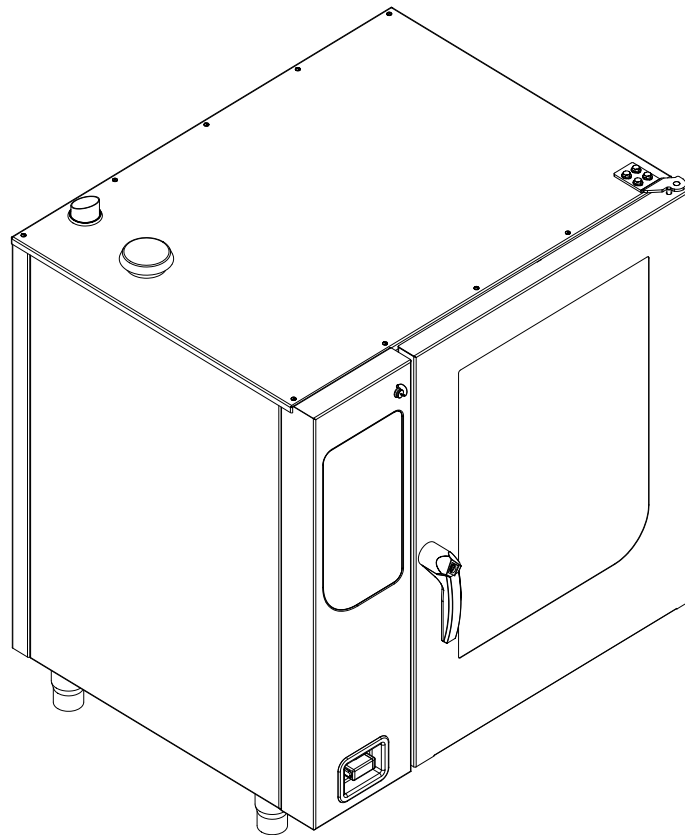




Read the operating instructions prior to commissioning

Installation instructions

Combisteamer



Translation from the original document • 10013864-0AIBE-C • 20/10/2016

Unit	Type of energy	Unit type	Model
FlexiCombi Classic	Electric	Countertop unit	FKECOD615 FKECOD621 FKECOD115 FKECOD121
		Floor-standing unit	FKECOD215 FKECOD221

Manufacturer

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1 Introduction

1.1 About this manual

The instruction manual is part of the unit and contains information on safe installation of the unit.

Observe and adhere to the following instructions:

- Read the instruction manual in its entirety prior to installation.
- Make the instruction manual available to the installer at the operating site at all times.
- Preserve the installation manual throughout the service life of the unit.
- Insert any supplements from the manufacturer.
- Pass on the installation manual to any subsequent operator of the unit.

Target group The target group for the installation manual is trained technical personnel that is familiar with installing and operating the unit.

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

1.1.1 Explanation of signs



DANGER
Imminent threat of danger

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



WARNING
Possible threat of danger

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



CAUTION
Dangerous situation

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

ATTENTION
Physical damage

Failure to comply can cause physical damage.



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 about it.

1.2 Use of the unit

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

The use of the unit is prohibited in the following countries:

- USA
- Canada

1.3 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,
- Incorrect startup, operation or maintenance of the unit,
- Problems resulting from failure to observe these instructions.

2 Safety information

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 installer must be familiar with regional regulations and observe them.

The installer must observe the safety instructions in these mounting 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 setup, 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.

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

- Identify hazard areas when transporting, setting up and connecting the unit.
- Prior to starting the installation work, notify any operators present about the procedure.
- Prior to starting the installation work, 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.

Setup Risk of property damage and personal injury from improper setup

- 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 electrical utility.
- Ensure that only electricians licensed by the electric utility connect the unit.
- Ensure that the electrical system is earthed by a protective earthing conductor.
- Note the information on the nameplate.

Risk 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 absence of voltage.
- Use only insulated tools.

Risk of electric shock

- The unit must be incorporated into the potential equalisation circuit through use of the specified minimum wire sizes.

Unit on casters Risk of a line breaking if subjected to high tensile load

- Secure the unit with a chain as a strain relief for the power connection at the installation site so that no tensile load is applied to the power connection if the unit is moved.

Commissioning Risk of property damage and personal injury from improper commissioning

- Read the operating instructions prior to commissioning. Observe the safety instructions in this installation manual and in the "Safety information" chapter of the operating instructions.
- Put the unit into service only after a successful function test following assembly.
- 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

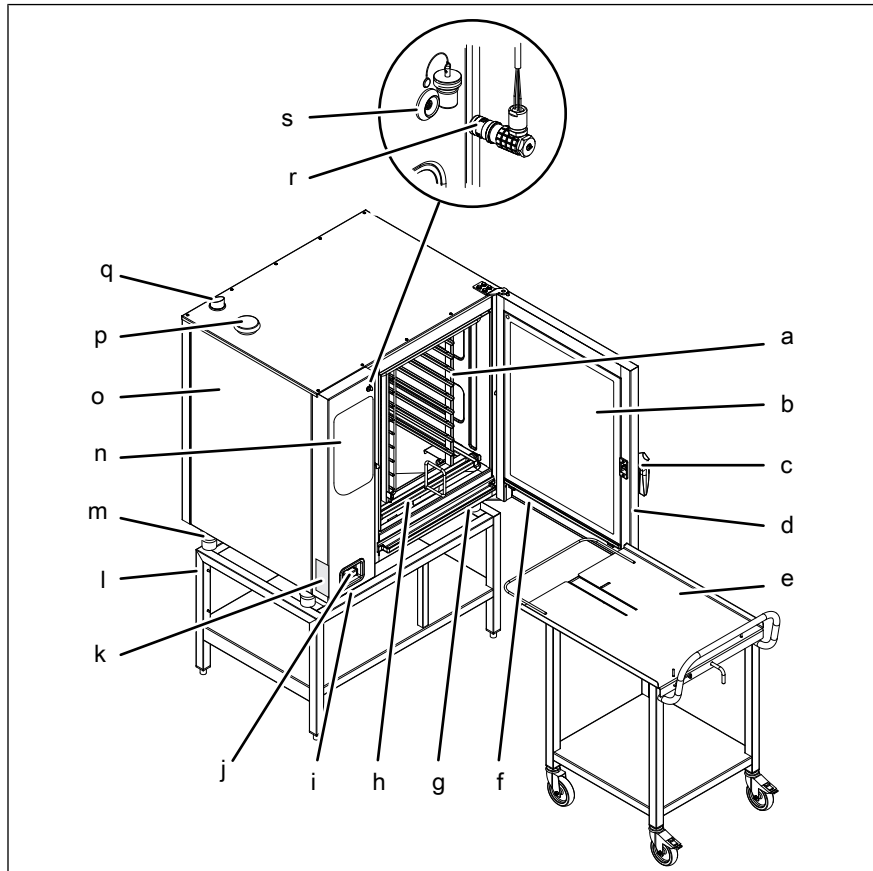


Image: Unit with tray rack trolley

- | | | | |
|---|-------------------------------------|---|---|
| a | Tray rack | k | Nameplate |
| b | Insulated window | l | Base frame (optional) |
| c | Door handle | m | Equipment leg |
| d | Cooking zone door | n | Control unit |
| e | Tray rack trolley (optional) | o | Housing |
| f | Steam drain channel, door | p | Air inlet |
| g | Steam drain channel, unit | q | Steam outlet |
| h | Guide rail for tray rack (optional) | r | Core temperature sensor (optional) |
| i | USB port (covered) | s | Connection for core temperature sensor (optional) |
| j | Hand shower (optional) | | |

