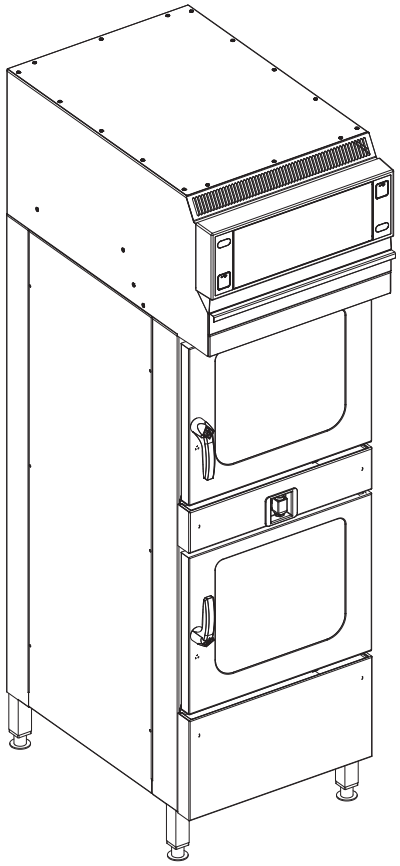
HENNY PENNY
Engineered to Last

Read the operating instructions prior to commissioning

FlexFusion® ELECTRIC SPACE$AVER PLUS TEAM



FLEXFUSION
SPACE$AVER PLUS

FM08-639-D • 6/27/2023

FM08-639-D en-US

Installation manual

Model

FSDE**610**

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1 Introduction

1.1 About this manual

The installation instructions are part of the unit and contain information on safe installation of the unit.

Observe the following notes and adhere to them:

- Read the installation instructions completely prior to installation.
- Make the installation instructions available to the installation fitter at the operating site at all times.
- Preserve the installation instructions throughout the service life of the unit.
- Insert any additions from the manufacturer.
- Pass on the installation instructions to any subsequent operator of the unit.

Target group The target group of the installation instructions is trained qualified personnel that is familiar with installing and operating the unit.

Figures All figures in this manual are intended as examples. Discrepancies can arise between this and the actual unit.

1.1.1 Explanation of signs

⚠ DANGER

Imminent danger

Failure to comply will lead to death or very severe injuries.

⚠ WARNING

Potential danger

Failure to comply can lead to death or very severe injuries.

⚠ CAUTION

Dangerous situation

Failure to comply can lead do slight to moderately severe injuries.

NOTICE

Property damage

Failure to comply can cause property damage.

INFORMATION

Information

Notes for better understanding and operation of the unit.

Symbol / sign	Meaning
•	Listing of information.
→	Action steps which can be performed in any sequence.
1. 2.	Action steps which must be performed in the specified sequence.
↳	Result of an action performed or additional information relating to it.

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1.2 Personnel qualifications

Explanation of qualification

Skilled personnel	• A skilled person is someone who, on the basis of their technical training, knowledge and experience as well as familiarity with the applicable standards, can assess the assigned work and recognize possible dangers.

Type of activity	Qualification
Electrical connection	• Electrician • Specialized training • Employee of the responsible technical company
Water connection	• Water specialist • Specialized training • Employee of the responsible technical company
Waste water connection	• Waste water specialist • Specialized training • Employee of the responsible technical company

1.3 Use of the unit

This unit is intended to be used solely for commercial purposes, particularly in commercial kitchens.

1.4 Warranty

The warranty is void and safety is no longer assured in the event of:

- Improper conversion or technical modifications of the unit,
- Improper use,
- Improper startup, operation or maintenance of the unit,
- Problems resulting from failure to observe these instructions.

2 Safety instructions

The unit complies with applicable safety standards. Residual risks associated with operation or risks resulting from incorrect operation cannot be ruled out and are mentioned specifically in the safety instructions and warnings.

The installation fitter must be familiar with regional regulations and observe them.

The installation fitter must observe the safety instructions in these installation instructions and in the "Safety information" chapter of the operating instructions.

Ensuring conformity with standards

Observe applicable international, European and national laws, regulations, standards and directives for the unit when transporting, setting up and connecting it.

Improper installation

Risk of property damage and personal injury from improper installation

- Install the unit only as specified in these installation instructions.
- Do not add anything to the unit or modify the unit.
- Use only original spare parts.

Transportation and storage

Risk of personal injury and property damage from improper transportation and improper storage

- Store the unit in a dry, frost-free environment.
- Observe the safety regulations for the lifting gear used.
- Attach the unit to the lifting gear securely during transport and installation, and prevent it from dropping.
- Transport the unit in an upright position, do not tilt or stack.
- Pay attention to protruding parts when transporting the unit without packaging.

Fire prevention

Risk of fire from combustible surfaces

- Observe general fire prevention regulations.

Organizational measures

Risk of property damage and personal injury from lack of organizational measures

- Identify danger zones when transporting, installing and connecting the unit.
- Prior to starting the installation tasks, notify any operator present about the procedure.
- Prior to starting the installation task, discuss how to behave in an emergency.
- Use equipment and protective gear suitable for the activity.
- Brace housing components to prevent them from falling over and dropping.

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Installation

Risk of property damage and personal injury from improper installation

- Ensure that the installation area has adequate load-bearing capacity.
- Wear safety shoes and protective gloves.

Electrical connection

Risk of fire from improper connection

- Observe applicable regional regulations of the electric supplier.
- Ensure that only electricians licensed by the electric supplier connect the unit.
- Ensure that the electrical system is earthed by a protective earthing conductor.
- Note the information on the nameplate.

Danger of electric shock from live components.

- Prior to working on the electrical system, switch off the unit, disconnect the electrical system from the mains and prevent power from being switched on again. Check to ensure the system is dead.
- Use only insulated tools.

Commissioning

Risk of property damage and personal injury from improper commissioning

- Read the operating instructions prior to commissioning. Observe the safety instructions in these installation instructions and in the "Safety information" chapter of the operating instructions.
- Only put the unit into service after a successful function test in its assembled state.
- Put the unit into service only after it has reached room temperature.
- Observe the units during operation.

3 Description of the unit

3.1 Overview of the unit

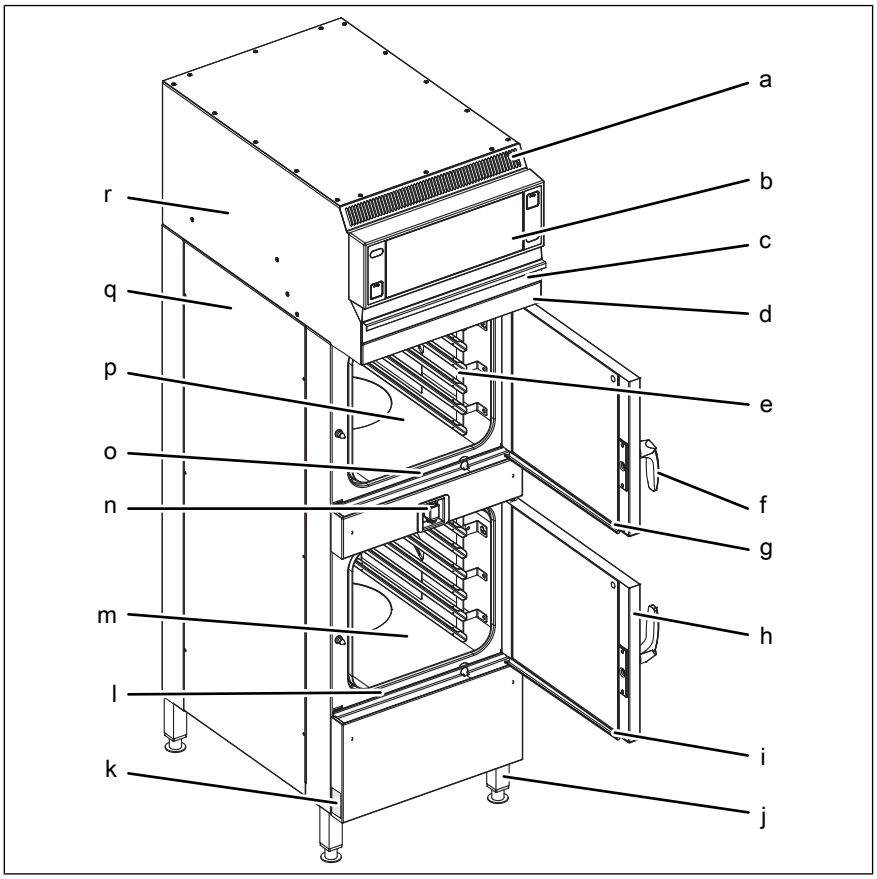

Image: Floor-standing unit

a	Air outlet	j	Unit leg
b	Operating unit	k	Nameplate
c	Filter drawer	l	Discharge channel for bottom unit
d	Condensate baffle	m	Cooking chamber in bottom unit
e	Hang-in frame	n	Hand shower (optional)
f	Door handle	o	Discharge channel for top unit
g	Discharge channel for top door	p	Cooking chamber in top unit
h	Cooking chamber door	q	Housing
i	Discharge channel for bottom door	r	Recirculation hood

3.2 Unit and connection data

INFORMATION

- All voltages listed below are technically available.
- For some voltages, however, the implementation must be agreed with the manufacturer.
- The voltage for which the device is designed is indicated on the nameplate.

