HOSHIZAKI EUROPE B.V.

SERVICE MANUAL

BAKER GA 550 & 950

As the user, please use the operating instructions.
This service manual does not include operating instructions. It is only intended for the service technician.
The user requires important safety information not included here.

Content

1) Safety Information

This service manual does not include comprehensive operating instructions for the user; it is only a further supplement to the operating instructions.

It is intended for a trained service technician. As a result, many important safety instructions for the user are missing with regard to the scope and readability. In case of doubt, please observe the information in the operating instructions for transport, installation, operation and electrical safety and never pass on this service manual in place of the operating instructions.

2) Intended Use

This product is intended for cooling/freezing, storage and proving of bakery products and other nutritions but not for the display to access by customer.

The product is only to be used for the purpose for which it has been expressly designed. Any other use could cause that the products stored in the product are not kept at the right temperature.

The product is not suited for storing blood plasma, laboratory samples, pharmaceuticals or similar substances. The manufacturer will not be held liable or responsible for any damage caused by improper, incorrect or unreasonable use of the product.

Area of application:

Climate Class	Ambient Temperatures and Humidity
4	+30°C with %55 RH
5	+40°C with %40 RH

Temperature Class	Cabinet Temperature
L1	- 18 °C
M1	+ 5 °C

3) Suitable Installation Site

The cabinet must be installed in a dry, well ventilated room away from direct sunlight at a sufficient distance from radiators and other sources of heat. Please always take into account the waste heat of all cabinets installed in one room!

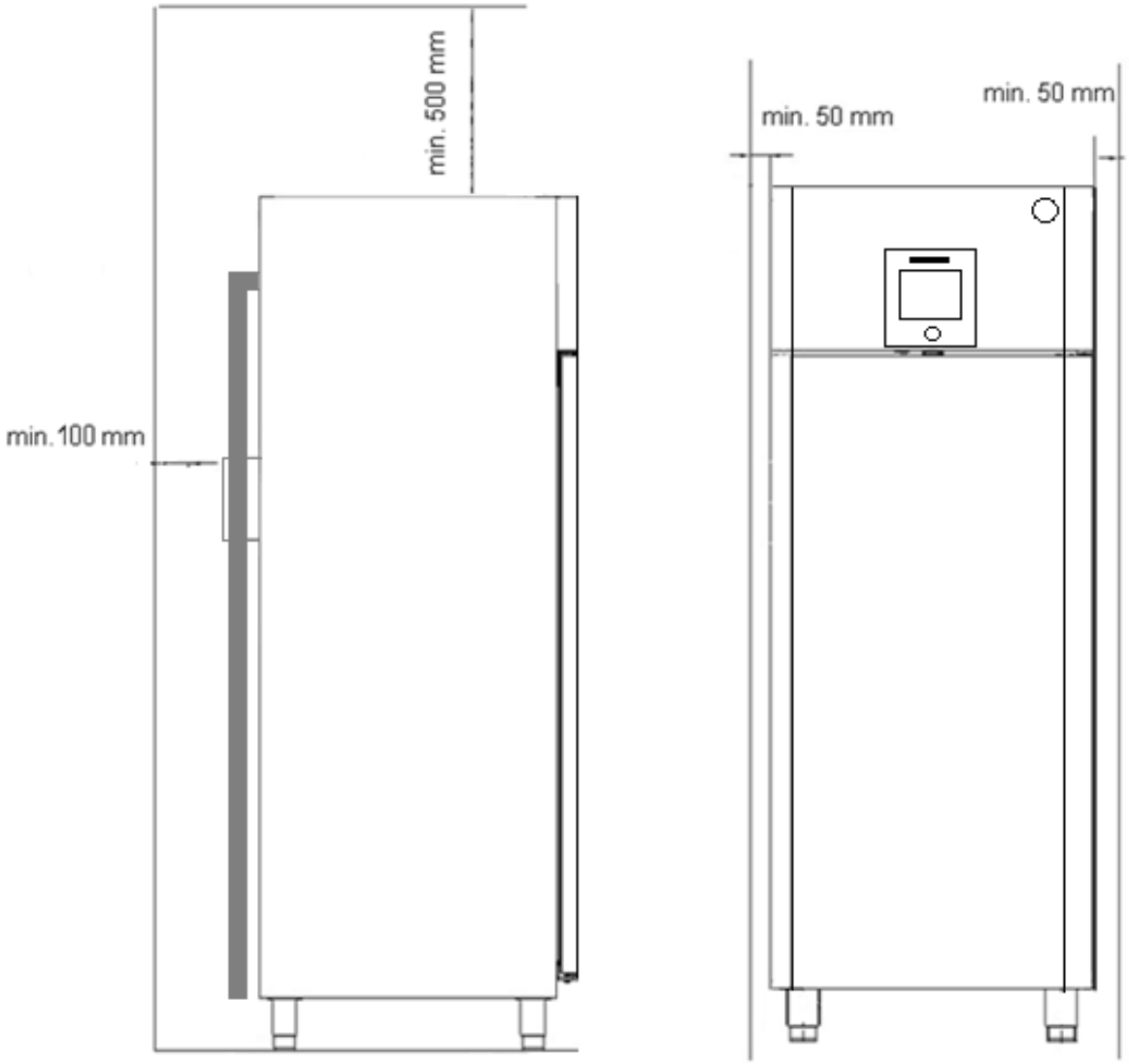
The ambient temperature must lie between a minimum of **+16 °C** and a maximum of **+ 40°C**. A gap of at least 0.5 cm must be kept between the top edge of the machine compartment and the ceiling. The air exchange in this area must not be obstructed from the front or the side by screens etc. hanging from the ceiling.

For electrical safety reasons, the cabinet must not be operated outside. The refrigeration technology of the cabinet does not function outside or in unheated rooms (particularly in colder seasons) and can be damaged by low temperatures. Avoid placement of the product in a chlorine/acid-containing environment due to risk of corrosion.

The product and parts of the interior is equipped with a protecting film, which should be removed before use.

Distance from walls and ceiling:

A gap of at least 500 mm must be kept between the top edge of the machine compartment and the ceiling, and of at least 100 mm from walls, furniture and other cabinets.



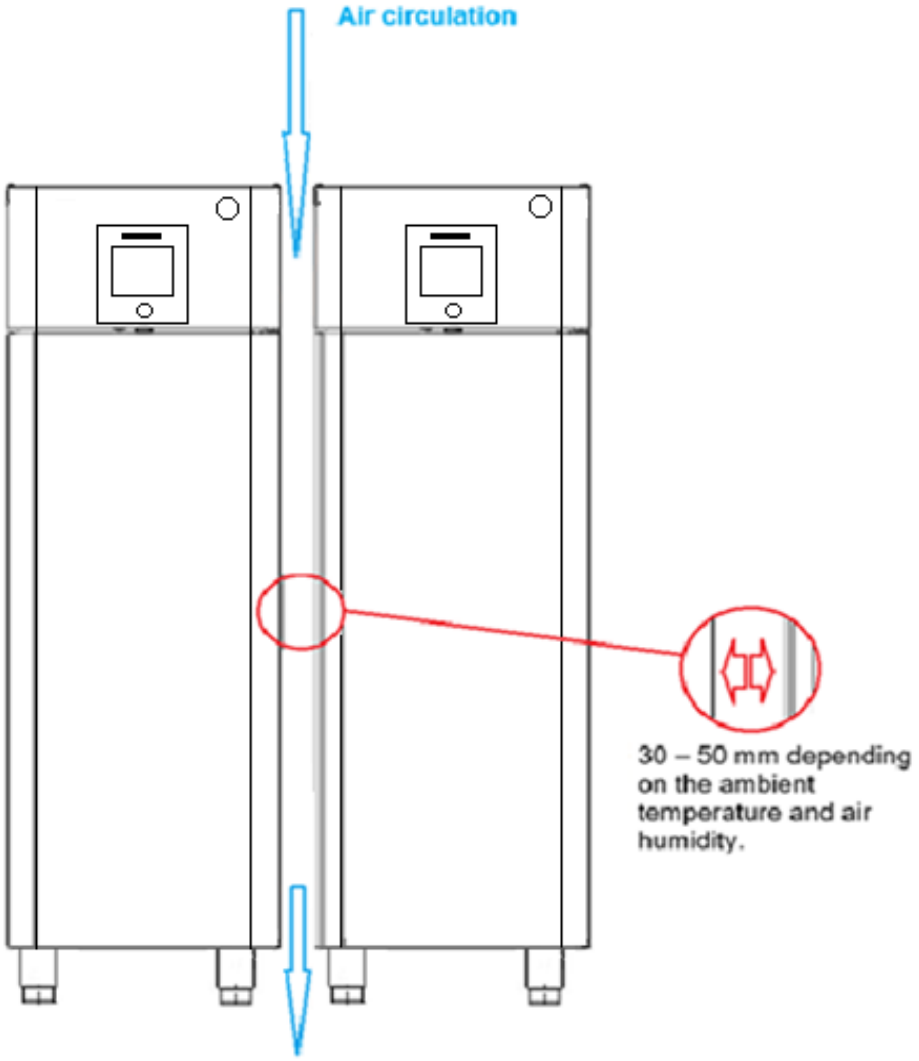
4) Setting up Several Cabinets Side by Side

Depending on the temperature and humidity at the installation site as well as the selected set point temperature, the moisture in the ambient air can condense on the surface of a refrigerating unit due to its design.

If several cabinets are set up side by side, this condensation effect becomes stronger, and a lower air quantity can circulate between the cabinets. As a result, a minimum distance of **30 to 50 mm** must be kept between the cabinets depending on the temperature and air humidity.

This gap must not be sealed either at the top or bottom, but can be covered by a stainless-steel panel from the front for aesthetic purposes. The canopy must be removable for cleaning within the gaps.

If it is not possible for air to circulate freely at the bottom (e.g. due to a base installation) then the gap cannot be sealed at the front.

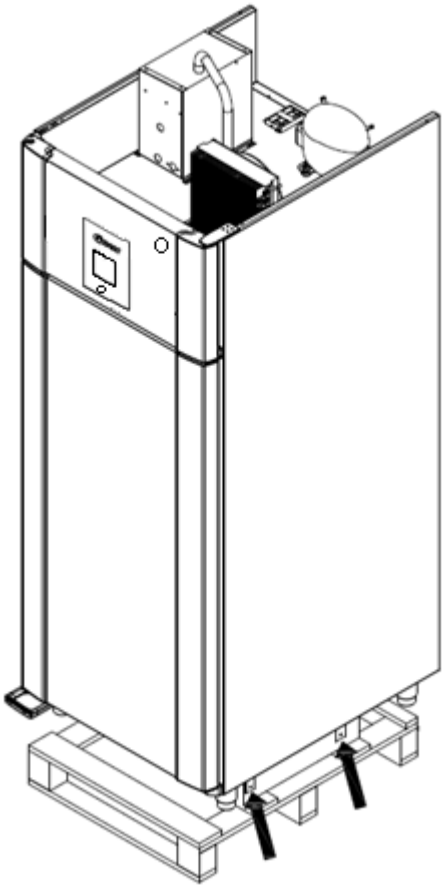


5) Unpacking and Installing the Cabinet

When receiving the product, check the packaging material for damage. If any damage occurs at the packaging material, it should be considered if the product might have been damaged too. If the damage is substantial, please contact your dealer.

Warning The refrigeration unit is located at the top of the cabinet. At least two person are required to lay down the cabinet and set it up right again. Be aware of this, when removing the transport pallet!

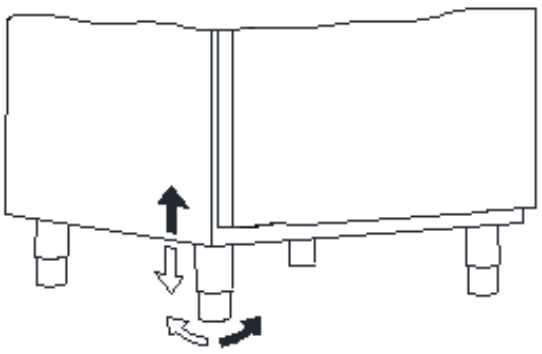
Important If the cabinet has laid on its back or was transported horizontally, then it must stand upright for at least two hours before switching it on to allow the oil to collect in the compressor. The handles on the back of the product **should not be used** to carry the cabinet. **Do not use** the handles on the back of the product to carry or move the cabinet.



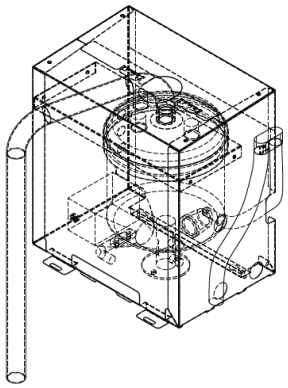
The transport pallet can be removed by loosening the screws that fasten the pallet to the product.

The place of installation must be level and horizontal.

Cabinets on legs require an even, solid floor. Cabinets on legs are levelled by turning the internal part of the feet.

