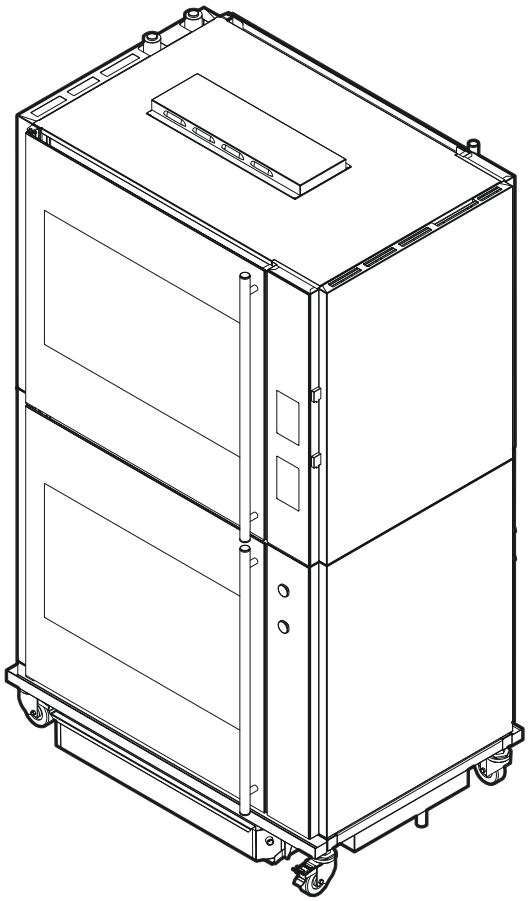
LDR 9+9 S AC

Installation manual, from serial number: 100134710
208V - USA



Document number: 500018405

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1 About this document

1.1 About the unit in this document

This document is applicable to this unit: LDR 9+9 S AC.



Note: For the identification of the model type, refer to the name plate.

1.2 Function of this document

This document has the information and instructions for the approved installation engineer to install the unit.
For the requirements of the approved installation engineer, refer to section *2.3*.

1.3 Revision information

Version	Date	Description
001	October, 2026	Initial version

1.4 Conventions

1.4.1 Language

The original instructions of this document are in English (EN-US). All other language versions are translations of the original instructions.

1.4.2 Illustrations

The illustrations in this document show a typical unit with related parts. Small differences between the illustrations and your unit are possible. These differences do not have an effect on understanding the information in this document. The illustrations are for instruction and description only.

1.4.3 Units of measurement

United States customary units are used in this document for the measurable parameters of the unit. All other possible units are conversions of the United States customary units. If the document has other units, these are between parentheses after the United States customary unit, or in different columns in a table.

1.4.4 Signal words used in the document

Signal word	Meaning	Symbol
Warning	Injury or death is possible, if you do not obey these instructions	
Caution	Damage to the unit or equipment is possible, if you do not obey these instructions	
Note	More information	

1.4.5 Symbols used in the document

Symbol	Description
	Preliminary requirement: supplies and consumables that are necessary for a procedure
	Preliminary requirement: condition of the unit before you start the procedure
	Preliminary requirement: support equipment or tools that are necessary for a procedure

1.4.6 Typographical conventions

If the sequence is important, the lists and steps in procedures have numbers (123) or letters (abc).

1.5 How to use the document

1. Make sure that you know the structure and contents of this document.
2. Specially read the safety chapter and make sure that you know all the instructions.
3. Do the steps in the procedures fully and in the correct sequence.

1.6 Related documents

Document name	Document code	Target group
Installation manual		Installation engineer
Service manual		Service engineer
Appendix		Service engineer
General Terms and Conditions for Sales and Delivery		All users

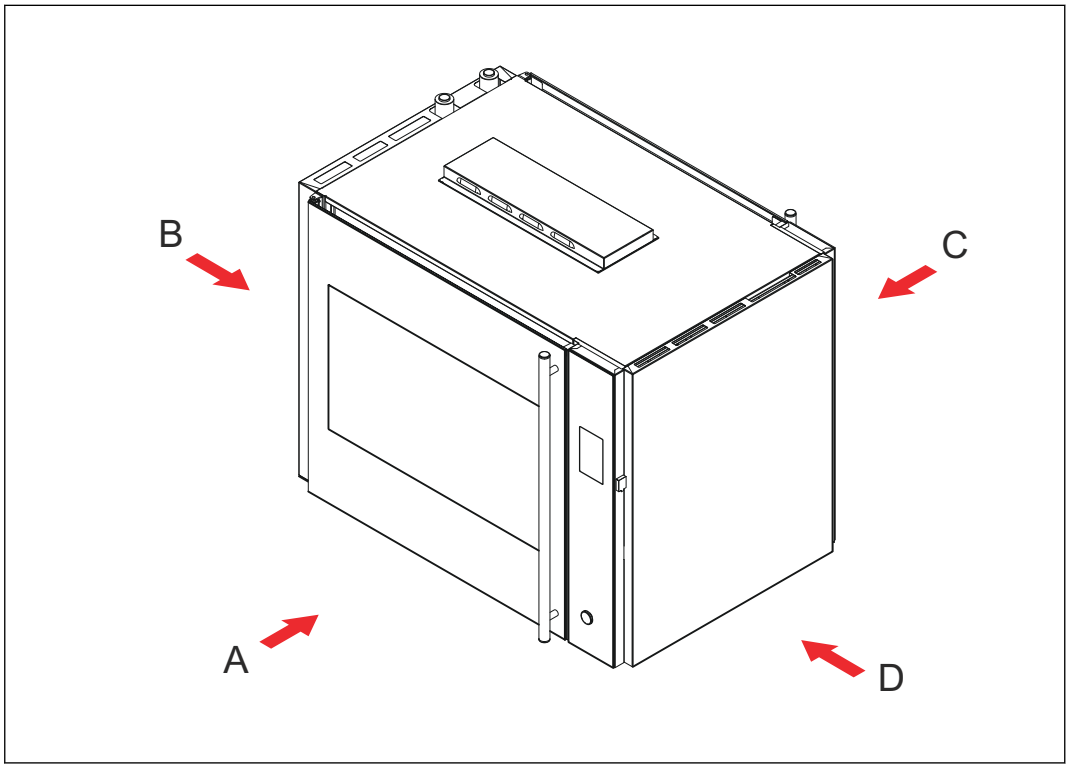
1.7 Abbreviations

Abbreviation	Definition
LDR	Large Deli Rotisserie
AC	Auto Clean

1.8 Terminology

Term	Definition
Food product	A food product is a product that is intended for human consumption.

1.9 Orientation agreements



A Front side
B Left side
C Rear side
D Right side

1.10 Disclaimer

Fri-Jado reserves the right to change the document without the obligation to notify any person.

1.11 Disclaimer and use of glass

This unit contains components made of tempered glass. Although tempered glass is designed to withstand increased mechanical stress, it remains susceptible to breakage if handled improperly, subjected to point loads, impact, or thermal stress.
When performing service or maintenance work on this unit, the user must at all times wear appropriate personal protective equipment, including but not limited to:

1. Protective gloves
2. Eye protection (safety glasses)

The glass must be handled with extreme care. Avoid impacts, dropping, twisting, or contact with hard or sharp surfaces. When the glass is removed, placed aside, or stored, it must be positioned only on a protected surface, preferably:

1. a soft cloth, or
2. cardboard, or
3. another flat, shock-absorbing material.

Failure to comply with these safety instructions may result in glass breakage or shattering, which can lead to personal injury and/or damage to the unit. The manufacturer accepts no liability for damage or injury resulting from improper handling or failure to follow these instructions.

1.12 Warranty

Fri-Jado advises you to refer to the supplier for the warranty.

2 Safety

2.1 Intended use

The machine is used to prepare food products. If you use the unit for a different function, this is misuse.

2.2 Liability

The supplier accepts no liability whatsoever for loss or injury caused by failing to strictly adhere to the safety guidelines and instructions in this manual or due to carelessness and misuse during installation, operation, maintenance and repair of the unit referred to in this manual and any of its accessories.
In case of unauthorized modifications in or on the unit, every liability on the part of the supplier becomes null and void.

2.3 Approved installation engineer

- The approved installation engineer knows the unit and its safe installation.
- The approved installation engineer obeys all local rules and the instructions in the installation manual.

2.4 General safety instructions



Note: This document, the related documents, and the warnings included do not replace your responsibility to use your common sense when you do work on the unit.