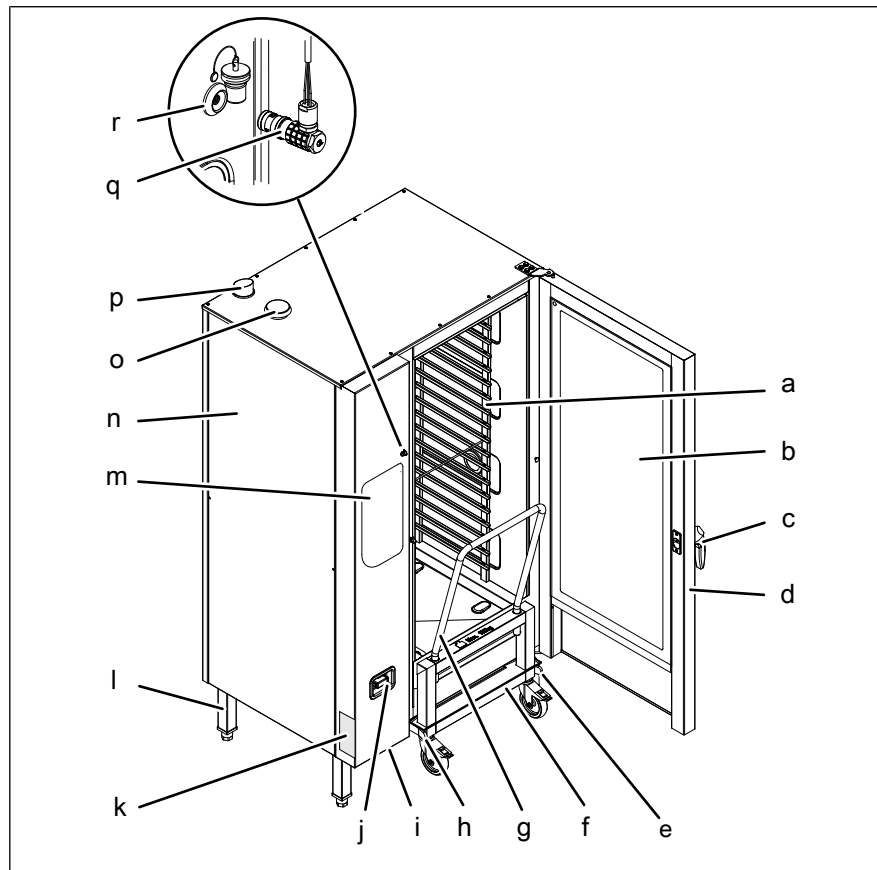


Image: Unit with tray trolley

- | | | | |
|---|--------------------|---|---|
| a | Tray rack | j | Hand shower |
| b | Insulated window | k | Nameplate |
| c | Door handle | l | Equipment leg |
| d | Cooking zone door | m | Control unit |
| e | Guide rail (right) | n | Housing |
| f | Tray trolley | o | Air inlet |
| g | Push handle | p | Steam outlet |
| h | Guide rail (left) | q | Core temperature sensor (optional) |
| i | USB port (covered) | r | Connection for core temperature sensor (optional) |

3.2 Planning drawing

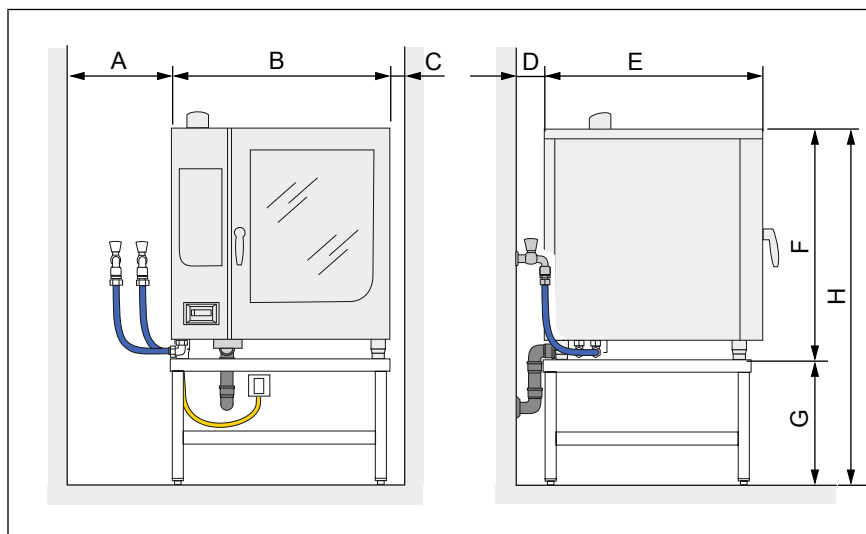


Image: Size 6XX and 1XX

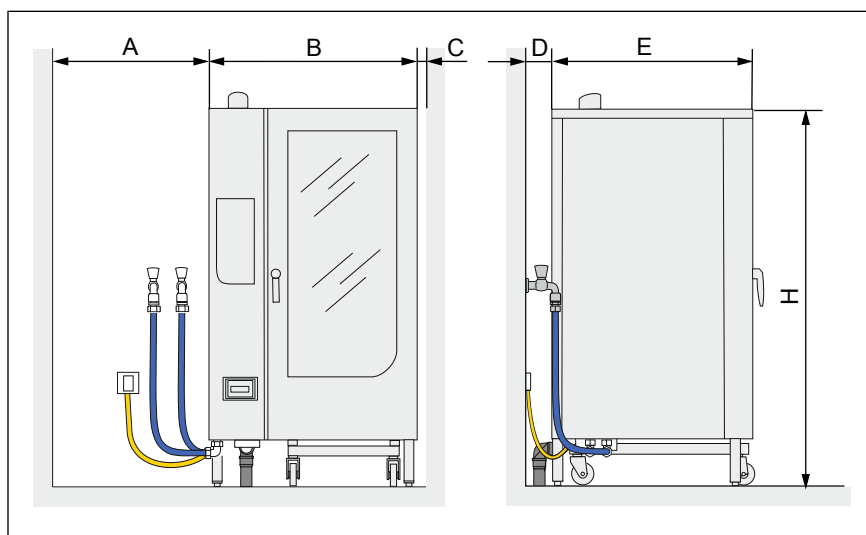


Image: Size 2XX

Size	615, 621	115, 121	215, 221
A	50	50	50
B	997	997	1075
C	50	50	50
D	50	50	50
E	799	799	813
F	790	1060	---
G	850	580	---
H	1640	1640	1960
All dimensions in mm			

3.3 Equipment and connection data

	Model: FKECOD					
Size	615	621	115	121	215	221
Dimensions						
Unit Length x Width x Height (mm)	997 x 799 x 790		997 x 799 x 1060		1075 x 813 x 1960	
Weight						
(kg) unit	120	125	140	145	305	313
Emissions						
Latent heat (W)	1780*	3670*	2750*	5400*	5510*	10200
Sensible heat (W)	1190	2450	1840	3600	3670	7100
Noise level (db(A))	< 70					
* The stated value is reduced by 80 % when operating with a condensation hood; the sensible heat is increased by the amount of the reduction.						
Operating environment						
Temperature (°C)	5 — 40					
Relative humidity (%) Non-condensing	95					
Power connection						
Protection class	IPX5, IPX6 (optional)					
Type of connection	3PE / AC 50/60 Hz, 3NPE / AC 50/60 Hz					
Voltage (V)	200					
Connected load (kW)	10.1	16.3	14.7	25.5	29.4	50.9
Fuse (A)	3 x 35	3 x 50	3 x 50	3 x 80	3 x 100	3 x 180
Voltage (V)	208					
Connected load (kW)	10.2	17.4	15.7	27.3	31.4	54.6
Fuse (A)	3 x 35	3 x 50	3 x 50	3 x 80	3 x 100	3 x 180
Voltage (V)	220					
Connected load (kW)	11.6	19.7	17.7	30.8	35.4	61.4
Fuse (A)	3 x 35	3 x 63	3 x 63	3 x 100	3 x 125	3 x 180
Voltage (V)	230					
Connected load (kW)	12.6	21.4	19.3	33.6	38.6	67
Fuse (A)	3 x 35	3 x 63	3 x 63	3 x 100	3 x 125	3 x 180
Voltage (V)	240					
Connected load (kW)	13.7	23.3	21	36.5	42	72.9
Fuse (A)	3 x 35	3 x 63	3 x 63	3 x 100	3 x 125	3 x 180
Voltage (V)	380					
Connected load (kW)	9.4	18.9	14.4	27.6	28.7	55
Fuse (A)	3 x 16	3 x 35	3 x 25	3 x 50	3 x 50	3 x 100

