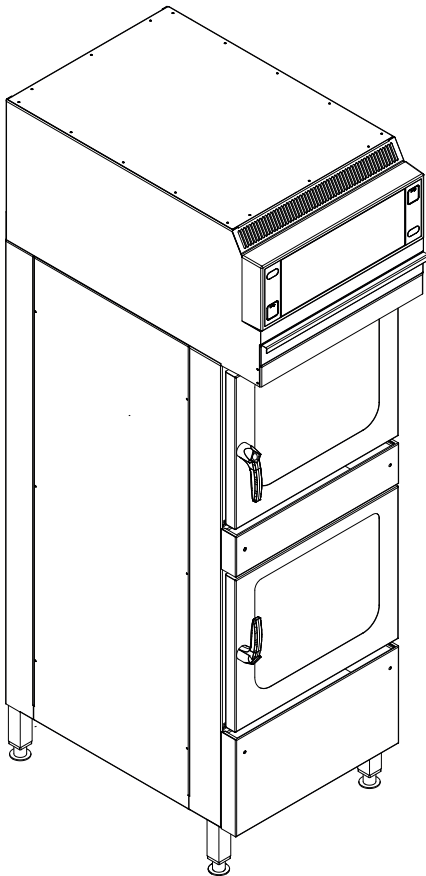




Read the operating instructions prior to commissioning

FlexFusion® ELECTRIC SPACE\$AVER PLUS TEAM



Installation manual

Model

FSDE610



FLEXFUSION
SPACE\$AVER PLUS

FM08-639-B • 12/13/2018

FM08-639-B

en-US



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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.

1.2 Personnel qualifications

Explanation of qualification

Skilled personnel	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Electrician • Specialized training • Employee of the responsible technical company
Water connection	<ul style="list-style-type: none"> • Water specialist • Specialized training • Employee of the responsible technical company
Waste water connection	<ul style="list-style-type: none"> • 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.

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

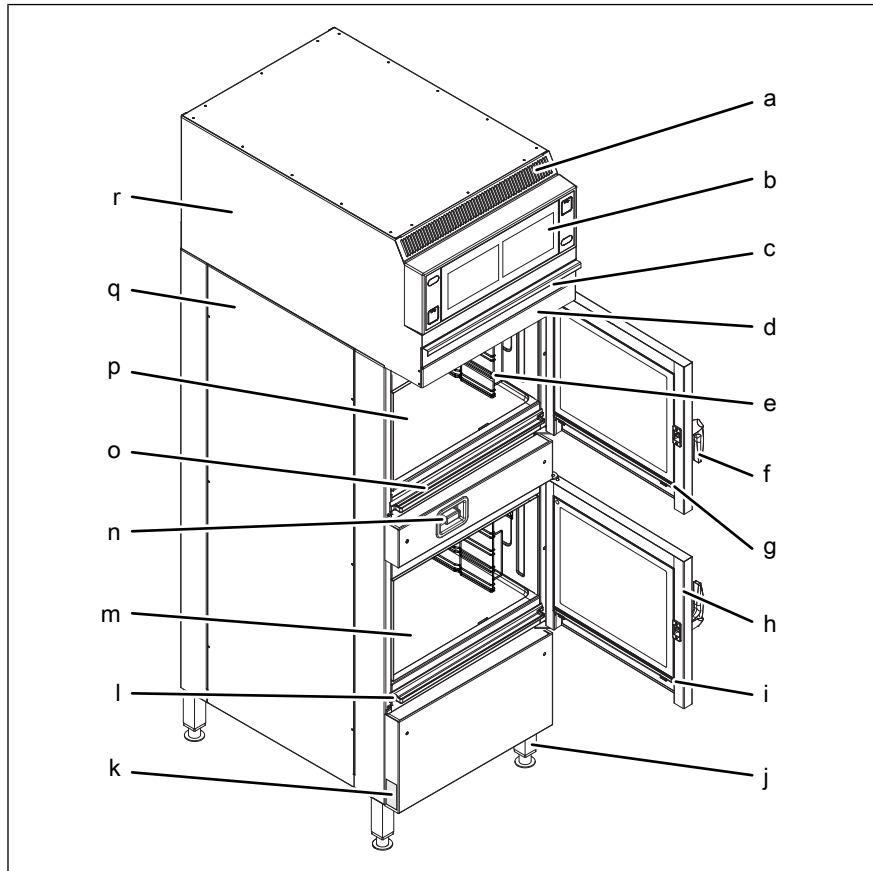


Image: Floor-standing unit

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

3.2 Unit and connection data

Size	610
Dimensions	
Unit Length x Width x Height (mm (in))	550 (21,65) x 880 (34,65) x 1908 (75,12)
Weight	
Unit (kg (lb))	220 (485,1)

