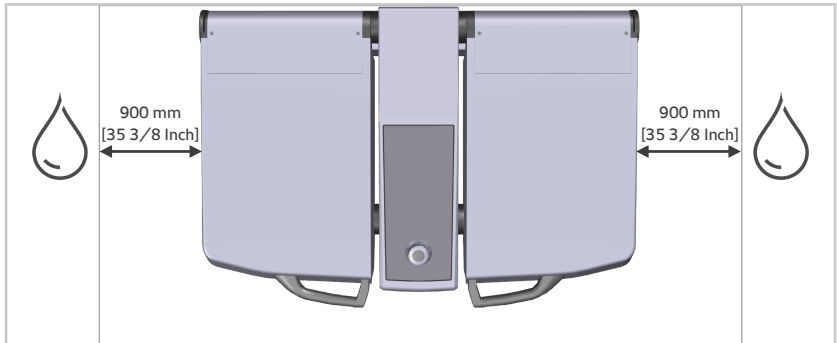
If the unit is placed at a distance of less than 500 mm [19 3/8 inches] from an open flame, always install a heat shield.

**5.1.3 Distance to water sources****⚠ WARNING****Risk of burns due to failure to comply with the minimum distances to open water sources**

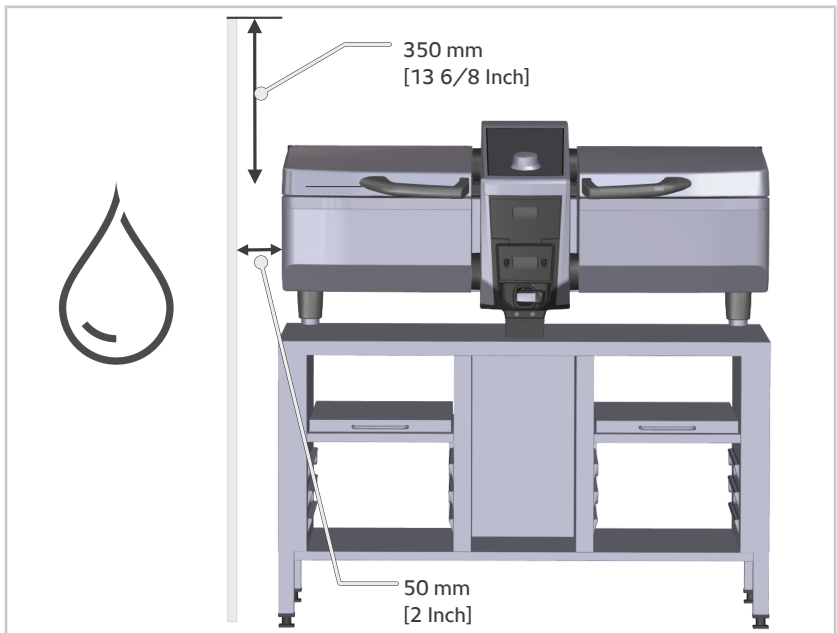
Water can splash into the hot pan, hot liquids or hot fat.

- Position the unit with a minimum clearance of at least 900 mm [35 3/8 inches].
- If you cannot comply with the indicated clearance, install the non-flammable partition as described in this manual.

1. Position the unit with a minimum clearance of 900 mm [35 3/8 inches] to open water sources on all sides.



1. If you cannot adhere to the clearance, mount a non-flammable 350 mm [13 6/8 inches] high separator between the unit and the water source.
2. Note the recommended minimum clearance to walls for easier cleaning of the unit.



5.2 Stand the unit up

CAUTION

Risk of tipping when installed on installation surface

Risk of crushing if the unit tips onto persons.

- Note the centre of mass of the unit.
- Make sure that the unit does not tip over during lifting.

NOTICE

Hygiene requirements not met

Where the adjustable foot is 45 mm high, a sealing base must be placed under the unit for hygiene reasons as it is not possible to clean properly under the unit at this height. The sealing base prevents liquids or food from getting underneath the unit.

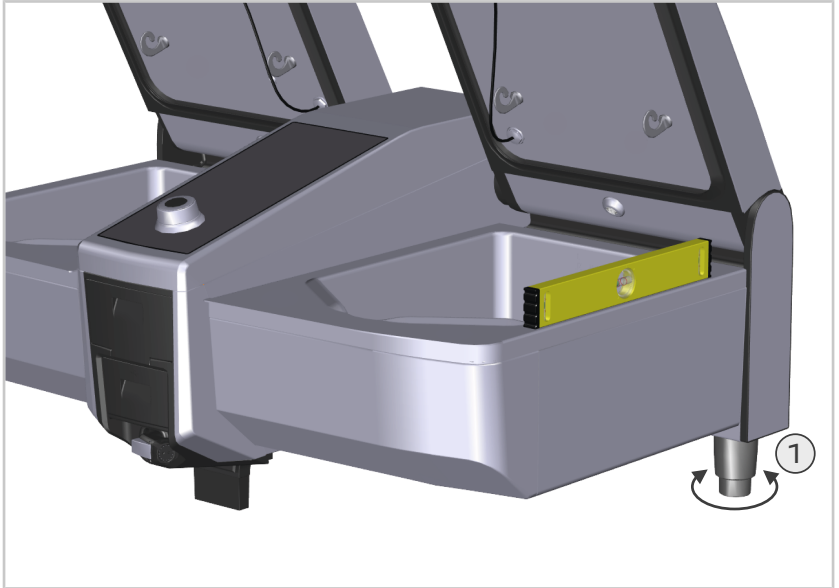
- ✓ The installation surface is horizontally level.
- ✓ The minimum clearances are adhered to.
- 1. If the unit is equipped with a 45 mm adjustable foot, make sure that a sealing base is attached.
- 2. Place the unit on the provided installation surface.
- >> The unit is standing on its installation surface and is ready for horizontal alignment.

5.2.1 Align the unit

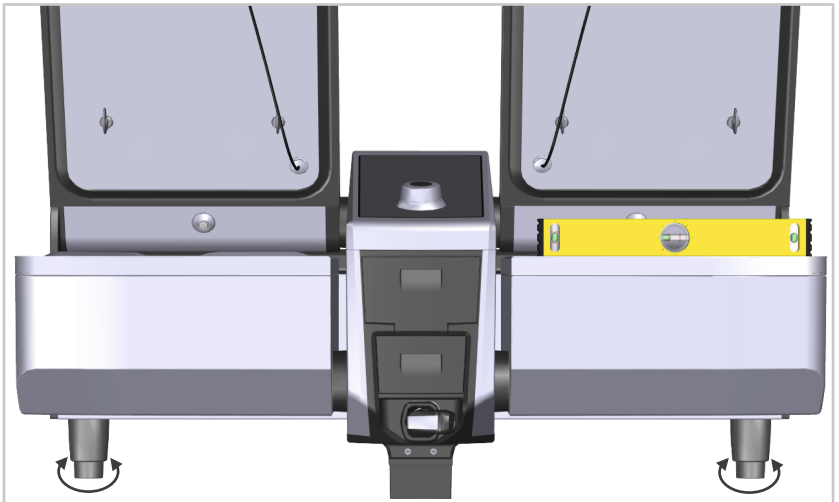
The feet are factory adjusted in height to the adjustable foot. If the installation surface is level, you only need to adjust the unit slightly horizontally.