Description of the unit

Model: FKECOD						
Size	615	621	115	121	215	221
Voltage (V)	400					
Connected load (kW)	10.4	20.9	15.9	30.5	31.7	60.9
Fuse (A)	3 x 16	3 x 35	3 x 25	3 x 50	3 x 50	3 x 100
Voltage (V)	415					
Connected load (kW)	11.2	22.5	17.1	32.8	34.1	65.5
Fuse (A)	3 x 16	3 x 35	3 x 25	3 x 50	3 x 50	3 x 100
Voltage (V)	440					
Connected load (kW)	10.4	20.9	15.8	30.5	31.5	60.9
Fuse (A)	3 x 16	3 x 35	3 x 25	3 x 50	3 x 50	3 x 100
Voltage (V)	480					
Connected load (kW)	12.3	20.9	18.9	32.6	37.6	65.1
Fuse (A)	3 x 16	3 x 35	3 x 25	3 x 50	3 x 50	3 x 100
Soft water connection						
Type of water	Soft water, cold					
Carbonate hardness CaCO ₃ (mmol/l (°dH))	< 0,9 (5)					
Chloride Cl (mg/l)	< 50					
Iron Fe (mg/l)	< 0.1					
Connection pressure (kPa (bar))	200 (2) — 600 (6)					
Connection (")	R 3/4					
Tap water connection						
Type of water	Tap water, cold					
Carbonate hardness CaCO ₃ (mmol/l (°dH))	< 4 (22)					
Connection pressure (kPa (bar))	200 (2) — 600 (6)					
Connection (")	R 3/4					
Water consumption for steaming						
Soft water (l/h)	16	21	18	24	36	48
Water consumption for Combisteam						
Soft water (l/h)	3,5	4,6	4	5,3	8	10,6
Water consumption for WaveClean cleaning program						
Soft water (l)	3					
Tap water (l)	32					
Wastewater connection						
Wastewater type	Dirty water, maximum 80 °C					
Connection to unit (mm)	50					
Maximum length (m)	1					

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	Model: FKECOD					
Size	615	621	115	121	215	221
Temperature resistance (°C)	95					
Maximum flow rate (l/min)	10					
Exhaust air connection						
Connection to unit (mm)	53				73	
Maximum length (m)	2,5					
Temperature resistance (°C)	180					

Transformer voltage

Type of connection	3NPE / AC 50/60 Hz	
Voltage range (V)	200 — 240	
Transformer	T1	
Marking or colour of the cores	Blue	Red
Voltage measured (V)	Voltage at the transformer (V)	
190 — 200	0	200
201 — 220	0	220
221 — 230	0	230
231 — 240	0	240
241 — 250	0	250

Type of connection	3NPE / AC 50/60 Hz	
Voltage range (V)	380 — 415	
Transformer	T1	
Marking or colour of the cores	Blue	Red
Voltage measured (V)	Voltage at the transformer (V)	
370 — 380	0	220
381 — 400	0	230
401 — 420	0	240

Type of connection	3PE / AC 50/60 Hz				
Voltage range (V)	380 — 480				
Transformer	T0			T1	
Marking or colour of the cores	T0 - 0 V	T0 - 230 V	T0 - 400 V	Blue	Red
Voltage measured (V)	Voltage at the transformer (V)				
370 — 380	0	219	400	0	230
381 — 415	0	230	400	0	230
416 — 450	0	230	440	0	230
451 — 490	0	230	480	0	230

Description of the unit

Basic control setting

Basic setting	Parameters	Standard value	Adjustment range	Explanation
Unit of temperature	1	0	0 = °C	Celsius (°C)
			1 = °F	Fahrenheit (°F)
Altitude	2	0	0 — 999 m	Request the altitude above sea level from the local weather station. If the altitude is unknown, set 0 – 999 m.
			1000 m — 1999 m	
			2000 m — 2499 m	
			2500 m or higher	
80 % power	3	0	1 = Yes	Power can be limited to 80 % (for special applications).
			0 = No	
Actual voltage	14	400	100 — 500 V	Set the local, mean voltage between the line conductors.
Audible signal volume	33	0	0 = Quiet	Sets the volume.
			1 = Loud	
Unit of volume	34	0	0 = (ml)	Millilitre (ml)
			1 = (fl.oz.)	Fluid ounce (fl.oz.)
	35	0	0 = Imperial (fl.oz.)	Imperial fluid ounce
			1 = U.S. (fl.oz.)	U.S. fluid ounces
Power optimisation system	42	0	0 = No	If a power optimisation system is connected, "1" must be selected for the unit to heat.
			1 = Yes	

Basic control setting (Advanced)

Basic setting	Parameters	Standard value	Adjustment range	Explanation
Ready2Cook preheating temperature	4	15	0 — 30 %	If the unit is fully loaded with a large mass (roasts, loaves of bread), increase the preheat temperature so that the cooking zone temperature does not drop too suddenly.
Time extension for condensation hood	5	60	0 – 600 s	Time extension for the condensation hood, after the cooking zone door has been opened
Preselect steaming temperature	9	100	30 °C — 130 °C	Preset temperature for steaming
Preselect Combisteam temperature	10	150	30 °C — 250 °C	Preset temperature for Combisteam
Preselect hot air temperature	11	180	30 °C — 250 °C	Preset temperature for hot air
Preselect regeneration temperature	12	130	30 °C — 150 °C	Preset temperature for regeneration

Basic setting	Parameter s	Standard value	Adjustment range	Explanation
Maximum waiting time after Ready2Cook, for T < 250 °C	37	120	0 — 300 min	Maximum waiting time after the Ready2Cook temperature is reached, for set value < 250 °C
Maximum waiting time after Ready2Cook, for T > 250 °C	38	30	0 — 60 min	Maximum waiting time after the Ready2Cook temperature is reached, for set value > 250 °C
Generator mode	45	0	0 = No 1 = Yes	If a generator is used to supply electricity
Cleaning monitoring	46	0	0 = No 1 = Yes	When cleaning monitoring is activated, a message appears if the cleaning program has not been started for more than 1 day.
Steam elimination	48	1	0 = Low 1 = Normal 2 = High	Sets the steam elimination level

4 Transporting the unit



CAUTION

Risk of property damage and personnel injury from tipping equipment

- Do not linger next to or behind raised equipment.
 - Move raised equipment carefully.
-

ATTENTION

Risk of physical 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

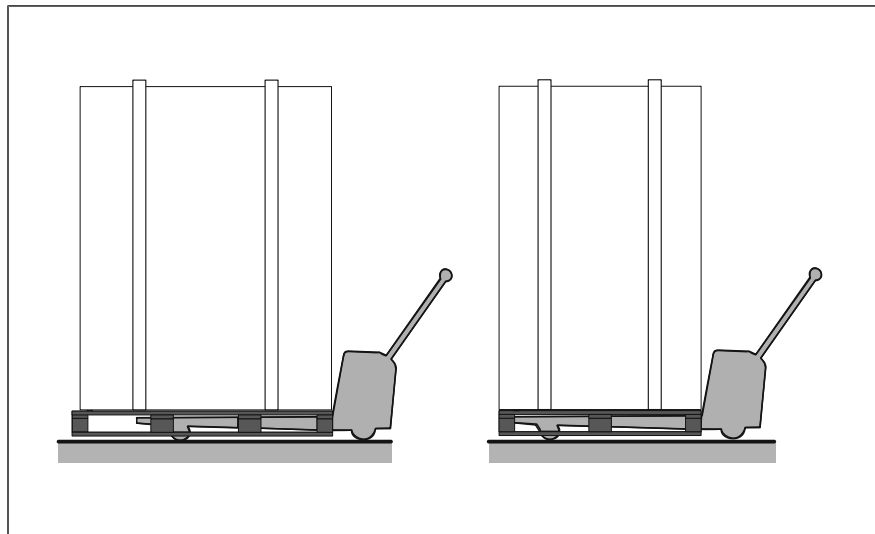


Image: Lengthwise and crosswise transport on pallet

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

4.2 Unpacking the unit



CAUTION
Risk of injury from sharp edges

- Wear protective gloves.
-



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 the packaging material from the cooking zone completely.
4. Clean the unit (see "Cleaning and maintaining the unit" in the operating instructions).
5. Enter the information from the nameplate into the commissioning report.

5 Setting up the unit



WARNING

Risk of burns from spraying hot fat

- Set up deep fat fryers outside the range of the hand shower.



CAUTION

Risk of crushing from improper setup

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



CAUTION

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

- Observe applicable regional fire prevention regulations.

ATTENTION

Risk of physical damage from overheating of the unit

- Do not set up the unit close to heat sources.

5.1 Minimum clearances

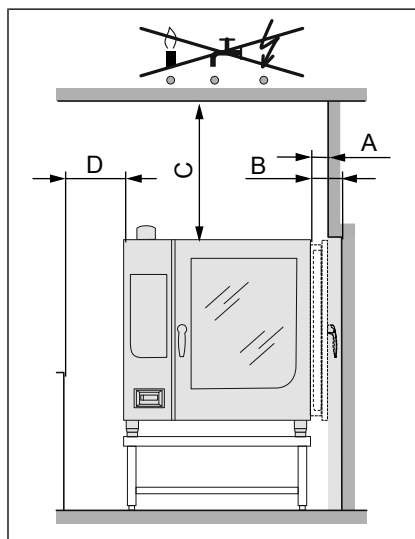


Image: Minimum clearances to walls, ceiling or units

A	B	C	D *
50	100	500	50
All dimensions in mm			
* Recommended for service work 500 mm			

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

- Left, right and rear at least 50 mm.