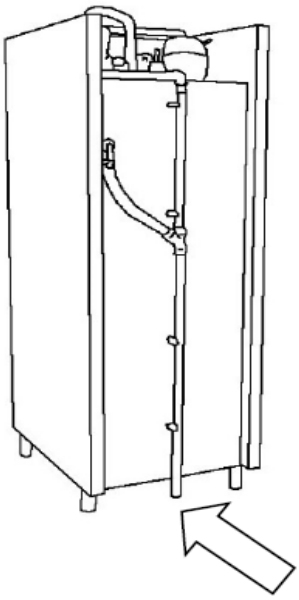


6) Water Circulation



HUMIDIFIER

The cabinet is equipped with a humidifier that provides steam during proving. The humidifier consists of a water tank heated by electrodes. From the tank, steam is led into the cabinet through a pipe. The tank is automatically filled from the water supply. The tank can be flushed by switching the cabinet off at the main switch and then switching it on again. In addition, the system is automatically flushed regularly depending on water quality.



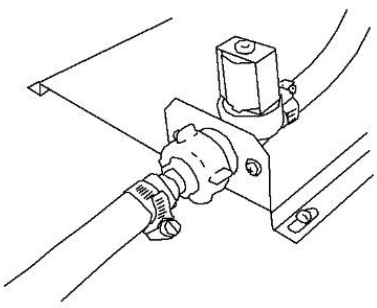
WATER DRAIN AND CONNECTION

Water flushed from the humidifier (or defrost water) is led away through the pipe connected on the rear of the cabinet. A water seal must be installed between cabinet and drain.

To provide proper steam production, the humidifier must be connected to a water supply. To assure ideal steam production, it is important that the electrical conductivity of the inlet water is measured by the installer, to assure it is within standard range. See Below Box!

Please note the following:

- The electrical conductivity of the water must be in the range: 200-800 µS/cm.*
- The temperature of the inlet water must not exceed 40°C.
- The water pressure must be in the range 1-10 bar.



*If the electrical conductivity of the water is outside the above mentioned standard range (200 – 800 µS/cm) some controller settings, might need adjustment in order to maintain proper steam production. These adjustments must be done by a service technician, and are described in the next part of this service manual.

Indications that water conductivity is outside of standard range are:

- Too poor steam production
- Frequently having boiler overfilled alarm

Adjustments related to water conductivity

In order to gain access to the area where the settings related to the water conductivity can be adjusted, it is necessary to access the service level of the controller (level III). How to access this area is described under "Entering the service parameters, level III". After entering this level it is necessary to go back by pushing the button (arrow back).

When this is done being in level III, you will see the accessible/highlighted *"SET"* button (picture below). This button must be pushed in order to access the parameters.

The parameters which must be adjusted are under the rH tab. The first parameter under this tab is H01.

In order to be allowed to adjust the H04 current to exceed 3,5 amp, there **must be fitted** an external SSR. This SSR has been the standard in the BAKER production since the 2nd of October 2017.

If this external SSR is fitted, the H03 parameter must be set to YES, in order to extend the amp range to a maximum of 7,5 amp.

If the external SSR is not fitted, **it is not allowed to** change the parameter H03 from NO to YES, before the external SSR has been fitted, otherwise the controller will be damaged. If the external SSR is fitted on a cabinet build before the 2nd of October 2017, it is of great importance, that the controller software is updated. This update is very important because compressor relay 2 is used to power the main supply of the SSR (see the wiring diagram).

This function is only available in the software used after the 2nd of October 2017. If the software is not updated the electrodes of the boiler will not be supplied with 230 Volt, which will result in no steam production. For advice regarding what external SSR service kit and software to use and how to fit it, please contact technical support.

Conductivity	Amp.	Amp.	Amp.	Sec.	Notes
µS/cm	H04	H05	H06	H07	
50	NA	NA	NA	NA	Water with conductivity < 150 µS/cm cannot be used
150	6,5	2	1	60	
200	6,5	2,3	2	60	
400	6,5	2,3	2	60	
600	6,5	2,3	2	60	If the boiler does become too "nervous" the parameter H05 can be raised to 3,0 amps
800	6,5	2,3	2	60	If the boiler does become too "nervous" the parameter H05 can be raised to 3,0 amps
1000	6,5	3	2	60	
1200	6,5	3,5	2	60	
If the conductivity is below 200 or above 600µS/cm it can be necessary to adjust H05 and H06 depending on the water pressure on sight.					

7) Electrical Connection

After measuring the conductivity of the tap water, which the cabinet is connected to it can be decided if adjustments to the controller are necessary. If the conductivity of the water is outside the standard range of 200 to 800 µS/cm, the below adjustments can be made in order to minimize the number of potential failures related to the boiler operation and to optimize the steam production

Read the text below thoroughly before electrical connection.

During working with the electrical equipment, the cabinet must always be disconnected from the mains by pulling out the power plug. It is NOT sufficient to switch off the cabinet with the ON/OFF button as parts of the cabinet are still live.

The product is intended for connection to alternating current. The connection voltage (V) and frequency (Hz) are shown on the name plate in the cabinet. Only the supplied cord is to be used.

Never use an extension cord for this appliance! If a wall socket is placed in a longer distance than the length of the supplied power cord, contact an electrician to establish a wall socket within the range of the supplied power cord.

If the product is defective, it must be examined by a service electrician during the guarantee period. Outside the guarantee period, it is advisable to use the service advised by Hoshizaki Commercial, if possible. If this is not the case, assistance is required from a refrigeration company with knowledge of Baker products.

Always disconnect the power if interruptions in power supply occur, and when electrical parts are removed/put on, and before cleaning and maintenance of the product.

Do not use the product before all coverings are installed, so that live or rotating machine parts can not be touched.

All earthing requirements stipulated by the local electricity authorities must be observed. The plug and wall socket should then give correct earthing. If necessary, contact an electrician.

8) Instructions for Daily Use

Do not use electrical devices inside the product.

To ensure correct and efficient air flow in the cabinet, the shaded areas must be kept free of items.

All items to be stored, that are not wrapped or packed, must be covered in order to avoid unnecessary corrosion of the inner parts of the cabinet.

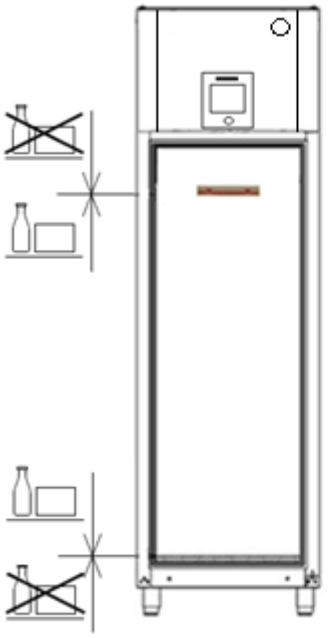
If any controller parameters are changed from default, this could cause that the product is not functioning normally, and harmful temperatures could damage items that are kept inside the product.

If the product is turned off, wait minimum 3 minutes before turning it on again. This is to protect the compressor from damage

Do not block vent holes in the front panel.

Do not damage the refrigeration system parts.

During normal operation, some parts of the refrigeration system in the compressor compartment might reach high temperatures and could therefore cause burns if touching these components.



9) Cleaning and Maintenance

The cabinet must be cleaned regularly. The intervals depend on the usage and level of soiling (at least annually).

Before carrying out any cleaning or maintenance operations, unplug the unit.

Don't touch or wet the machine compartment parts. This could result in failure or breakdown.

To prevent possible damage, don't clean the plastic parts with water above 40° C or in a dishwasher.

Interior & Exterior of Cabinet and Shelves

Clean the interior and exterior at least once a week for sanitary use.

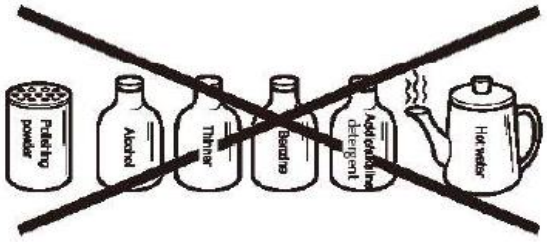
Clean off the interior and exterior of cabinet with a soft cloth soaked in cold or warm water containing the proper amount of neutral cleaner and wrung dry. Don't use a water jet to clean the machine compartment.

Chemical agents other than neutral cleaner might cause damage to the interior and exterior surfaces.

Any remaining detergent will damage metal or plastic surfaces. Use a soft cloth dampened with warm water to wipe it off.

Don't use the following items, they could damage painted or plastic surfaces:

- Polishing powder, alcohol, thinner, benzene, acidic or alkaline detergent, hot water, petroleum, soap powder, metal scourer or brush, etc. Especially detergent to clean grease on ventilator or microwave



Note: Some solutions other than the above may also damage painted or plastic surfaces. Immediately stop using such solutions if they cause any problems!

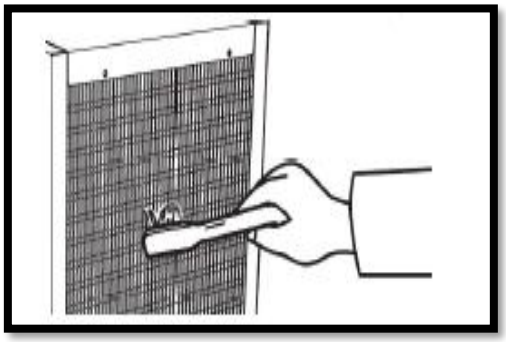
The door gasket and its contact surface get soiled easily. Clean every surface of these parts thoroughly. Remnants of food will accelerate aging.

Use a cloth to wipe off any water staying inside the cabinet.

Condenser

Use vacuum cleaner or a soft brush to remove dust and stains from the condenser.

Warning: If users clean the condenser with a hard brush, such as a dishwasher brush, the coating of the condenser may peel off.



Air Filter

To prevent deformation do not wash the air filter hot water above 40°

Plastic mesh air filters remove dirt or dust from the air and keep the condenser from getting clogged. If the filters get clogged, the refrigerator/freezer's performance will be reduced.

Check the filters at least twice a month. When clogged or when the temperature controller shows "cH" use warm water and a neutral cleaner to wash the filters. Don't operate the unit with the air filters removed, or the condenser will get clogged, resulting in failure.

1) Open the front panel and remove the air filter. To prevent injury, don't touch the condenser fins directly.
2) Wash the air filter carefully with cold or warm water containing the proper amount of neutral cleaner. Rinse and dry the air filter thoroughly.
3) To refit the air filter, put the two tabs into the heat exchanger or fins in condenser and tightly attach the air filter over the condenser.

Baker GA 590 modals are controlled by touch screen.

10) Control Elements

Overview of the display:

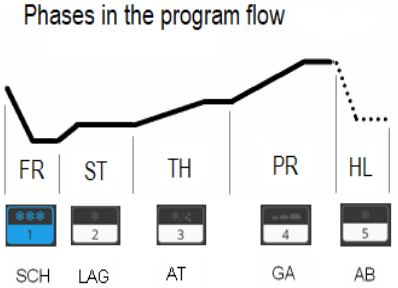
To ensure reliable processes for Freezing (1), Storage (2), Thawing (3), Proving (4), and Holding (5) the cabinet must be furnished with controls to regulate the air temperature, ventilation, and relative humidity.

The operating modes of Storage, Thawing, Proving, and Holding can be connected manually. The unit can be used as a standard refrigerator or freezer in a storage program with a constant temperature. With the thawing and proving operating modes, the relative humidity is kept constant while the temperature varies.

Correct programming of the controls establishes the desired combination of the operating modes:

- time-controlled freezing with subsequent storage for an arbitrary length of time
- time-controlled freezing with subsequent storage and time-controlled thawing as well as subsequent maintenance of the climate upon conclusion of the thawing program
- complete program with freezing, storage, thawing and proving until being taken out or holding when the roux time is exceeded.

All operating functions are performed by touching the respective buttons displayed on the touchscreen, for example, changing values and starting and stopping programs. In connection with this, the function is "touch and release," which, in other words, is that the controls react to being touched once you let go of the keyboard.



Display of the phases in the main menu

Aggregates \ Opr. Modes		Freezing (FR)	Storage (ST)	Thawing (TH)	Proving (PR)/ Holding (HL)
Chiller		X	X	X	X
Heater	Defrosting		X	X	X
	Proving			X	X
Steamer / Humidifier				X	X

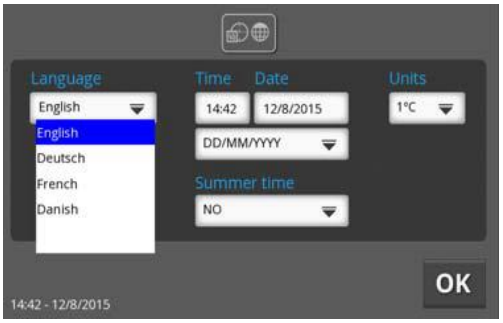
When the unit is connected with the lighting mains and the main breaker is switched on, then the standby display is shown on the screen: The Gram logo and the unit type "GA 86/GA950" as well as the date and time, are offered on a field with a blue background. Please check that the correct date and time are displayed.