- ✓ The unit is standing on its intended installation surface.

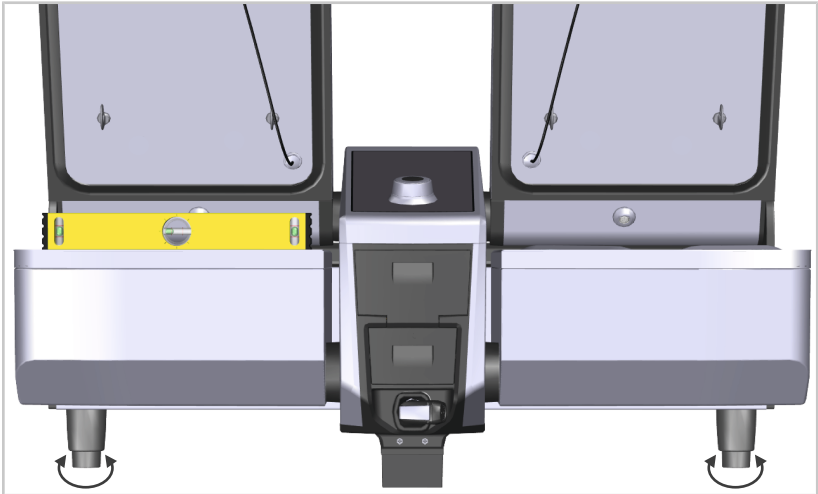
1. Place the spirit level on the right pan and level the unit horizontally using the unit base (1).



2. Place the spirit level on the right pan and level the unit using both unit feet.



3. Place the spirit level on the left pan and level the unit using both unit feet.



4. Check both pans to ensure they are level.

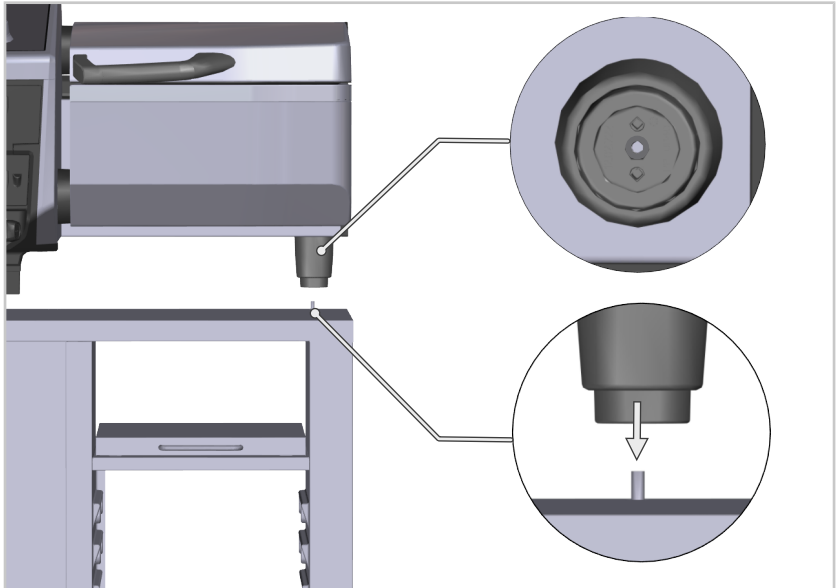
>> The unit is level.

5.3 Set up the unit on the base

This description refers to a standard base with height-adjustable plastic feet. Observe all other installation variants of the base frame and the instructions in the original installation instructions for base frames for the unit dimensions 2-XS / 2-S.

- ✓ The support table is level.
- ✓ The minimum clearances are adhered to.

1. Position the feet of the unit on the bolts of the stand.



>> The unit stands on the base and is secured to prevent shifting.

5.4 Fixing the unit in place

The manufacturer recommends that the unit be fixed to the installation surface. The kit for fixing the unit in place, including special glue, screws and dowels, is **not** included in the scope of delivery of the unit and can be ordered separately from the manufacturer under article number 60.72.905.

6 Electrical connection

DANGER

High voltages when connecting to the mains power

Danger to life due to high voltage.

- Disconnect from the power supply.
- Make sure the unit is disconnected from the power.

DANGER

Electric shock from incorrect connection

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

Connect the wires correctly according to their colour coding.

CAUTION

Risk of injury due to improper installation

Use an accessible all-pole disconnection device provided by the customer with a minimum of 3 mm [0.12 inches] contact gap.

NOTICE

Mains voltage does not correspond to unit voltage

Before connecting, check whether the mains voltage corresponds to the required voltage on the type plate of the unit.

6.1 Regulations for electrical connection

- Adhere to the regulations of the VDE and the local energy supply companies.
- Connect the unit in accordance with the applicable regulations of your country.
- Connect the unit to a standard energy supply network.
- The amp draw, contactors and cable cross-sections depend on the following factors:
 - Local regulations
 - Cable length
 - Cable quality
 - Power supply
- For a proper electricity connection, adjust the power ratings to the local circumstances and requirements.

- Adhere to the regulations of IEC 60364 or those of the local version of IEC 60364.

Notes

- The cross-sections of the connection lines depend on current consumption and local regulations.

Colour coding of wires:

Note the colour coding of wires and local deviations.

Wire colour	Wire function
Yellow/green	Protective conductor
Blue	Neutral conductor (neutral wire)
Brown, grey or black	Phase L1, L2, L3

Residual current circuit breaker

All units are generally equipped with a protective conductor terminal. In accordance with the national standards and regulations, a residual current device (RCD) type A or type B (RCD type A, RCD type B) must also be included in the installation of the unit.

6.2 Open the electrical compartment

WARNING

The unit is falling from the installation surface

Risk of crushing and injury from tipping or turning of the unit.

- Do not tip the unit onto the installation surface.
- When turning the unit, make sure that the weight of the unit is evenly distributed and that the unit is completely on the installation surface.

CAUTION

Sharp edges on the housing

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

Wear protective gloves.

NOTICE

The cover of the electrical compartment is curved

The cover of the electrical compartment has a pre-load to ensure a uniform sealing. When dismantled, the cover of the electrical compartment is curved.