- Keep this document in a safe place for future use.
- Only do the procedures that the related documents show and that you are approved for.
- Do not make changes to the unit without the written approval from the supplier.
- Obey all the preliminary requirements of the procedures.
- Put on the correct personal protective equipment.
- Do not use the unit when a safety device or a cover is removed, does not operate, or if you think that it does not operate.
- If you remove safety devices, make sure that you install the safety devices again before operation.
- Obey the local rules and the instructions in this document. If the local rules do not agree with the instructions in this document, the local rules will apply.
- Keep the unit in good condition. Make sure that defective parts are replaced immediately.
- Keep the working area of the unit clean.
- Make sure that at least two brakes on the wheels are applied.
- Make sure that the unit is electrically grounded.

2.4.1 Eye and face protection

- Wear closed safety glasses. Refer to EN 166.

- Make sure that eye wash fountains are available in the vicinity of any potential exposure.

2.4.2 Skin protection

- Wear suitable protective clothing. Refer to EN ISO 13688.
- During cleaning, wear resistant protective gloves. Replace the gloves after each use and when the gloves have signs of wear of perforation.
- After operation, use thermal insulated gloves when you remove the accessories from the unit.

2.4.3 Respiratory protection

- In case of insufficient ventilation, wear suitable respiratory equipment.

2.5 Safety instructions for the unit

Note: You can refer to the Safety Data Sheet of ProteClean (daily clean) and RotiShine (descale) in the resource library.

2.6 Safety instructions for installation

- Make sure that you are an approved installation engineer.
- Be careful when you do maintenance on the unit. The unit can be hot.

2.7 Signs on the unit



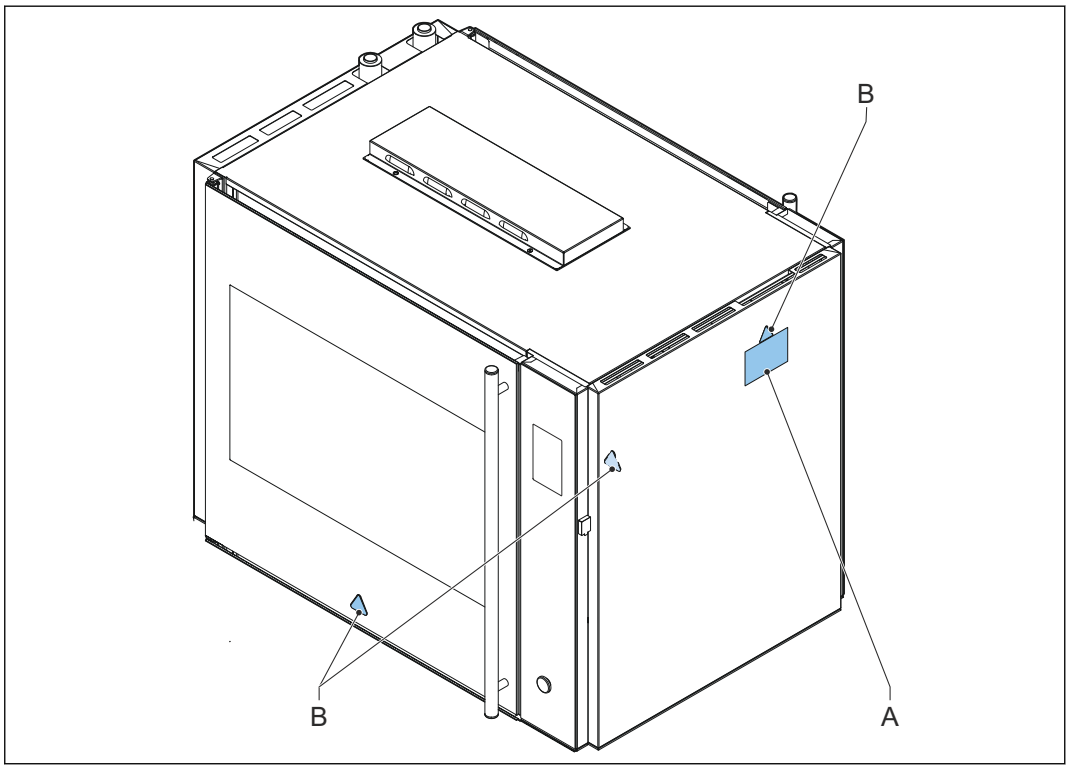
Warning: Do not remove the signs from the unit.



Warning: If a sign on the unit has damage, make sure to replace the sign immediately.

Symbol	Name of the sign	Step to decrease the risk of injury
	Hot surface	Do not touch this surface.
	High voltage	Set the unit to standby mode. Disconnect the power supply before you open the technical area.

2.8 Location of signs on the unit



A Name plate B Safety sign

2.9 Discard the unit or the unit parts

- Obey the local rules to discard the unit, parts, or consumables.