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Size	610	
Emissions		
Heat dissipation at a connected load of 400 V		
Latent heat (W)	2808	
Sensible heat dissipation (W)	1872	
Noise level (db(A))	< 65	
Operating environment		
Temperature (°C (°F))	5 (41) — 40 (104)	
Relative air moisture (%) non-condensing	95	
Electrical connection		
Protection class	IPX5	
Connection terminal (mm ² (sqin))	6 (0,0093)	
Connection line	One connection line	Two connection lines Information per connection line
Type of connection	3PE AC 50/60 Hz, 3NPE AC 50/60 Hz	
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	
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

Description of the unit

Size	610	
Fuse (A)	25	16
Voltage (V)	440	
Connected load (kW)	15.8	7.9
Fuse (A)	25	16
Type of connection	2PE AC 50/60 Hz	
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 50/60 Hz	
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 (mm ² (sqin))	2,5 (0,0039)	
Softened drinking water connection		
Type of water	Softened drinking water, cold	
Carbonate hardness CaCO ₃ (mmol/l (ppm))	< 0,9 (90 ppm)	
Chloride Cl (mg/l)	< 100	
Iron Fe (mg/l)	< 0.2	
Connection pressure (kPa (psi))	200 (29) — 600 (87)	
Connection (")	R 3/4 male thread	
Drinking water connection		
Type of water	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 male thread	
Water consumption for steaming *		

Size	610
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 length (m (ft))	1 (3,3) with a drop of at least 5 % or 3°
Temperature-resistant to (°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
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)

Description of the unit

Basic setting	Parameters	Standard value	Range of adjustment	Explanation
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				<ol style="list-style-type: none"> 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.

Basic setting of control (Advanced)

Basic setting	Parameters	Standard value	Range of adjustment	Explanation
Condensation-hood after-running time	5	60	0 – 600 s	Time extension for the condensation hood, after the cooking chamber door has been opened
Generator mode	45	0	0 = No	When a generator is used to supply electricity
			1 = Yes	
Steam elimination	48	1	0 = Low	Sets the steam elimination level
			1 = Normal	
			2 = High	
Time format	675	0	0 = 24 h	Set the 12-h or 24-h time format
			1 = 12 h	

Basic setting	Parameters	Standard value	Range of adjustment	Explanation
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

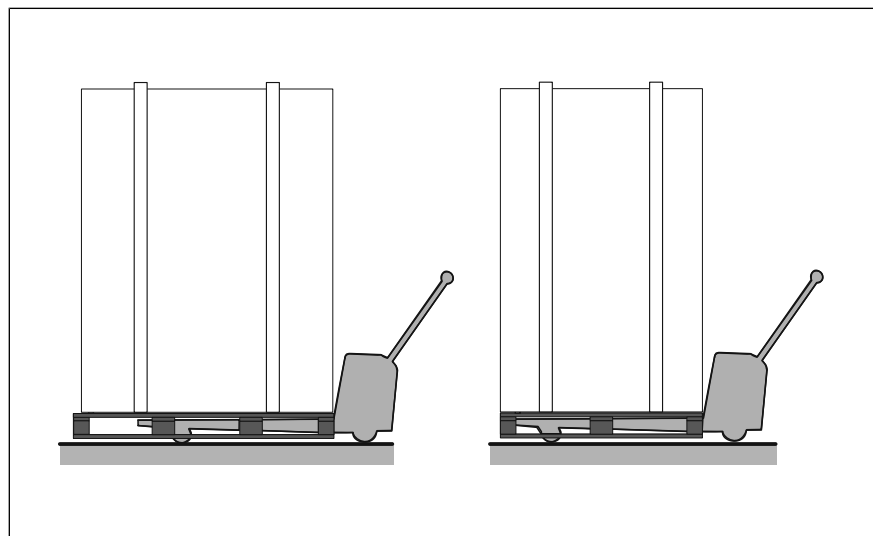


Image: Lengthwise and crosswise transport on pallet

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

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

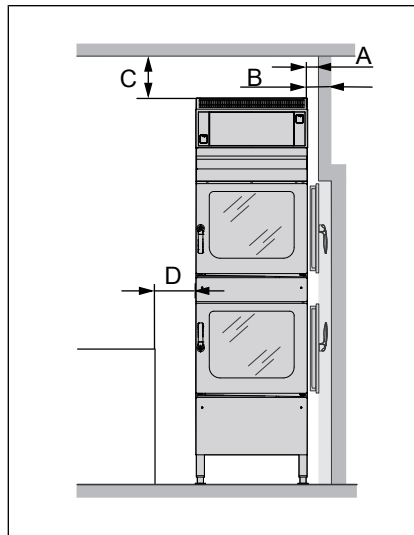


Image: Minimum clearances to walls, ceiling or units

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

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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.

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").