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Size	610	
Dimensions		
Device Length x width x height (mm (in))	550 (21,65) x 880 (34,65) x 1908 (75,12)	
Construction-related minimum distance between device and wall (mm (in))	70 (2,76)	
Weight		
Unit ≈ (kg (lb))	169 (372,6)	
Emissions		
Noise level (db(A))	< 65	
Steam output (g/h (oz/h))	1240 (43,74)	
Steam output (m³/h (cuft/h))	2,1 (74,1)	
Latent heat dissipation (W) *	842	
Sensible heat dissipation (W) *	1872	
The sensible and latent heat amounts are determined in Germany on the basis of VDI 2052 at a connection voltage of 400 V. The applicable regional regulations may vary from this.		
Operating environment		
Temperature (°C (°F))	5 (41) — 40 (104)	
Relative humidity (%) non-condensing	95	
Electrical connection		
Protective system	IPX5	
Connection terminal (mm² (sqin))	6 (0,0093)	
Connection line	One connection line	Two connection lines Information per connection line
Type of connection	3PE AC 50/60Hz, 3NPE AC 50/60Hz	
Voltage (V)	**200**	
Connected load (kW)	14	7
Fuse (A)	50	25
Voltage (V)	**208**	
Connected load (kW)	14.8	7.4
Fuse (A)	50	25
Voltage (V)	**220**	
Connected load (kW)	16.8	8.4
Fuse (A)	50	25
Voltage (V)	**230**	
Connected load (kW)	18.2	9.1
Fuse (A)	50	25
Voltage (V)	**240**	

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Size	**610**	
Connected load (kW)	19.6	9.8
Fuse (A)	50	25
Voltage (V)	**380**	
Connected load (kW)	14.8	7.4
Fuse (A)	25	16
Voltage (V)	**400**	
Connected load (kW)	15.6	7.8
Fuse (A)	25	16
Voltage (V)	**415**	
Connected load (kW)	16.2	8.1
Fuse (A)	25	16
Voltage (V)	**440**	
Connected load (kW)	15.8	7.9
Fuse (A)	25	16
Type of connection	2PE AC 50/60Hz	
Voltage (V)	**208**	
Connected load (kW)	10.6	5.3
Fuse (A)	63	35
Voltage (V)	**240**	
Connected load (kW)	13.8	6.9
Fuse (A)	63	35
Type of connection	1NPE AC 50/60Hz	
Voltage (V)	**220**	
Connected load (kW)	11.6	5.8
Fuse (A)	63	35
Voltage (V)	**230**	
Connected load (kW)	12.8	6.4
Fuse (A)	63	35
Voltage (V)	**240**	
Connected load (kW)	13.8	6.9
Fuse (A)	63	35
Power optimization system		
Connection terminal (mm² (sqin))	2,5 (0,0039)	
Softened drinking water connection		
Water type	Softened drinking water, cold	
Residual hardness $CaCO_3$ (mmol/l (ppm))	< 1 (100 ppm)	
Chloride Cl (mg/l)	< 100	

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Size	610
Iron Fe (mg/l)	< 0.2
Connection pressure (kPa (psi))	200 (29) — 600 (87)
Connection (")	R 3/4 outside thread
Drinking water connection	
Water type	Drinking water, cold
Carbonate hardness $CaCO_3$ (mmol/l (ppm))	< 4 (400 ppm)
Connection pressure (kPa (psi))	200 (29) — 600 (87)
Connection (")	R 3/4 outside thread
Water consumption for steaming *	
Softened drinking water (l/h (gal/h))	20 (5,28)
Water consumption for Combisteaming *	
Softened drinking water (l/h (gal/h))	4,4 (1,16)
Water consumption for WaveClean cleaning program *	
Softened drinking water (l (gal))	2,5 l (0,66)
Drinking water (l (gal))	35 l (9,25)
Waste water connection	
Waste water type	Dirty water, maximum 80 °C (176 °F)
Maximum length (m (ft))	1 (3,3) with downward slope of at least 5% or 3°
Temperature resistance (°C (°F))	95 (203)
Connection (mm (in))	50 (1,97)
Maximum flow rate (l/min (gal/min))	10 (2,64)
* Applies to both cooking chambers together	

Fastening to the floor

Absolutely essential for the following unit types	
TKECOD610	Only for unit on casters

Basic setting of the control

Basic setting	Parameters	Standard value	Range of adjustment	Explanation
Supply voltage	14	400	100 — 500 V	Enter the local, mean voltage between the line conductors.
Date / time			yyyy - mm - dd	Year - Month - Day
			hh : mm	Hour : Minute

Basic setting	Parameters	Standard value	Range of adjustment	Explanation
Altitude	2	0 — 999	0 — 999 m (3277 ft)	Request the altitude above sea level from the local weather station. If the altitude is unknown, enter 0 — 999 m (3277 ft).
			1000 m (3280 ft) — 1999 m (6557 ft)	
			2000 m (6560 ft) — 2499 m (8197 ft)	
			2500 m (8200 ft) or higher	
Volume of audible signal		Medium	Individual	Sets the volume.
Temperature unit setting	1	°C	°C	Celsius (°C)
			°F	Fahrenheit (°F)
Volume unit	34	ml	(ml)	Milliliter (ml)
			(fl.oz.)	Fluid ounce (fl.oz.)
	35	Imperial (fl.oz.)	Imperial (fl.oz.)	Imperial fluid ounces
			U.S. (fl.oz.)	U.S. fluid ounces
Water filter maintenance	44	0	0 — 99900 l (26393,66 gal)	Water quantity up to the maintenance message.
				0 = No maintenance message
Network		DHCP	Network address and DHCP	Select and set interface.
Kitchen control technology	652	Disabled	0 = Disabled 1 = Active	Indicates whether the kitchen guiding system is in use.
	659	Ethernet	0 = Ethernet 1 = Serial	Type of signal transmission (interface)
	653	1188	0 — 65535	TCP port setting
	654	254	0 — 254	Unit address
80 % power	3	100	80 %	Power can be limited to 80 % (for special applications).
			100 %	
Power optimization system	42	Off	On	If a power optimization system is connected, "On" must be selected for the unit to heat.
			Off	
Settings parameters				1. Set parameters via the roller. 2. Tap the "Read" button to display the set values. 3. Specify another value via the button panel. 4. Press the "Write" button to save the new value.

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Basic setting of control (Advanced)

Basic setting	Parameters	Standard value	Range of adjustment	Explanation
Generator mode	45	0	0 = No	When a generator is used to supply electricity
			1 = Yes	
HoodIn (Wrase deletion)	48	1	0 = Lower water consumption, large amount of steam in the unit when the cooking chamber door is opened	Setting of the strength of the vapour quenching. Depending on the setting, cooking method and cooking product, water consumption may be increased.
			1 = Normal	
			2 = Higher water consumption, greatly reduced amount of steam in the unit when the cooking chamber door is opened	
Time format	675	0	0 = 24 h	Set the 12-h or 24-h time format
			1 = 12 h	
Format for cooking program times	676	0	0 = hh:mm 1 = mm:ss 2 = automatic	Display format for cooking program times

4 Transporting the unit

⚠ CAUTION

Risk of property damage and personnel injury from tipping unit

- Stay clear of lifted unit.
- Move lifted unit carefully.

NOTICE

Risk of property damage from improper transport

- Transport the unit upright.
- Do not tilt or stack the unit.
- Pay attention to protruding parts when transporting the unpacked unit.

Prior to transporting the unit to the installation site, ensure that:

- The roadway has adequate load-bearing capacity.
- Wall openings are large enough.