- For service work, 500 mm on the left is recommended.
- For parking the tray trolley, 800 mm on the left.
- Clearance from heat sources (baking oven), 500 mm on the left.
- Clearance to deep-fat fryers, at least one length of the hand shower on the left and right.
- There must be no water, gas or electric lines in the ceiling above the unit.

5.2 Lifting the unit off the pallet



CAUTION

Risk of property damage and personnel injury from tipping equipment

- Do not linger next to or behind raised equipment.
- Move raised equipment carefully.

ATTENTION

Risk of physical damage from lifting the unit incorrectly

- Place the forks of the lift truck next to the waste trap.

Requirement Unit unpacked
Protective film removed
Unit cleaned

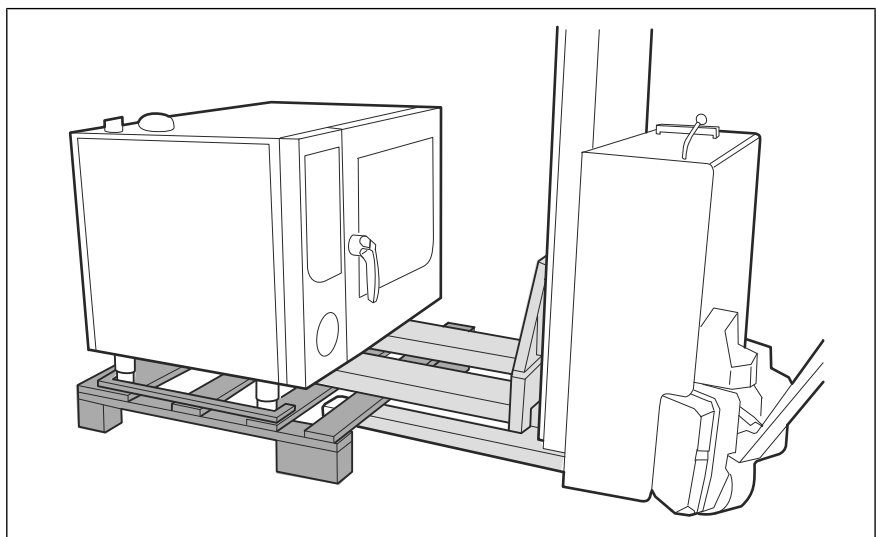


Image: Lifting the unit off the pallet

1. Slide the forks of the pallet truck under the unit and to the right of the waste trap.
2. Lift the unit off the pallet.

5.3 Setting up the unit on the equipment legs

Requirement The floor must carry the weight of the unit

1. Lift the unit with the pallet truck.
2. Move the unit to the installation site.
3. Place the unit on the floor.
4. Set up the unit in accordance with the planning drawing (see "Planning drawing").

5.4 Placing the unit on the base frame

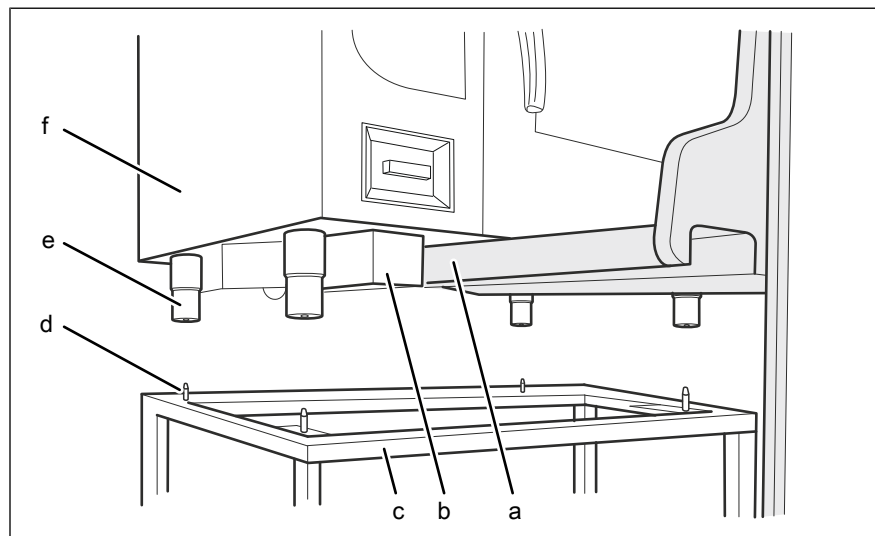


Image: Setting up the unit on a base frame

- | | |
|--------------------------|-----------------|
| a Lifting fork | d Stud bolt |
| b Waste trap on the unit | e Equipment leg |
| c Base frame | f Unit |

Requirement The base frame must carry the weight of the unit

Base frame levelled

Base frame must be set up in accordance with the planning drawing

1. Lift the unit.
2. Place the unit over the stud bolts and onto the base frame.



CAUTION

Risk of scalding due to spillage of hot cooked food

- Attach sticker if the upper slide-in rails are higher than 1,6 m.

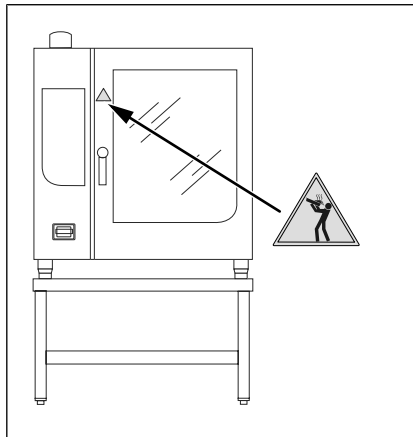


Image: Attach a warning sign about the shelf height

3. Clean the adhesive surface for the sticker.
4. Attach the sticker to the cooking zone door at a height of 1,6 m.

5.4.1 Installing the support rack

Depending on the version, the base frame can be equipped with a support rack.

The support rack is used to hold containers, metal trays and grates.

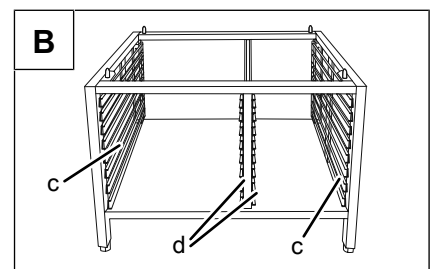
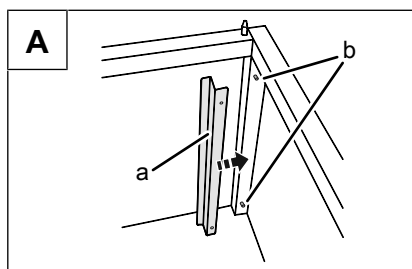


Image: A Stop profile, B Support rack

- a Stop profile
- b Pin

- c Outboard support rack
- d Inboard support rack

Requirement Pins installed in the uprights of the base frame

1. Place the stop profiles on the pins (at the back).
2. Install the support racks.

5.5 Aligning the unit

5.5.1 Aligning countertop units

Requirement Base frame levelled

- Level the unit by screwing the equipment legs in or out.
- Fill out the Commissioning report.

5.5.2 Aligning floor-standing units

ATTENTION

Risk of water discharge from leaking cooking zone

The cooking zone will leak if the tray trolley is not aligned.

- Operate a floor-standing unit only with the tray trolley.
- Align the tray trolley carefully.



The tray trolley is needed to align a floor-standing unit.

Prepare the tray trolley.

Aligning tray trolleys

Requirement The floor under and in front of the unit is flat

1. Level the unit by screwing the equipment legs in or out.
2. If the floor conditions are poor, insert spacers on the casters of the tray trolley.
3. Open the cooking zone door.
4. Move the tray trolley into the unit until it stops and check the alignment.
5. Close the cooking zone door.
 - ↳ The sheet metal seal on the tray trolley should make full contact (no gaps) with the door seal.
 - ↳ The shelves in the unit should be horizontal.
6. Fill out the Commissioning report.

Aligning the tray trolley with the insertion system

The Combisteamer can be equipped with the *EasyIn* insertion system(optional).