3 Description

3.1 Name plate

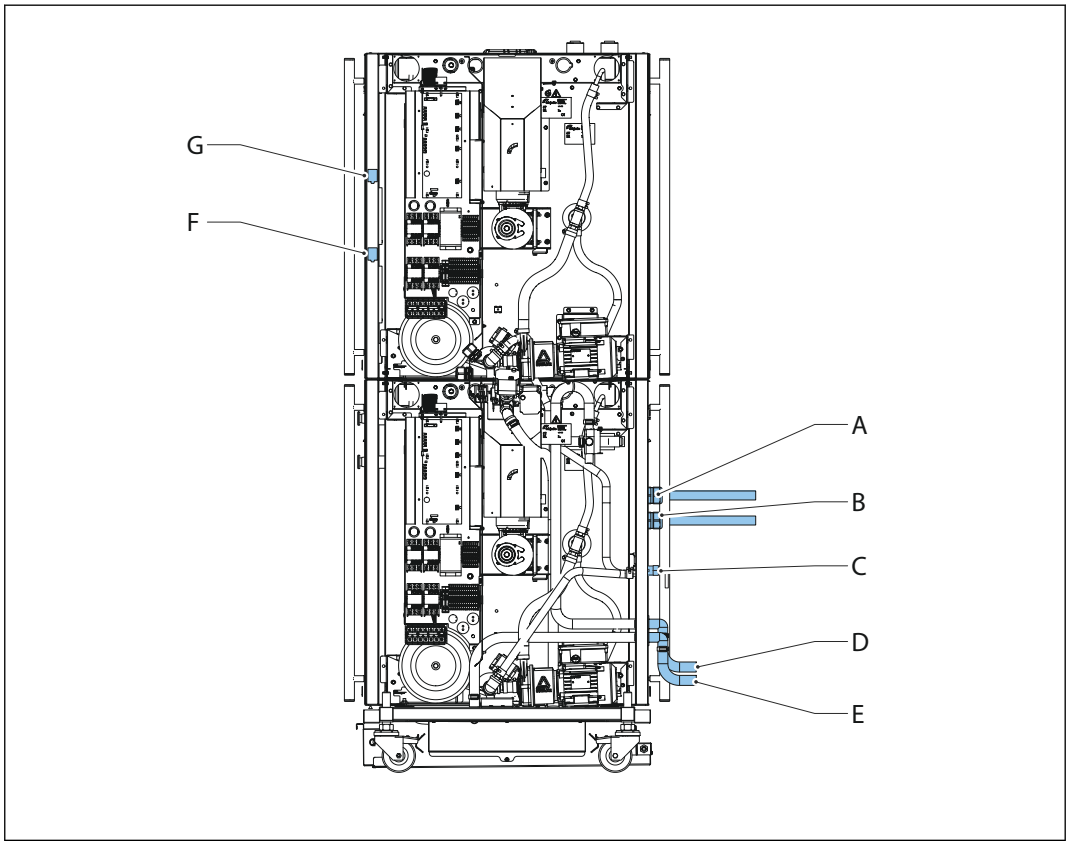


A Name of manufacturer and QR code
B Unit data
C Quality data

3.2 Contact information

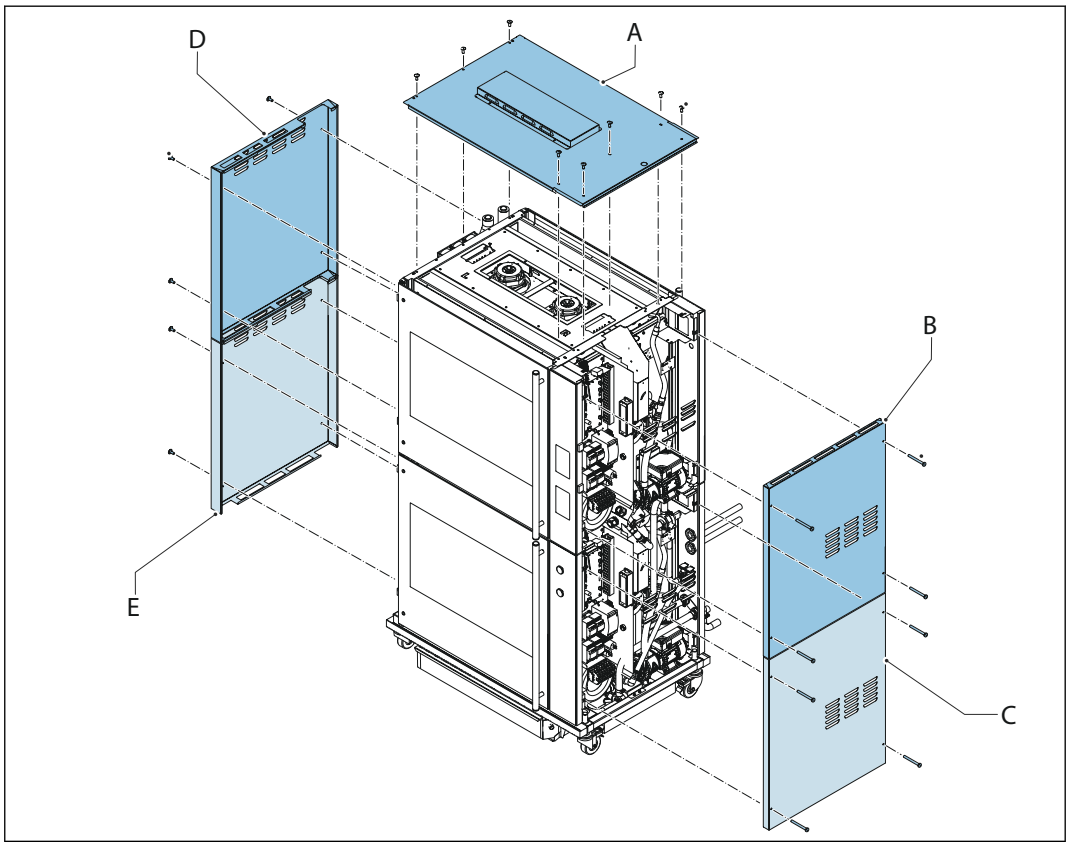
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+18773745236

3.3 Overview of the connections



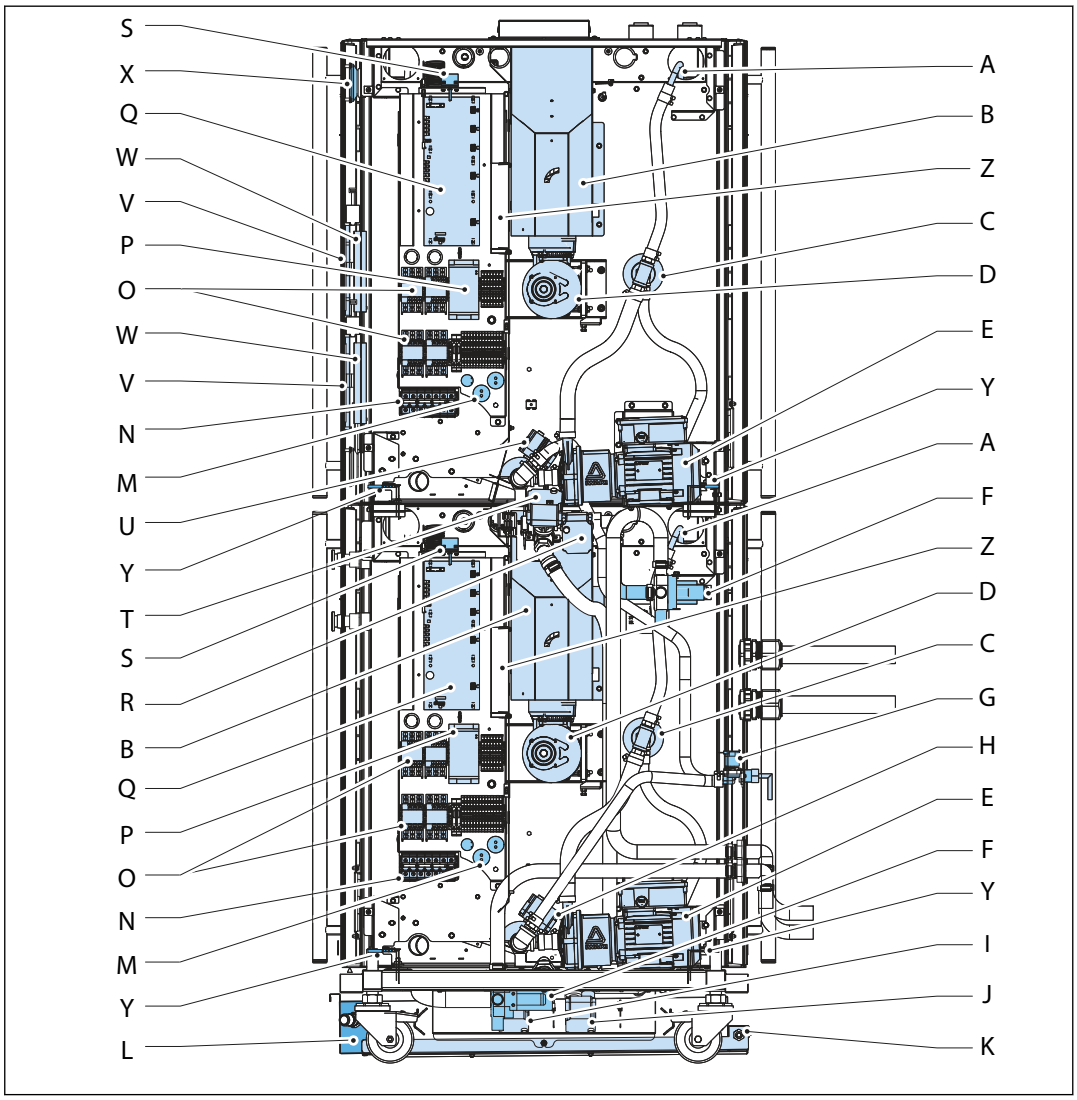
A	Power connection (upper unit)	E	Drain connection (lower unit)
B	Power connection (lower unit)	F	USB port (lower unit)
C	Water connection	G	USB port (upper unit)
D	Drain connection (upper unit)		

3.4 Locations for access to the parts



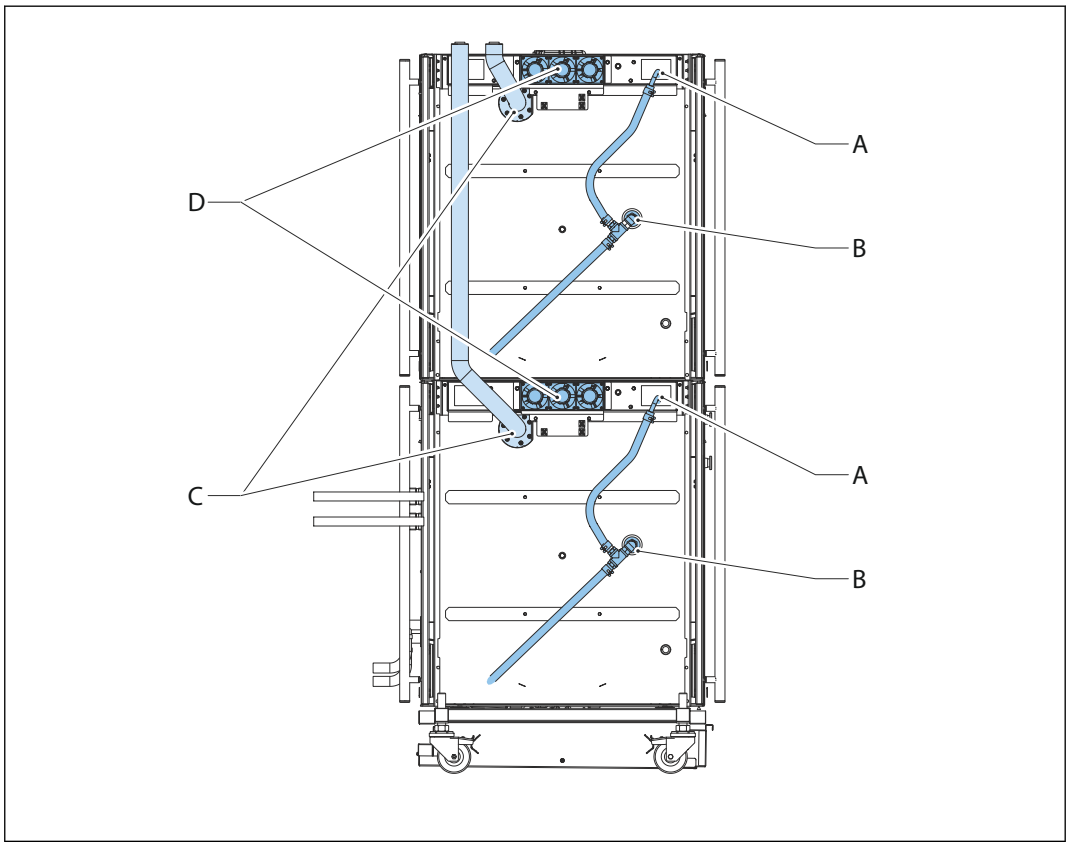
A	Top panel	D	Upper left panel
B	Upper right panel	E	Lower left panel
C	Lower right panel		