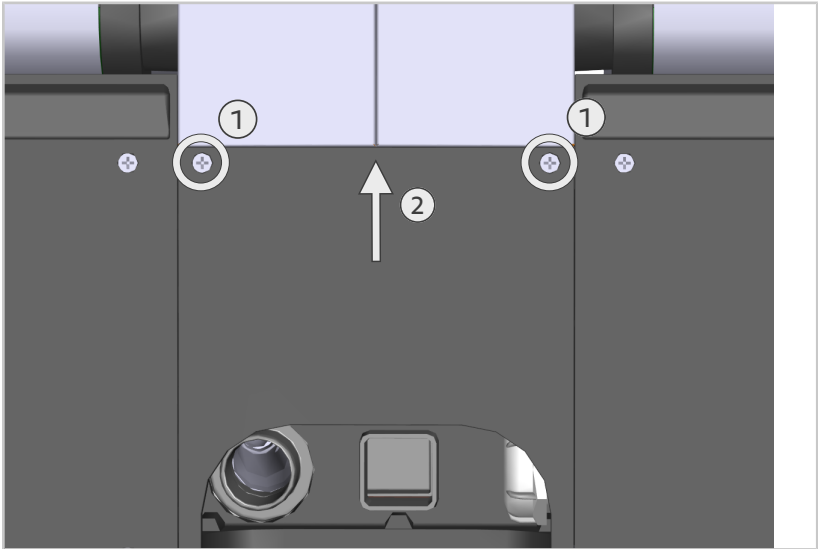
NOTICE

Damage to the drill holes for covering the electrical compartment

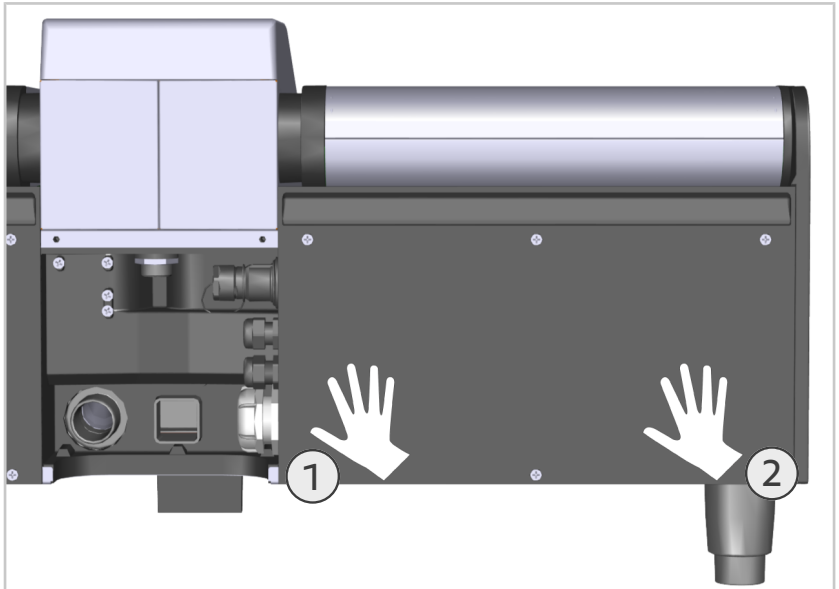
Failure to follow the proper order of first removing and tightening the electrical compartment cover bolts may damage the holes due to the pre-load in the cover.

The electrical compartment is behind the right cover on the rear of the unit.

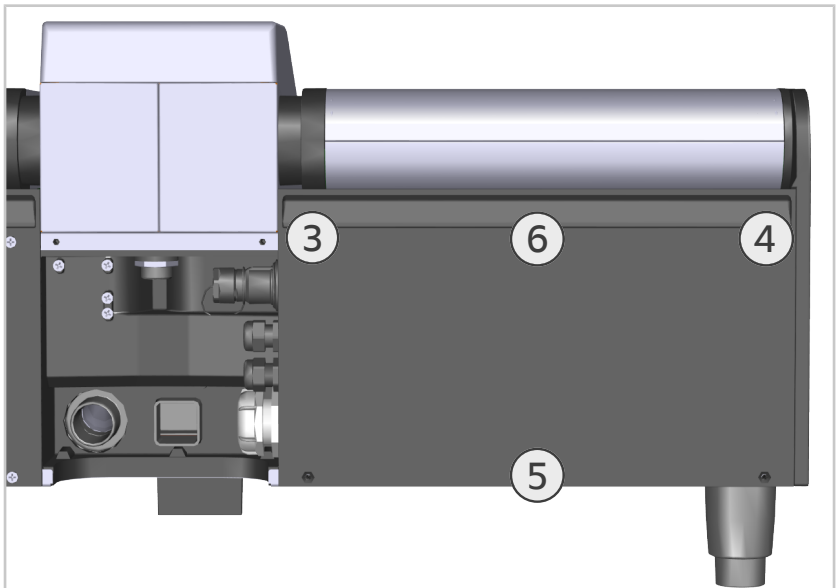
- ✓ The unit is standing on its intended installation surface.
 - ✓ The unit top covers are closed.
 - ✓ A cross-headed screwdriver is ready for use.
 - ✓ All power sources are switched off by way of an external circuit breaker.
1. Remove the marked cross-headed screws (1) and remove the cover by pulling it upwards (2).



- Lightly press on the cover in the area of the respective screw and loosen the screws (1) and (2).



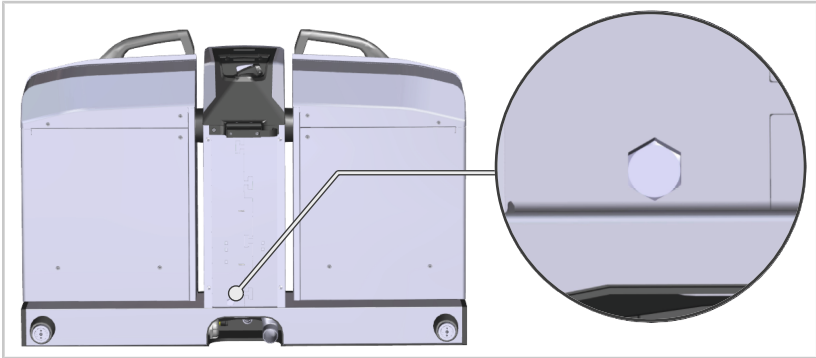
- Loosen the screws (3), (4), (5) and (6) one after the other.



- Remove the cover of the electrical compartment.
>> The electrical compartment is open.

6.3 Connecting the equipotential bonding

1. Connect the equipotential bonding before installing the connections.



6.4 Connect the unit to the mains

Notes on power cable and connection point

- The manufacturer recommends using a flexible power cable. A rigid power supply cable makes connection difficult and can impact the position of the unit.
- The unit can be connected either with a permanent connection or a plug connection.
- The connection point for the power cable is on the main contactor in the electrical compartment.
- Units are delivered without mains cables.
- A dedicated supply line is available for the unit.
- The flexible power cable is at least a type H07RN-F.
- The rigid power cable is at least a type U-1000R02V.

Maximum cross-section of the connecting conductor on the main fuse:

- iVario 2-XS: 6 mm²
- iVario Pro 2-S : 35 mm²

Establish the connection

- ✓ A residual current device type A or B is provided.
 - ✓ The electrical compartment is open.
1. Unscrew the cable gland.
 2. Lead the mains cable through the cable gland into the electrical compartment to the connection point.
 3. Tighten the cable screw in the opening.
 4. Open the connector terminals with the appropriate tool and connect the wires. Adhere to the following colour coding.