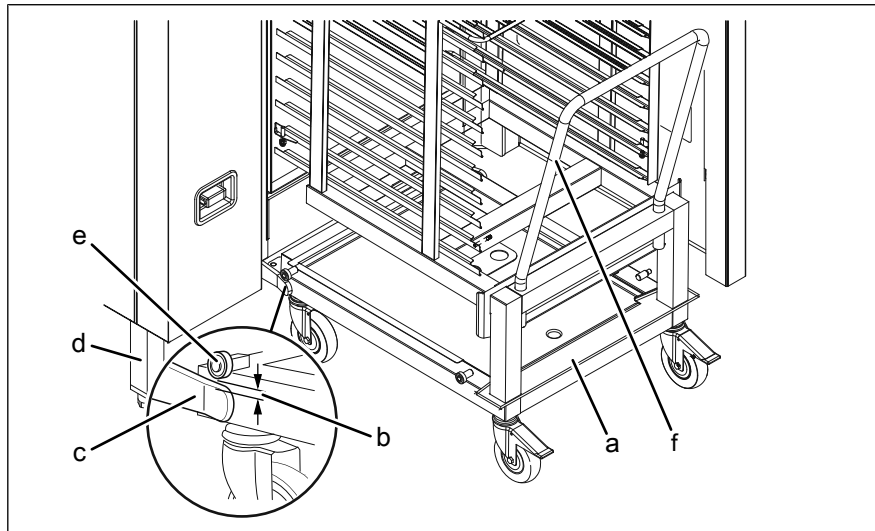


Image: Aligning the tray trolley with the insertion system

- | | |
|----------------|------------------|
| a Tray trolley | d Equipment leg |
| b Distance | e Support roller |
| c Guide rail | f Push handle |

1. Level the unit by screwing the equipment legs in or out.
2. Open the cooking zone door.
3. Place the tray trolley against the guide rails.
4. Screw the equipment legs in or out, until the support rollers are 1 mm — 5 mm above the guide rails.
5. Retract the tray trolley.
6. Level the guide rails.
7. Move the tray trolley into the unit until it stops and check the alignment.
 - ↳ The casters of the inserted tray trolley should no longer have floor contact.
8. Remove the push handle.
9. Close the cooking zone door.
10. Fill out the Commissioning report.

6 Connecting the unit



DANGER

Risk of personal injury and physical damage from electric shock

- Prior to working on the unit, ensure that the unit has been disconnected from the mains.
- Do not operate the unit with the housing open.



CAUTION

Risk of injury from sharp edges

- Wear protective gloves.

ATTENTION

Risk of physical 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 side wall

Removing the side wall

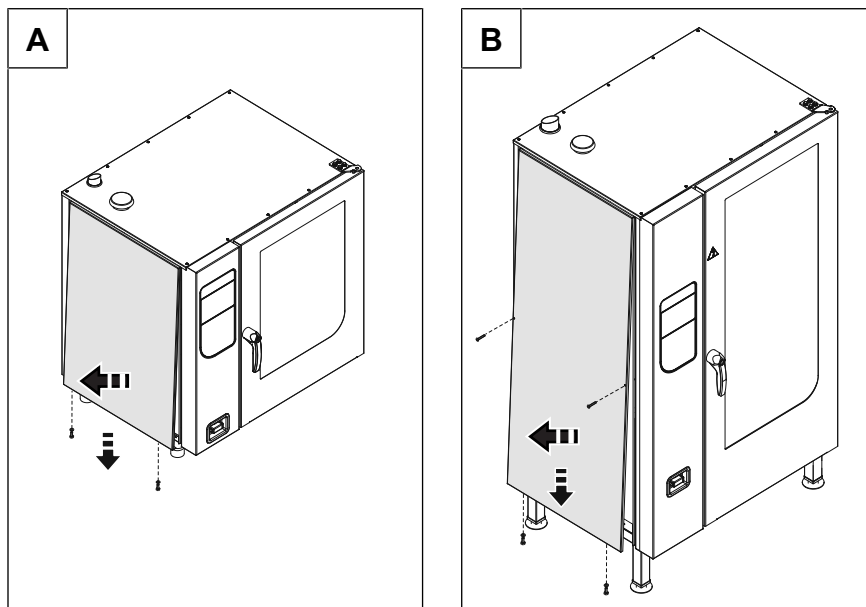


Image: A Size 6XX and 1XX; B Size 2XX

1. Unscrew the screws on the side wall.
2. Pull the bottom edge of the side wall forwards.
3. Remove the side wall.

Attaching the side wall

ATTENTION

Risk of physical damage from leaky housing

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

1. Insert the top edge of the side wall.
2. Carefully push the bottom of the side wall inwards.
3. Fasten the side wall with the screws.
4. Check that the side wall is in contact with the unit on all sides.

6.2 Making the power connection

The unit must be connected on the basis of the information on the nameplate and this manual.

ATTENTION

Risk of physical damage from incorrect connection voltage

- Before making the connection, measure the connection voltage and check the set voltage on the transformers in the unit.

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 Impressum).

Installation work

Electrical installation work must be carried out by an electrician. Comply with the local regulations of the electrical utility company.

Power connection cable

Minimum requirements for the unit's power connection cable to the electric mains:

Connection	Power connection cable
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 plug.	
Permanent connection for fixed installation with a permanently laid cable and direct connection to the unit.	PVC sheathed cable for permanent ducting 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 electrical connection, install an all-phase disconnect switch before the unit.
-

Install an all-phase disconnect switch if the unit will be connected permanently to the electric 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 power-supply mains, use plugs and sockets according to IEC60309.

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

Insulation monitoring

If there is an unearthed network (IT network), the unit can be incorporated into the insulation monitoring.

Fault current device

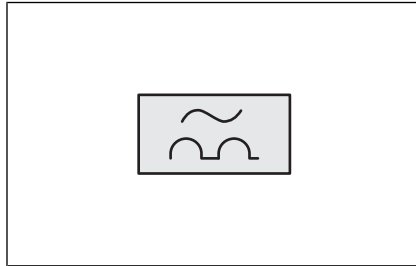


Image: RCD switch type A, circuit symbol

The unit can be connected to a fault current device.

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

Equipotential bonding

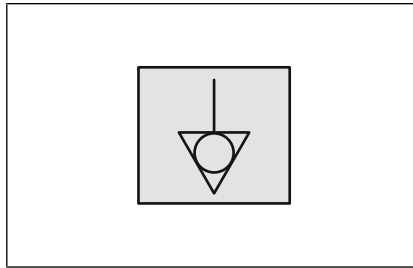


Image: Equipotential bonding symbol

The unit must be included in a potential equalisation system by means of appropriately sized wiring.

6.2.1 Matching the unit to the connection voltage



DANGER

Risk of personal injury and physical damage from electric shock

- Prior to working on the unit, ensure that the unit has been disconnected from the mains.
 - Do not operate the unit with the housing open.
-

ATTENTION

Risk of physical damage from incorrect connection voltage

- Before making the connection, measure the connection voltage and check the set voltage on the transformers in the unit.
-

When the unit is delivered, it is preset to a certain connection voltage or voltage range.

If the connection voltage on site differs from the preset connection voltage, damage to the unit can arise.

Before connecting the unit, the connection voltage must be measured and the transformers in the unit checked, and if necessary they must be reconnected.