3.5 Overview of the parts - right side



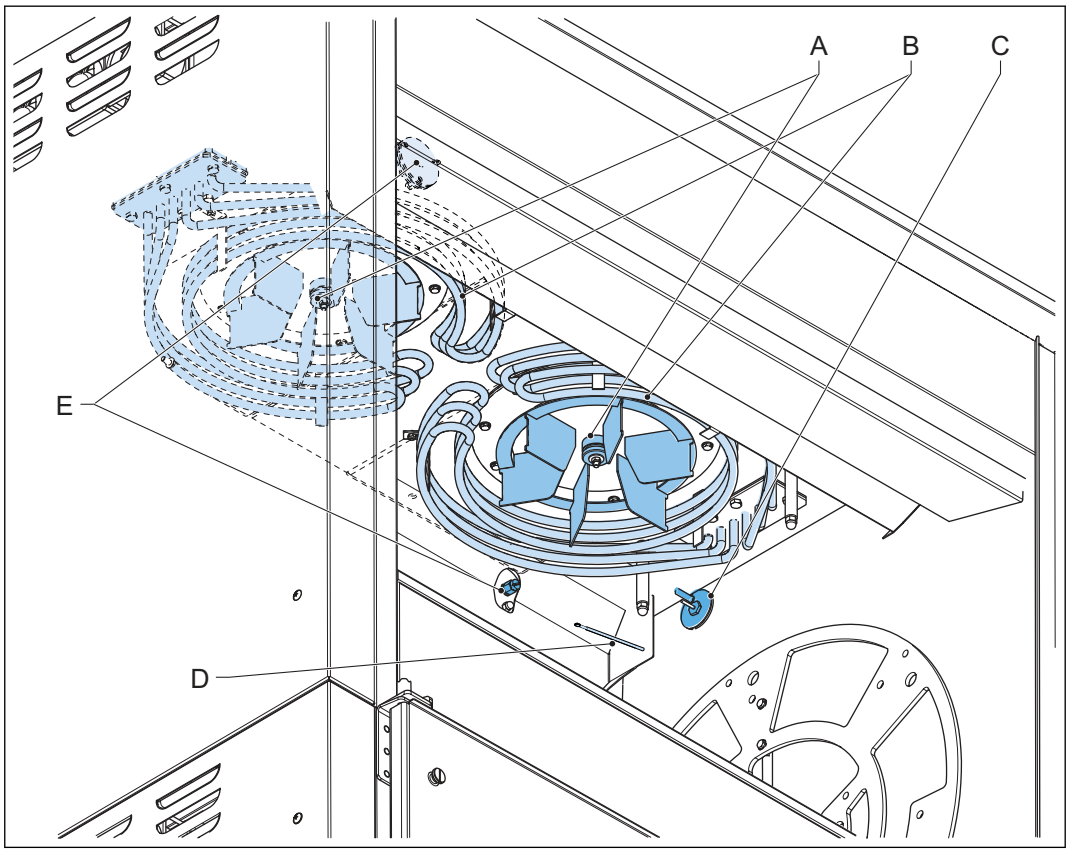
A	Spray connections	N	Mains connection blocks
B	Air guides	O	Contactors
C	Spray arm connections	P	Power supplies + 24 V DC
D	Rotor motors	Q	I/O boards
E	Pumps (Auto Clean)	R	Motor valve of the water drain (upper unit)
F	Drain pumps	S	High limit thermostats
G	Water inlet valves	T	Motor valve of the grease drain (upper unit)
H	Motor valve of the suction side (lower unit)	U	Motor valve of the suction side (upper unit)
I	Motor valve of the grease drain (lower unit)	V	Touchscreens and CPU boards
J	Motor valve of the water drain (lower unit)	W	CPU boards
K	Grease container heating	X	Speaker
L	Grease container	Y	Door sensors
M	Capacitors	Z	LED drivers

3.6 Overview of the parts - left side



A	Spray connection	C	Air and steam outlet
B	Spray arm connection	D	Cooling fans

3.7 Overview of the parts - inside (without fan plate)



A Blower with blower fan
B Heating element
C Temperature sensor (PT1000)
D High limit capillary (outside the cavity between insulation and sheet metal)
E Top sprayer nozzle

3.8 User interface

3.8.1 Manager settings

Note: If applicable, you can use the PIN code to get access to the manager settings: 1111.

Note: For the default settings, refer to the relevant and latest settings list.

Menu (Level 1)	Menu (Level 2)	Description
Change PIN		To change the pin code for the manager.
Toggle light		To set the interior light to on or off.
Temperature unit		To set the temperature unit. [C, F]

Menu (Level 1)	Menu (Level 2)	Description
Volume unit		To set the volume unit. [Gallons]
UTC Time	Hours	To set the hours of the local time. [0–23]
	Minutes	To set the minutes of the local time. [0–59]
UTC Date	Year	To set the years of the date. [2020–2050]
	Month	To set the months of the dates. [1–12]
	Day	To set the days of the date. [1–31]
Timezone offset		To set an offset to the local timezone. [-12–12]
Time format		To set the time format. [24h, AM/PM]
Date format		To set the date format. [D/M/Y, M/D/Y]
Start delay recipe		To set the start a recipe with a delay. [Off, On]
Alarm		To set the alarms to on or off. [Off, On]
End-user recipe editing		To enable the user to change and save recipes. [No, Yes]
Ask weight		To set the ask weight question. [Off, On]
Preheat mode		To set the preheat mode. [No, 1x, Continue] !x: one time at the beginning of the day Continue: at the beginning of each recipe
Preheat temp default		To set the default preheat temperature. [68–482 F]
Eco function		To set the eco function to on or off. [Off, On] The eco function saves energy to use latent heat at the end of the recipe.
Audio	Audio setting	To set the audio tone. [1–11]
	Audio factor	To set the volume of the audio. [1–100]
	Test audio	To do a test of the current audio settings.
	Sound set	To set the audio sound. [Marimba, Bell, Beeper]

Menu (Level 1)	Menu (Level 2)	Description
Keyboard beep		To set the sound when you use the touchscreen to on or off. [Off, On]
Filter capacity		To set the filter capacity of the used water filter system in relation to the water quality on site. [50–3000, ∞]
Lime filter		To show the filter capacity of the lime filter as a percentage.
Lime filter replaced		To reset the counter when the lime filter is replaced.
Clean screen time		To set the time for cleaning the touchscreen without a response of the controller. [10–60 seconds]
Store Number		To set the store number.
Reference cook		To select a reference program for cooking correction.
Recipes -> USB		To copy all recipes from the unit to a USB flash drive.
Recipes <- USB		To copy all recipes from a USB flash drive. to the unit.
Add recipes <- USB		To copy selected recipes from a USB flash drive. to the unit.
Cloud setings	Cloud username	To set the username of the cloud.
	Cloud Password	To set the password of the cloud.
Reset hard		To do a hard reset of the unit. [no, yes]

3.8.2 Service settings

Note: You can use the PIN code to get access to the service settings: 4878

Note: For the default settings, refer to the relevant and latest settings list.