4.1 Transporting the unit to the installation site

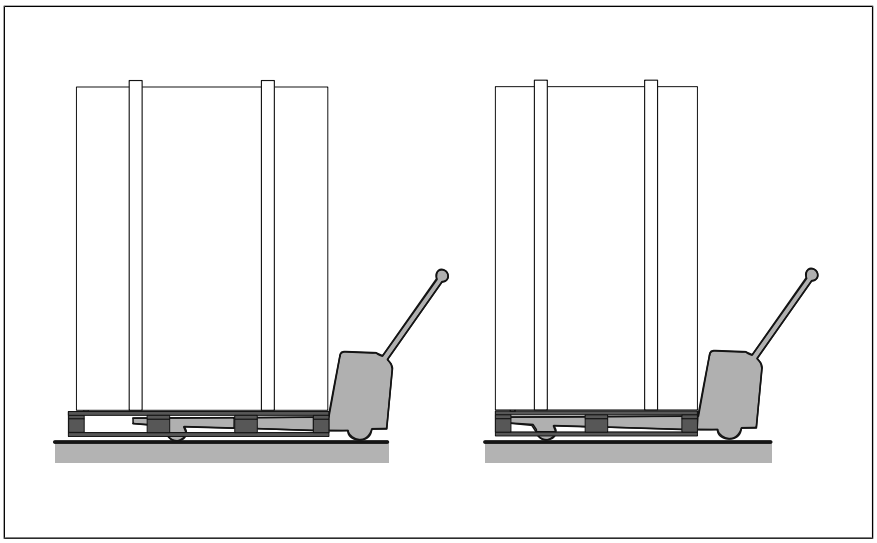

Image: Lengthwise and crosswise transport on pallet

→ Use suitable transport means to move unit to its installation site.

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4.2 Unpacking the unit

⚠ CAUTION	**Risk of injury from sharp edges** • Wear protective gloves.

INFORMATION	When unpacking the unit, inspect it for transport damage. Do not install damaged units or put into service.

1. Remove the packaging.
2. Pull the protective film off the unit.
3. Remove all packaging material from the cooking chamber.
4. Clean the unit (See Operating instructions).
5. Enter the information from the nameplate into the Start-up operation report.
6. Enter the information from the nameplate into the Operating instructions.

5 Installing the unit

⚠ CAUTION

Risk of crushing from improper installation

- Protect the unit and work area during installation and alignment.

⚠ CAUTION

Risk of fire from failure to observe applicable regional fire prevention regulations

- Observe applicable regional fire prevention regulations.

NOTICE

Risk of property damage from overheating of the unit

- Do not install the unit close to heat sources.

NOTICE

Risk of property damage from lifting the unit by the discharge channels

The discharge channels may become deformed

- Do not lift or support the unit by the discharge channels.

5.1 Minimum clearances

The following clearances from walls, ceilings or other equipment must be maintained when installing the unit:

- Clearance to deep-fat fryers, at least one length of the hand shower at left and right.

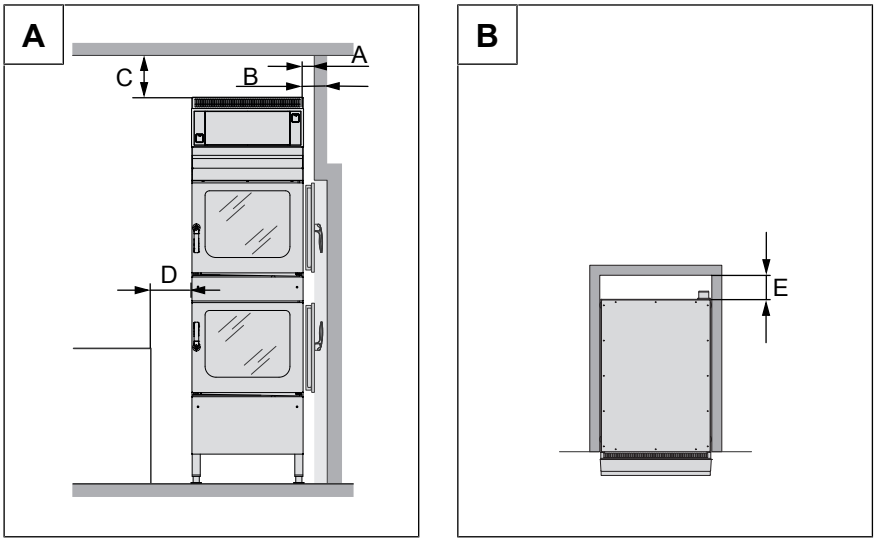

Image: Minimum distances to (A) wall (side), ceiling and device, (B) wall (back)

A	B	C *	D	E
---	100 (3,94)	50 (1,97)	---	120 (4,72)
All dimensions in mm (in)				
* Depends on the kitchen ventilation system and quality of ceiling material				

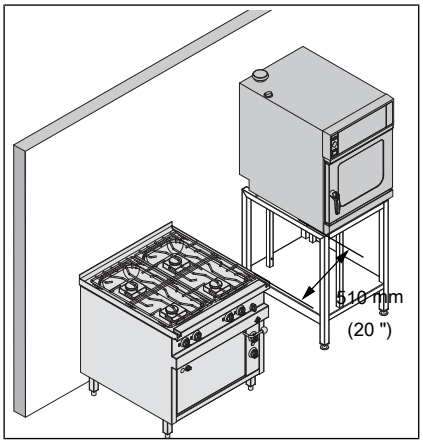

Image: Minimum distance from equipment with high heat radiation on right and left side.

NOTICE

Material damage to the device control due to excessive ambient temperatures

Minimum distance to equipment with large heat radiation 510 mm (20") on right and left side.

These include, for example:

- Gas stoves
- Gas griddle plates
- Grills
- Deep fryers

5.2 Lifting the unit off the pallet

⚠ CAUTION

Risk of property damage and personnel injury from tipping unit

- Stay clear of lifted unit.
- Move lifted unit carefully.

Prerequisite Unit unpacked
Protective film removed
Unit cleaned

1. Slide the forks of the pallet truck under the unit.
2. Carefully lift the unit off the pallet.

5.3 Installing the unit on the unit legs

Prerequisite The floor must support the weight of the unit

1. Use appropriate lifting gear to lift the unit.
2. Install the unit in accordance with the planning drawing.
3. Align the unit lengthwise and crosswise (see "Aligning the unit").

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5.4 Aligning the unit

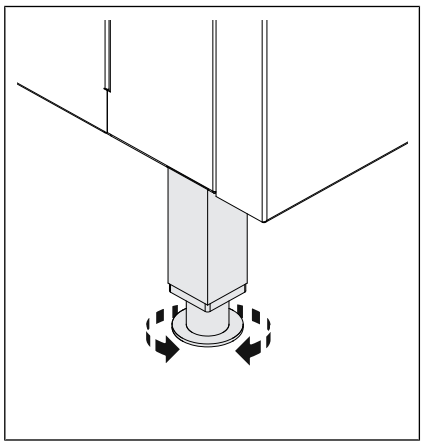

Image: Aligning the unit on the unit legs

1. Place a bubble level on the unit.
2. Align the unit horizontally by screwing the unit legs in or out.
3. Fill out the start-up operation report.

5.5 Inspecting the recirculation hood filter

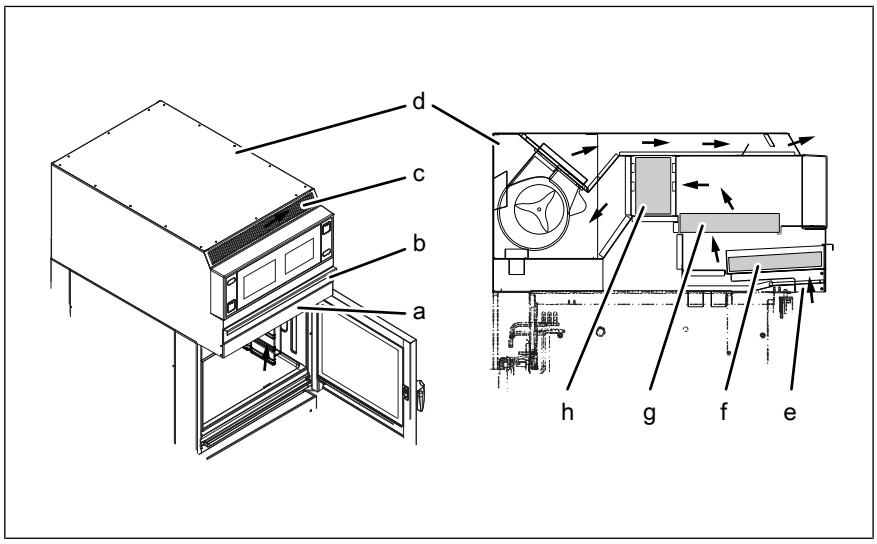

Image: Recirculation hood filter

a	Condensation baffle	e	Vapor inlet
b	Filter drawer	f	Filter mat (yellow)
c	Air outlet	g	Air filter
d	Recirculation hood	h	Activated charcoal filter

Prerequisite Unit dead
Step ladder set up securely

1. Remove the filter drawer with the filter.
2. Unhook the condensation baffle.

3. Check that the air filter is located correctly in the holder.
   ↪ Make sure that the filter is in the correct position.
   ↪ The air filter lies in the holders.
4. Hook the condensation baffle back in.
5. Check that the yellow filter mat is firmly located in the filter drawer.
6. Push the filter drawer in as far as the end stop.
7. Fill out the start-up operation report.