When the display is touched, the controls change from standby to the first on-screen menu. This menu is the start menu for all further functionality. If the unit is in the process of running an active program, and you do not touch the screen for 30 minutes, then the controls will switch back to the standby display.

In order to change the settings for the date, time, formats, units or menu language, you need to press the button on the keyboard (in the lower right corner of the screen). The factory setting for the language is English. When you press the button, the menu for settings for the unit opens.

To set the date, time or language, press the button. The settings menu then opens with the ass ociated field.

Language Settings



When you touch the dropdown button (red marked), the possible values of languages will display. The desired language can be selected by touching it. **It is essential to restart the controls to ensure that this change has been performed for all areas.**

Date & Time Settings

The clock is set by touching the field with the time under the text. Enter the desired time directly using the numerical keypad and confirm with the "OK" button. The clock works with days in 24-hour format. It is not possible to use a 12-hour form ("am"/"pm"). After pressing the "OK" button, the time is saved, and the display returns to the previous menu. Exit the menu without making any changes by selecting “<“.

The date is set by pressing on the date field under the text "Date." The calendar menu will be displayed. Here, you must select the month, year, and day, and then confirm with "OK." Exit the menu without making any changes by selecting "<. " The previous menu is then displayed.

Set the date format by pressing the "DD/MM/YYYY" field. The choice between the sequence day/month/year and month/day/year is now shown. Select by pressing.

Season Settings

Setting of the season, i.e. the setting of winter/summer time is done by pressing on the field under the text "Summer time"

Possible choices:

"NO" = manual selection of winter time (system time)
"YES" = manual selection of summer time (system time + 1 hour)
"AUTO" = automatic switching to Central European Summer Time, CEST:
Start on summer time: last Sunday in March
End of summer time: last Sunday in October

The factory setting is "AUTO". Select by pressing.

Temperature Measurement Settings

Setting the unit to display temperatures in Celsius or Fahrenheit is done by pressing the dropdown button "Units" Here, you can choose to display temperatures in Celsius or Fahrenheit for all displays in the controls. When you have made all the changes to the settings, then return to the Settings menu. For the unit by pressing the "OK" button. Return to the start menu by pressing the field “<“ (arrow back) in the lower right corner.

Setting of Ending Times for Programs for Each Weekday

In order to consider take weekends or holidays, an ending point in time can be established for programs for each weekday as a default. This is then shown upon later program selection; you only need to confirm it by choosing "morning".

Press the  button on the keyboard in the start menu. The menu for settings for the unit now opens.

Press on the "Calendar page" to open the program's ending time menu. When you press the white buttons with the times for the day, a settings menu opens, where you can enter the time.

Enter a time. In order to jump over a day, the symbol "---" needs to be inserted on the desired day. With "OK", you save what you entered for this weekday, or you can return to the weekly overview without saving.

Once all the changes have been made, you return to the start menu by pressing “<” button twice.

Preconfigured Program

There are five preconfigured programs (Master, Store, Thaw, Prove, Holding) stored in the controls, which can be selected directly in the start menu under the overview

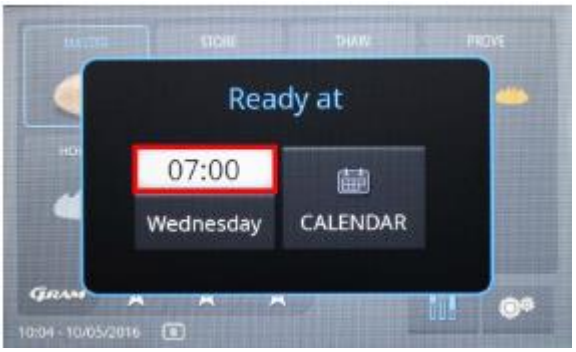
These programs cannot be deleted or overwritten.

Selection and Start of a Program

To start a preconfigured program without changing the settings, you press the button on the keyboard with the symbol "Master". The selected symbol is shown with a blue edge, and the "Settings" button is shown in blue, which means that it has been activated.
Further touching of the Master symbol opens a window with an ending time for the program (ready at) on the following day.

Selection of Ending Time for the Program

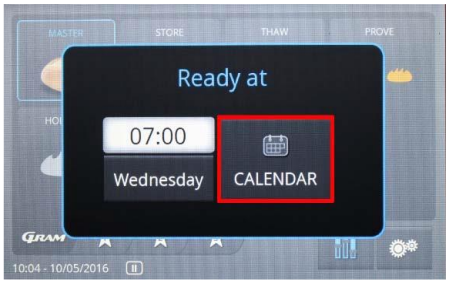
A menu is opened in which the ending time for the program is selected, and the default setting of "Weekday" must be confirmed. The usual ending time for programs can be established in the menu Settings for the unit as a default value for each weekday (see the section entitled "Default ending times for programs for each weekday").

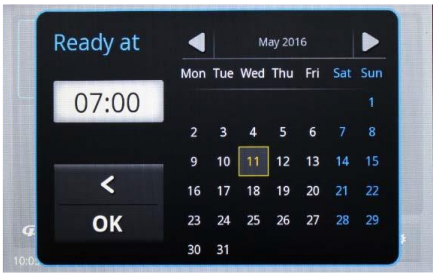


If the ending time established for the program is correct, then the program can be started by choosing "Weekday" (Monday, Tuesday, etc.). The program only starts if there is sufficient time remaining between the time for the starting and ending times for the schedule for the sum of the programmed program sections (phases). Otherwise, the earliest possible ending time for the program is shown.

To switch out of the display, press on "**Ready at**".

Changing of Established Date and Ending Time for the Program





Press on the “Calendar” button. The calendar menu will be displayed. Here, the date can be changed by touching the date fields. Selections for changing the time can be opened by touching the time window. Here, the time can be entered and then saved with "**OK**". By selecting you exit the menu without making any changes. With "**OK**" you exit the menu and start execution of the program.

Changing of further Settings Before Program Start

To adjust a preconfigured program, touch the button on the keyboard with the "Master" symbol. The selected symbol is displayed with a blue edge, and the "Settings" button (symbol with sliding button) is shown in blue, which means it has been activated.
Touching the "Settings" button (symbol with sliding button) displays the settings menu with five program phases:
Freezing, Storage, Thawing, Proving, and Holding.

The opening menu shows that contain the duration, temperature, and relative humidity values for the respective program phase. By touching the buttons for the individual program phase, (for example ) you select it to have its values set. The fields are then opened (for example 

). The data entry menu is shown, for example, time, "Duration".

In order to deactivate a program phase, the symbol must be selected, after which you press on it until the field "GREY" has been saved. To reactivate the program phase, you must press on it again until the symbol has its original color. If goods are placed in the unit that has been refrigerated in advance, and the program is started with storage, then under "BUTTON 1" you must choose a selection; see the first section. For example, to disconnect holding, you must make the same selection under "BUTTON 5". With "OK" the values are accepted, and the menu is closed. The selection menu "Save recipe" is then shown.

Saves the entered values temporarily and accordingly runs the execution of the program activated only once.

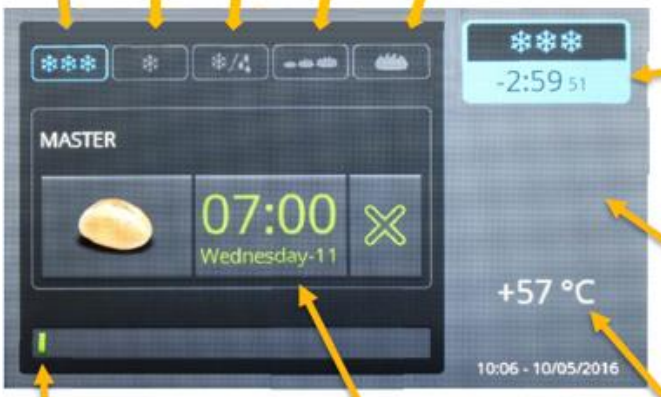
Enables storage of the changes in a special user-defined program.

The menu will be exited without changes, i.e. the changes will berejected.

Display During Program Execution

The top line shows the phase of the program execution currently running depending upon the program selected:

Freezing Storage Thawing Proving Holding



The field in the upper right rectangle shows the currently running program phase and the associated remaining (residual) time.

A red triangle is shown as an alarm symbol in the event of an alarm.

The current value for the temperature or the relative humidity is shown in the lower right corner depending upon the program phase.

The green bar at the bottom of the display shows the total program execution in proportion to the duration.

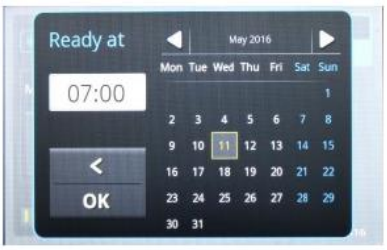
In the window in the middle, the symbol for the currently

running program is shown at the left, in the centre the ending time for the program and at the right a button to interrupt the program.

Changing a Running Program

Touching the program symbol opens the settings menu, where you can change the specifications for program phases that have not been run yet.

Touching the field with the ending time for the program opens the settings menus for date and time for purposes of changing the ending time for the program; check on the page 12 for the descriptive section *"Changing the ending time for the program"* or *"Changing the date of the ending time for the program."*



Here, the date can be changed by touching the date fields. Selection of the time can be opened by touching the time window.

Here, the time can be entered and saved with "OK". Exit the menu without making changes with "<". The ending time for the program may only be changed before the start of the thawing phase!

Interruption of the Currently Running Program

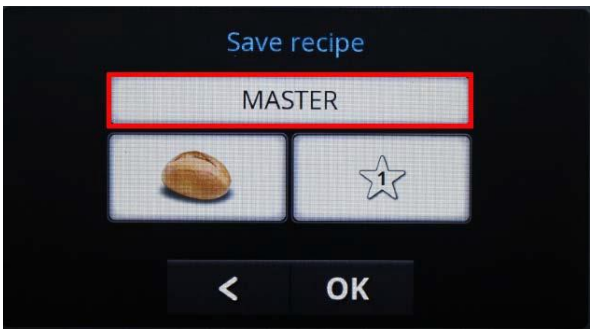
Touching the  button causes the currently running progrem to be interrupted.

A window opens where for verification purposes you are asked whether the program should really be halted.

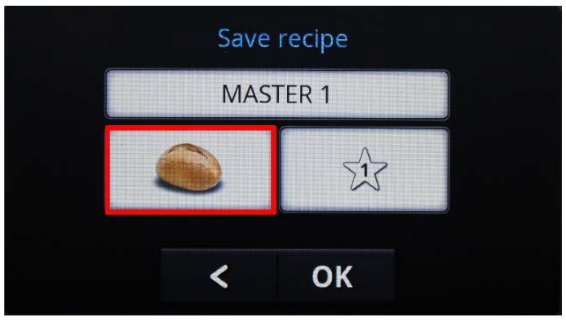
- If ("YES") is selected, the program is stopped.
- If ("NO") is selected then interruption of the program is interrupted, i.e. you return to the currently running program without any action being taken.

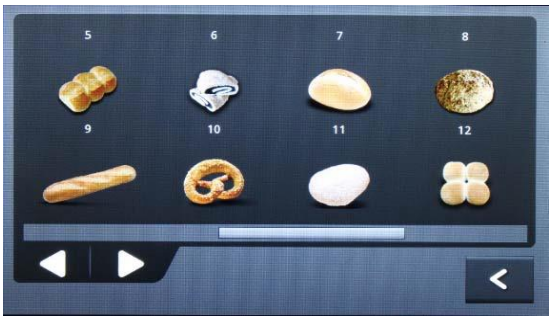
Storage of User-Defined Programs

We have mentioned how you can adjust a preconfigured program on page 13. Following steps will explain how a user define their own program:

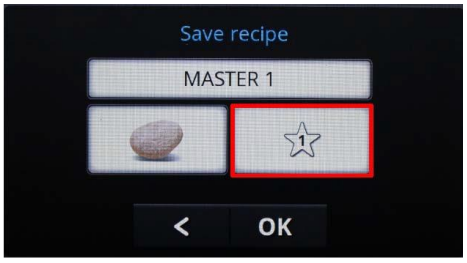


When touching the button with the program name, a window with an alphanumeric keyboard is displayed for entry of a special program name. Enter a name for the program, and press "OK", or exit the window without changes with “<”. The storage menu is then displayed again.





Touching the program symbol shows a selection of symbols for your own programs. Choose a symbol by touching it, and navigate back and forth among other symbols with "<" or ">" (left-down) or exit the menu without changes with "<" (right-down). The storage menu will be displayed.



Touching the  button selects the memory location in one of the bookmarks  in the start menu. Select a bookmark, or exit the menu without changes with "<". When all settings have been adjusted, you can save your program with "OK".