5.4 Aligning the unit

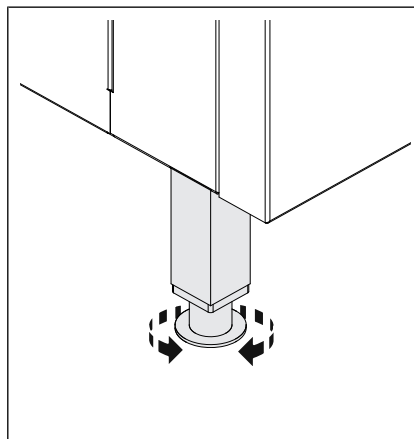


Image: Aligning the unit on the unit legs

1. Place a spirit 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

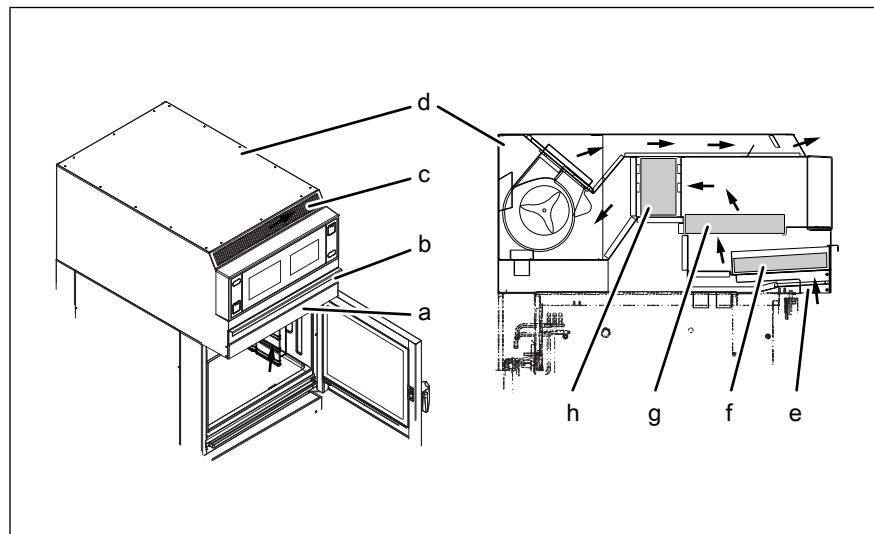


Image: Recirculation hood filter

- | | | | |
|---|---------------------|---|---------------------------|
| 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 combi-steamer types or combi-steamers 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").

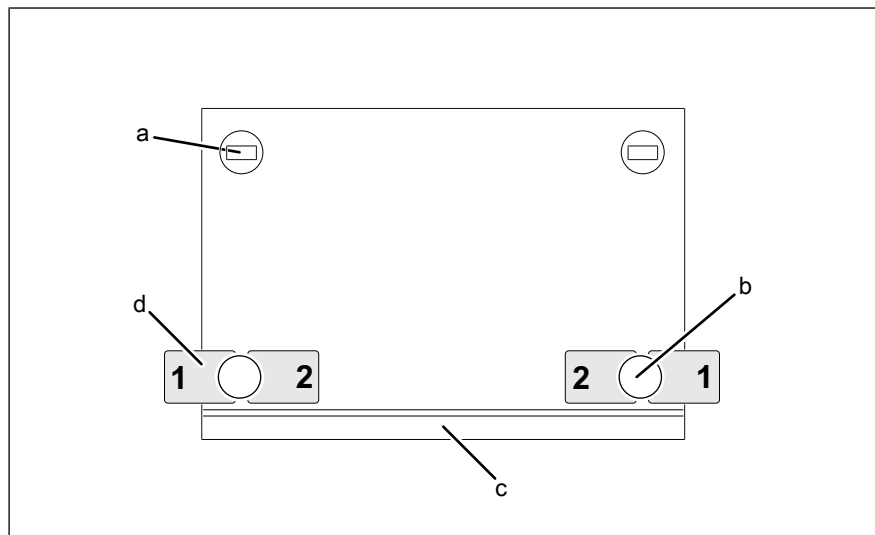


Image: Arrangement of floor plates (view from above)

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

A special set of fasteners is either supplied by the manufacturer or available as an accessory to secure the unit against tipping.

The set of fasteners includes two floor fasteners and all components required for bolting or gluing to the floor.

The unit is fastened by means of two floor fasteners, as indicated 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.