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
Configuration	Device type		To set the correct type of unit.
	R6 output function		To set the R6 output function. [Backflush valve, Heater Safety]
	Pressure sensor		To set the pressure sensor. [Off, On]
	Customer ID		To set the customer ID. [0–9]
	Hood		To set whether the hood is installed. [Off, On]
	Lights out		To set the lights. [Disabled, Enabled]
	Auto off time		To set the unit to off automatically when you do not operate the machine. [1–240]
Smart Temperature			To set the smart temperature function. [Off, On]
Autocorrect			To set the autocorrect function. The autocorrect function adds time to the remaining time based on the quantity of the product and temperature loss.
Language			To set the language of the user interface.
Save error history			To save the error history.
Erase error history			To delete the error history.
Generate error			TBD
Demo mode menu	Demo mode		To set the demo mode of the unit to on or off. [Off, On]
Change PIN	Enter a new pincode		To set the pin code. The default pin code is 1111. If you set the pin code to 0000, it is not necessary to enter a pin code to get access to the manager settings.
Sensor offset			To set the sensor offset. [-30–30]
Cleaning	Cleaning temp	Clean Temp 1	To set the cleaning temperature during cycle 1.
		Clean Temp 2	To set the cleaning temperature during cycle 2.

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
		Clean Temp 3	To set the cleaning temperature during cycle 3.
		Quick CL Temp	
		Descale Temp	To set the descaling temperature.
		Soap safe temp	To set the safe temperature to cool down before soap can be added at the beginning of the cleaning cycle.
		Cooling temp	To set the temperature before the cleaning cycle starts.
	Cleaning times	Hot rinse time 1	To set the time for hot rinsing step in cleaning cycle 1.
		Hot rinse time 2	To set the time for hot rinsing step in cleaning cycle 2.
		Hot rinse time Q CL	
		Hot rinse time Desc.	
		Cold rinse time 1	
		Cold rinse time 2	
		Cold rinse time Q CL	
		Cold rinse time Desc.	
		Drain time	To set the time for the drain open step in the cleaning cycle.
		Flush time	To set the time for flush step in the cleaning cycle.
		Drain backflush time	To set the time for the drain backflush step in the cleaning cycle.
		Final time	To set the time for the final step in the cleaning cycle.
		Shine rinse time	To set the time for shine rinsing step in the cleaning cycle.
	Clean water supply	Supply time 1	To set time 1 to fill the unit with clean water.

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
		Supply time 2	To set time 2 to fill the unit with clean water.
		Add water interval	To set the interval time to add water during cleaning.
		Add water time	To set the time to add water during cleaning.
	Clean sanitation	Sanitation step	To set the sanitation step on or off.
		Sanitation time	To set the time for the sanitation step in the cleaning cycle.
		Sanitation temp	To set the temperature during the sanitation step.
	Descale warning		
	Daily clean warning		
	Open door cooling		
	Force cleaning		
	Cleaning options	Quick clean	
		Daily clean	
		Descale	
	Clear cleaning status		
Delete all programs			To delete all recipes.
Hood			To activate the hood (optional)
I/O test	J7 analog in		
	J8 oven temp. in		
	J9 analog in		
	J10 analog in		
	J11 analog in		
	J12 analog in		
	Digital inputs		To read the input of: • the door (J13) • the blower (J14) • the hood filter placement (J15) • the hood filter press diff (J16)

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
	Digital outputs		To set the output of: • the rotor (M1) • the blower (M2) • the heater (K1) • the lamp (K2) • the water supply (W1) • the backflush water (W2) • the water pumpt (K6) • the drain valve (Q5) • Casco (Q1) • Spray right (Q2) • Spray left (Q3) • the fat drain (Q4)
	Board Feedback		To read the feedback value.
	Board Version		To read the board version.
	Board Variant		To read the board variant.
Test program			To start a cleaning cycle to test the program.
Ignore errors			To ignore errors.
Save HACCP	Start		To save the HACCP log file to a USB flash drive.
HACCP days			To set the amount of days for the HACCP log file.
Params -> USB	Enter filename		To save the parameters to a USB flash drive.
Params <- USB			To load the parameters from a USB flash drive.
Init. Heatup Time			To show the recorded heatup time during initial operation.
Act. Heatup Time			To show the recorded heatup time during the last operation.
HeatUp program			To activate the heatup program and shows the heatup time in seconds.
HeatUp times reset			To reset the heatup times.
Wifi	Wifi Smartphone		To set a connection to a smartphone.
	Wifi Cloud		To set a connection to the Fri-Jado Smart Connect website.

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
	Wifi RSSI		To show the signal level of the Wifi connection. In practice the values are betwen -85 dBm and -25 dBM. A bad connection is -85 dBm and a very good connection is -25 dBM.
	Wifi auto restart		"If you set a time of >= 5 minutes here, the machine will regularly check whether the WiFi no longer receives messages during the set time interval. In case there was no communication during that time interval, the Wi-Fi communication will be restarted. This is intended to be able to automatically recover any loss of the WiFi connection if there should be long-term problems."
	Start Config		"This allows you to force the machine to start a new cloud configuration. The old WiFi access point data will be deleted at that time and after a few seconds a smart-phone symbol will appear in the top right corner of the status bar on the screen. From the moment that smartphone symbol appears, the user can set the cloud configuration on the machine via the smartphone."
	Allow open WLAN		TBD
Factory settings	Fact reset settings		To reset the setting fo factory settings.
	Fact reset recipes		To reset the setting fo factory recipes.
	Fact reset data		To reset the setting fo factory data.
	Eco variable		To set the eco variable.
	Correction factor		To set a cook correction.
	Fat drain		To drain fat during cooking Open or Auto.

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
	RS485 debugging		To give information to the developer.
	PID factors	P factor	To set the temperature regulation setting (P = proportional).
		I factor	To set the temperature regulation setting (I = integrating).
		D factor	To set the temperature regulation setting (D = differentiating).
		IMAX factor	TBD
		Relay actions	TBD
	Use factory config.		TBD
	S/N:		TBD
Commission reset			TBD
Commission apply			TBD
Restart soft			This performs a 'soft' reboot of the entire S control software. This means that the entire soft-ware restarts internally without an external electrical reset signal being issued.
Restart hard			This performs a 'hard' (electronic) reboot of the entire S control software, which is similar to turning the unit off and on again.
Swipe sensitivity			To set the sensitivity of the touchscreen.
Live variables	Status counters	Active total	To show the active time of the unit.
		Operation total	To show the total time that the unit was in operation.
		Preheat total	To show the total time that the unit was preheating.
		Reset preheat total	To reset the total preheating time.
		Manuallly added	To show the time that was added manually.
		Reset manual total	To reset the times that were added manually.
		Cook corrections	To show the total time of cook corrections.

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
		Reset correction	To reset the total time of cook corrections.
	Output counters	Heater	To show the time of heater activation.
		Reset heater time	To reset the time of heater activation.
		Blower	To show the time of blower activation.
		Reset blower time	To reset the time of blower activation.
		Rotor	To show the time of rotor activation.
		Reset rotor rime	To reset the time of rotor activation.
		Light	To show the time that the light was on.
		Reset light time	To reset the time that the light was on.
		Pump	To show the time of pump activation.
		Reset pump time	To reset the time of pump activation.
	Start/End counters	#started recipes	To show the quantity of started recipes after the last reset.
		#ended recipes	To show the quantity of ended recipes after the last reset.
		#started quick clean	To show the quantity of quick cleans after the last reset.
		#ended quick clean	To show the quantity of ended quick cleans after the last reset.
		#started daily clean	To show the quantity of started daily cleans after the last reset.
		#ended daily clean	To show the quantity of ended daily cleans after the last reset.
		#started descales	To show the quantity of started descales after the last reset.
		#ended descales	To show the quantity of ended descales after the last reset.
		Reset Starts/ Ends	To reset all starting and ending counters.

Menu (Level 1)	Menu (Level 2)	Menu (Level 3)	Description
	UTC system time		To set the time and date.
	Commission time		To show the time and dat of commissioning.
	Limefilter time		To show the last installation time and date of the water filter.

3.8.3 Change the manager PIN code

Note: If you change the manager PIN code, you must enter the PIN code every time that you access the manager settings. The default manager PIN code is 1111. You can set the manager PIN code to 0000 to stop asking for the PIN code when you access the manager settings.

1. Go to the menu *Change PIN* in the manager settings to change the PIN code for the manager settings. You can use the PIN code to get acces to the manager settings: 0000.

3.8.4 Change the settings

Note: You must use a password to get access to the settings for *Manager* and *Service*.

1. Swipe up to go to the swipe up screen.
2. Select *Settings*.
3. For manager, select *Manager*. Refer to section Manager settings.
4. For service, select *Service*. Refer to section *3.8.2*.

4 Transport

4.1 Move the unit



Warning:

- Do not move the unit over objects higher than 0.4 inch.
- Do not move the unit by pushing or pulling the door handles.