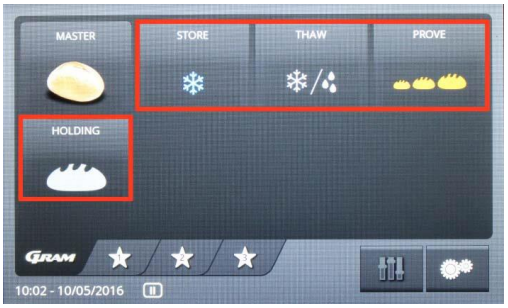
IMPORTANT

Remember that the preconfigured programs in the bookmarks cannot be themselves!

Deletion of a Specially Created Program

Select program, blue frame is displayed, after which you continue to press until a new menu item is displayed. You can now select "YES" or "NO" for deletion. The program is deleted by selecting "YES", whereas it continues to be available by selecting "NO".

Manual Programs



The display start page will save up to four different symbols. You can activate each one of these program phases separately to for example use the unit as a storage freezer or solely as a proving machine.

Procedure at the start of the phases:

- Select the desired program, and press once, until a blue frame is displayed.
- Then press the  symbol at the bottom to the right, and set the settings accordingly.
- Exit the menu with the symbol OK. For further steps in connection with execution, storage and interruption, please see page 14-15.
- Exit the menu without saving with the button "<".

Alarms/Error Messages

If an error arises, an error message window is displayed on the screen. In order to acknowledge this alarm, you must touch the alarm window (the area with the black background).

Then a red triangle is shown on display for the currently executing program until the error is remedied. Depending on the priority of the error, the program will continue with an emergency program, or it will be interrupted.

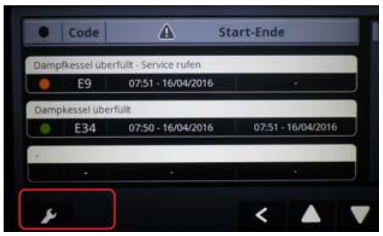
Alarm Log

Alarms are stored in the alarm list

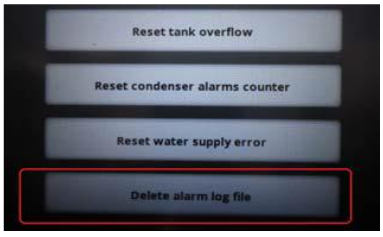
To open the alarm list, first push „Settings“

and then push "Alarm".

During operation, the alarm list can be accessed by pressing the area of the alarm symbol on the right edge of the photo.



The last 20 alarms are displayed.
By touching the "Maintenance" button, you can enter the menu for deleting the alarm entries and counter headers.



With the button "Delete alarm log file", the list is deleted.

Info I/O: Switching states and sensor values

The current values of the sensors and the switching states of the controller outputs can be displayed in the menu „Info I/O“.

To display the „Info I/O“ menu, first push the “Settings” button and then the “Info” button.

During operation, the Info window can be accessed by pressing the area of the temperature and humidity symbol on the right edge of the picture

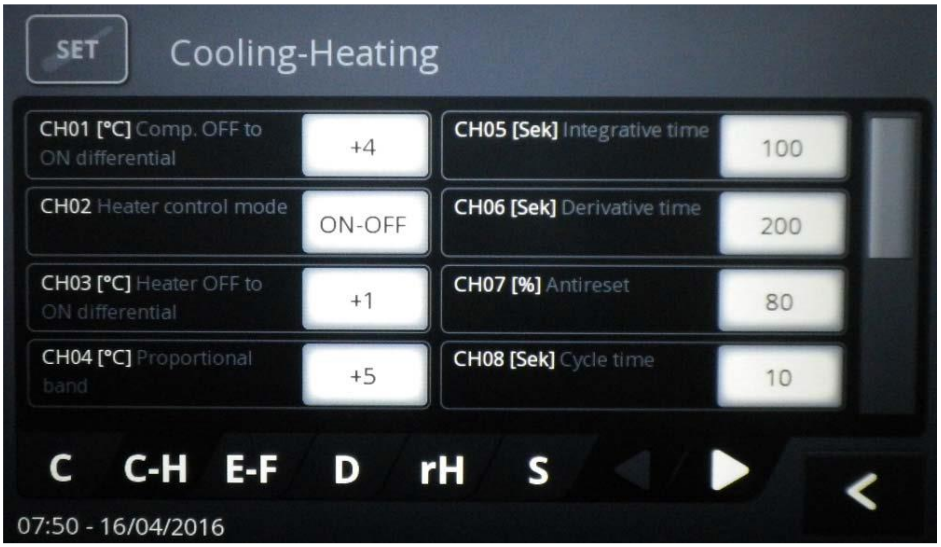
TEST: Manual switching of the components

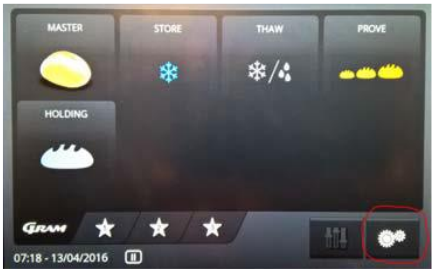
The outputs of the electronic controller can be switched manually for test purposes. When a button is touched, it appears blue, the output is switched on. Press again to turn off.

To display the Test menu, first push the “Settings” button and then the “TEST” button.

SET: Service parameters

The parameters are listed in several pages of the "SET" menu.





To display the list, first push the “Settings” button and then the “SET” button.

Navigation between pages is done by touching the corresponding tabs at the bottom edge:

C = Cooling
C-H = Cooling/Heating
E-F = Evaporator Fan
D = Defrost
rH = relative Humitity
S = System parameter
A = Alarm parameter
I = Input
N = Network parameter (not used)

Touching the white buttons with the entries opens an input window. Here the values are edited and saved with “OK” or leave the menu without changes with “<”.

Entering the serviceparameters, level III

The change of the service parameters requires the registration to level "III".
The input window is reached by pressing the "Service/Settings" button. Touching the input field opens a numerical keypad.
The service password is "6500".

After completion of the work, please log out!
Logging off is done automatically when the device is disconnected from the power supply.

Entering level II as authorized user (owner)

Reading the info window and changing the user settings requires logging in as an authorized user.
The input window is reached by pressing the "Service/Settings" button. Touching the input field opens a numerical keypad.
The service password is "2222".

When the device is disconnected from the power supply, the device automatically returns to level I (personnel, unauthorized user).

	Error message	Error Code	Description	System reaction
Temperature alarms	Alarm high temperature	**E10**	The temperature around the room sensor has been above the alarm value for longer than the alarm delay time	none
	Alarm low temperature	**E11**	The temperature around the room sensor has been below the alarm value for longer than the alarm delay time	none
	Condenser temperature high	**E8**	The temperature around the evaporatör sensor has been above the alarm value for longer than the alarm delay time	none
	Too many consecutive evaporatör temperature alarms	**E7**	The evaporator temperature alarm is occurring more frequently than the setting for repetition counts	The compressor is disconnected, and the evaporator fan runs with 100% power.
Sensor alarms	Room sensor error	**E0**	Sensor defective, not connected or shortcircuited.	Compressor runs for 5 min. ON and 5 min. OFF.
	Evaporator sensor error	**E1**	Sensor defective, not connected or shortcircuited.	Defrosting will be 45 min., and the evaporator fan will start 10 min. after the defrosting.
	Condenser sensor error	**E2**	Sensor defective, not connected or shortcircuited	None
	RF sensor error	**E6**	Sensor defective, not connected or shortcircuited	Vapour system will be shut off until the error has been remedied
Vapour system alarms	Boiler overfilled – summon service	**E9**	Too much water in boiler, defective water valve.	Vapour system will be shut off until the error has been remedied
	Water connection error	**E13**	No water connection to boiler, no power to water valve.	No steam production
	Test water connection	**E14, E32**	No water connection to boiler, no power to water valve.	No steam production
	Boiler discharge error	**E15, E33**	Defective water valve	Vapour system will be shut off until the error has been remedied.
	Boiler overfilled	**E34**	Defective water valve	Vapour system will be shut off until the error has been remedied.
Other alarms	Door open	**E12**	Door open longer than 45 min. or defective door contact.	Compressor disconnected until the error has been remedied
	Power connection error	**E35**	Loss of power for more than 5 min.	Program is shut down when the power comes back on again.

PARAMETER LIST

Item	COOLING	Min	Max	Def	Dim.	Lev	Note
C01	Minimum compressor on time	0	60	2	min	serv	
C02	Minimum compressor off time	0	60	5	min	serv	
C03	Compressor ON->OFF differential -FREEZE, STORAGE, RETARD-	0,0	10,0	2,0	°K	serv	Troom <= SP - C03 ==> compressor OFF
C04	Compressor OFF->ON differential - FREEZE, STORAGE, RETARD-	0,0	10,0	2,0	°K	serv	Troom >= SP + C04 ==> compressor ON
C05	Diff. between room set point and evaporator temp. to allow compressor cut in	0,0	30,0	5,0	°K	serv	Tevap <= SP - C05 ==> compressorcut in not allowed
C06	Compressor run when Troom is faulty - FREEZE-	0	30	10	min	serv	C06=0 ==> compressor alwaysOFF; C07=0 and C06>0 ==> compressor always ON; C06=4, C07=6: the compressor willcycle 4 minutes ON and 6 minutes OFF;
C07	Compressor stop when Troom is faulty - FREEZE-	0	30	2	min	serv	
C08	Compressor run when Troom is faulty - STORAGE, RETARD-	0	30	5	min	serv	
C09	Compressor stop when Troom is faulty - STORAGE, RETARD-	0	30	5	min	serv	
Item	**COOLING / HEATING-**	**Min**	**Max**	**Def**	**Dim.**	**Lev**	**Note**
CH01	Compressor OFF->ON differential	0,0	10,0	4,0	°K	serv	T room >= SP + CH01 ==> compressor ON; T room <= SP ==> compressor OFF
CH02	Heater control mode	ON-OFF	PID	ON-OFF		serv	
CH03	Heater OFF->ON differential	0,0	10,0	1,0	°K	serv	T room <= SP - CH02 ==> heater ON; T room >= SP ==> heater OFF
CH04	Proportional band	1,0	30,0	5,0	°C	serv	
CH05	Integrative time	0	600	100	s	serv	
CH06	Derivative time	0	600	200	s	serv	
CH07	Antireset	0	100	80	%	serv	
CH08	Cycle time	1	300	10	s	serv	Tevap >= SP + CH07 ==> heater cutin not allowed
CH09	Minimum time between heater off and compressor on	0	20	2	min	serv	
CH10	Minimum time between compressor offand heater on	0	20	2	min	serv	
CH11	Diff. between room set point and evaporator temp. to allow heater cut in	0,0	30,0	7,0	°K	serv	Tevap >= SP + CH07 ==> heater cutin not allowed
CH12	Allow the use of the defrost heater as additional cabinet heater	NO	YES	YES		serv	

Item	EVAPORATOR FAN	Min	Max	Def	Dim.	Lev	Note
F01	Evaporator fan speed, compressor, heater and steamer OFF -FREEZE-	5	100	100	%	serv	
F02	Evaporator fan speed, compressor, heaterand steamer OFF -STORAGE-	5	100	50	%	serv	
F03	Evaporator fan speed, compressor, heater and steamer OFF -THAW-	5	100	50	%	serv	
F04	Evaporator fan speed, compressor, heater and steamer OFF -PROVE-	5	100	30	%	serv	
F05	Evaporator fan speed, compressor, heaterand steamer OFF -RETARD-	5	100	50	%	serv	
Item	**DEFROST -STORAGE-**	**Min**	**Max**	**Def**	**Dim.**	**Lev**	**Note**
D01	Defrost enable	NO	YES	YES		serv	
D02	Defrost start mode in storage	TIMED, REAL TIME		REAL TIME		serv	
D03	Time interval among defrosts	0	24	6	hrs	user	
D04	Scheduled time for defrost 1	0	23:59	--:--		user	
D05	Scheduled time for defrost 2	0	23:59	--:--		user	
D06	Scheduled time for defrost 3	0	23:59	--:--		user	
D07	Scheduled time for defrost 4	0	23:59	--:--		user	
D08	Defrost end temperature	5,0	25,0	15,0	°C	serv	
D09	Maximum duration of defrost	1	100	45	min	serv	
D10	Defrost type	OFF, ELECTRIC, HOT GAS		ELECTRIC		serv	
D11	Dripping time	0	10	2	min	serv	
D12	Fan in defrost	NO	YES	NO		serv	
D13	Evaporator fan speed in defrost	20	100	50	%	serv	
D14	Evaporator fan re-start temperature after defrost	-10,0	10,0	0	°C	serv	
D15	Maximum evaporator fan stop after defrost	0	120	10	min	serv	
D16	Defrost with evaporator probe fail	NO	YES	YES		serv	
D17	Defrost performed setpoint	0,0	15,0	5,0	°C	serv	Enabled only for timed defrost: if Tevaporator stay above "defrost performed setpoint" for "defrost performed" minutes, defrost is considered performed (timer counter is reset).
D18	Defrost performed duration	0	60	15	min	serv	