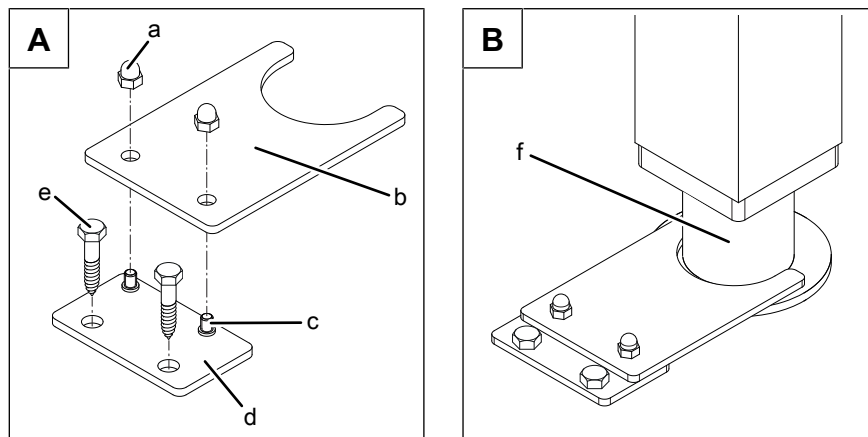


Image: A: Position of floor plate; B: floor plate bolted to the floor

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

Requirements The floor must support the weight of the unit
The floor must be clean and suitable for the manner of fastening
Unit set up and aligned in accordance with the planning drawing

1. Insert the floor plate from the fastener set into the holding plate as shown in the drawing.
2. Screw on the cap nuts hand-tight.
3. Align the floor plates in position 1-1 or 2-2 on the unit leg as shown in the drawing and mark the fastening holes in the floor.
4. Mark the position of all unit legs on the floor.
5. Using appropriate lifting gear, move the unit so that the holes can be drilled in the floor.
6. Drill holes matching the diameter of the anchor sufficiently deep in the floor.
7. Carefully place the unit in the installation position.
8. Screw on the cap nuts and remove the holding plate from the floor plate.
9. Screw the floor plate to the floor using the anchors and bolts supplied.
10. Ensure that sealing of the floor is restored after the bolts are screwed in.
11. Place the holding plate on the floor plate and fasten in place with cap nuts.
12. Fill out 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.

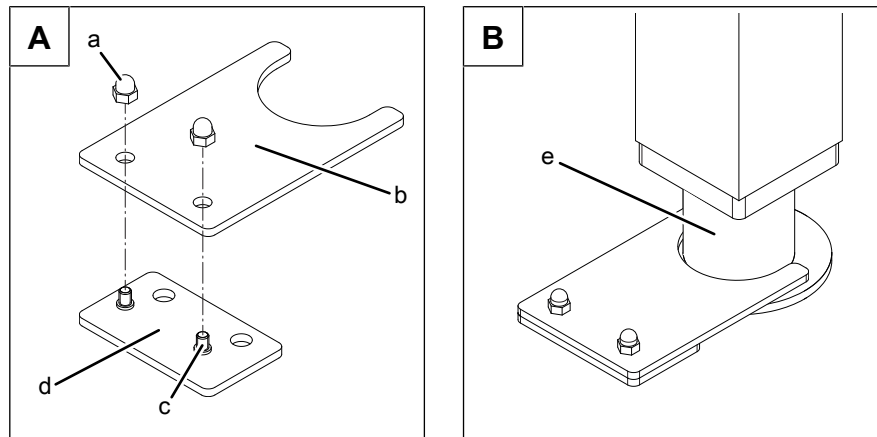


Image: A: Position of floor plate; B: floor plate glued to the floor

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

Requirements The floor must support the weight of the unit
 The floor must be clean and suitable for the manner of fastening
 Unit set up and aligned in accordance with the planning drawing

1. Insert the floor plate from the fastener set into the holding plate 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 as shown in the drawing and mark the floor.
4. Screw on the cap nuts and remove the holding plate from the floor plate.
5. Fasten the floor plates to the floor with the enclosed adhesive.
 - ↳ Follow the instructions of the adhesive manufacturer.
 - ↳ Apply the adhesive in accordance with the manufacturer's instructions.
 - ↳ Observe the drying time in the manufacturer's instructions.
6. Place the holding plate on the floor plates and fasten in place with cap nuts.
7. Fill out 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.

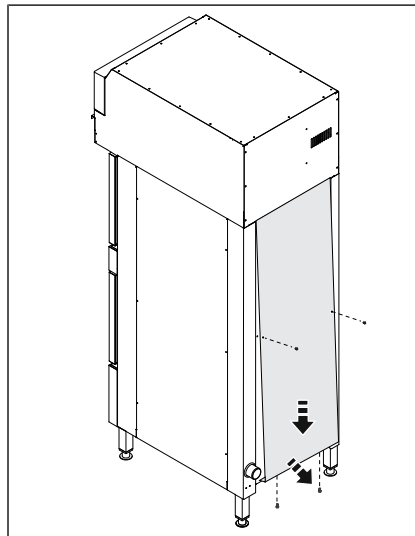


Image: Remove the rear panel.

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 seals when attaching the housing parts.
- Replace damaged seals.

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.

Permanent connection

CAUTION

Risk of property damage and personal injury from improper installation

- In the case of a permanent connection, install an all-pin separating device before the unit.

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

Plug-in connection

CAUTION

Risk of property damage and personal injury from improper installation

- The plug-in connection must be readily accessible.