5.6 Fastening the unit to the floor

5.6.1 Securing the unit to prevent tipping

⚠ WARNING

Risk of accident from insufficient fastening

Unit can tip over

- Depending on the unit type, suitable measures must be taken to fasten the unit to the floor.
- Comply with the requirements for the condition of the floor.
- Comply with the requirements for the means of fastening.
- Follow the manufacturer's instructions for using the means of fastening.

Depending on the size, it is essential that certain combisteamer types or combisteamers used in combination with a Stapelkit (stacking kit), a recirculation hood, an underframe or base cabinet be secured to prevent tipping.

Unit types that must be secured to prevent tipping (see "Unit and connection data").

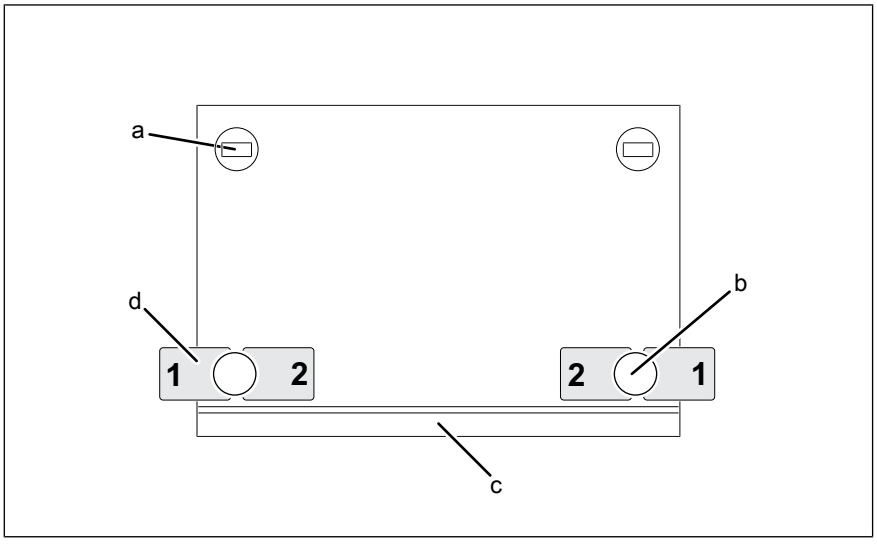

Image: Arrangement of floor plates (view from above)

a Unit leg with castors
b Unit leg
c Cooking chamber door
d Floor plate

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To prevent the unit from tilting, a special fastening kit is supplied by the manufacturer or is available as an accessory.

The fastening kit contains two floor fasteners and all components required to bolt or bond to the floor.

The unit or underframe is fastened by means of two floor fasteners as shown in the drawing.

Floor without steam barrier

In the case of floors without a steam barrier, the floor plates are bolted to the floor using the bolts provided.

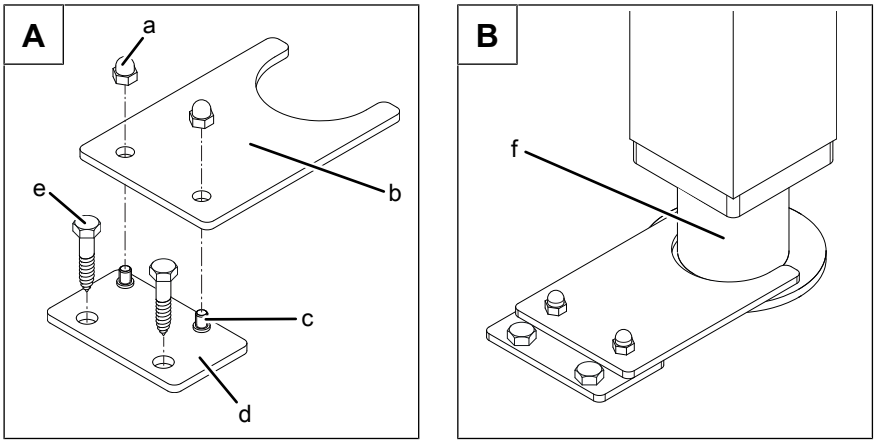

Image: A: Position of floor plate; B: floor plate bolted to the floor

a	Cap nut	d	Floor plate
b	Holding plate	e	Lag bolt
c	Upright bolt	f	Unit leg

Prerequisite Floor capable of accommodating the weight of the unit

Floor must be clean and suitable for the manner fastening

Unit set up and aligned in accordance with the planning drawing

1. Insert the floor plate from the fastening kit into the retainer as shown in the drawing.
2. Screw on the cap nuts hand-tight.
3. Align the floor fastener in position 1-1 or 2-2 on the unit leg or underframe as shown in the drawing and mark the fastening holes on the floor.
4. Mark the position of all unit legs or underframe on the floor.
5. Using suitable lifting equipment, move the unit so that the holes can be drilled in the floor.
6. Drill holes with a diameter matching that of the anchor sufficiently deep in the floor.
7. Carefully place the unit in the installation position.
8. Screw on cap nuts and remove the retainer from the floor plate.
9. Using the anchors and fastening screws provided, screw the floor plate to the floor.
10. Ensure that a tight seal against the floor has been reestablished after the fastening screws are installed.

11. Place retainer on the floor plate and secure using cap nuts.
12. Complete the start-up operation report.

Floor with steam barrier

In the case of floors with a steam barrier, the floor plates are not screwed to the floor but fastened with the enclosed adhesive.

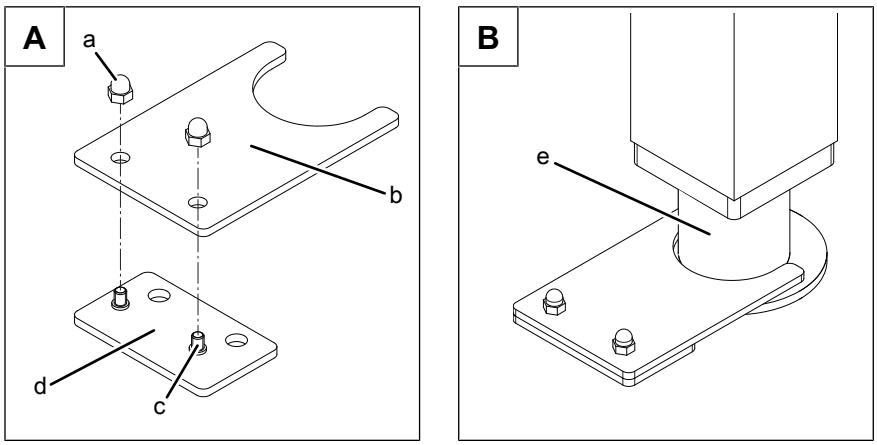

Image: A: Position of floor plate; B: floor plate glued to the floor

a	Cap nut	d	Floor plate
b	Holding plate	e	Unit leg
c	Upright bolt		

Prerequisite Floor capable of accommodating the weight of the unit

Floor must be clean and suitable for the manner fastening

Unit set up and aligned in accordance with the planning drawing

1. Insert the floor plate from the fastening kit into the retainer as shown in the drawing.
2. Screw on the cap nuts hand-tight.
3. Align the floor fasteners in position 1-1 or 2-2 on the unit leg or underframe as shown in the drawing and mark the floor.
4. Screw on cap nuts and remove the retainer from the floor plate.
5. Using the adhesive provided, fasten the floor plates to the floor.
   - ↪ Follow the manufacturer's instructions regarding the adhesive.
   - ↪ Apply the adhesive in accordance with the manufacturer's instructions.
   - ↪ Observe the drying time specified in the manufacturer's instructions.
6. Place retainers on the floor plates and secure using cap units.
7. Complete the start-up operation report.