5. Connect the protective conductor to the yellow-green terminal.
 6. Connect the neutral conductor to the blue terminal.
 7. Connect the grey cable directly to contactor K1.
 8. Check that the wires are properly plugged in.
 9. Screw in the cable gland.
 10. Connect the power cable to the mains.
- >> The power connection is completed.

Colour coding of the terminals

Connection	Wire colour	Connector terminal	Tool
Phase	Grey, brown or black	L1, L2, L3	Allen key
Neutral conductor (neutral wire)	Blue	N	Slot screwdriver
Protective conductor	Yellow/green	PE	Slot screwdriver

6.5 Connect the unit to the mains

Notes on power cable and connection point

- The manufacturer recommends using a flexible power cable. A rigid power supply cable makes connection difficult and can impact the position of the unit.
- The flexible power cable is at least of type SOOW 90 °C.

Establish the connection

6.6 Connect the unit to the mains for Demo mode

The Demo mode is used for demonstration purposes for the basic functions of the unit.

Refer to the table below with the colour codes for the connection.

Colour coding of connector terminals for Demo mode

Connection	Wire colour	Connector terminal	Tool
Phase	Grey	L1	Allen key
Neutral conductor	Blue	N	Slot screwdriver
Protective conductor	Yellow/green	PE	Slot screwdriver

The following functions are activated or deactivated in Demo mode:

- Cooking processes are simulated (processes are accelerated)
- Movement of the pans and unit top panel is active

- Heating is deactivated

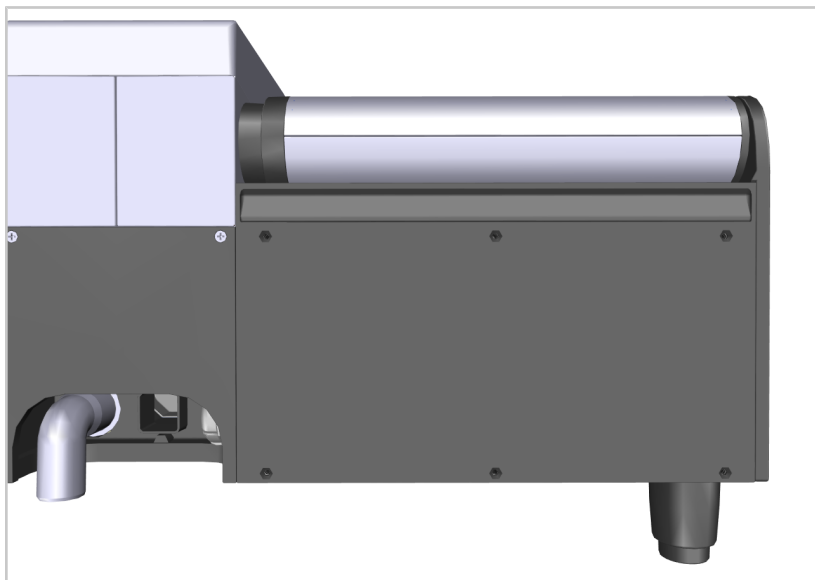
If the unit is connected in Demo mode, the following connections are sufficient:

- one phase
- one neutral conductor
- one protective conductor
- Equipotential bonding

6.7 Close the electrical compartment

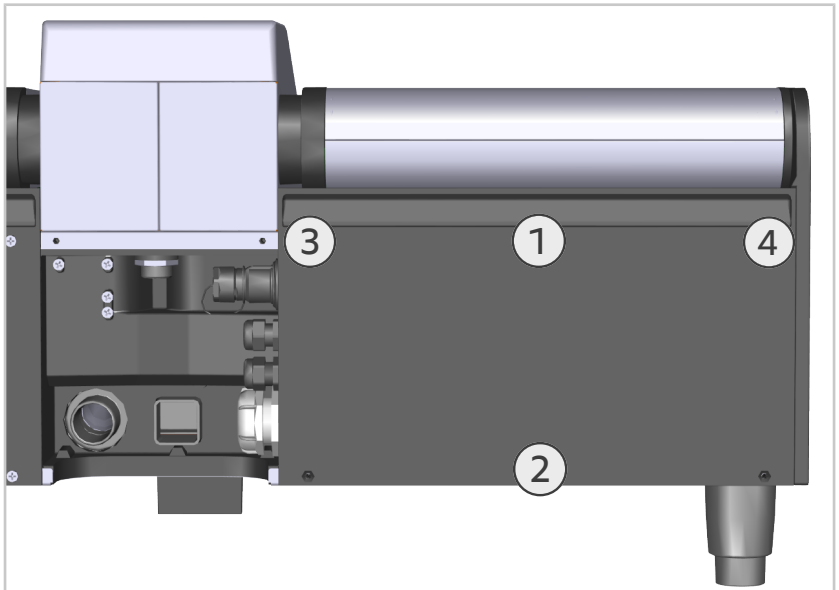
✓ The power cable is connected to the unit.

1. Place the cover on the electrical compartment.

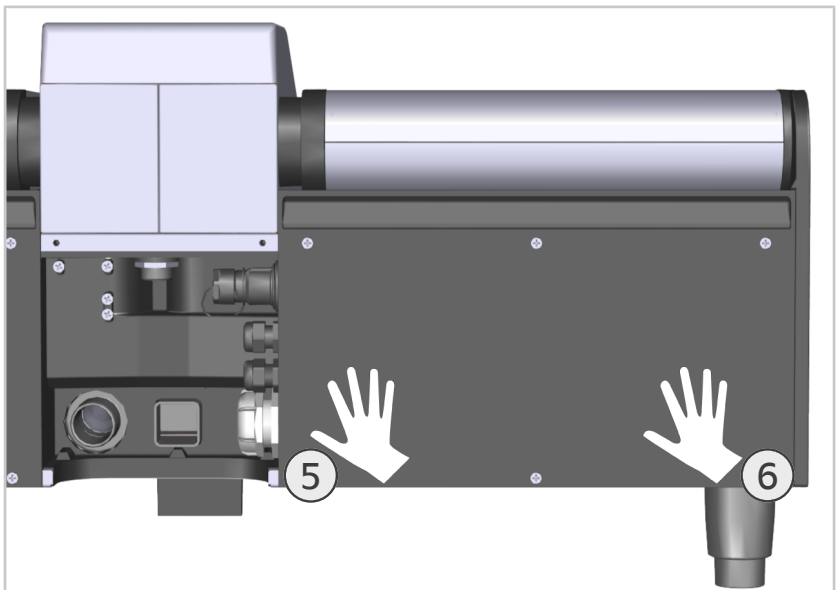


2. Insert the screws.

3. Successively tighten screws (1), (2), (3) and (4).



4. Insert screws (5) and (6).
5. Lightly press the cover in the area of the respective screw and tighten the screws (5) and (6) one after the other.



>> The electrical compartment is closed and protected against the penetration of water and humidity.

6.8 Power ratings of different voltage types

Maximum connection voltage

- Maximum permissible tolerance for input voltage: - 10% to 10%
- The unit can be used with frequencies of 50 Hz and 60 Hz without making any technical modifications.