1. Disconnect the power supply.
2. Make sure the unit is cooled down. Wait a minimum of 10 minutes.
3. Disconnect the water supply.
4. Disconnect the water drain.
5. If necessary, remove the grease container.
6. Release the breaks on the wheels.
7. Push the unit at the center.

5 Storage

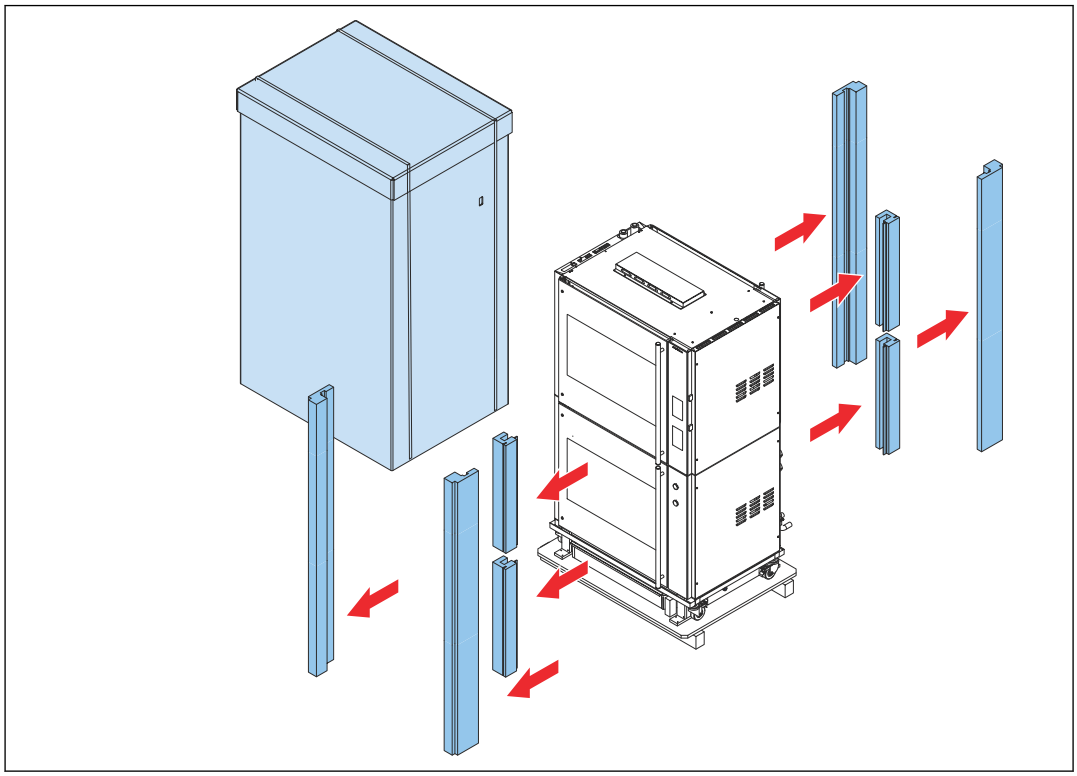
5.1 Put the unit in storage

1. Disconnect the power supply.
2. Disconnect the water supply.
3. Remove water from the water valve, tubes and the pump.
4. Clean the unit.
5. Put a cover over the unit to prevent dust on the unit and water leakage.
6. Store the unit in a dry non-condensing environment (50–90 °F) .
7. Apply the breaks on the wheels of the unit.

6 Installation

6.1 Unpack the unit

Caution: Make sure that the unit has no damage. If the unit has damage, refer to the supplier.



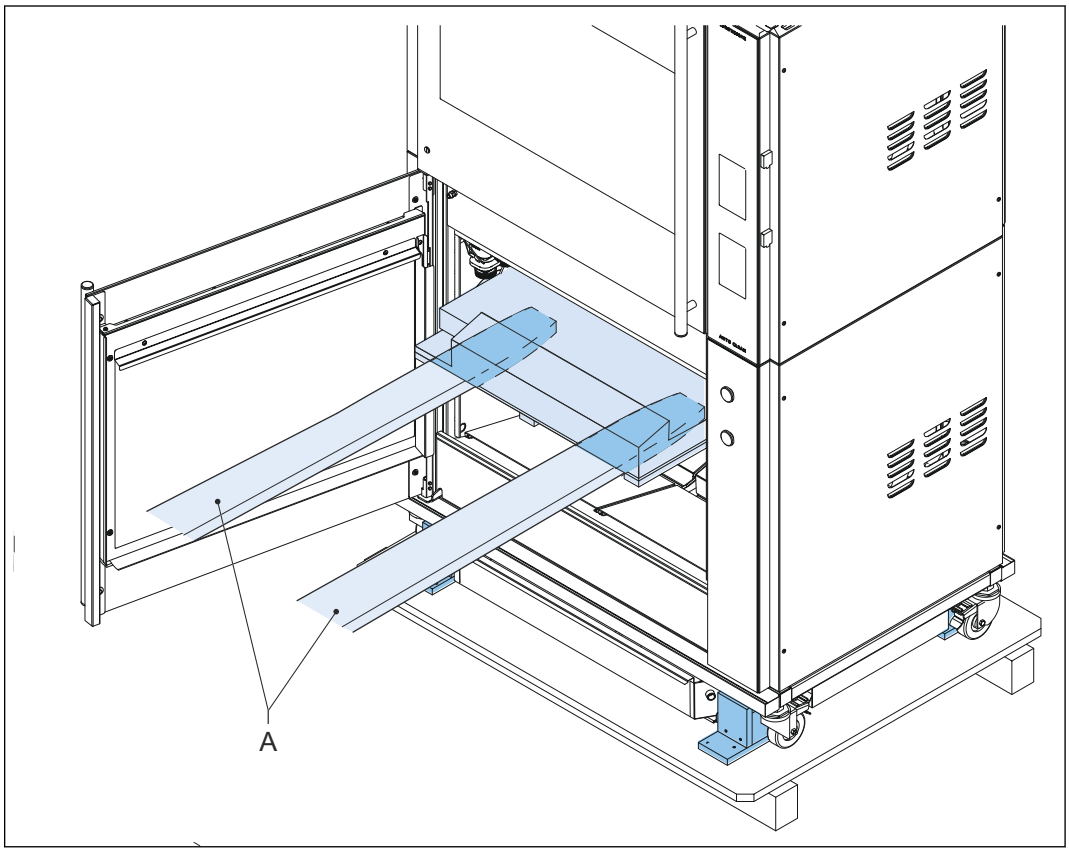
1. Remove the straps and box.
2. Remove the tempex.
3. Dispose the packing material.
4. Remove loose components and accessories.

6.2 Remove the unit from the pallet

6.2.1 Remove the unit from the pallet with a fork lift

Note: A lifting insert is supplied with the unit.

Caution: Be careful when you lift the unit. The doors can swing open. This can cause damage to the glass of the door.