6 Connecting the unit

⚠ DANGER

Risk of personal injury and property damage from electric shock

- Before working on the unit, ensure that the unit is dead.
- Do not operate the unit with the housing open.

⚠ CAUTION

Risk of injury from sharp edges

- Wear protective gloves.

NOTICE

Risk of property damage from damage to the lines

- Remove and attach housing components carefully.

6.1 Opening and closing the housing

6.1.1 Removing and attaching the rear panel

Remove the rear panel.

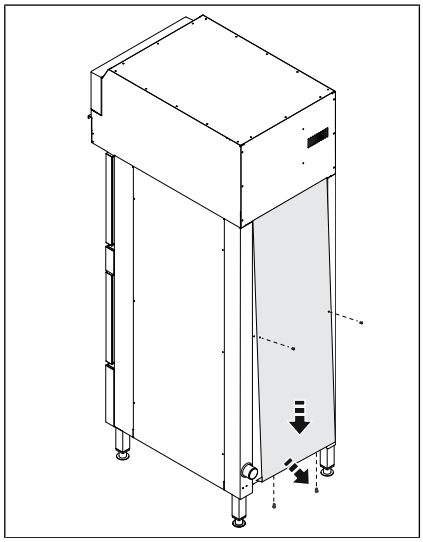

Image: Remove the rear panel.

1. Unscrew the screws on the rear panel.
2. Remove the rear panel.

Attaching the rear panel

NOTICE

Risk of property damage from leaky housing

- Check gaskets when attaching the housing parts.
- Replace damaged gaskets.

1. Carefully press in the rear panel.
2. Screw in the screws on the rear panel.

↳ The rear panel must be in contact with the unit on all sides.

6.2 Making the electrical connection

Electrical installation work

Electrical installation work on the electric system and the unit may only be performed by a specialist company, which is approved by the electric utility company in the particular region. The applicable regional regulations, standards and guidelines must be observed, as well as the connection conditions imposed by the electric utility company responsible.

Technical qualifications for electrical installation tasks

Electrical installation tasks on the electrical system and the unit may be carried out only by an electrician provided by the specialist company contracted.

The unit must be connected in accordance with the information on the nameplate and the instructions of this manual.

Wiring diagram

The wiring diagram is included with the unit.

The wiring diagram and additional documents are available on the manufacturer's Internet page by entering the serial number of the unit (see Imprint).

Electrical connection line

Minimum requirements for the unit's electrical connection line to the electrical supply mains:

Connection	Electrical connection line
Permanent connection for fixed installation with a cable from the unit to a separate connection box.	Rubber sheath cable, oil-resistant, shrouded and flexible in accordance with IEC 60245-57 (for example: H05RN-F).
Connection of the unit with a connector.	
Permanent connection for fixed installation with a hard-wired line directly connected to the unit.	PVC sheathed cable for permanent installation in buildings or damp and wet rooms.

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Permanent connection

⚠ CAUTION

Risk of property damage and personal injury from improper installation

- In the case of a fixed electrical connection, install an all-pole disconnecting unit with at least 3 mm (0.12 in) contact opening in front of the unit.

Install an all-pin separating device if the unit will be connected permanently to the electrical supply mains.

⚠ CAUTION

Risk of property damage and personal injury from improper installation

- The plug-in connection must be readily accessible.

Plug-in connection

If the unit is connected with a plug to the electrical supply mains, use plugs and sockets according to IEC60309.

The socket must be readily accessible so that the unit can be disconnected from the electrical supply mains at any time.

Insulation monitoring

In the case of an unearthed network (IT network), the unit can be incorporated into the insulation monitoring.

Fault current device

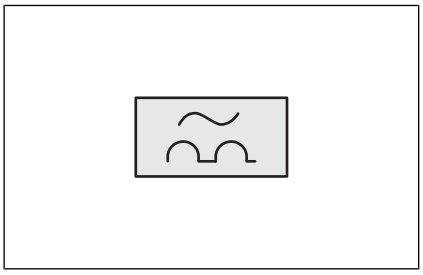

Image: RCD switch type A circuit symbol

The unit can be connected to a fault current device.

If a residual-current circuit breaker is used, the residual-current circuit breaker installed must be type A (RCD type A) to ensure that AC fault currents and pulsating DC fault currents are detected.

If the unit is connected to electrical supply mains without a neutral conductor, a type B fault current circuit breaker (RCD type B), which is sensitive to all types of current, must be installed.

The unit generates a small fault current through use of special electronic components. To ensure that the residual current device does not trip during normal operation, each unit should have its own residual current device.

Potential equalization

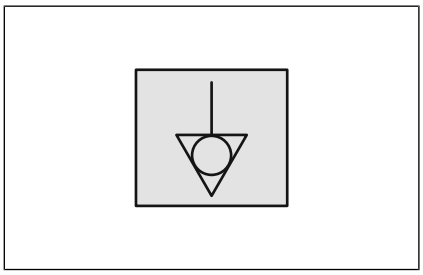

Image: Potential equalization symbol

The unit can be included in a potential equalization system by means of appropriately sized wiring.

6.2.1 Connecting the electrical connection line

⚠ DANGER

Risk of personal injury and property damage from electric shock

- Before working on the unit, ensure that the unit has been disconnected from the power supply.

⚠ DANGER

Risk of personal injury and property damage from electric shock

- Before connecting, ensure that the electrical connection line is dead.
- Ensure that the electrical connection line is undamaged.

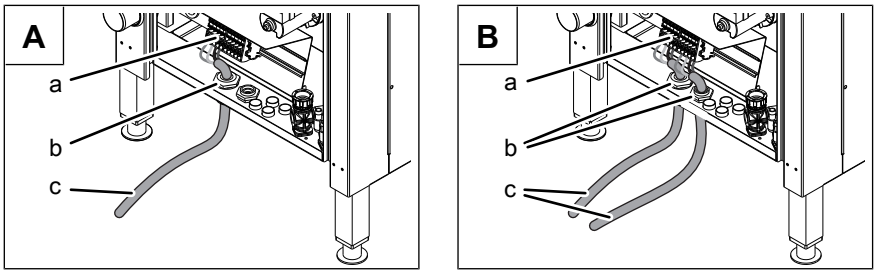

Image: A: Unit with one electrical connection; B: Unit with two electrical connections

a Connection terminals
b Threaded cable connection
c Electrical connection line

Prerequisite Unit dead
Electrical connection line dead
Rear panel removed

1. Feed the electrical connection line into the unit through the threaded cable connection.

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2. Connect the electrical connection line in accordance with the wiring diagram.
3. Secure the electrical connection line with cable ties.
4. Tighten the threaded cable connection securely to provide strain relief.
5. Close the housing (see "Opening and closing the housing").
6. Fill out the start-up operation report.

6.2.2 Connecting the power optimization system

⚠ DANGER

Risk of personal injury and property damage from electric shock

- Before working on the unit, ensure that the unit has been disconnected from the power supply.

⚠ DANGER

Risk of personal injury and property damage from electric shock

- Before connecting, ensure that the electrical connection line is dead.
- Ensure that the electrical connection line is undamaged.

INFORMATION

When integrating the device into an power optimization system, observe the information in the operating manual of the power optimization system.

The unit can be connected to a power optimization system designed to DIN 18875 with a potential-free contact. The potential-free contact is used to link the unit to the control.