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

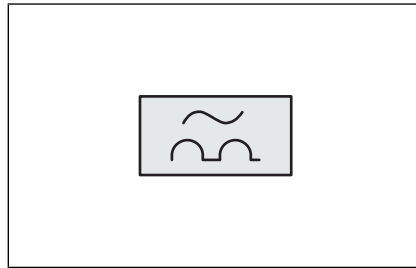


Image: RCD switch type A circuit symbol

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

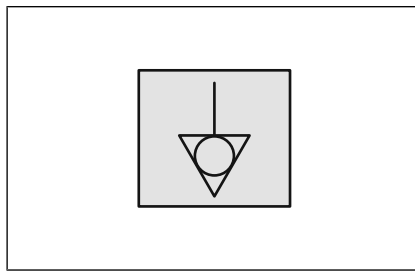


Image: Potential equalization symbol

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.

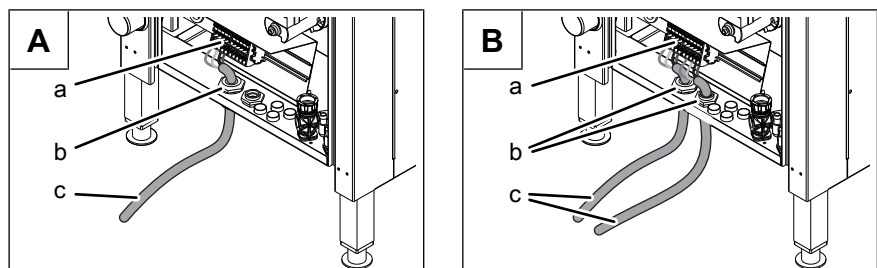


Image: A: Unit with one electrical connection; B: Unit with two electrical connections

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.
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.

Connecting the unit

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.

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.

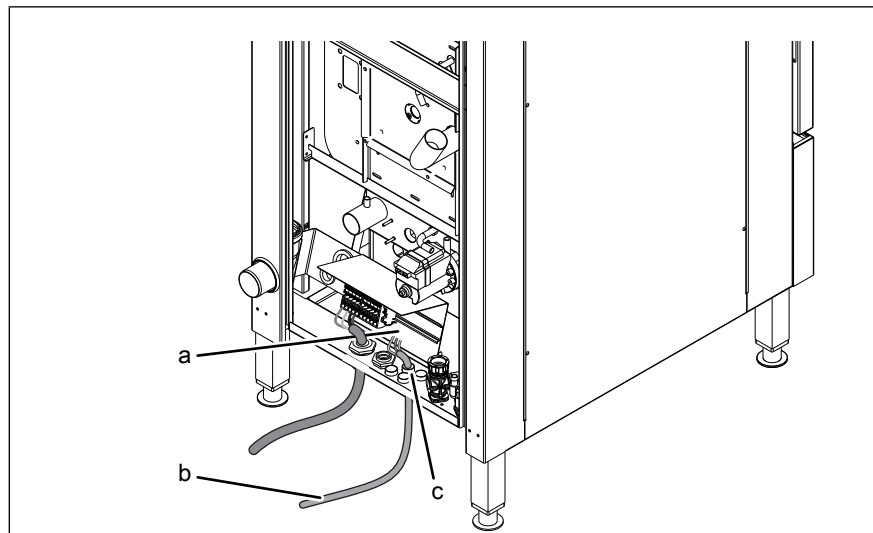


Image: Connecting the power optimization system

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

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

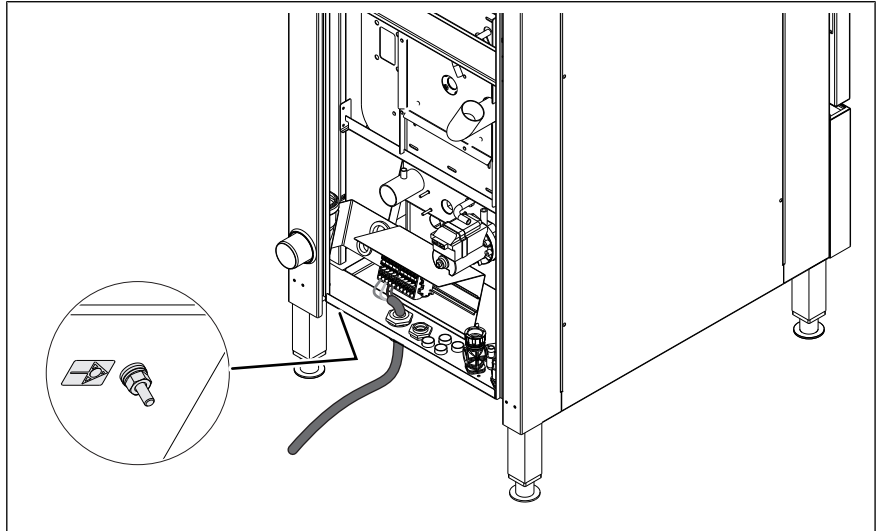


Image: Connecting the potential equalization

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.