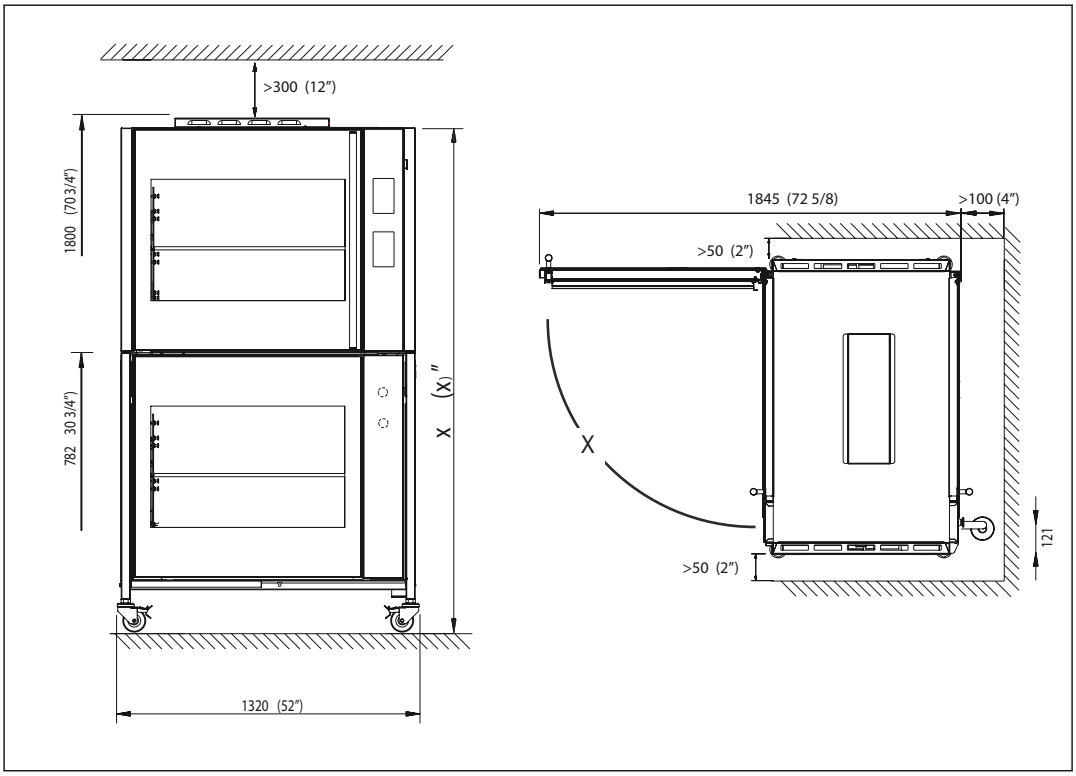


1. Put the lifting insert (A) on the forks of a fork lift.
2. Open the door of the lower unit.
3. Move the forks with the lifting insert (A) into the unit.
4. Lift the forks with the lifting insert (A) until the lifting insert fits into the upper area of the unit.
5. Lift the unit from the supports.
6. Remove the pallet under the unit.
7. Lower the unit onto the ground.

6.3 Change the audio settings

1. Go to *Settings* > *Manager* > *Audio*.
2. Select *Audio settings* to select the audio sound.
3. Select *Audio factor* to set the volume.
4. Select *Test audio* to test the audio set and volume.
5. Select *Sound set* to select the sound set. *Beeper* has the highest volume.

6.4 Prepare the site



1. Install the unit on a level surface.
2. Make sure that you have easy access to the unit.
3. Make sure that moisture cannot fall onto the unit.
4. Refer to the illustration for the dimensions and measurements.
5. When you install an extraction hood, make sure that you have these conditions:
   a. The minimum capacity of the extraction hood must be 1600 m3/h or 50000 cf/h.
   b. The extraction hood must extend by a minimum of 8 inch on all sides of the unit.
   c. The height between the extraction hood and unit must be a minimum of 12 inch.
   d. The extraction hood must have facilities to drain any condensation into a drain.

6.5 Do a check of the power supply

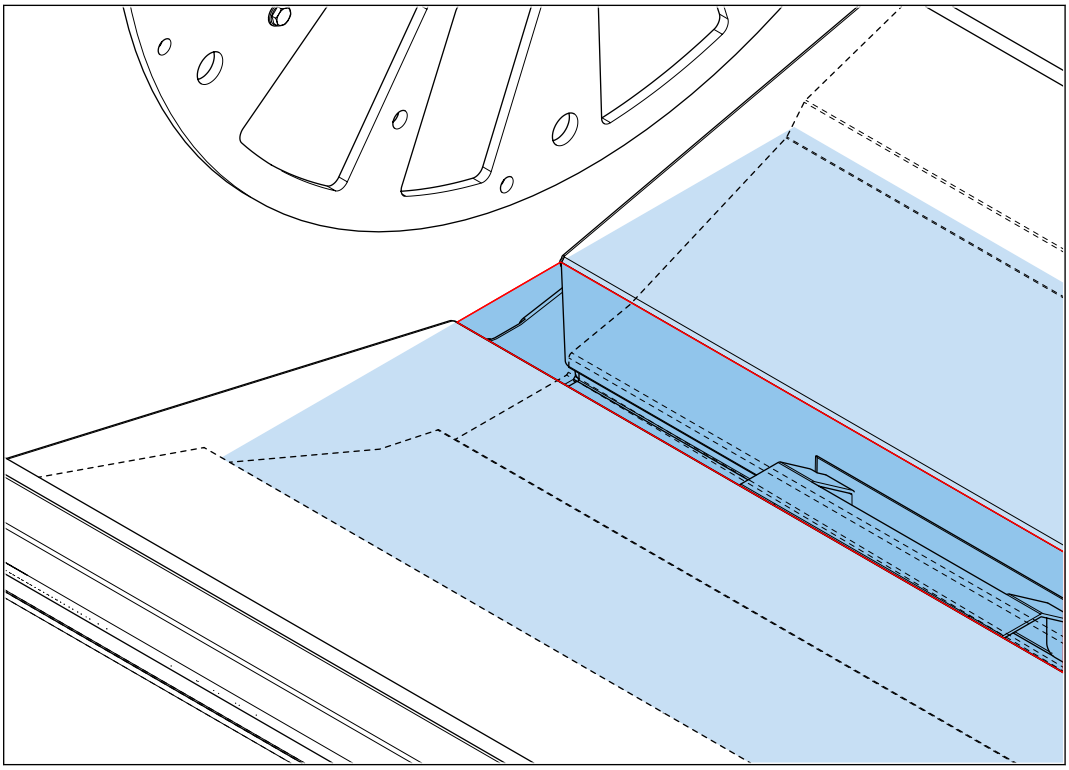
1. Make sure that the electrical service agrees with the data on the type plate of the unit. Refer to section *3.1*.
2. Make sure that you install an approved plug on the connecting cable.
3. If a plug is not installed, make sure that a manual switch is installed.

6.6 Do a check of the water level during cleaning

Warning:
Do not add cleaning agents for this procedure. Injury can occur.

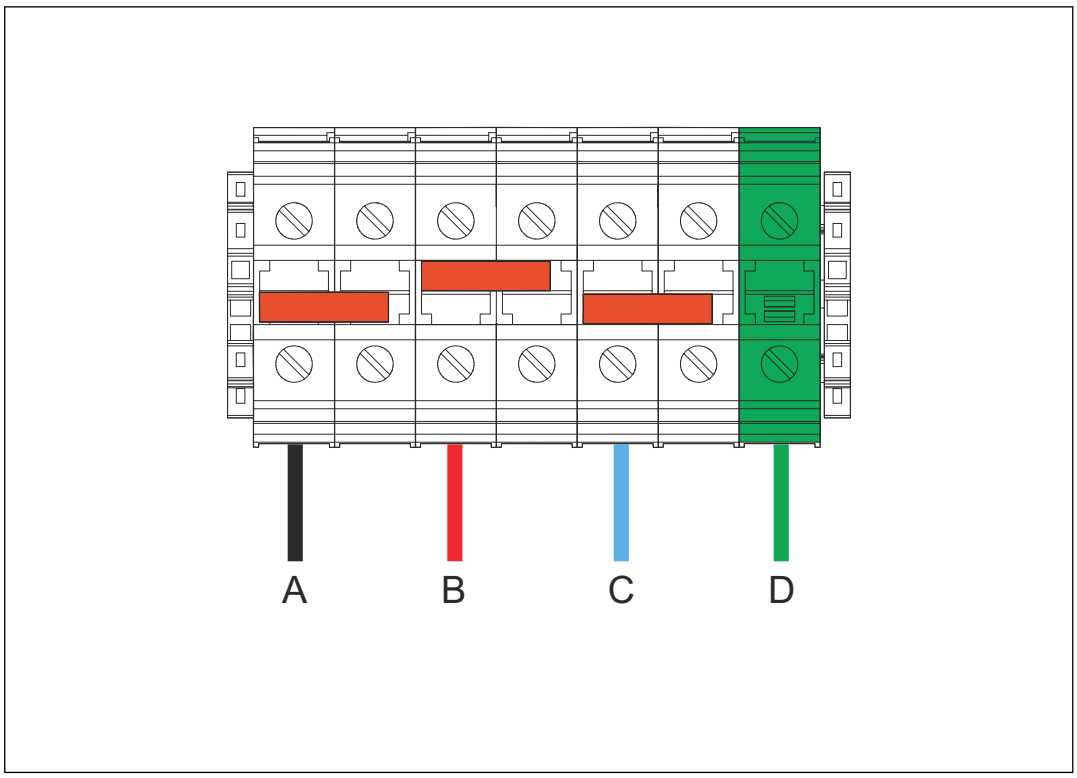
During cleaning, water flows into the rotisserie. If there is too much water, this will reduce the wash power of the detergent. If there is not enough water, this can cause insufficient cleaning and damage to the pump.

Low water levels can occur when the water pressure is too low.



1. Start the daily clean.
2. Let the daily clean run for 6 minutes.
3. Pause the daily clean.
4. Open the door.
5. Measure the water level. Refer to section *6.8*.
6. If it is necessary, adjust the water level. Refer to section *6.9*.