Item	STEAMER	Min	Max	Def	Dim.	Lev	Note
H01	Humidity control	NO	YES	YES		serv	
H02	Set temperature above which the boiler canbe activated	-5,0	15,0	5,0	°C	serv	
H03	Use external SSR	NO	YES	YES		serv	
H04	Max allowed current in boiler (Imax2)	0,5	3.5 / 7.5	6,5	A	serv	
H05	Current in boiler to close the water inletvalve (Imax1)	0,5	3.5 / 7.5	2,3	A	serv	
H06	Current in boiler to open the water inletvalve (Imin)	0,5	3.5 / 7.5	2,0	A	serv	
H07	Max water inlet time	1	180	60	s	serv	
H08	Number of (H07) to elaps without resulting in (H05) being reached, before check water supply warning	1	5	2		serv	
H09	Number of (H07) to elaps without resulting in (H05) being reached, before setting boiler alarm	1	5	5		serv	
H10	Number of over flow detections to stop theboiler operation until a service reset	0	5	5		serv	
H11	Boiler check performed at the beginning ofevery proces including steam	NO	YES	NO		serv	
H12	Total drain time for boiler	1	120	30	s	serv	
H13	Drain time if H04 is reached	1	30	1	s	serv	
H14	Total drain of boiler (H12) is performed atleast every X day	0	8	3		serv	
H15	Number of tank load to perform a total drain(at the end of a recipe execution)	1	10	5		serv	
H16	Steam production ON -> OFF differential	0	10	0	%	serv	
H17	Steam production OFF -> ON differential	0	10	2	%	serv	
H18	Delay for water inlet	0	60	5	s	serv	

Item	SYSTEM	Min	Max	Def	Dim.	Lev	Note
S01	Plateau time -THAW-	0	100	25	%	user	
S02	Plateau time -PROVE-	0	100	25	%	user	
S03	Starting point acquisition time	10	180	60	s	serv	for slope calculation
S04	Frame heaters setpoint	-30,0	30,0	-5,0	°C	serv	
S05	Frame heaters differential	0,0	10,0	5,0	°K	serv	
S06	Door switch	NONE, NO, NC		NO		operator	No door switch; Normally Open; Normally Closed
S07	Door open shutdown delay	1	60	1	min	serv	After this time the compressor,heater and boiler are cut off
S08	Door open timeout	0	180	45	min	serv	After this time the controller resumesthe regulation as per door closed (0 ==> disabled)
S09	Maximum time lights ON	1	30	5	min	serv	
S10	Daylight saving time	NO, YES, AUTO		AUTO		user	YES = manual, AUTO = europe
S11	Power Fail max duration	0	60	5	min	serv	0 => disabled
S12	Buzzer sounds at recipe completion	0	600	20	s	serv	0 => buzzer doesn't sound
S13	Modbus address	1	250	1			
S14	Performance test setpoint	-25,0	50,0	-18,0	°C		
S15	Performance test duration	1	60	30	min		
S16	Component test duration	1	300	30	s		
S17	Component test pause	1	300	5	s		
S18	Boiler test: current setpoint	0,5	3,5	2,0	A		
S19	Boiler test: overflow timeout	1	10	5	min		
S20	Level II password	0	9999	2222	min		
Item	ALARM	Min	Max	Def	Dim.	Lev	Note
A01	Low temperature alarm differential - STORAGE, RETARD, plateau timeTHAW, plateau time PROVE-	-20,0	0,0	-10,0	°K	serv	0 => low temp. Alarm disabled
A02	High temperature alarm differential - STORAGE, RETARD, plateau timeTHAW, plateau time PROVE-	0,0	20,0	10,0	°K	serv	0 => high temp. Alarm disabled
A03	Delay before alarm temperature warning	1	240	120	min	serv	
A04	Condensation temperature alarm set	0,0	100,0	65,0	°C	serv	Tcondenser1 >= S14 ==> high condenser temperature alarm set
A05	Condensation temperature alarm reset	0,0	100,0	40,0	°C	serv	Tcondenser1 <= S15 ==> high condenser temperature alarm reset
A06	Operation in case of high condenser alarm	NON, ALARM, STOP		STOP		serv	Compressor OFF, condenser fan ON
A07	Max consecutive high condenser temp alarms before setting an alarm	0	10	5		serv	only active if S16 = STOP; 0 = disabled

Item	INPUT	Min	Max	Def	Dim.	Lev	Note
I01	Adjusting room sensor input	-5,0	5,0	**0,0**	°K	serv	
I02	Adjusting evaporator sensor input	-5,0	5,0	**0,0**	°K	serv	
I03	Adjusting condenser 1 sensor input	-5,0	5,0	**0,0**	°K	serv	
I04	Adjusting Humidity sensor input	-5	5	**0**	%	serv	
Item	**NETWORK**	**Min**	**Max**	**Def**	**Dim.**	**Lev**	**Note**
N01	IPaddr - 1	1	255	**192**		user	
N02	IPaddr - 2	1	255	**168**		user	
N03	IPaddr - 3	1	255	**0**		user	
N04	IPaddr - 4	1	255	**27**		user	
N05	Subnet mask - 1	1	255	**255**		user	
N06	Subnet mask - 2	1	255	**255**		user	
N07	Subnet mask - 3	1	255	**255**		user	
N08	Subnet mask - 4	1	255	**0**		user	

Defrosing Intervals (Storage)

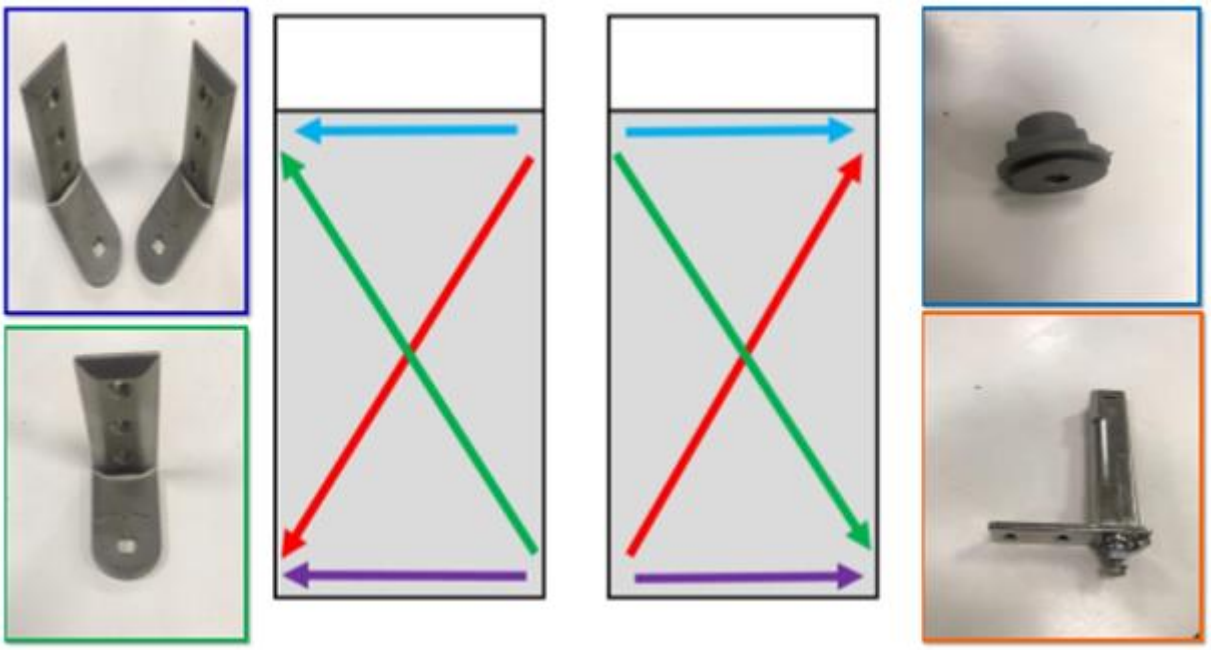
The defrost intervals or time points are set in the “SET” menu, “D” (defrost) tab, see above parameter list.

Item	DEFROST -STORAGE-	Min	Max	Def	Dim.	Lev	Note
D03	Time interval among defrosts	0	24	**6**	hrs	user	
D04	Scheduled time for defrost 1	0	23:59 , --:--	**--:--**		user	
D05	Scheduled time for defrost 2	0	23:59 , --:--	**--:--**		user	
D06	Scheduled time for defrost 3	0	23:59 , --:--	**--:--**		user	
D07	Scheduled time for defrost 4	0	23:59 , --:--	**--:--**		user	

11) Switching the Door Hinge Side

The door hinge side can be changed without additional parts. The hinge brackets are asymmetrical, so you must take special care to not get them mixed up – if in doubt, label them before making the modification.

Since physical strength is required to change the door hinges on two opposite ends of the door, the door hinge change should be carried out by two suitably qualified persons for safety reasons. Otherwise, there is a risk of injury and damage to the cabinet.



Change from right to left:

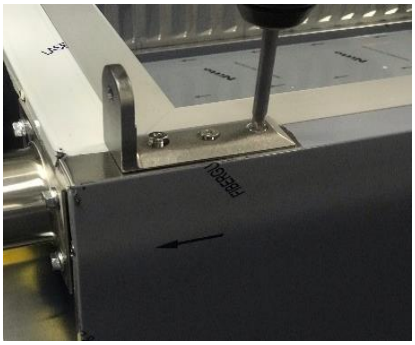
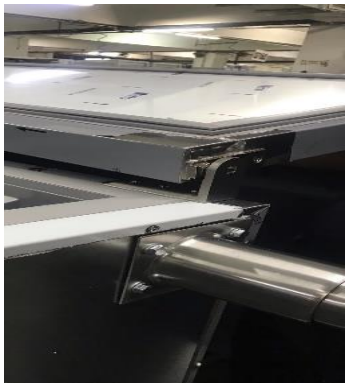
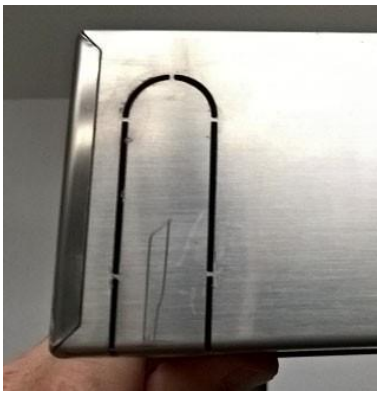
The door is turned by 180°, then the hinge brackets are moved diagonally, rotated by 180°. The door closer is moved from the bottom right to the bottom left; the square with M8 internal thread is moved from the top right to the top left.

Change from left to right:

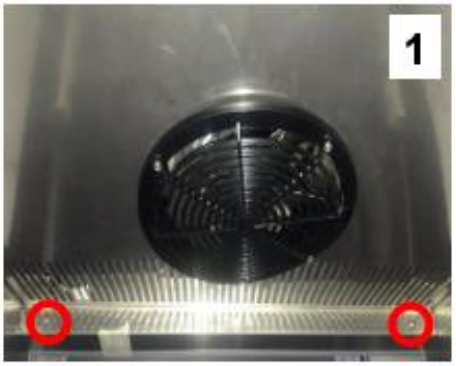
The door is turned by 180°, then the hinge brackets are moved diagonally, rotated by 180°. The door closer is moved from the bottom left to the bottom right; the square with M8 internal thread is moved from the top left to the top right.

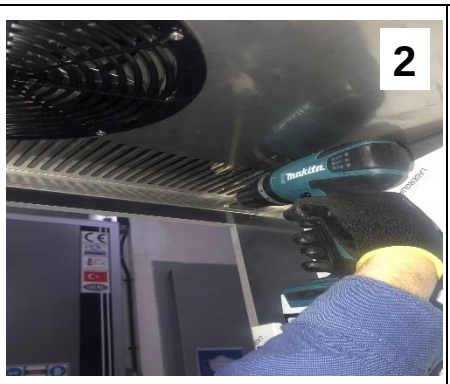
The following description applies to the modification from right to left. In the opposite situation, the corresponding procedure is reversed.

		
1. Remove the fastening screw in the middle at the bottom edge of the canopy.	2. Fold the canopy upwards and secure it against folding back down using adhesive tape or similar.  **Risk of injury!**	3. Open the door at an angle of around 120°.
		
4. Remove the screw from the door closer square at the bottom right hinge (wrench size 8 mm).	5. Remove the fastening screw on the top right hinge (wrench size 13 mm).	6. Pull out the door under the top hinge bracket and lift it out of the lower hinge bracket.

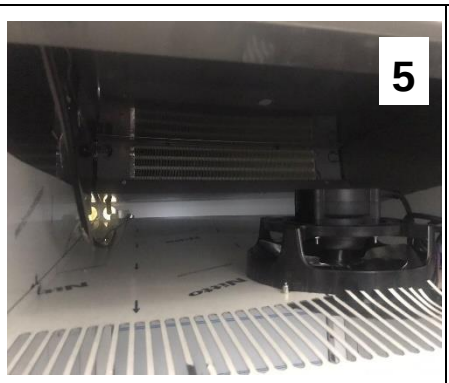
		
7. Remove the door closer without turning the door closer square.	8. Move the hinges from the bottom right to the top left, and from the top right to the bottom left; PH2 screwdriver.	9. Remove the blind plugs for this.
		