NOTICE

The values stated for the cable cross-section relate to a maximum cable length of 2 m [78 Inch]. Calculate the conductor cross section according to the length and quality of the power cable used.

3N AC 400 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	14	20	20	2,5
iVario Pro 2-S	21	30	32	4
3N AC 415 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	15	20	25	2,5
iVario Pro 2-S	22	31	32	4
3 AC 200 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	13	37	40	6
iVario Pro 2-S	19	55	63	10
3 AC 208 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	15	48	50	10
iVario Pro 2-S	23	64	70	16
3 AC 220 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	13	33	40	6
iVario Pro 2-S	19	50	50	10
3 AC 230 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	14	34	40	6

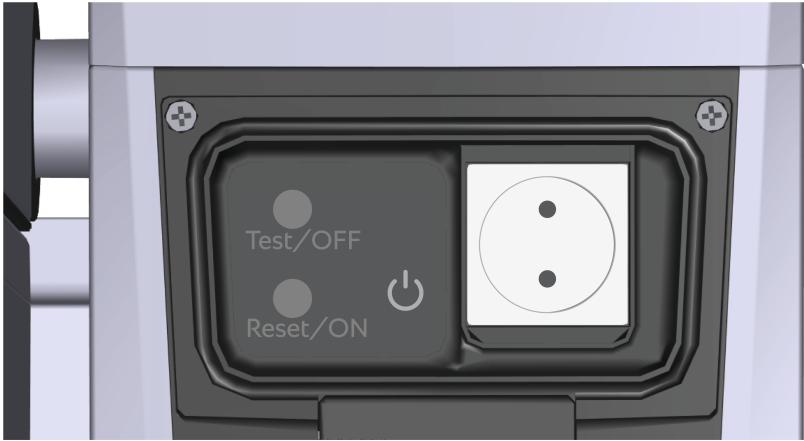
3 AC 230 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario Pro 2-S	21	51	51	10
3 AC 240 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	15	35	35	6
iVario Pro 2-S	22	53	60	10
3 AC 400 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	14	20	20	2,5
iVario Pro 2-S	21	30	32	4
3 AC 415 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	15	20	20	2,5
iVario Pro 2-S	22	31	32	4
3 AC 440 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	13	17	20	3
iVario Pro 2-S	19	25	25	4
3 AC 480 V	Power kW	Amp draw A	Fuse A	Conductor cross-section mm ²
iVario 2-XS	15	18	20	2,5
iVario Pro 2-S	22	27	30	4

6.9 Check the function of the socket in the unit

Power ratings for socket in the unit

Standard version with residual current circuit breaker:

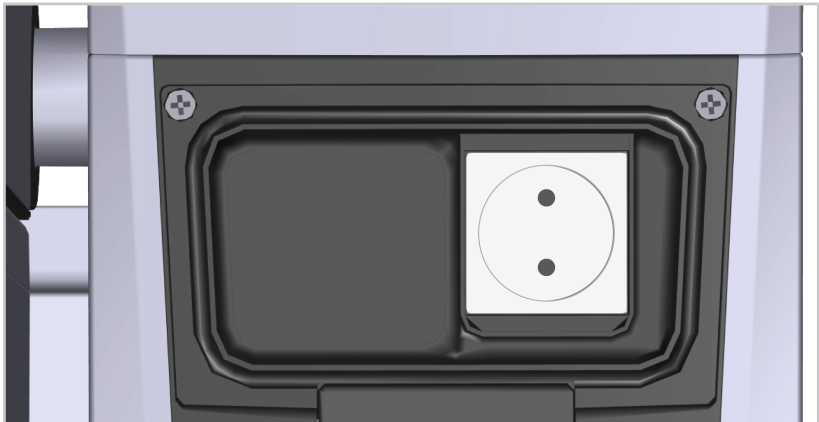
The socket in the unit is fitted with an integrated RCD, which disconnects the socket if there is any current leakage. Check the socket in the unit before first use.



Version without residual current circuit breaker:

Optionally, the socket in the unit is equipped with a 10 A fuse. The maximum available power is 2,3 kW.

Optional version without residual current circuit breaker:



Check the function

When the unit is switched on, the socket is inactive.

✓ The unit is connected to the mains.

1. Press the Reset/On LED button.

> The aforementioned Reset/On LED button lights up and the socket is functional.

2. Press the Test/Off LED button.

> The aforementioned Test/Off LED button lights up and the socket is not functional.

>> The function of the socket is checked.

Malfunction of the socket in the unit

Both LED buttons do not light up.

- If the Test/Off LED button does not stop lighting up when pressed, the residual current device may be faulty.
- The fuse on the residual current circuit breaker may be faulty.
- If the fuse is functional, the fault current protection switch may be faulty.

7 Network connection

7.1 Notes on network connection

The network connection allows you to connect the unit to your network, in order to connect the unit to ConnectedCooking.

Ethernet connection (Local Area Network)

- Optionally, the unit can be ordered or retrofitted with an Ethernet connection.
- The retrofit kit is available from the manufacturer under article number 87.01.643S.
- Use at least one Category 6 network cable to connect to the network, specification: CAT-6.
- The network connection is located on the rear of the unit.
- A detailed description of the connection to the network can be found in the original operating instructions.

WLAN (Wireless Local Area Network)

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

- For units of the series iVario 2-XS WLAN is optionally available.
- The units in the series iVario Pro 2-S come with WLAN as standard.

7.2 Connecting the unit to the network

Connecting the Ethernet cable (LAN)

1. Unscrew the LAN connection.
 2. Unscrew the cap.
 3. Remove the sealing plugs.
 4. Push the Ethernet cable through the union nut.
 5. Push the Ethernet cable through the rubber grommet.
 6. Insert the rubber grommet back into the clamp ring.
 7. Plug the Ethernet cable into the socket.
 8. Screw in the connection.
 9. Tighten the cap.
- >> The Ethernet cable is connected and can be used.

8 Water connection

8.1 Regulations for water connection

NOTICE

Connection to soft water

Make sure the residual hardness of the water is at least 4 dH if you connect the unit to soft water. A soft water connection is not necessary.

Water hose

- Supply and use a separate water tap for each unit.
- Do not use any used water hoses.
- Use a water hose at least meeting the requirements of IEC 61770, EN 61770, EN 13618 or of equivalent quality.
- A water hose according to EN 61770 is enclosed with the unit. The materials used in this connection hose meet KTW, DVGW W270, and FDA requirements.

Drinking water protection

For a drinking water connection, a drinking water protection device meeting the requirements of EN 1717 is required.

- Adhere to the country standards and regulations for a connection to the drinking water supply, including hygiene requirements.

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.