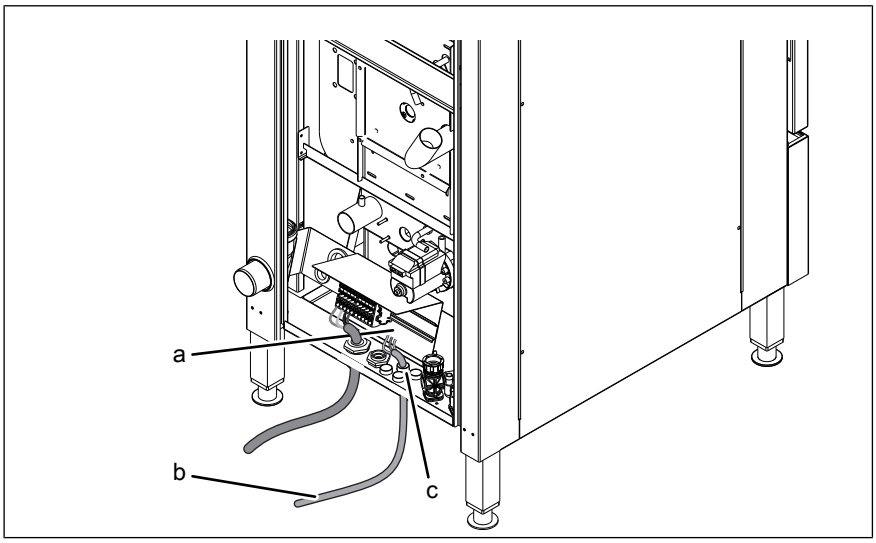

Image: Connecting the power optimization system

a Connection terminals for power optimization system
b Electrical connection line for power optimization system
c Threaded cable connection

Prerequisite Unit dead
Electrical connection line dead
Housing opened

1. Pull the electrical connection line into the unit through the cable gland.
2. Route the electrical connection line to the connection terminals.
3. Connect the electrical connection line in accordance with the wiring diagram.
4. Secure the electrical connection line with cable ties.
5. Register the power optimization system in the basic settings of the control (see "Making the basic settings of the control").
6. Fill out the Start-up operation report.

6.2.3 Connecting the potential equalization

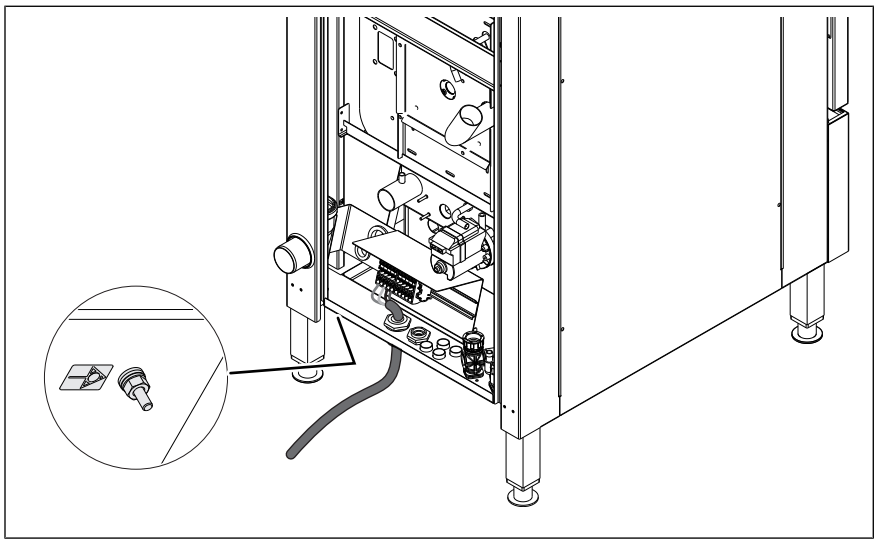

Image: Connecting the potential equalization

1. Route and connect the potential equalization line to the marked connection.
2. Fill out the Start-up operation report.

6.3 Connecting the kitchen guiding system

The units can be connected to a kitchen guiding system using an RJ45 plug.

⚠ DANGER

Risk of personal injury and property damage from electric shock

- Before working on the unit, ensure that the unit is dead.
- Do not operate the unit with the housing open.

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Minimum requirements for the network cable

Type of network	Ethernet
Cable quality	4-pair shrouded patch cable Cat-5 S/FTP
Connection to unit	Shrouded RJ45 connector

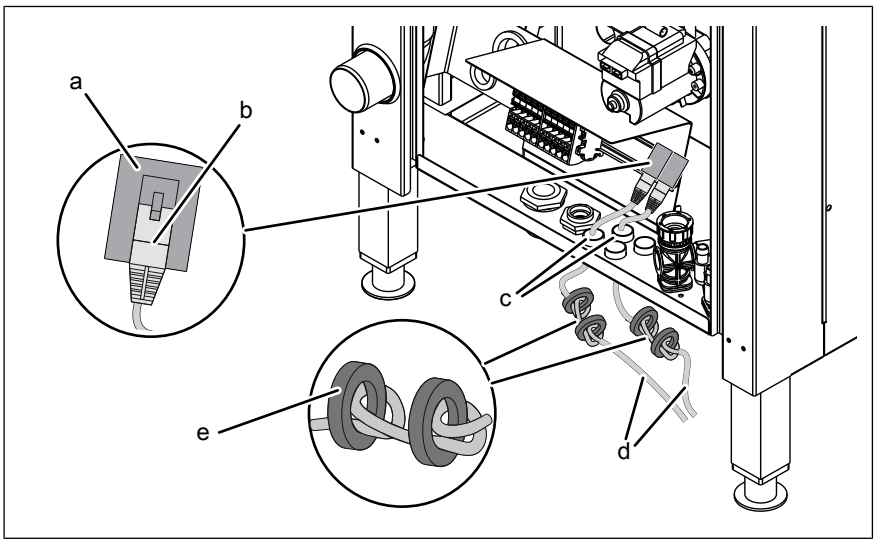

Image: Connecting the kitchen guiding system

a RJ45 socket
b RJ45 connector
c Threaded cable connection
d Network cable
e Ferrite ring

Prerequisite Unit dead

Housing opened

1. Pull the network cable into the unit through the cable gland.
2. Route the network cable through the two ferrite rings, with one winding through each.
3. Connect the network cable to the unit with the RJ45 connector.
4. Register the network in the basic control setting (see "Making the basic control setting").
5. Fill out the Start-up operation report.

6.4 Performing the basic setting of the control

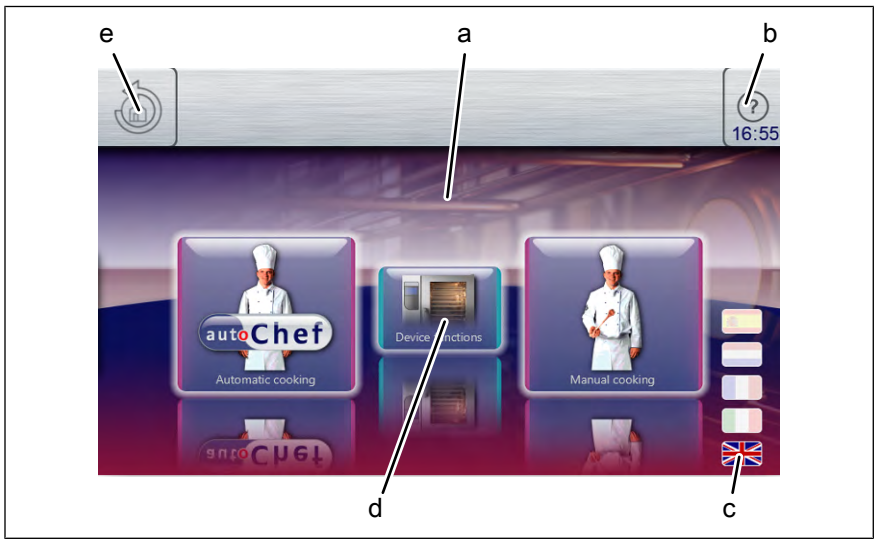

Image: Main menu

a Main menu
b *FlexiHelp* button
c Language selection
d "Unit functions" button
e *Back* button

6.4.1 Changing the basic setting of the control

By entering the password "2100", the basic setting for the installation can be displayed and changed.

INFORMATION

The basic settings are made in the dialogue.

Advanced settings are made via the parameters for the settings.

Prerequisite Unit is on

The Main menu is displayed

1. Tap the "Unit functions" button.
   ↳ The *Unit functions* menu is displayed.
2. Tap the "Unit settings" field.
   ↳ The *PIN* window opens.
3. Enter the password.
4. Tap the *Confirm* button.
   ↳ The *Unit settings* menu is displayed.
   ↳ The basic settings can be changed (see "Unit and connection data").
5. Fill out the Start-up operation report.

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6.5 Making the water connection

Drinking water installation tasks

Drinking water installation tasks on drinking water lines and the unit may only be performed by a specialist company, which is approved by the drinking water utility company in the particular region. The applicable regional regulations, standards and guidelines must be observed, as well as the connection conditions imposed by the drinking water utility company responsible.

Technical qualifications for drinking water installation tasks

Drinking water installation tasks on drinking water lines and the unit may be carried out only by a water specialist provided by the specialist company contracted.

The unit has a connection for permanent installation to the drinking water supply.

The unit is equipped with a permanent connection for:

- Softened drinking water for steam generation
- Drinking water for cooling, rinsing and cleaning

⚠ CAUTION

Hygiene risk from contaminated drinking water

- The connection to the drinking water supply must be equipped with a back-flow preventer.