10. Move the lock fitting from the former top edge to the intended top edge of the door.	11. Place the door closer at the bottom left at an opening angle of 180°, and put the bottom left corner of the door over the door closer with the recess provided.	12. Push the top left door corner over the hinge bracket there and screw in the M8 screw.
		
13. Screw in the fastening screws of the door closer at the bottom left.	14. Break out the left recess at the bottom of the canopy flap.	15. Close and screw on the canopy.

12) Reaching the Evaporator Unit for Service





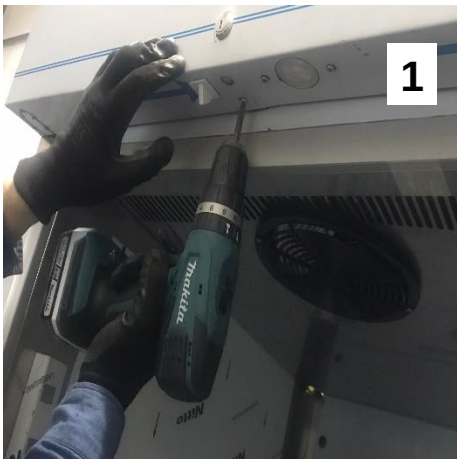
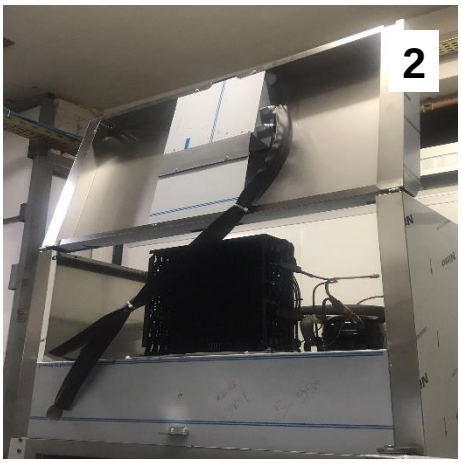
1-2-3) The inner air sheet plate of the refrigerator cabinet is disassembled by cordless or manual screwdriver and removed carefully.



4) To easy work, sheet place can put on the top of the rail.

5-6) After reaching the Evaporator Unit and fix, the same method must use to close the Evaporator section.

13) Reaching the Refrigerating Unit for Service

	
1. Remove the fastening screw in the middle at the bottom edge of the canopy.	2. Fold the canopy upwards and secure it against folding back down using adhesive tape or similar. **Risk of injury!**
	
3. Cooling Unit is at the top of the cabinet.	4. Close and screw on the canopy.

14) Steam Humidifier System Maintenance

The operating characteristics and maintenance intervals of the steam humidifier are mainly dependent on the exising water quality (total hardness, conductivity) and the amount of steam generated since the last maintenance. Different qualities can lengthen or shorten the period. The residues found in the steam cylinder provide an indication of future maintenance intervals.

Flushing the steam cylinder

The steam cylinder can be flushed by turning the cabinet off and then on again. Furthermore the system conducts a flushing regularly, dependent on the water quality.

Servicing

Servicing of the steam humidifier system should be done with the following intervals:

4 weeks after commisioning (with normal water quality):

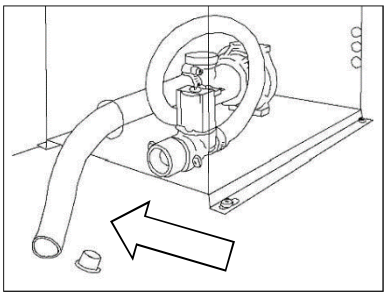
- Visual inspection of electrical and mechanical components, cables, connections, etc.
- Removal of scale from cylinder, water outlet hose and drain pump.
- Inspection of electrodes.

Every 6 months (with normal water quality):

- Visual inspection of electrical and mechanical components, cables, connections, etc.
- Removal of scale from cylinder, water outlet hose and drain pump.
- Inspection of electrodes.

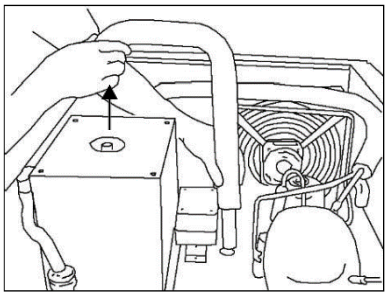
Cleaning the steam cylinder

Disconnect the cabinet at the mains.

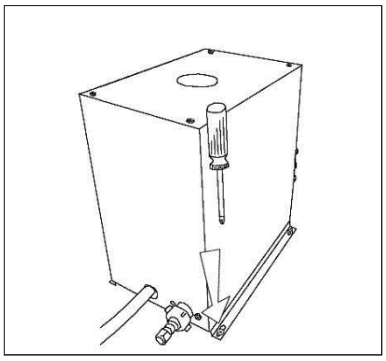


Empty the cylinder of water. Pull out the yellow plug of the drain hose. Bend the hose down behind the cabinet back, so that the water can be emptied into a bucket or drain. Place the plug in the hose and put the hose in place again.

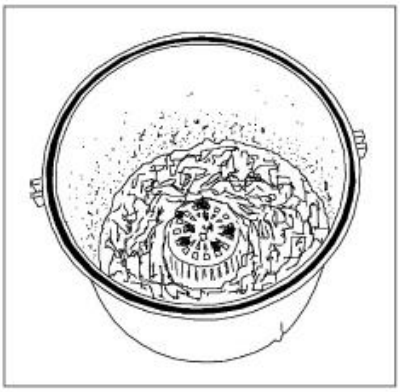
Be aware that the water from the cylinder might be very hot!



Dismount the steam pipe.

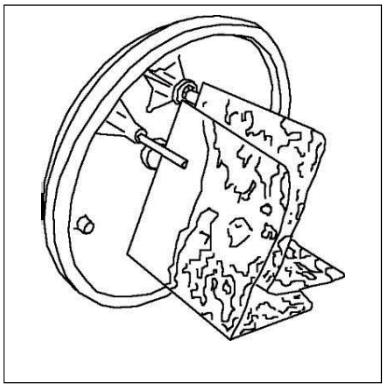


Dismantle the steam cylinder cover. Hoses and electrical connections should be disconnected. Lift the cylinder off the base. Open the cylinder by releasing the flange clamps.

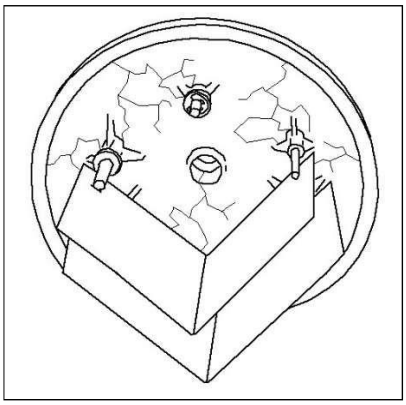


Remove all scale and sludge from cylinder.

When cleaning do not use acids or other chemicals.

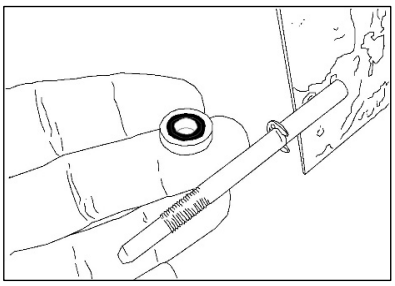


Remove deposit from the heating electrodes by knocking them (small amounts that remain are acceptable).



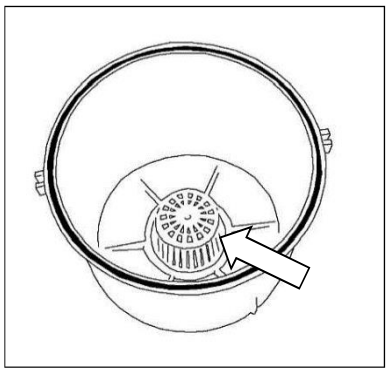
Inspect the inside of the top part of the cylinder for furring and any electrical bridging (black grooves) between the electrodes and their bushings and remove completely by washing.

Top half of the cylinder must be replaced if electrical bridges have penetrated deeply into the material.



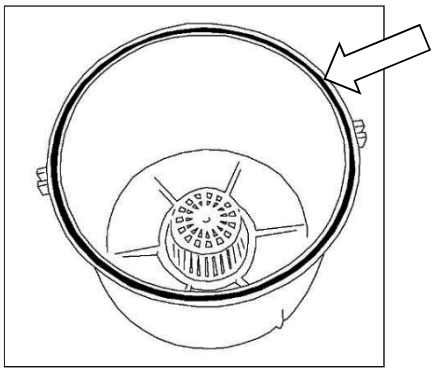
Examine the electrode bushings, and clean them if necessary.

Be aware that the rubber seal should face the top of the cylinder.

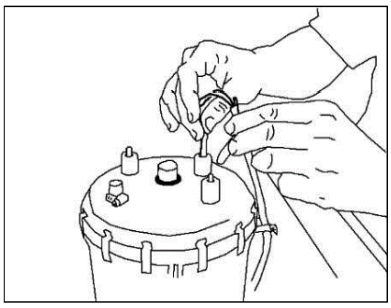


Clean cylinder coarse strainer.

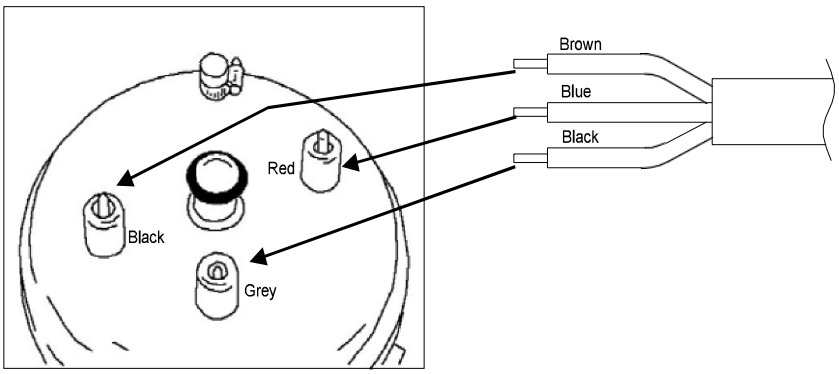
Assembling the cylinder:

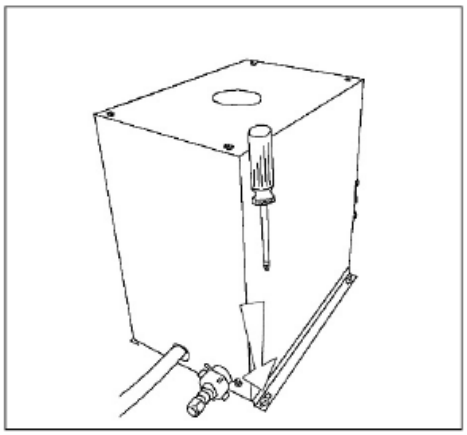


If necessary, replace the o-ring seal between the top and bottom part.
Connect upper and lower parts with clamps.
Replace the o-ring seal in the bottom of the cylinder, if necessary.
Refit cylinder firmly into the base.

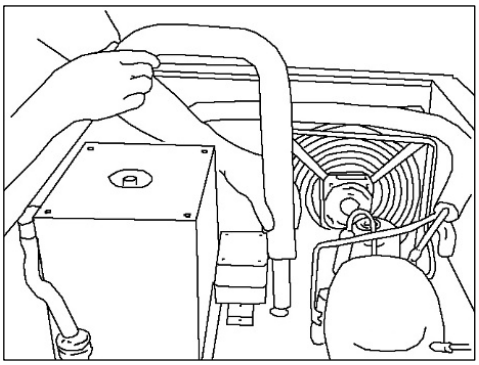


Connect plugs to the matching electrodes and level sensor.
Connect hoses for water supply and drain.





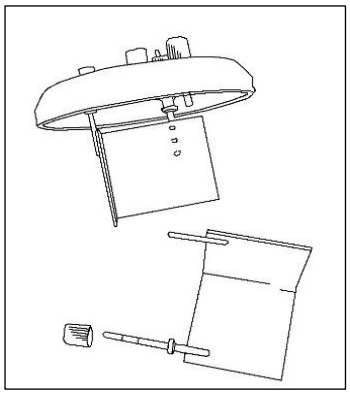
Refit the cylinder cover.



Refit the steam pipe.

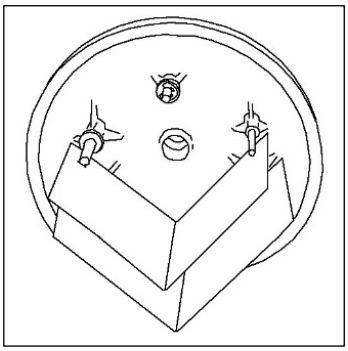
Switch on the unit and operate for 15 to 30 minutes. Check for any leaks.