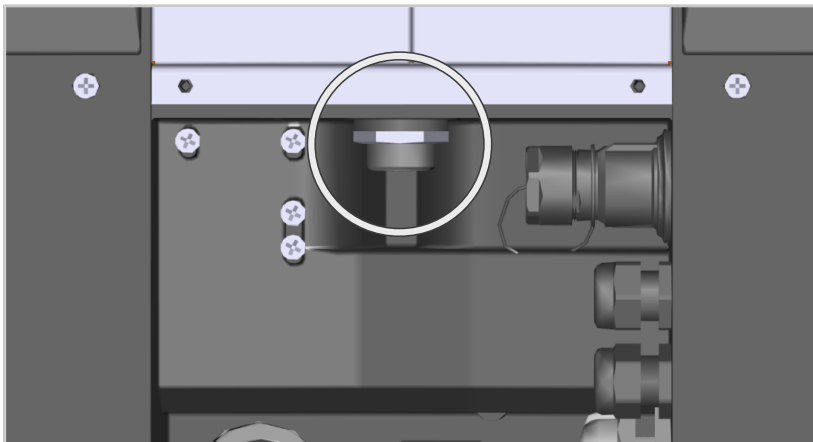
Water temperature

- Maximum cold water: 30 °C [86 °F]

8.2 Connecting water inlet

- ✓ The water hose meets the hygiene requirements for drinking water hoses in your country.
- ✓ Cable for the joint cold water connection: 3/4 Inch
- ✓ The water hardness is at least 4°dH.

1. Connect the water hose to the water inlet of the unit.



2. Open the water tap.
>> The water inlet is connected.

9 Waste water connection

9.1 Regulations for waste water connection

NOTICE

The drain pipe does not meet requirements

Use a drain pipe with a high temperature resistance, which corresponds at least to a type PP pipe. Do not use a hose.

NOTICE

Dirty and greasy waste water

Make sure that a grease trap is installed by the owner to clarify the waste water.

NOTICE

Never close or cover the safety overflow

Do not reduce the safety overflow in the cross section.

The safety overflow must always be accessible and free. This is used for ventilation and drainage as a drain.

NOTICE

Incorrect installation of drain pipe

Do not stick or weld the drain pipe to the unit drain.

Do not connect the drain pipe using a reducer to the unit drain.

- A wall drain or floor drain can be provided for all units.
- To avoid rising odours, use an odour trap.
- If there is a drain without an odour trap, keep a free outlet of at least 20 mm [3/4 Inch].
- Connect the drain pipe so that it has a constant fall of at least 5% or 3°.

Requirements

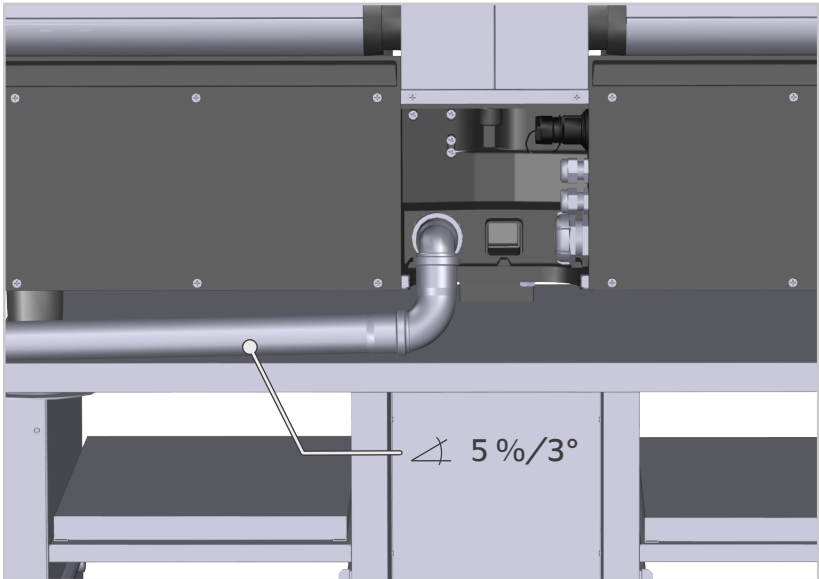
- Each unit must have its own waste water connection.
- The kit with the unit drain DN 40 is **not** enclosed with the unit. The kit is available separately from the manufacturer under article number 87.00.745.
- If you install a base with height-adjustable feet, a flexible unit drain is required. The kit with the flexible unit drain DN 40 is **not** enclosed with the unit. The kit is available separately from the manufacturer under article number 87.00.749.

9.2 Connect waste water drain

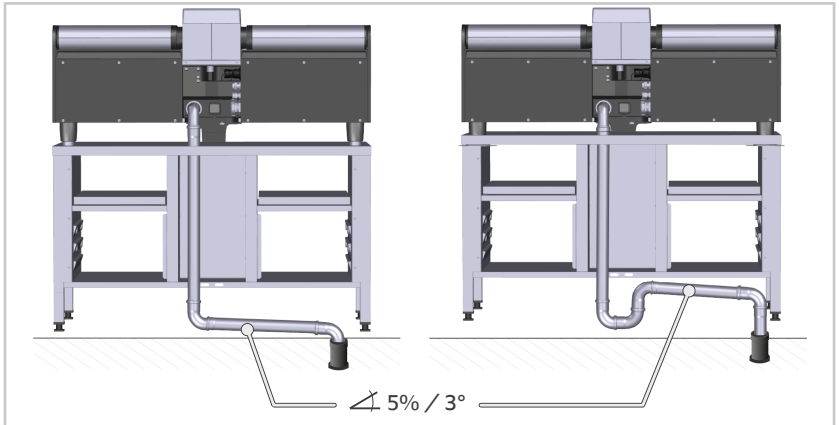
- The drain connection is on the rear of the unit.
- Diameter at unit drain: DN 40 mm

Install the waste water connection with a drain to the rear of the unit

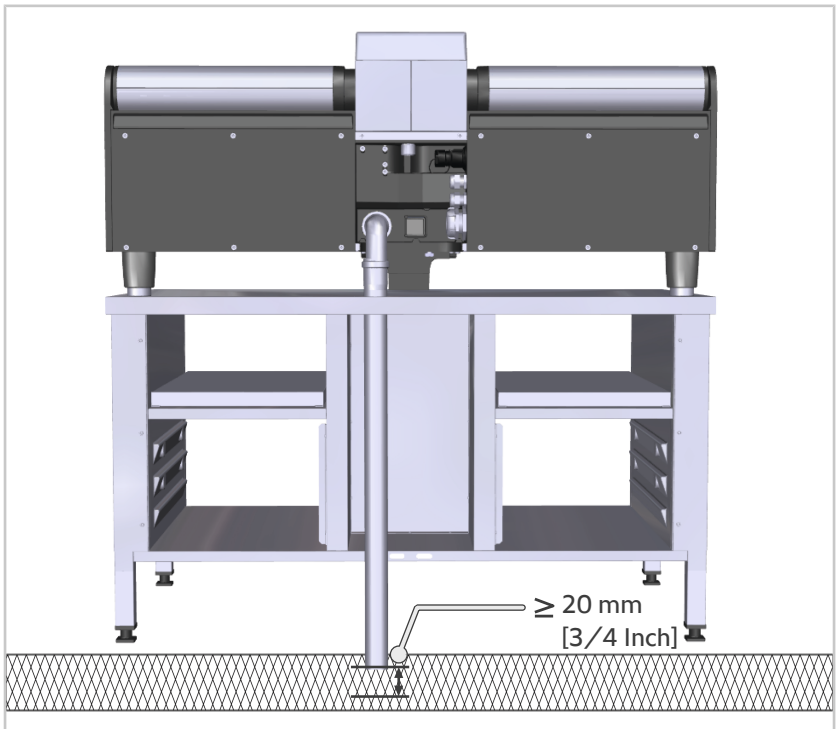
- ✓ The drain pipe is designed as a DN 40 mm unit drain.
 - ✓ The drain pipe corresponds to at least type PP and is resistant to high temperatures.
1. Use a 90° elbow as the first pipe section for the drain pipe.
 2. Close the drain pipe to the side or to the bottom.