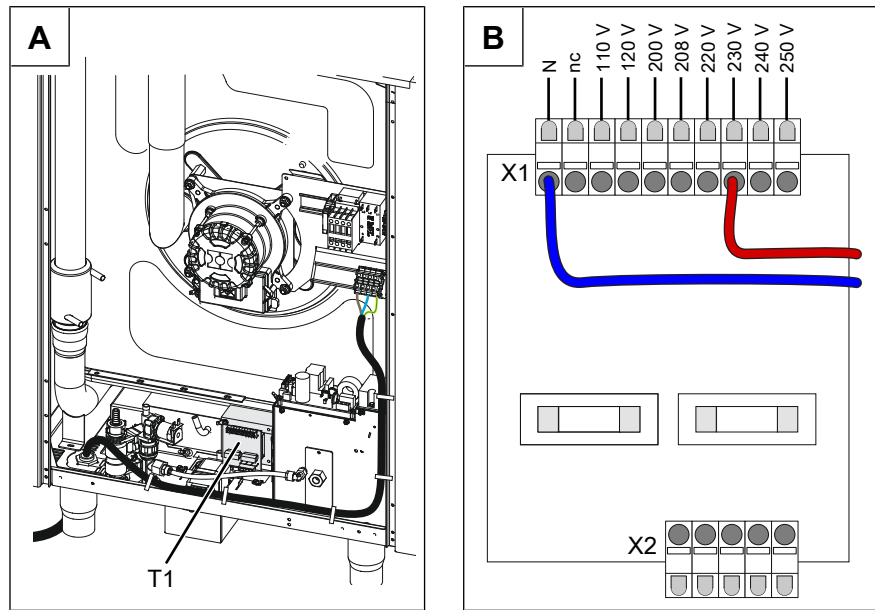


Image: A Transformer position T1; B Connection for transformer controls

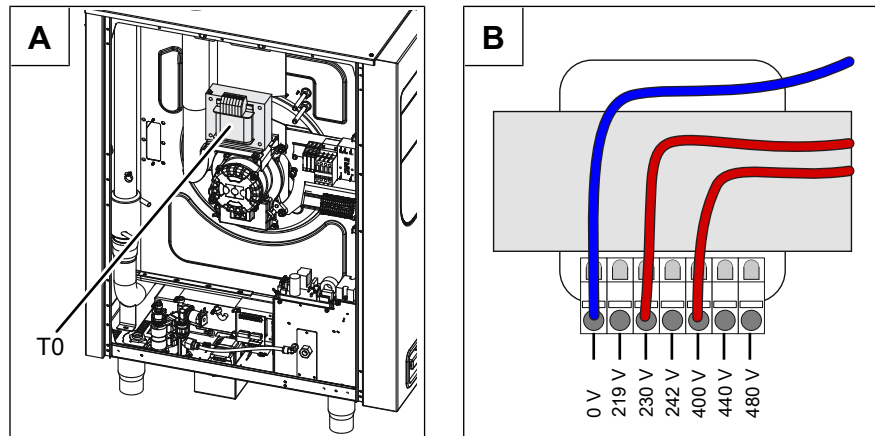


Image: A Transformer position T0, only for unit without neutral wire; B Transformer connection

Requirement Unit not live

Left side wall removed

1. Measure the connection voltage with a suitable measuring device.
 - ↳ The voltage range must match that on the nameplate.
 - ↳ If there are voltage fluctuations, the maximum expected voltage must be taken into account.
2. Check whether the transformer voltage is within the specified range (see "Equipment and connection data").
 - ↳ If the set voltage differs, match the transformer voltage by reconnecting.
 - ↳ Document the new voltage set on the sticker.
3. In the case of units with several transformers, repeat the procedure for each transformer.
4. Close the housing (see "Opening and closing the housing").
5. Fill out the Commissioning report.

6.2.2 Connecting the power connection cable



DANGER

Risk of personal injury and physical damage from electric shock

- Prior to working on the unit, ensure that the unit has been disconnected from the mains.
- Do not operate the unit with the housing open.



DANGER

Risk of personal injury and physical damage from electric shock

- Before connecting, ensure that the power connection cable has been disconnected from the power supply.
- Ensure that the power connection cable is undamaged.

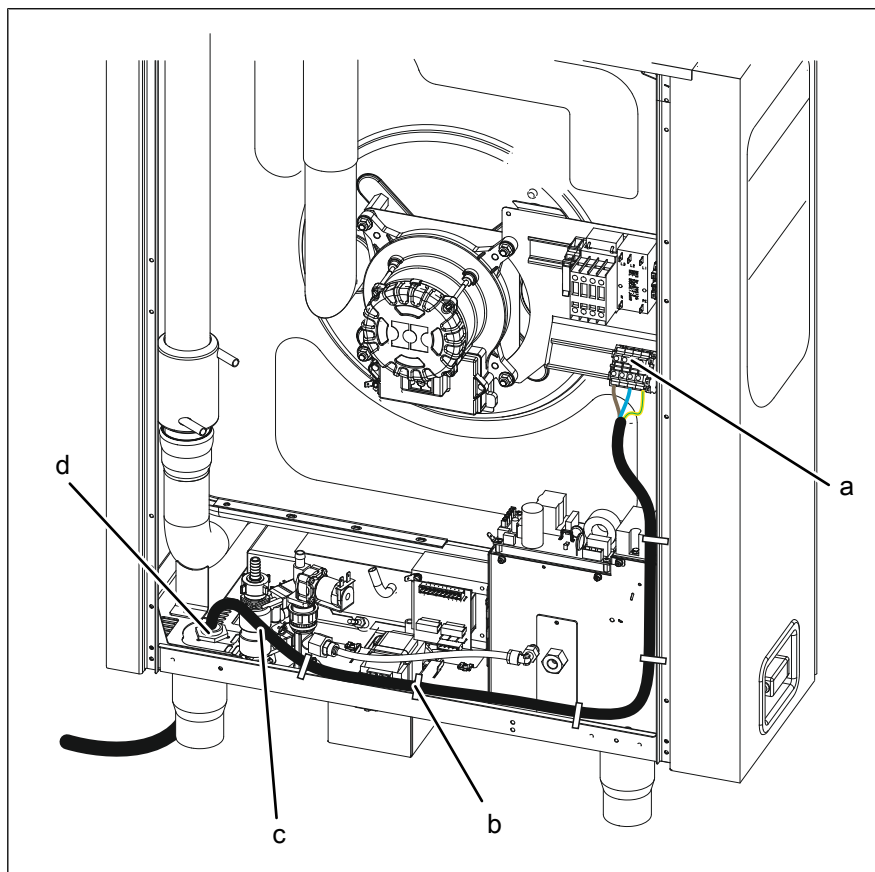


Image: Connecting the electric power cable

a Connection terminals
b Cable tie

c Electric power cable
d Cable gland

Requirement Unit not live

Power connection cable not live

Unit matched to the connection voltage

Side wall open

1. Route the power connection cable into the unit through the cable gland.
2. Connect the power connection cable in accordance with the wiring diagram.
3. Secure the power connection cable with cable ties.
4. Tighten the cable gland securely to provide strain relief.
5. Close the housing (see "Opening and closing the housing").
6. Fill out the Commissioning report.

6.2.3 Connecting the power optimisation system



DANGER

Risk of personal injury and physical damage from electric shock

- Prior to working on the unit, ensure that the unit has been disconnected from the mains.
 - Do not operate the unit with the housing open.
-



DANGER

Risk of personal injury and physical damage from electric shock

- Before connecting, ensure that the power connection cable has been disconnected from the power supply.
 - Ensure that the power connection cable is undamaged.
-

The unit can be connected to a power optimisation system.

Requirement Unit not live

Power connection cable not live

Housing opened

1. Pull the power connection cable into the unit through the cable gland.
2. Bring the power connection cable to the connection terminals.
3. Connect the power connection cable in accordance with the wiring diagram.
4. Secure the power connection cable with cable ties.
5. Register the power optimisation system in the basic control settings (see "Making the basic control settings").
6. Fill out the Commissioning report.

6.2.4 Connecting to the potential equalisation circuit

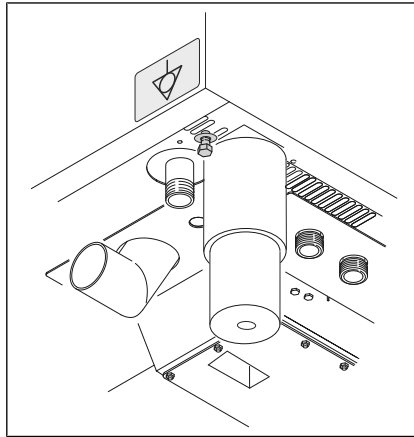
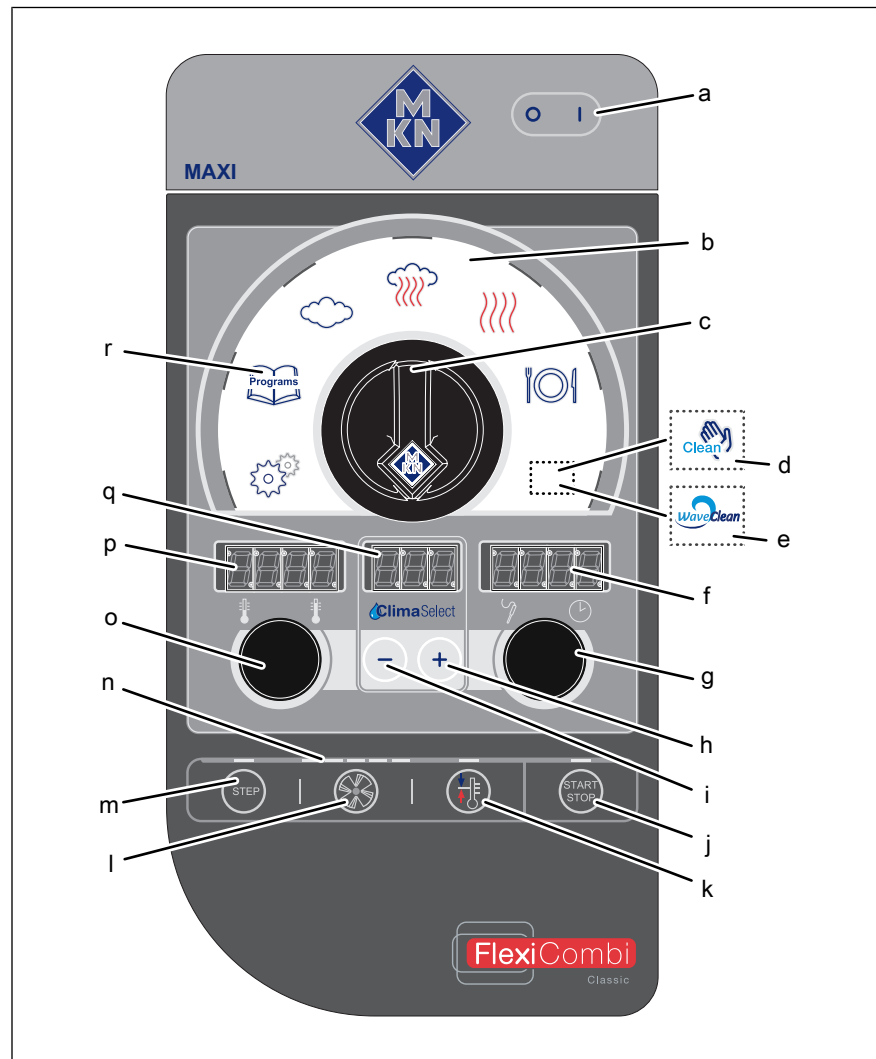