Minimum requirements for the network cable

Type of network	Ethernet
Cable quality	4-pair shrouded patch cable Cat-6 S/FTP
Connection to unit	Shrouded RJ45 connector

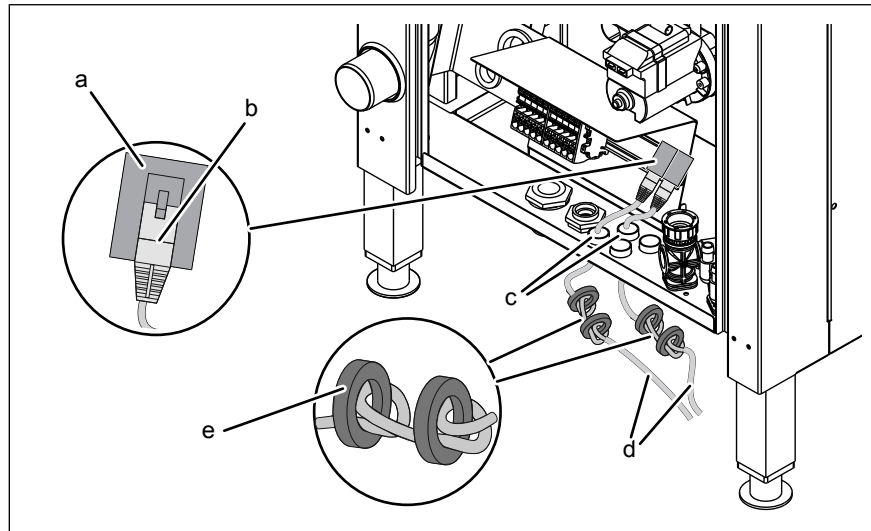


Image: Connecting the kitchen guiding system

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

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

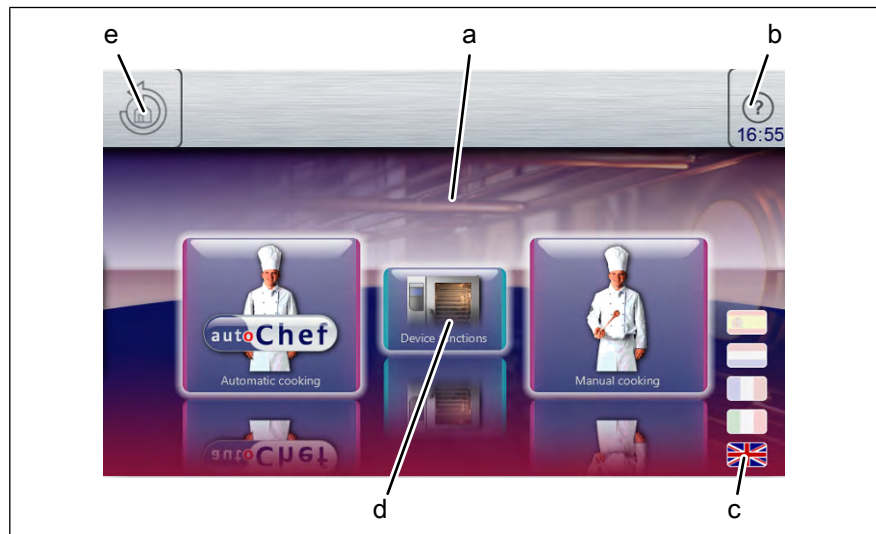


Image: Main menu

- | | |
|---------------------------|---------------------------|
| a Main menu | d "Unit functions" button |
| b <i>FlexiHelp</i> button | e <i>Back</i> button |
| c Language selection | |

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.

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

Always connect both water connections to the unit.