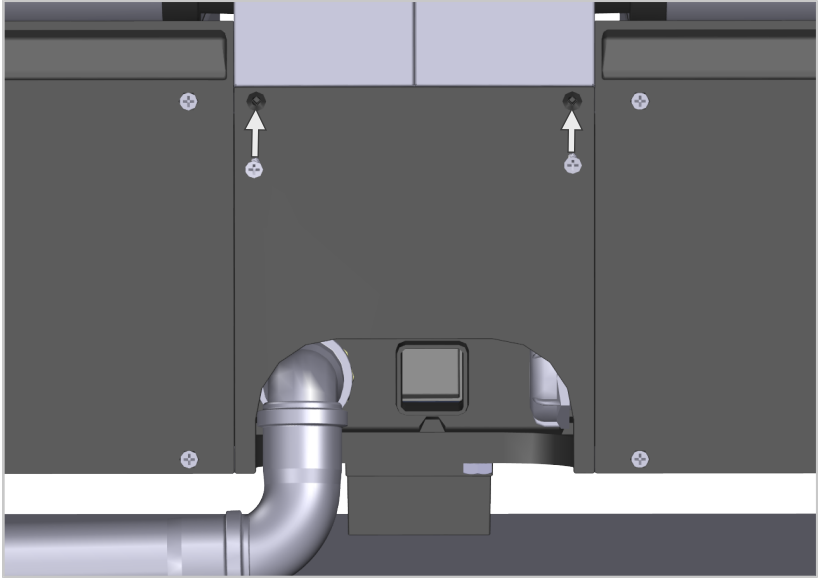
3. If installing the unit on an original base, insert the drain pipe through the recess in the base.



4. Keep a minimum clearance of at least 20 mm [3/4 inches] between the drain channel and the waste water drain. The manufacturer recommends a minimum clearance of 50 mm [2 inches], in order to facilitate cleaning.



5. Put the cover back on and screw in the 2 screws.



- >> The drain pipe is connected to the unit drain water-tight.
- >> The drain pipe is connected with a constant fall of at least 5% or 3°.
- >> The cover of the connections is screwed to the unit.

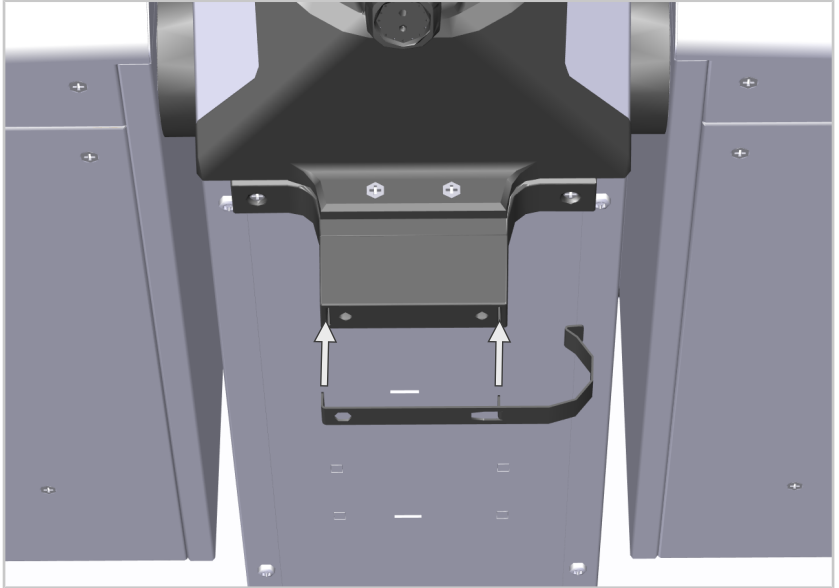
Install the waste water connection with a drain on the front of the unit

If the waste water drain is installed on the front, the unit feet must be 90 mm [3 35/64 Inch] high.

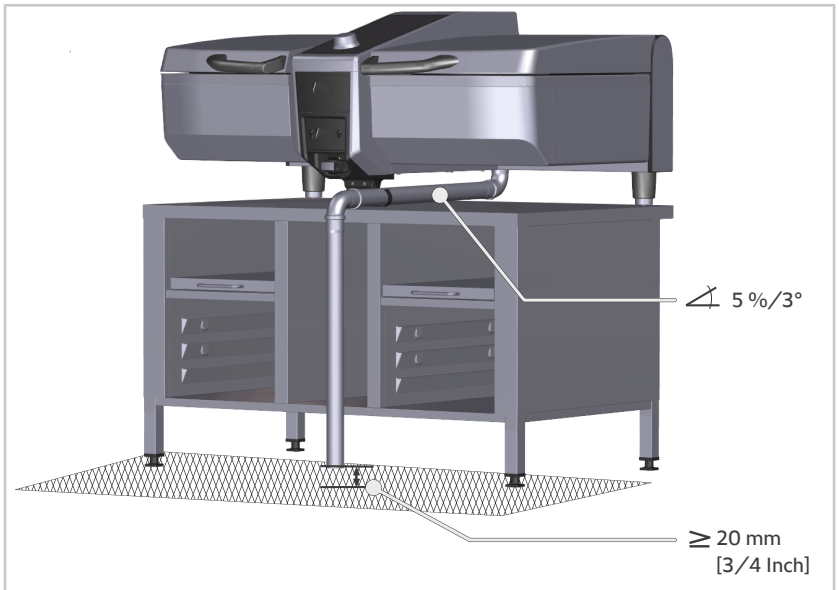
The drain pipe is fixed to the adjustable foot with a mounting clamp. The fixing for the waste water pipe is included in the equipment connection kit.

- ✓ The adjustable foot is mounted at a height of 90 mm [3 35/64 Inch].
- ✓ There is a drain channel with a drain sieve on the front of the unit.