Replacing electrodes



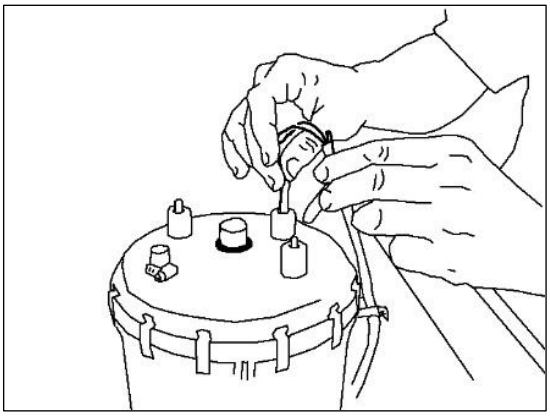
Disassemble the cylinder and open as described in chapter "Cleaning the steam cylinder".

Loosen hand nuts and take out old electrodes.



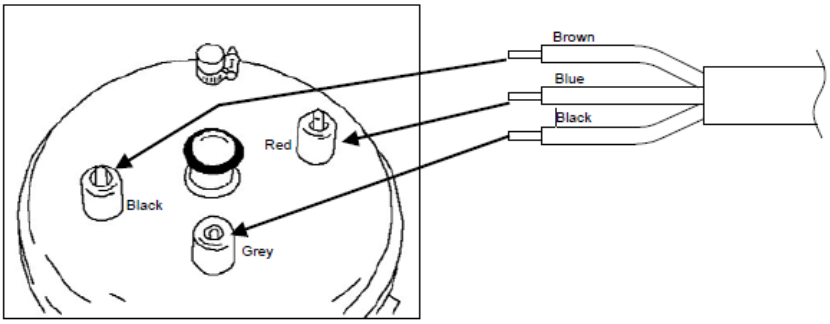
Insert new electrodes and fasten hand nuts – *by hand only.*

Reassemble the steam cylinder and fit as desribed in the chapter "Cleaning the steam cylinder".



Connect plugs to the matching electrodes and level sensor.

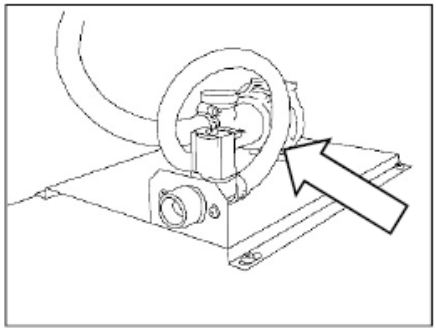
Connect hoses for water supply and drain.



Switch on the unit and operate for 15 to 30 minutes. Check for any leaks.

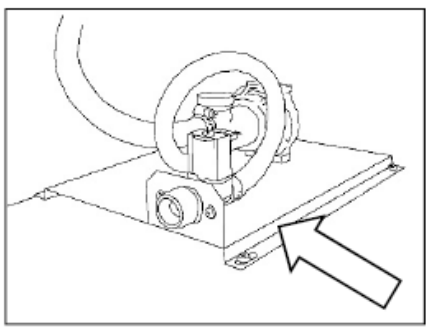
Cleaning the pump

Disassemble the cylinder and open as described in chapter "Cleaning the steam cylinder".



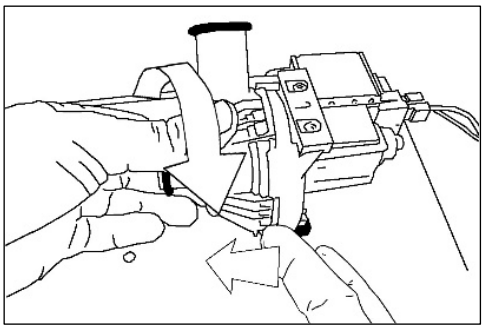
Remove electric cable from pump.

Disconnect the hoses from the pump.

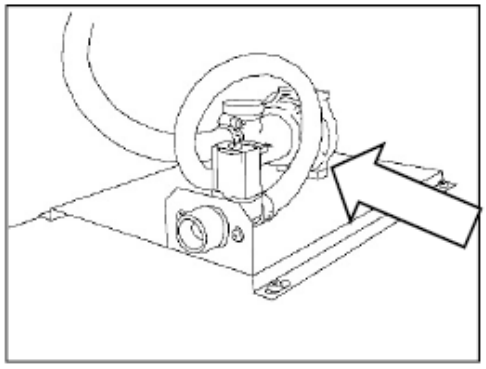


Dismount the base plate.

Dismount the pump from the plate.



Open pump (bajonet joint).
Remove residues from discharge hoses and pump.
Replace o-ring as necessary.
Reassemble the pump.



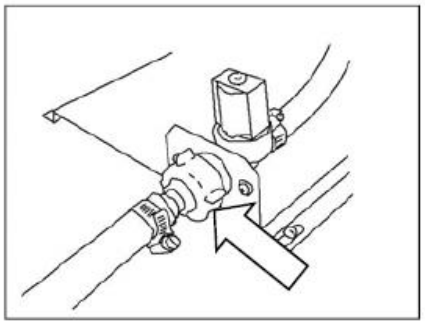
Mount the pump at the base plate.
Connect the hoses to the pump.
Connect electrical cable to pump.

Reassemble the steam cylinder and fit as desribed in the chapter "Cleaning the steam cylinder".
Switch on the unit and operate for 15 to 30 minutes. Check for any leaks.

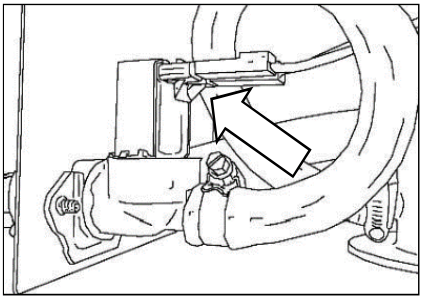
Cleaning the solenoid valve and filter

Disconnect the cabinet at the mains

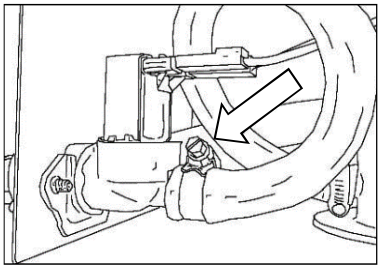
Dismount the steam pipe and the cover as descibed in: "Cleaning the steam cylinder".



Shut off the water supply, and loosen the water connector.

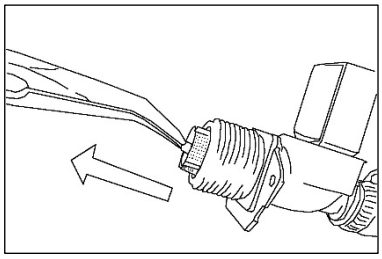


Remove the connectors for the solenoid valve.

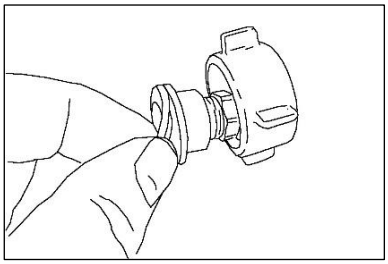


Remove the water supply hose by loosening the hose clip.

Dismount the solenoid valve from the bracket.

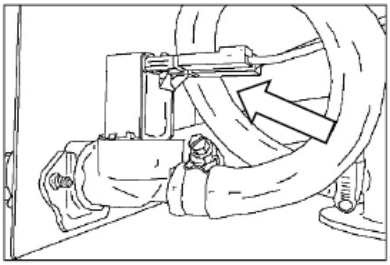


Disassemble the solenoid valve, and remove filter and reducer. Clean the parts.

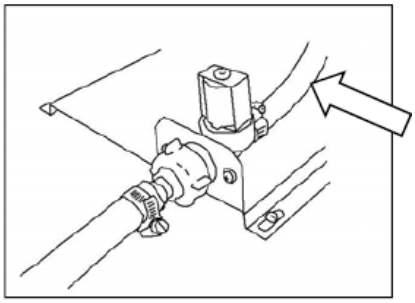


If necessary, replace the rubber seal.

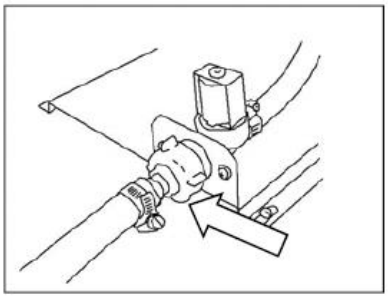
Assemble the solenoid valve with filter and reducer again.



Mount the valve at the bracket and put on the connectors.



Put on the water supply hose again.



Mount the steam pipe and the cover again as descibed in: "Cleaning the steam cylinder".

Connect the water supply again, and check for leaks.

15) Measures for Taking the Cabinet Out of Operation for Long Periods

- Disconnect the power plug from the socket or switch off the circuit fuse.
- Remove all foods from the cabinet.
- Clean the cabinet (see cleaning section).
- Do not fully close the door; this will prevent unpleasant odors.

Warning Please note that as soon as you disconnect the cabinet from the mains, condensation water may drip from the cabinet onto the floor. This could damage the floor and make it slippery.

16) Disposal

Electrical and electronic equipment (EEE) contains materials, components and substances that could pose a threat to humans and the environment if proper disposal (WEEE) is not observed. Products labelled with a crossed-out bin symbol belong to this group of electrical and electronic components. The crossed-out bin symbol indicates that this type of waste must not be disposed of with regular household waste, but must instead be collected and sorted separately. If the cabinet requires disposal, this must be carried out in a proper and environmentally friendly manner. The applicable laws and directives related to disposal must be observed. Please ask your specialist dealer or your local authority about proper disposal.	

The below only concerns the United Kingdom.

Disposal of an old cabinet is only available when we are delivering a new one at the same time. Cabinets must be fully defrosted and emptied prior to collection.

Hoshizaki recognizes that our products for the catering market are considered as WEEE when they become obsolete. To ensure that Hoshizaki's responsibilities are handled correctly and environmentally friendly, we are signed up the largest "Business to Business" compliance scheme in the UK – B2B Compliance

http://www.b2bcompliance.org.uk

B2B Compliance will on our behalf deal with all areas of our responsibilities when collecting and disposing of equipment which fall under the UK WEEE regulations.

B2B Compliance can be contacted on telephone number 0117 301 8829.

17) Technical Support and Ordering Spare Parts

Technical support for **resellers and service partners**:

Branches

Hoshizaki UK - UK, Ireland
TEL: +44 845 456 0585
uksales@hoshizaki.co.uk

Hoshizaki Deutschland - Germany, Switzerland, Austria
TEL: +49 (0)5121 697370
vertrieb@hoshizaki.de

Hoshizaki Benelux - Netherlands, Belgium, Luxembourg
TEL: +31 (0)85 0188370
info@hoshizaki.nl

Hoshizaki France - France
TEL: +33 (0)1 48 63 93 80
info@hoshizaki.fr

Hoshizaki Iberia - Spain, Portugal
TEL: +34 (0)93 478 09 52
info@hoshizaki.es

Hoshizaki Denmark - Denmark
TEL.: +45 89 88 53 50
salg@hoshizaki.dk

Hoshizaki Norway - Norge
TEL.: +47 22 88 17 50
salg@hoshizaki.no

Hoshizaki Sweden - Sverige
TLF.: +46 108 84 87 47
OrderSE@hoshizaki.dk

Hoshizaki Italia – Italia
TEL: +39 348 3022156
commerciale@hoshizaki.it

Hoshizaki Europe B.V – All other countries in Europe and Africa
TEL: +31 (0)20 691 84 99
sales@hoshizaki.nl -- http://hoshizaki-europe.com/

In the event of faults, please first check if the cabinet is connected to the mains, then check the fault indicator on the display and consult the service manual.

Spare parts can only be ordered **from commercial resellers** (refrigeration specialist companies, dealers, purchasing cooperatives, e.g. BÄKO) and **in writing (e-mail, fax, conventional mail)**.

Please always note the cabinet type, part number and serial number when making enquiries and placing orders. This information can be found on the label.

If you have a smartphone, we recommend sending us a photo of the label and, if in doubt, of the cabinet and the defective part as well.