Image: Connecting the potential equalisation circuit

1. Run and attach potential equalisation line to the identified terminal.
2. Fill out the commissioning report.

6.3 Making the basic control settings



- | | | | |
|---|---------------------|---|---------------------|
| a | On Off "I O" button | j | "START STOP" button |
| b | Selection range | k | Ready2Cook button |
| c | Select knob | l | Fan speed button |
| d | HandClean symbol | m | "STEP" button |
| e | WaveClean symbol | n | Indicator light |
| f | Right display | o | Left knob |
| g | Right knob | p | Left display |
| h | Plus button | q | Middle display |
| i | Minus button | r | "Programs" button |

6.3.1 Calling up the Setting menu

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

Requirement The unit is on

1. Turn the *Select* knob to the *Settings* symbol.
 - ↳ The indicator light illuminates.
 - ↳ The left display shows "PASS".
 - ↳ The right display flashes "0000".
 2. Use the right knob to set the password.
 - ↳ The right display shows the set password.
 3. Press the "START STOP" button.
 - ↳ The left display flashes "HAC".
 4. Use the left knob to select OPT.
 - ↳ The left display flashes "OPt".
- ↳ The basic settings can be changed.

6.3.2 Changing the basic control settings

1. Press the "START STOP" button.
 - ↳ Left display flashes the basic setting parameter (see "Equipment and connection data").
 - ↳ "OPt" appears on the centre display.
 - ↳ The right display shows the first set value.
2. Turn the left knob.
 - ↳ Set number.
3. Press the "START STOP" button.
 - ↳ The basic setting can be adjusted.
4. Turn the right knob.
 - ↳ Set new value.
5. Press the "START STOP" button.
 - ↳ Accept changes.
6. Press and hold the "STEP" button for 3 seconds.
 - ↳ Changes are saved.
 - ↳ "OPt" flashes on the left display.
 - ↳ The centre display shows "Stor".
7. Press the "STEP" button to leave the Settings menu.
8. Fill out the commissioning report.

6.4 Making the water connection

Installation work involving drinking water must be performed by an authorised plumbing contractor.

Observe applicable regional regulations with regard to drinking water installations and connection data (see "Equipment and connection data").

The unit has a connection for permanent attachment the drinking water system.

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 backflow preventer.

ATTENTION

Risk of physical damage from the wrong water quality

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



Always connect both water connections to the unit.

6.4.1 Connecting the tap water connection line

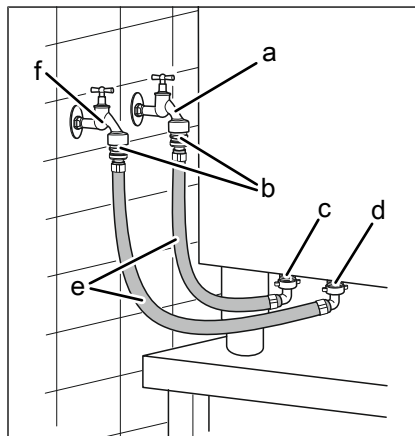


Image: Water connection

- | | |
|-------------------------|-----------------------------|
| a Soft water | d Tap water connection |
| b Backflow preventer | e Tap water connection line |
| c Soft water connection | f Tap water |

Requirement Water pressure complies with the specified range (see "Equipment and connection data")

Backflow preventer installed

The connection lines are pressure-tight and suitable for tap water

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

6.4.2 Connecting softened tap water to both connections

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

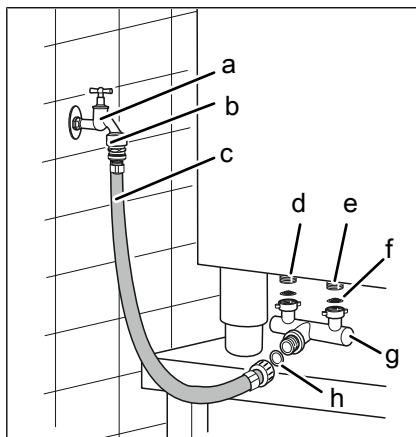


Image: Connecting softened tap water to both connections

- | | |
|---------------------------------|------------------------|
| a Softened tap water | e Tap water connection |
| b Backflow preventer | f Dirt filter |
| c Connection line | g T-piece |
| d Softened tap water connection | h Seal |

Requirement Water pressure complies with the specified range (see "Equipment and connection data")

Backflow preventer installed

The connection line is pressure-tight and suitable for tap water

1. Connect the connection line to the tap water valve for soft water using a seal.
2. Flush the connection line thoroughly.
3. Insert dirt filters into the water connections on the unit.
4. Connect the T-piece to the unit.
5. Connect the connection line for soft water to the T-piece using a seal.

6. Open the tap water valve and check the threaded connectors for leaks.
7. Fill out the Commissioning report.



6.5 Making the wastewater connection

Installation work involving wastewater must be performed by an authorised plumbing contractor.

Observe the applicable regional regulations of the sewage utility involved.

6.5.1 Determining the type of connection to the sewer system

The units can be equipped with either an automatic or manual cleaning system. The symbol on the control unit indicates which cleaning system is installed.

Cleaning system	Type of connection to the sewer system
 Automatic cleaning system	Permanent connection , with on-site waste trap: Install a vacuum breaker in the wastewater line.
 Manual cleaning system	Unobstructed discharge with funnel waste trap: With an on-site waste trap, connect only discharge funnel.

6.5.2 Connecting the wastewater line to a permanent connection

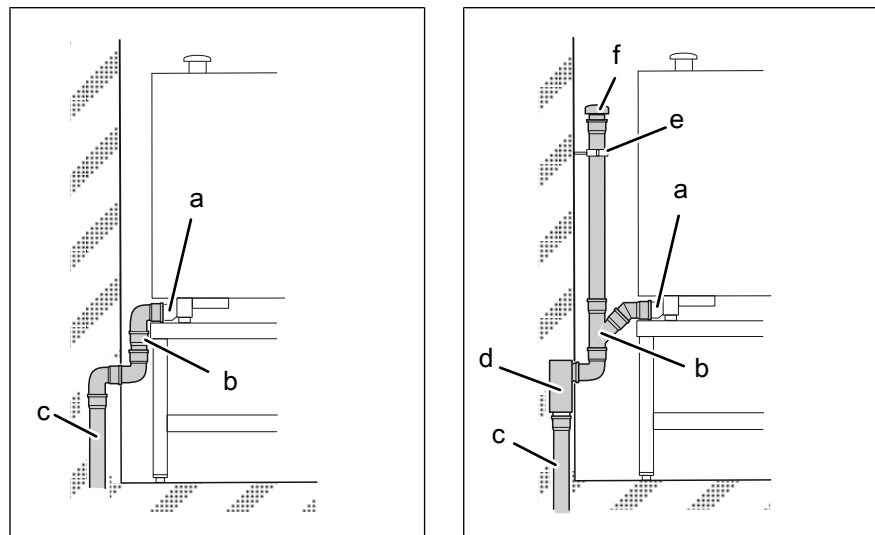


Image: Wastewater line to a permanent connection

- | | |
|-------------------------|---------------------------|
| a Wastewater connection | d Sewer system waste trap |
| b Wastewater line | e Pipe clamp |
| c Sewer system | f Vacuum breaker |



If a waste trap is installed in the wastewater system, a vacuum breaker must be installed in the wastewater line.