6.5.1 Connecting the drinking water connection line

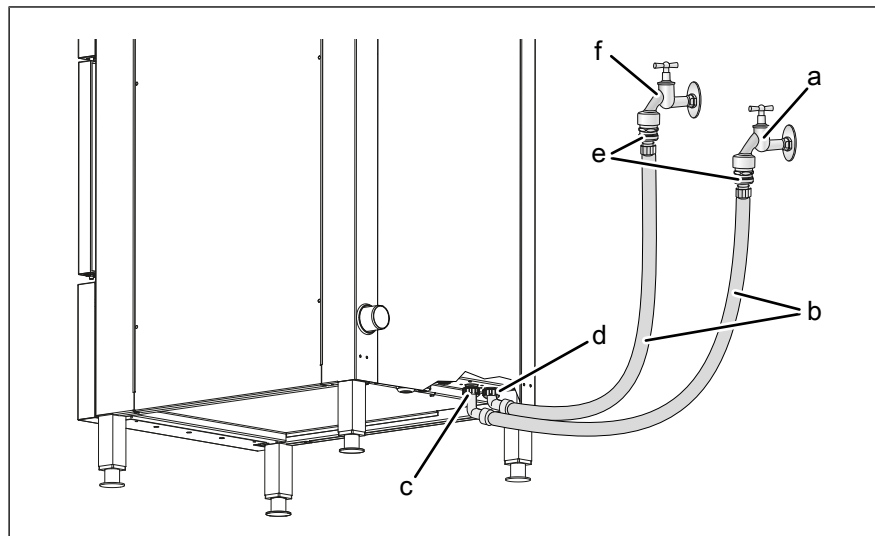


Image: Water connection

- | | |
|--------------------------------------|-----------------------------|
| 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

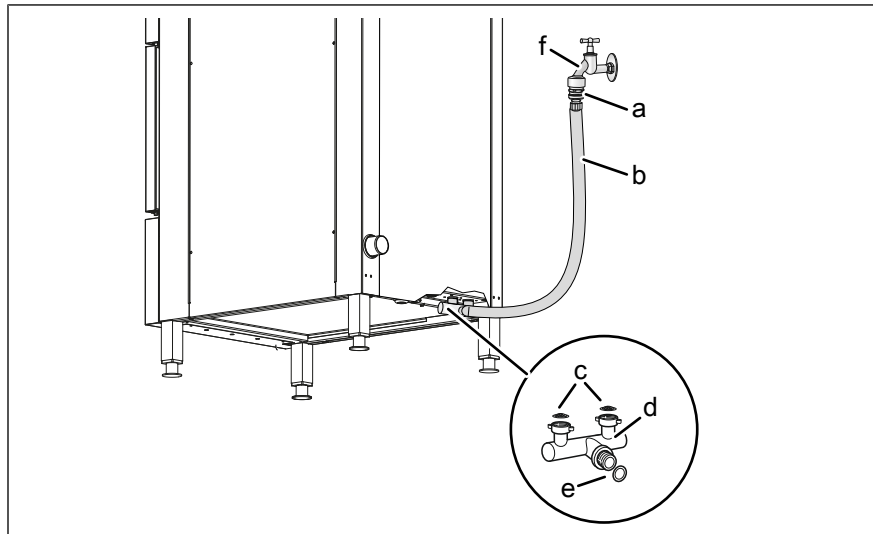


Image: Connecting softened drinking water to both connections

- | | |
|----------------------|---------------------------|
| 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

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

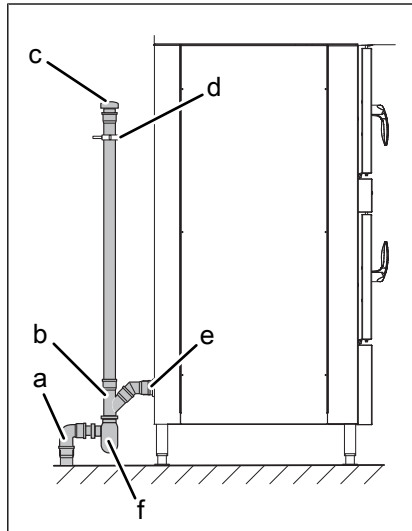


Image: Waste water line with vacuum breaker to a permanent connection

- | | | | |
|---|-------------------|---|--------------------------|
| a | Waste water mains | d | Pipe clamp |
| b | Waste water line | e | Waste water connection |
| c | Vacuum breaker | f | Waste water mains siphon |

INFORMATION

Install a vacuum breaker 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.

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 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. Run the unit in the Steaming mode for 15 minutes at 100 °C.
4. Rinse the cooking chamber thoroughly with clear water.
5. Run the unit in the hot air mode for 5 minutes at 180 °C.
6. Open the cooking chamber door and leave it ajar until the unit is used again.
7. Fill out 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

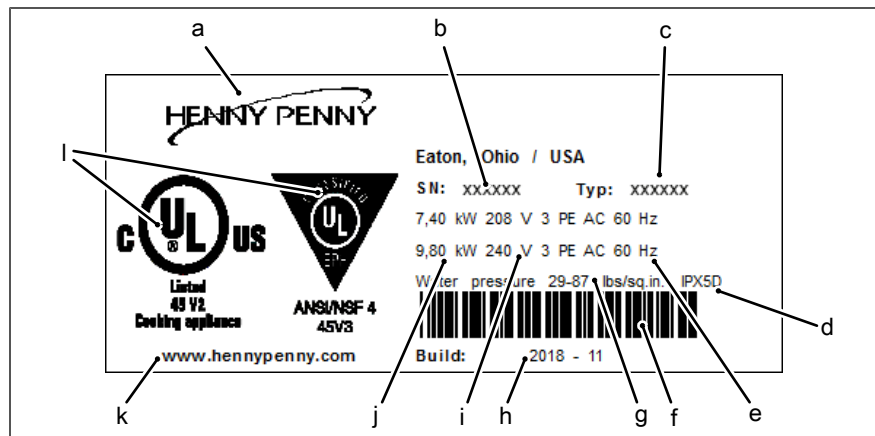


Image: Nameplate information

- 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
Information from the nameplate entered?	<input type="checkbox"/>	<input type="checkbox"/>
SN: _____ Typ: _____		
E: _____		
Bez: _____		
Item-Nr.: _____ (if listed)		