6.7 Connect the unit to the power supply



A	Black (L1)	C	Blue (L3)
B	Red (L2)	D	Yellow-Green (PE)

Caution: Make sure that you do a check of the local electrical codes and regulations before you start to work with electrical wiring.

Note: The unit is supplied with a power cord. If no power cord is supplied, do the steps.

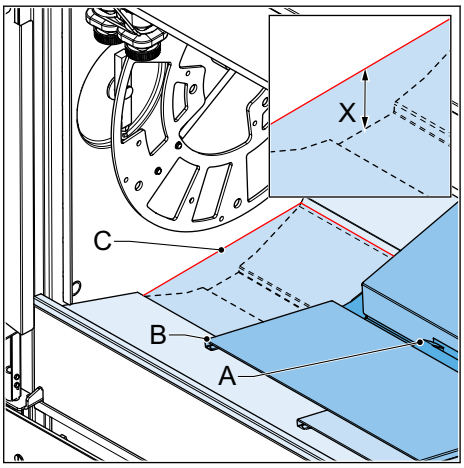
1. Connect the cables. Refer to the illustration.

   It is recommended to connect the unit to a dedicated circuit breaker with GFCI (Ground Fault Circuit Interrupter).

6.8 Measure the water level

1. Remove the filter (A) with plates (B).
2. Measure the water level at the correct point (C).

Note:
The ideal water level (X) is 2.76 inch. A tolerance of ± 0.2 inch is acceptable.



6.9 Adjust the water level

1. Go to *Settings* > *Service* > *Cleaning* > *Clean water supply* to change *Supply time 1* and *Supply time 2*. For the latest default value parameters, refer to the parameter list.

6.10 Connect the unit to the water supply

Caution: Install a sediment pre-filter or a strainer for the reduction of silica and other non-dissolved sediments.

Caution: If the water hardness is more than 20 gpg, install a descaling filter.

Note: If the water hardness is more than 4 gpg, a descaling filter is recommended.

The water must have these conditions:

- Minimum dynamic water pressure: 29 psi.
- Maximum water pressure: 72 psi.
- Maximum water temperature: 100 °F
- Acidity: pH 7.0–8.0
- Chlorides: <30 ppm

1. Use a water supply hose with swivel size G 3/4" and hose length 43 inch.
2. Flush the water tap. Use a minimum of 5.3 gallons of water.
3. Connect the unit to the water connection.
4. In the manager settings, set the capacity of the filter.

6.11 Do a check of the unit after installation

Note:
For more information about the recipes and programs, refer to the user manual.

1. Start the cleaning cycle.
2. Wait 5 minutes.
3. Pause the cleaning cycle.
4. Do a check of the water level during cleaning. Refer to section *6.6*.
5. Cancel the cleaning cycle and clear the cleaning status.
6. Do a check of the Grill recipe for 30 minutes.

7 Troubleshooting

7.1 General troubleshooting procedure

1. Before troubleshooting:
   a. Make sure that the time clock is correctly set.
   b. Make sure that the power supply operates correctly.
2. Try to find a solution for the problem. Use the troubleshooting table. Refer to section *7.2*.
3. If you cannot find a solution for the problem, refer to the supplier.

7.2 Troubleshooting table

Problem	Possible cause	Possible solution
The unit does not start.	The power supply is disconnected.	Connect the power supply.
	Short circuit or insulation problem.	Close the mains breaker.
	The fuse is defective.	Replace the fuse on the electrical panel.
	Wiring problem	Make sure that the wiring is not loose. Make sure that the connectors are connected. Make sure that the cable between the CPU board and the I/O board is connected.
The unit does not heat up.	Wiring problem	Make sure that the wiring is not loose. Make sure that the connectors are connected. Make sure that the cable between the CPU board and the I/O board is connected.
	The unit is set to demo mode.	In the service settings, set *Demo mode* to *off*.
	The recipe is incorrect.	Adjust the recipe.
Mains fuse or breaker is set to off.	Wiring problem	Make sure that there is no shortage in the wiring. Make sure that the wiring is not wet.
The rotor motor does not stop.	The rotor switch is pushed in.	
The door does not close correctly.	The door is not installed correctly.	Make sure that you installed the door correctly. Make sure that the door is level.
The controls do not operate.	The controller is overheated.	Make sure that the air can move freely to the controller.

Problem	Possible cause	Possible solution
	The fuse is defective.	Replace the fuse on the electrical panel.
There is water on the floor.	The water drain is blocked.	Clean the water drain.
	The water drain hose is not installed correctly.	Install the water drain hose correctly. Refer to the installer manual.
Bad cleaning results	The water supply is disconnected.	Connect the water supply. Open the tap.
	The cleaning cartridge is not installed correctly.	Install the cleaning cartridge correctly. Refer to the user manual.
	The water level is too low.	Do a check of the water level during cleaning. Refer to section *6.6*.
The inner door does not open correctly.	The inner door is not installed correctly.	Make sure that the inner door is installed correctly. Make sure that the inner door is level. Adjust the inner door as necessary.
The outer door does not open correctly.	The outer door is not installed correctly.	Make sure that the outer door is installed correctly. Make sure that the outer door is level. Adjust the outer door as necessary.
The unit does not get the set temperature.	Wiring problem	Make sure that the wiring is not loose. Make sure that the connectors are connected.
The rotor motor does not operate.	Wiring problem	Make sure that the wiring is not loose. Make sure that the connectors are connected.
	No power supply connected	Connect the unit to the power supply.
The main fuse is burned.	The coil is defective.	Do a check of the insulation value of the coil on 500 V. Make sure that the minimum value is 0.5 MΩ. If necessary, replace the rotor motor.
The blower does not operate.	Wiring problem	Make sure that the wiring is not loose. Make sure that the connectors are connected.
	No power supply connected	Connect the unit to the power supply.
Error message: PT1000 underflow	The temperature sensor is defective. The wiring is shorted.	In the service settings, do an I/O test.

Problem	Possible cause	Possible solution
Error message: Sensor shorted	The temperature sensor is defective. The wiring is shorted.	In the service settings, do an I/O test.
Error message: PT1000 overflow	The temperature sensor is defective. The wiring is disconnected.	In the service settings, do an I/O test.
Error message: Sensor open	The temperature sensor is defective. The wiring is disconnected.	In the service settings, do an I/O test.
The touchscreen does not operate.	Wiring problem	Make sure that the cable between the CPU board and the touchscreen is connected.
		In the manager settings, do a hard reset.
	The touchscreen is defective.	Replace the touchscreen.
The touchscreen is difficult to operate.	Incorrect setting of the parameter	Make sure that the setting of the parameter is correct.
The touchscreen does not come on.	Wiring problem	Make sure that the wiring is not loose. Make sure that the connectors are connected.
		Make sure that the CPU board has power. Make sure that the two LED indicators flash.
	The fuse is burned.	Do a check of the fuse on the I/O board. If necessary, replace the fuse.
		Do a check of the other fuses. If necessary, replace the fuse.
	Malfunction of the flat cable	Make sure that the flat cable is connected. Make sure that the flat cable has no damage. If necessary, replace the flat cable.

8 Technical data

8.1 General specifications

Parameter	Specification
Water connection (inch)	¾
Water pressure (psi)	29–72
Acidity (pH)	7–8
Chlorides (ppm)	<30
Hardness (dH)	<4
Drain connection (inch)	>1 ⅝

8.2 Dimensions

Parameter	Specification
Width (inch)	50 4/5
Depth (inch)	38 5/13
Height (inch)	86 8/13

8.3 Mass

Parameter	Specification
Gross mass (lb)	1419
Net mass (lb)	1303

8.4 Electrical specifications

Parameter	Specification
Voltage (V)	208 (3~)
Maximum nominal current (A)	62 (2x)
Power (W)	22600 (2x)
Frequency (Hz)	50/60
Plug	4-pin CEE 100A 250VAC IP67 UL/CSA (2x)
Power cable length (in)	75 inch

Parameter	Specification
Voltage (V)	480 (3~)
Maximum nominal current (A)	29,5 (2x)
Power (W)	22600 (2x)
Frequency (Hz)	50/60

Parameter	Specification
Plug	4-pin CEE 60A 480VAC IP67 UL/CSA (2x)
Power cable length (in)	75 inch

8.5 Ambient conditions

Parameter	Specification
Operation temperature (°F)	32–95
Storage temperature (°F)	32–95
Relative humidity (%)	20–80

8.6 Noise level

Parameter	Specification
Maximum noise level (dB(A))	<70


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