NOTICE

Risk of property damage from the wrong water quality

- Ensure that the water quality complies with the unit and connection data.

INFORMATION

The unit can be connected to a reverse osmosis system.

The material of the connection line from the reverse osmosis system to the unit must be suitable.

INFORMATION

Always connect both water connections to the unit.

6.5.1 Connecting the drinking water connection line

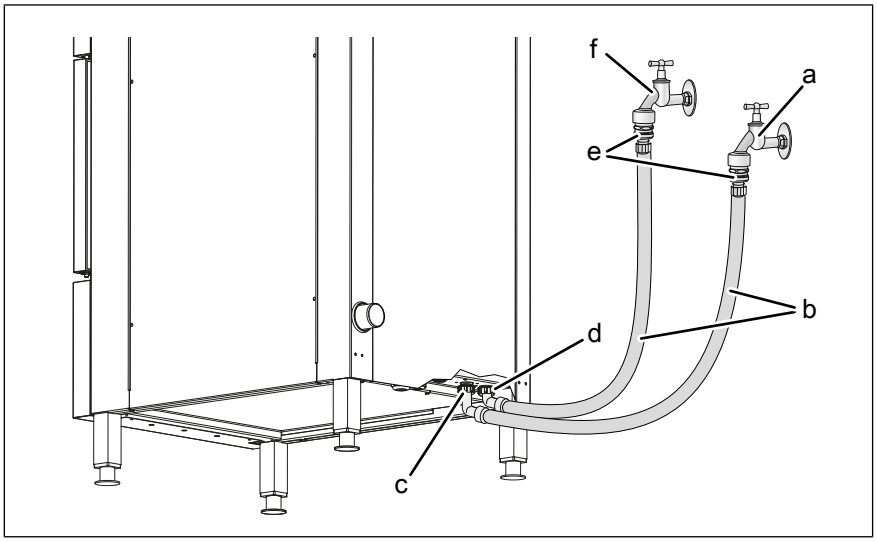

Image: Water connection

a	Softened drinking water	d	Drinking water connection
b	Connection line	e	Backflow preventer
c	Softened drinking water connection	f	Drinking water

Prerequisite Water pressure complies with specifications (see "Unit and connection data")

Backflow preventer installed

Pressure-resistant connection lines suitable for tap water are available

1. Connect the connection lines to the drinking water taps using seals.
2. Flush the connection lines thoroughly.
3. Insert dirt filters into the water connections on the unit.
4. Connect the drinking water connection line to the unit.
5. Connect the connection line for softened drinking water to the unit.
6. Open the tap water valves and check the threaded connectors for leaks.
7. Fill out the Start-up operation report.

6.5.2 Connecting softened drinking water to both connections

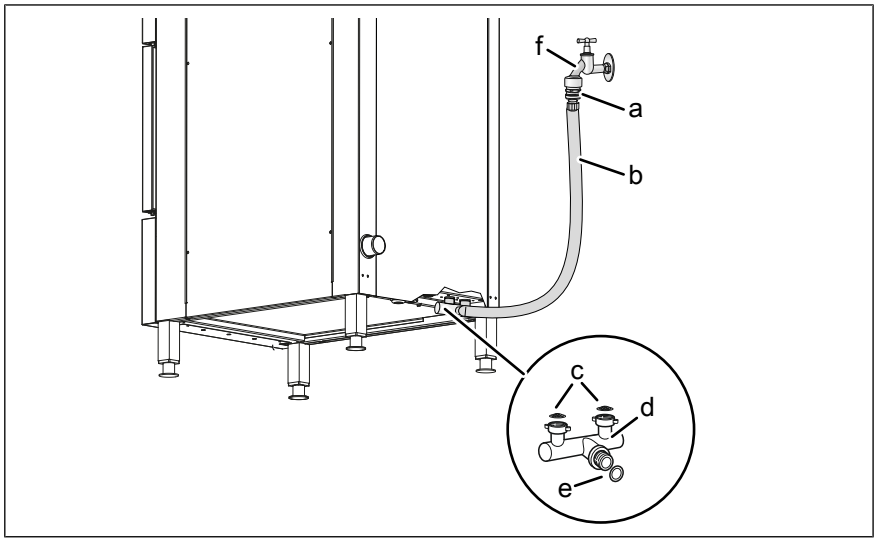

Image: Connecting softened drinking water to both connections

a	Backflow preventer	d	T-piece
b	Connection line	e	Seal
c	Dirt filter	f	Softened drinking water

If only softened drinking water is available at the installation site, use a T-piece to connect both water connections on the unit to each other.

Prerequisite Water pressure complies with specifications (see "Unit and connection data")

Backflow preventer installed

Pressure-tight connection line suitable for drinking water is available

1. Connect the connection line to the tap for softened drinking water using a seal.
2. Flush the connection line thoroughly.
3. Insert dirt filters into the water connections on the unit.
4. Connect T-piece to the unit.
5. Connect the connection line for softened drinking water to the T-piece using a seal.
6. Open the drinking water tap and check the threaded fittings for leakage tightness.
7. Fill out the Start-up operation report.

6.6 Making the waste water connection

NOTICE

Overflow of the device through an externally mounted siphon

Combi steamers have an integrated siphon.

An additional, external siphon without ventilation of the drain line will cause the unit to overflow in these combi steamers.

Therefore, do not connect an external siphon without ventilation to the waste water connection.

The wastewater connection needs a free outlet or vent.

Only exception:

- FlexFusion Gold **without WaveClean**

Waste water installation tasks

Waste water installation tasks on waste water systems and the unit may only be carried out by a specialized company that is responsible for waste water systems. The applicable regional regulations, standards and guidelines must be observed, as well as the connection conditions imposed by the operator of the waste water company responsible.

Technical qualifications for waste water installation tasks

Waste water installation tasks on waste water lines and the unit may be carried out only by a waste water specialist provided by the specialist company contracted.

6.6.1 Connecting the waste water line to a permanent connection

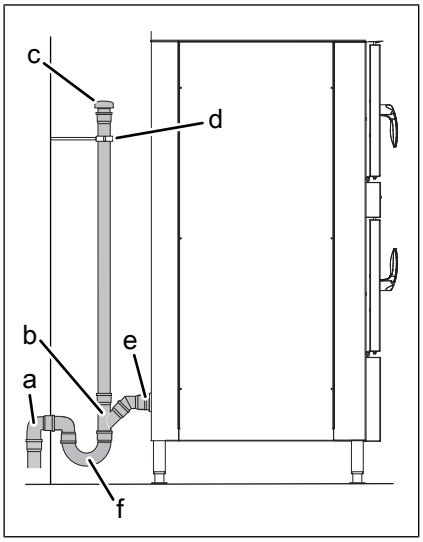

Image: Waste water line with vacuum breaker connected to a permanent connection

a	Waste water mains	d	Pipe clamp
b	Waste water line	e	Waste water connection
c	Vacuum breaker	f	Siphon

INFORMATION

If a siphon is installed in the waste water system, a vacuum breaker must be installed in the waste water line.

Prerequisite The waste water line complies with the specifications (see "Unit and connection data")

1. Install waste water line up to connection to the waste water system.
2. Secure waste water line with pipe clamps.
3. Fill the siphon of the unit with drinking water.
4. Fill out the Start-up operation report.