General information		Yes	No
Obvious damage to the unit? What and where?: _____		<input type="checkbox"/>	<input type="checkbox"/>
Unit levelled?		<input type="checkbox"/>	<input type="checkbox"/>

General information		Yes	No
Unit fastened to floor?		<input type="checkbox"/>	<input type="checkbox"/>
secured against tipping <input type="checkbox"/> Screwed to floor <input type="checkbox"/> Glued to floor	secured against shifting <input type="checkbox"/> Screwed to floor <input type="checkbox"/> Glued to floor		

Electrical connection		Yes	No
Electrical connection made properly?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Potential equalization	<input type="checkbox"/> Power optimization system		
<input type="checkbox"/> Potential-free contact	<input type="checkbox"/> _____		
Electrical connections made properly?		<input type="checkbox"/>	<input type="checkbox"/>
Fault current device connected directly before this unit?		<input type="checkbox"/>	<input type="checkbox"/>
Fault current device connected before this and other units?		<input type="checkbox"/>	<input type="checkbox"/>

Kitchen guiding system		Yes	No
Kitchen guiding system connected properly?		<input type="checkbox"/>	<input type="checkbox"/>

Basic setting of the control		Yes	No
Temperature unit set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> °C	<input type="checkbox"/> °F		
Date and time set?		<input type="checkbox"/>	<input type="checkbox"/>
Software version identified?		<input type="checkbox"/>	<input type="checkbox"/>
Version: _____			
Altitude set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 0 — 999 m (3277 ft)	<input type="checkbox"/> 1000 m (3280 ft) — 1999 m (6557 ft)		
<input type="checkbox"/> 2000 m (6560 ft) — 2499 m (8197 ft)	<input type="checkbox"/> 2500 m (8200 ft) or higher		
80% power set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 100 %	<input type="checkbox"/> 80 %		
Supply voltage set?		<input type="checkbox"/>	<input type="checkbox"/>
Voltage: _____ V			
Audible signal volume set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Low	<input type="checkbox"/> High		
Signal tone selected?		<input type="checkbox"/>	<input type="checkbox"/>

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Putting the unit into service

Basic setting of the control		Yes	No
Volume unit set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> ml	<input type="checkbox"/> fl.oz. (Imperial)		
<input type="checkbox"/> fl.oz. (U.S.)			
Power optimization system set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> On	<input type="checkbox"/> Off		
Water filter maintenance set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> No maintenance message	<input type="checkbox"/> Maintenance message at: _____ l (gal)		
Network configuration set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> DHCP	IP address: _____		
Subnet mask: _____	Gateway: _____		
Kitchen guiding system set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Active	<input type="checkbox"/> Disabled		
<input type="checkbox"/> Ethernet	<input type="checkbox"/> Serial		
TCP port: _____	Unit address: _____		
Unit address: _____			
Water connection		Yes	No
Connection pressure within indicated range?		<input type="checkbox"/>	<input type="checkbox"/>
Connection pressure: _____ (_____) kPa (psi)			
Water connection made properly?		<input type="checkbox"/>	<input type="checkbox"/>
Lines and connections leak-tight?		<input type="checkbox"/>	<input type="checkbox"/>
Water connections connected with T-piece?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Connected only to softened drinking water	<input type="checkbox"/> Connected only to drinking water		
Waste water connection		Yes	No
Waste water connection made in a technically correct manner?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Siphon in the building	<input type="checkbox"/> Vacuum breaker		
<input type="checkbox"/> Funnel drain	<input type="checkbox"/> Floor drainage channel		
Connection size of waste water line: _____ mm (in)			
Recirculation hood		Yes	No
Checked filter for correct and tight fit?		<input type="checkbox"/>	<input type="checkbox"/>
Function check		Yes	No
Controls functioning?		<input type="checkbox"/>	<input type="checkbox"/>
Both fan speed level of recirculation hood functioning?		<input type="checkbox"/>	<input type="checkbox"/>
Monitoring of cooking chamber door functioning?		<input type="checkbox"/>	<input type="checkbox"/>
Unit heated and rinsed?		<input type="checkbox"/>	<input type="checkbox"/>

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Final notes	Yes	No
Was the unit put into service?	<input type="checkbox"/>	<input type="checkbox"/>
Comments:		
Operator trained?	<input type="checkbox"/>	<input type="checkbox"/>

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

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

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

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

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

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



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