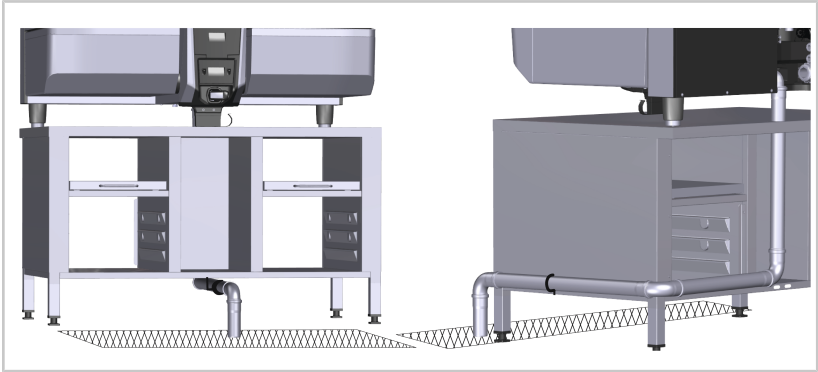
1. Put the mounting clamps in the recesses of the adjustable foot.



2. Connect the drain pipe DN 40 mm with a constant fall of at least 5% or 3° and pass it through the mounting clamp to the front of the unit.
3. Keep a distance of at least 20 mm [3/4 inches] between the drain channel and the waste water drain.



4. If the unit is installed on an original base, the drain pipe can be fixed to the base with a bracket.



- >> The drain pipe is installed with a fall of at least 5% or 3° with the outlet towards the front.
- >> The distance between the drain pipe and drain channel is at least 20 mm [3/4 inches].

10 Decommissioning

10.1 Notes on decommissioning

Note the following information on decommissioning the unit:

- Make sure that the unit is disconnected from the power supply.
- Remove all water and waste water connections from the unit.
- If the unit is to be transported, remove the unit from the foot locks and from any wall brackets (fastening chain).
- Please note that water remains in the unit after decommissioning. Frozen water expands and can damage the unit. Follow the general safety instructions found in this manual.

10.2 Disposal

Electric and electronic units like the iVario and iVario Pro must be disposed of separately.

1. Do not dispose of the unit with the household waste or at a municipal collection point for waste or used electrical appliances.
2. The appliance disposal regulations of each country must be observed.
3. If required, contact the manufacturer for further information on disposal.

11 Options

11.1 Positioning options

The unit can be set up and ordered from the manufacturer under the following article number:

Unit size	iVario 2-XS	iVario Pro 2-S
Stand with feet	60.31.221	60.31.319
Stand with castors	60.31.317	60.31.320
Stand with stainless steel feet	60.31.538	60.31.539
Stand for appliance plinth setup (without feet)	60.31.540	60.31.541
Stand with electric height adjustment	60.31.326	60.31.327
Base frame covering for kitchen integration	60.76.120	60.76.121

Observe the descriptions and instructions of the original installation instructions for base frames for the unit dimensions 2-XS / 2-S.

11.1.1 Change the unit foot height to 45 mm

CAUTION

Risk of crushing due to the weight of the unit

Hands can be crushed by the weight of the unit.

- Make sure that hands are not crushed under the unit.

NOTICE

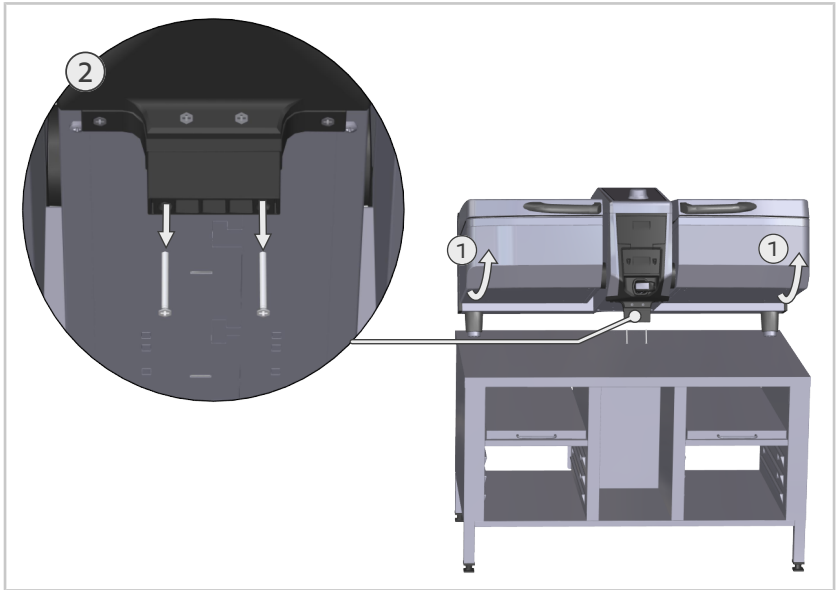
Hygiene requirements not met

Where the adjustable foot is 45 mm high, a sealing base must be placed under the unit for hygiene reasons as it is not possible to clean properly under the unit at this height. The sealing base prevents liquids or food from getting underneath the unit.

If the unit has the unit height 90 mm [3 35/64 Inch], the unit foot height can be changed to 45 mm [2 Inch]. The front adjustable foot and the plastic cover of the feet can be removed.

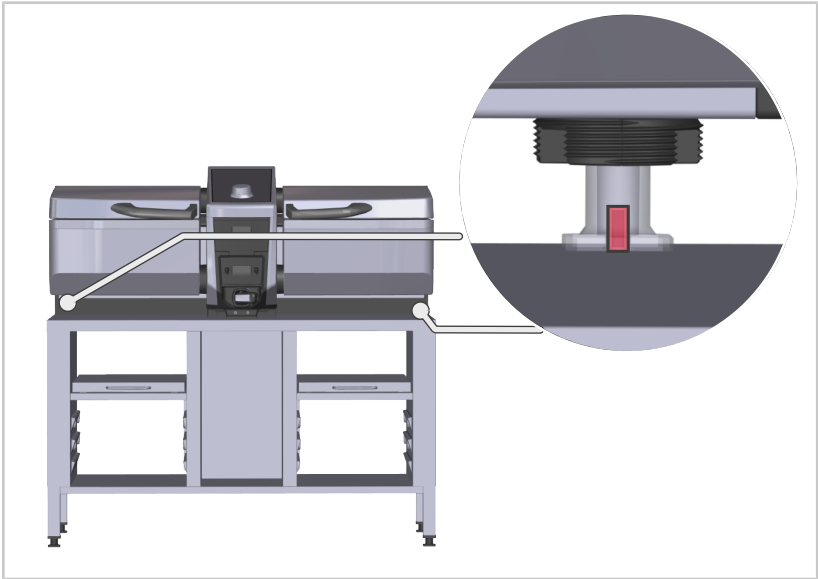
- ✓ The sealing base is ready for use.

1. Lift the unit slightly (1) and remove the 2 M5 screws in the adjustable foot (2).



- > The adjustable foot height is removed.
2. Remove the plastic covers of the unit feet one after the other.
 3. Level the unit with the unit feet again.
 4. Lift the unit slightly and glue the sealing base to the unit from below.

5. Make sure that the feet are placed on the positioning pins.



- >> The plastic covers are twisted and the sealing base is glued.
- >> The unit is level.

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