6.6.2 Connecting the waste water line to the collecting pan (optional)

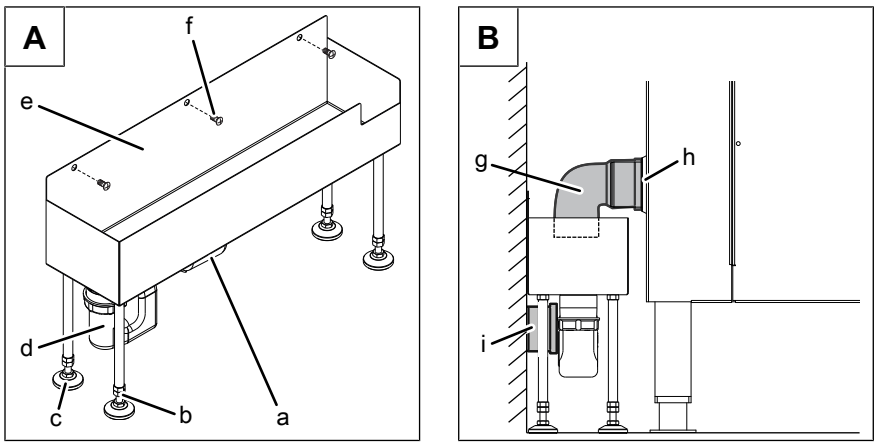

Image: A: Collecting pan; B: waste water connection

a	Waste water line	f	Fastening screw (by customer)
b	Locknut	g	Waste water line (by customer)
CE symbol	Adjustable foot	h	Waste water connection
d	Siphon	i	Waste water mains
e	Collecting pan		

Prerequisite The waste water line complies with the specifications (see "Unit and connection data")

1. Attach a 90° waste water pipe to the waste water connection on the unit.
2. Loosen the locknuts on the adjustable feet.
3. Use the adjustable feet to align the collecting pan vertically and horizontally.
   ↳ When moving the Combisteamer, make sure that the 90° bend does not strike the collecting pan.
4. Position the Combisteamer such that the waste water line is centered above the collecting pan.
5. Use the locknuts to secure the adjustable feet.
6. Use fastening screws to secure the collecting pan to the wall.
7. Install waste water line up to connection to the waste water system.
8. Fill the siphon with water.
9. Fill out the start-up operation report.

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7 Testing the function

⚠ DANGER

Risk of personal injury and property damage from unsuccessful operational check

- Do not put the unit into service.
- Contact customer service.

Prerequisite Electrical connection made

Water connection made

Waste water connection made

Unit aligned

Unit cleaned

7.1 Inspecting the recirculation hood

Prerequisite Cooking chamber door closed

1. Switch on the unit.
   ↳ Recirculation hood fan runs continuously.
2. Open cooking chamber door.
   ↳ Recirculation hood fans run faster.
   ↳ Recirculation hood is connected correctly.
3. Switch off the unit.
4. Fill out the start-up operation report.

7.2 Checking the controls

1. Switch on the unit and start any cooking program (see operating instructions).
   ↳ Set the cooking chamber temperature to a higher temperature than the current cooking chamber temperature.
   ↳ The unit heats up.
   ↳ Once the set temperature is reached, heating switches off.
   ↳ The temperature no longer increases.
   ↳ The controls are functioning.
2. Switch off the unit.
3. Fill out the Start-up operation report.

7.3 Checking the inspection of the cooking chamber door

1. Switch on the unit and start any cooking program (see operating instructions).
   ↳ The unit heats up.
   ↳ The fan is turning.
2. Open the cooking chamber door during operation.
   ↳ The unit shuts off the heating function.
   ↳ The fan comes to a stop.
   ↳ The monitoring of the cooking chamber door is functioning.
3. Close the cooking chamber door.
4. Switch off the unit.
5. Fill out the Start-up operation report.

7.4 Heating and rinsing the unit

1. Switch on the unit.
2. Tap the "Manual cooking" button.
   ↳ The Manual cooking menu is displayed.
3. Steam cooking mode for 15 minutes at 100 °C (212 °F).
4. Rinse the cooking chamber thoroughly with clear water.
5. Operate hot air cooking mode for 5 minutes at 180 °C (356 °F).
6. Open the cooking chamber door and leave it ajar until the unit is used again.
7. Complete the start-up operation report.

8 Putting the unit into service

INFORMATION

If the unit is not put into service immediately after being connected and the function check, all inspections must be repeated.

Prerequisite

Electrical connection made
Water connection made
Waste water connection made
Function successfully tested
Housing closed

1. Instruct operator.
2. Fill out the start-up operation report.

8.1 Nameplate

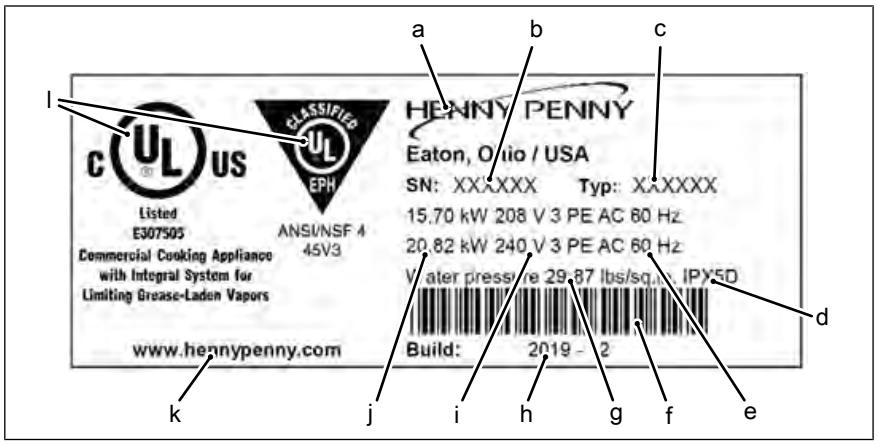

Image: Nameplate information

a Manufacturer
b Serial number
c Type number
d Protection class
e Frequency
f Barcode
g Connection pressure for water
h Year of manufacture
i Type of connection
j Electrical connected load
k Manufacturer's web address
l Certificate

8.2 Filling out the Start-up operation report

General information	Yes	No
Enter the data on the nameplate. SN: _____ Type _____ Electrical connection _____ Designation _____ Item no.: _____ (if available)		
Obvious damage to the device? What and where? _____	☐	☐
Unit levelled?	☐	☐

General information	Yes	No
Is it necessary to secure the device against tipping or slipping? If so, how was it secured?	☐	☐
secured against tipping ☐ Screwed to floor ☐ Glued to floor	**secured against shifting** ☐ Screwed to floor ☐ Glued to floor	

Electrical connection		Yes	No
Electrical connection made properly?		☐	☐
☐ Potential equalization	☐ Power optimization system		
☐ Potential-free contact	☐ _____		
Electrical connections made properly?		☐	☐
Fault current protection installed immediately upstream of this unit?		☐	☐

Kitchen guiding system	Yes	No
Kitchen guiding system connected properly?	☐	☐

Basic control setting		Yes	No
Set temperature unit			
☐ °C	☐ °F		
Date and time set?		☐	☐
current software version _____			
set installation altitude			
☐ 0 — 999 m (3277 ft)	☐ 1000 m (3280 ft) — 1999 m (6557 ft)		
☐ 2000 m (6560 ft) — 2499 m (8197 ft)	☐ 2500 m (8200 ft) or higher		
80% power set?		☐	☐
☐ 100 %	☐ 80 %		

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Basic control setting		Yes	No
Voltage set in the control.			
Voltage: _____ V			
Set volume unit			
☐ ml	☐ fl.oz. (Imperial)		
☐ fl.oz. (U.S.)			
Power optimization system set?		☐	☐
☐ On	☐ Off		
Set water filter maintenance			
☐ No maintenance message	☐ maintenance message at _____ l (gal)		
Kitchen guiding system set? Unit address: _____		☐	☐

Water connection		Yes	No
Connection pressure within indicated range? Connection pressure: 200 kPa (29 psi) - 600 kPa (87 psi) _____ kPa (psi)		☐	☐
Confirm that the device is connected to cold water. **CAUTION! Never connect the device to hot water.**		☐	☐
Lines and connections leak-free?		☐	☐
☐ Connected only to softened drinking water	☐ Connected only to drinking water		
Water connections connected with T-piece?		☐	☐

Waste water connection		Yes	No
Waste water connection made in a technically correct manner?		☐	☐
☐ Siphon in the building	☐ Vacuum breaker		
☐ Funnel drain	☐ Floor drainage channel		
Diameter of the drain pipe: _____ mm (in)			
☐ Collecting pan			

Recirculation hood	Yes	No
Checked filter for correct and tight fit?	☐	☐

Function check	Yes	No
Set steaming at 90 °C (194 °F). Start cooking process. Device reaches the preset values.	☐	☐
Both fan speed level of recirculation hood functioning?	☐	☐
Start the convection heating. Open the cooking chamber door. Does the fan stop if you open the cooking chamber door while the appliance is running?	☐	☐
Unit heated and rinsed?	☐	☐

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Final notes	Yes	No
Was the unit put into service?	☐	☐
Comments:		
Operator trained?	☐	☐

Electrical installation was made by:			
Company	Installation fitter	Place, date	Signature

The connection to a kitchen guiding system was made by:			
Company	Installation fitter	Place, date	Signature

The water and sewage installation was carried out by:			
Company	Installation fitter	Place, date	Signature

Function check was made by:			
Company	Installation fitter	Place, date	Signature

Operator was trained by:			
Company	Installation fitter	Place, date	Signature

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