Requirement Wastewater line complies with the specifications (see "Equipment and connection data")

1. Install the wastewater line up to the connection at the sewer system.
2. Secure the wastewater line with pipe clamps.
3. Fill the waste trap on the unit with tap water.
4. Fill out the Commissioning report.

6.5.3 Connecting a wastewater line with an unobstructed discharge

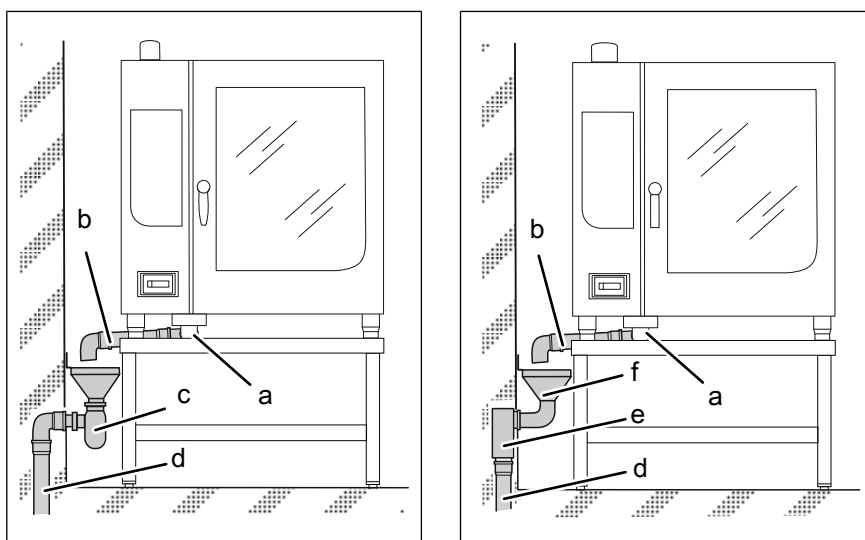


Image: Connecting a wastewater line with an unobstructed discharge

- | | |
|-------------------------|---------------------------|
| a Wastewater connection | d Sewer system |
| b Wastewater line | e Sewer system waste trap |
| c Funnel waste trap | f Discharge funnel |



Connect only the discharge funnel if a wastewater trap is installed in the wastewater system.

Requirement Wastewater line complies with the specifications (see "Equipment and connection data")

1. Connect the discharge funnel with waste trap to the sewer system.
2. Connect the wastewater line to the unit and route it as far as the discharge funnel.
3. Secure the wastewater line with pipe clamps.
4. Install the outlet of the wastewater line 20 mm above the discharge funnel.
5. Fill the discharge funnel with tap water.
6. Fill out the Commissioning report.

6.6 Making the exhaust air connection

When setting up the unit under a ventilation system, observe the regional regulations for heating, ventilation and air conditioning systems.

ATTENTION

Risk of physical damage from fouling of the exhaust air ducts

- Do not connect the exhaust air line directly to the ventilation system.

ATTENTION

Risk of corrosion damage from condensate

- Install the exhaust air line such that condensate cannot collect.
-

6.6.1 Connecting the exhaust air line

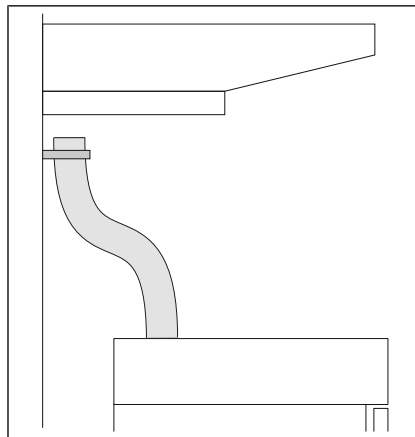


Image: Connecting the exhaust air line

Requirement Exhaust air line complies with the specifications (see "Equipment and connection data")

1. Connect the exhaust air line to the steam outlet.
2. Route the exhaust air line with a 3° rise as far as the ventilation system.
3. Fasten the end of the exhaust air line 50 mm — 200 mm underneath the ventilation system.
4. Fill out the Commissioning report.

7 Checking operation



DANGER

Risk of personal injury and physical damage from unsuccessful operational check

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

Requirement Power connection made
 Water connection made
 Wastewater connection made
 Unit cleaned

7.1 Checking the controls

1. Switch on the unit and start any cooking program (see Operating instructions).
 - ↳ Set the cooking zone temperature to a higher temperature than the current cooking zone 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 Commissioning report.

7.2 Checking the monitoring of the cooking zone door

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

8 Putting the unit into service



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

- Requirement**
- Power connection made
 - Water connection established
 - Wastewater connection established
 - Exhaust connection made (if required by the customer)
 - Operation successfully checked
 - Housing closed
1. Instruct the operator.
 2. Fill out the commissioning report.

8.1 Filling out the Commissioning report

General		Yes	No
Information from the nameplate entered? SN: _____ Typ: _____ E: _____ Bez: _____ Item-Nr.: _____ (if listed)		<input type="checkbox"/>	<input type="checkbox"/>
Obvious damage to the unit? What and where?: _____		<input type="checkbox"/>	<input type="checkbox"/>
Unit levelled?		<input type="checkbox"/>	<input type="checkbox"/>
Electrical connection		Yes	No
Power connection made properly?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Equipotential bonding	<input type="checkbox"/> Power optimizing system		
<input type="checkbox"/> Floating contact	<input type="checkbox"/> ...		
Electrical connections made properly?		<input type="checkbox"/>	<input type="checkbox"/>
Residual-current protective device connected immediately before this unit?		<input type="checkbox"/>	<input type="checkbox"/>
Residual-current protective device connected before this and other units?		<input type="checkbox"/>	<input type="checkbox"/>
Connection voltage measured? Connection voltage: _____ (V)		<input type="checkbox"/>	<input type="checkbox"/>
Set transformer voltage T0: 0 V _____ V _____ V; T1: blue 0 V red _____ V; T2/T3: blue _____ V red _____ V			

Basic control setting		Yes	No
Unit of temperature set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> °C	<input type="checkbox"/> °F		
Altitude set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 0 — 999 m	<input type="checkbox"/> 1000 m — 1999 m		
<input type="checkbox"/> 2000 m — 2499 m	<input type="checkbox"/> 2500 m or higher		
80 % power set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 100 %	<input type="checkbox"/> 80 %		
Current voltage set?		<input type="checkbox"/>	<input type="checkbox"/>
Voltage: _____ V			
Audible signal volume set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> quiet	<input type="checkbox"/> loud		
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 optimisation system set?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> On	<input type="checkbox"/> Off		

Water connection		Yes	No
Connection pressure within indicated range?		<input type="checkbox"/>	<input type="checkbox"/>
Connection pressure: _____ (_____) kPa (bar)			
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 tap water	<input type="checkbox"/> Connected only to tap water		

Wastewater connection		Yes	No
Wastewater connection made properly?		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Waste trap in the building	<input type="checkbox"/> Aerator		
<input type="checkbox"/> Funnel drain	<input type="checkbox"/> Floor gutter		
Connection dimension of wastewater line: _____ mm			

Exhaust air connection		Yes	No
Setting up below ventilation system?		<input type="checkbox"/>	<input type="checkbox"/>
Connected to exhaust air duct?		<input type="checkbox"/>	<input type="checkbox"/>
Connection dimension of exhaust air line: _____ mm			
Length of exhaust air line: _____ mm			

Function check		Yes	No
Controls are functioning?		<input type="checkbox"/>	<input type="checkbox"/>
Monitoring of the cooking zone door is functioning?		<input type="checkbox"/>	<input type="checkbox"/>

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Putting the unit into service

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 provided by:			
Company	Installer	City, date	Signature

Water installation was provided by:			
Company	Installer	City, date	Signature

Wastewater installation was provided by:			
Company	Installer	City, date	Signature

Exhaust air connection was provided by:			
Company	Installer	City, date	Signature

The function check was performed by:			
Company	Installer	City, date	Signature

Operator training was provided by:			
Company	Installer	City, date	Signature

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