18) Technical Data

Placement of the label:

PRODUCT DESCRIPTION LABEL

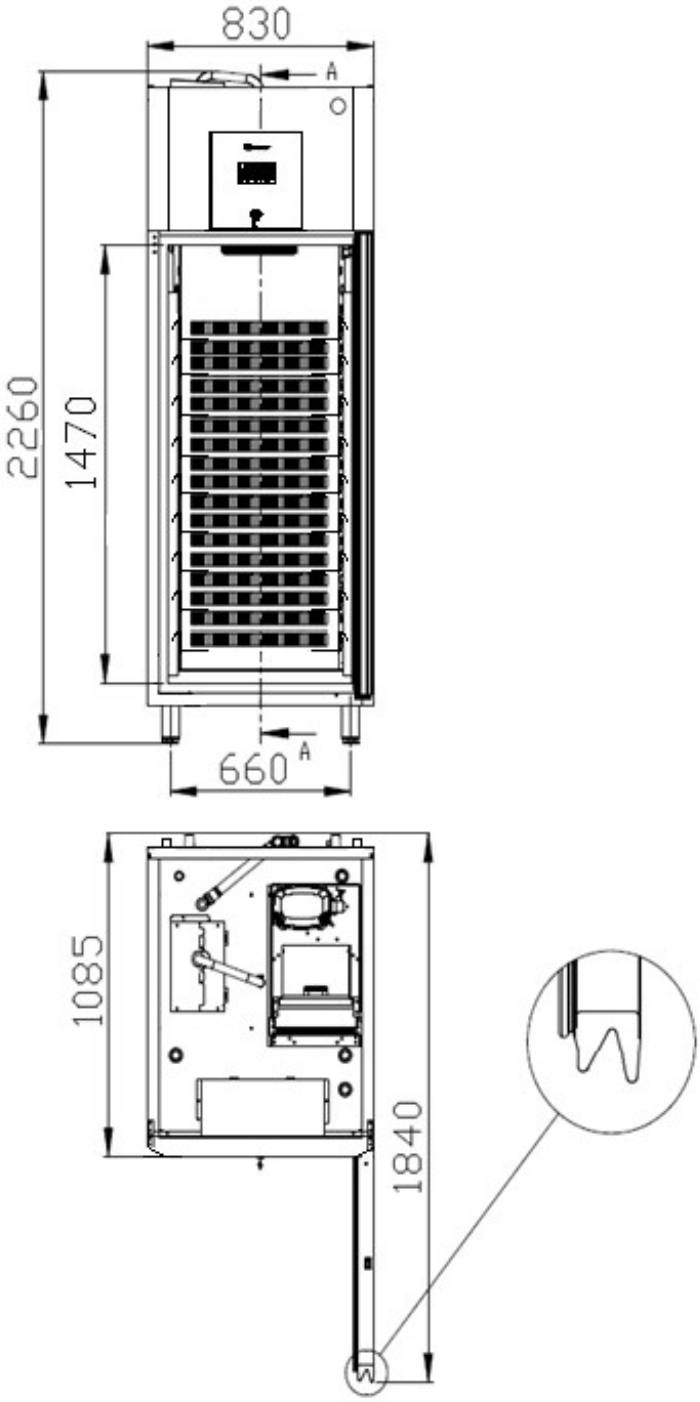
1 Product Number
2 Product Description
3 Model
4 Refrigerant (GWP)
5 CO2 Equivalent
6 IP Protection
7 Climate Class
8 Production Date
9 Total power / Current / Lamp power
10 Voltage - Frequency
11 Heating Element
12 System Pressure
13 Blowing Agent
14 Serial Number

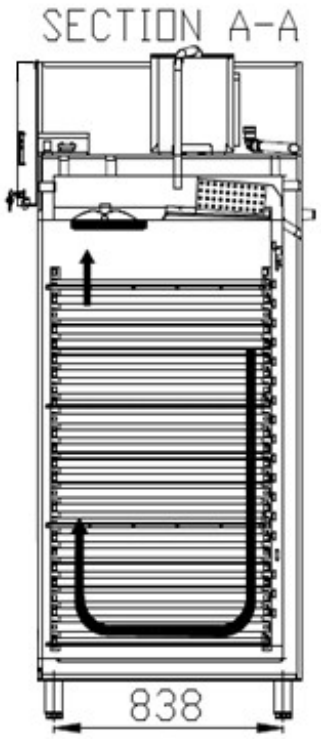
TRADE MARK			BAKER GA 550	
MODEL NAME			BAKER GA 950	BAKER GA 550
Intended Use			Cooling/Freezing/Storage/ Thawing/Proving/ Holding	Cooling/Freezing/Storage/ Thawing/Proving/ Holding
Chilled Operating Temperature				
Frozen Operating Temperature				
Multiuse Cabinet			X	X
Vertical Cabinet			X	X
Counter Cabinet				
Parameter	**Symbol**	**Unit**		
Gross volume	V_{nT}	litre	950	480
Climate Class	CC		5/T (5L1)	5/T (5L1)
Refrigerant			R290	R290
Charge		kg	0,149	0,133
GWP			3	3
CO_2 Equivalent			0,5	0,4
Heavy-duty; This appliance is intended for use in ambient temperatures up to 40°C			X	X
Contact Details:	HOSHIZAKI EUROPE B.V. Address: Burgemeester Stramanweg 101 1101 AA Amsterdam, The Netherlands Tel.: +31 (0)20 691 84 99 - http://hoshizaki.europe.com			

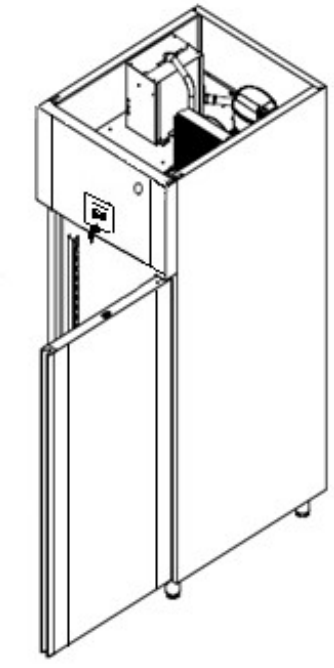
19) Dimensions

DIMENSIONS OF THE DEVICES

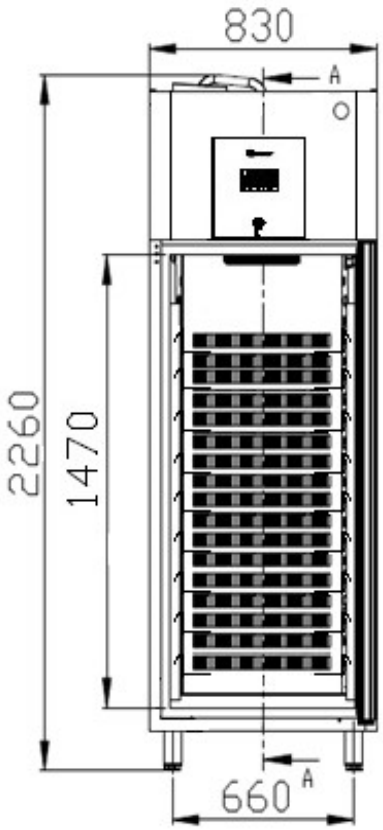
BAKER GA 950

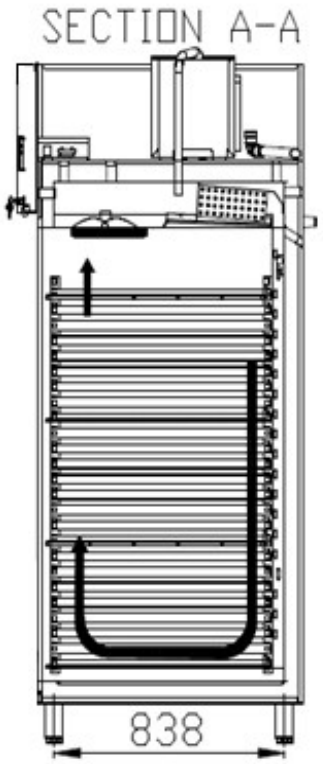


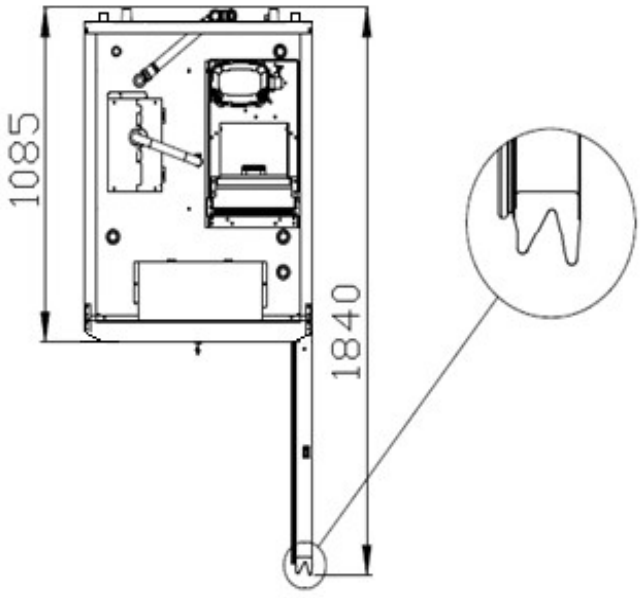


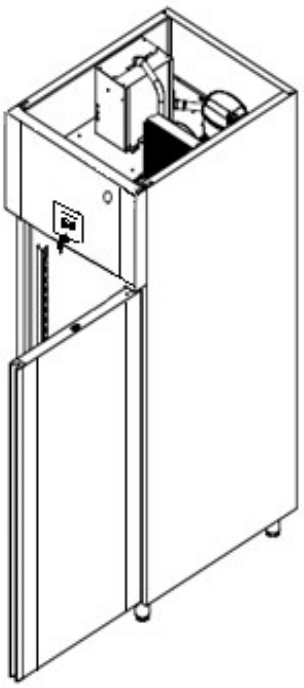


BAKER GA 550

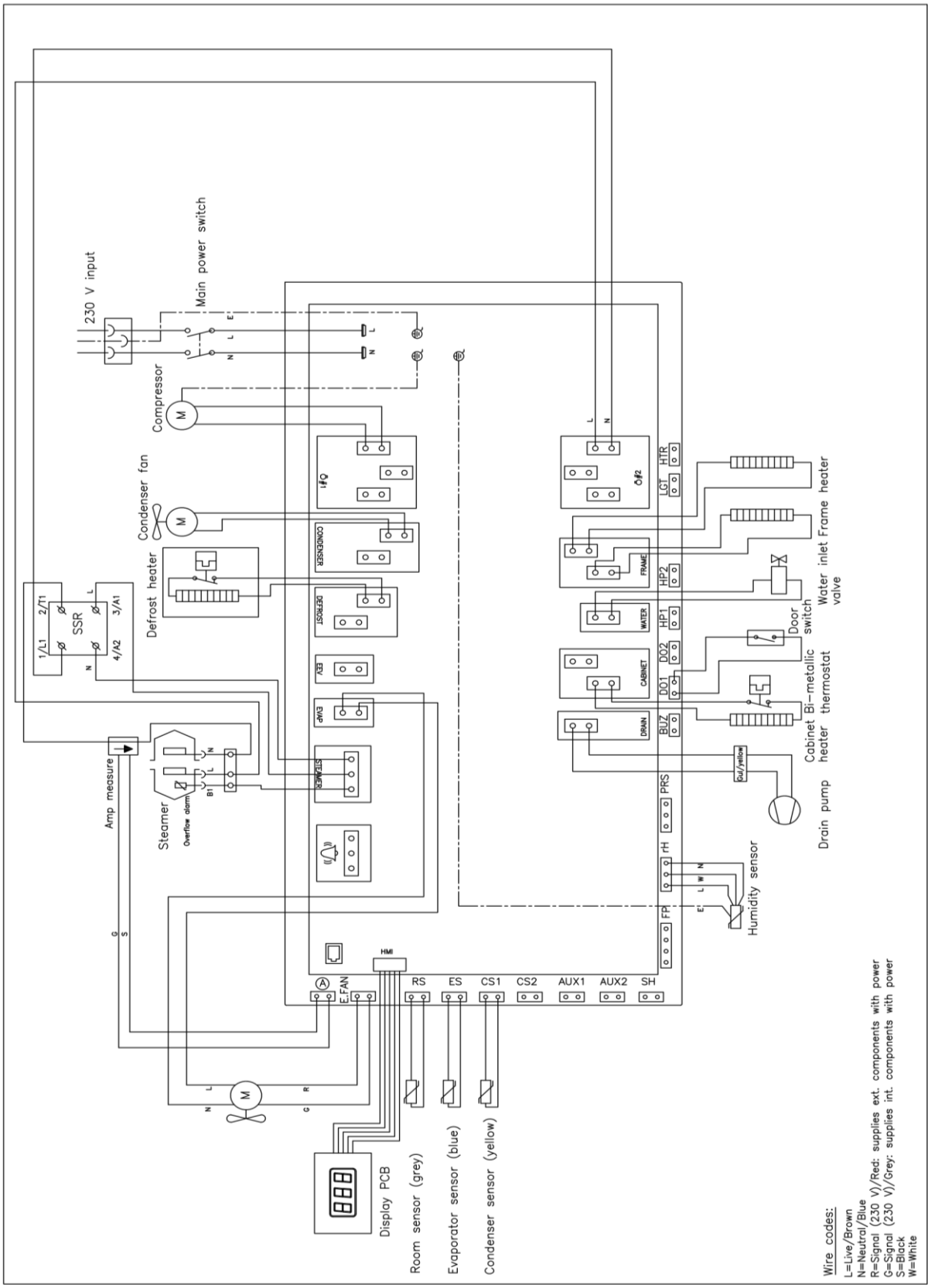




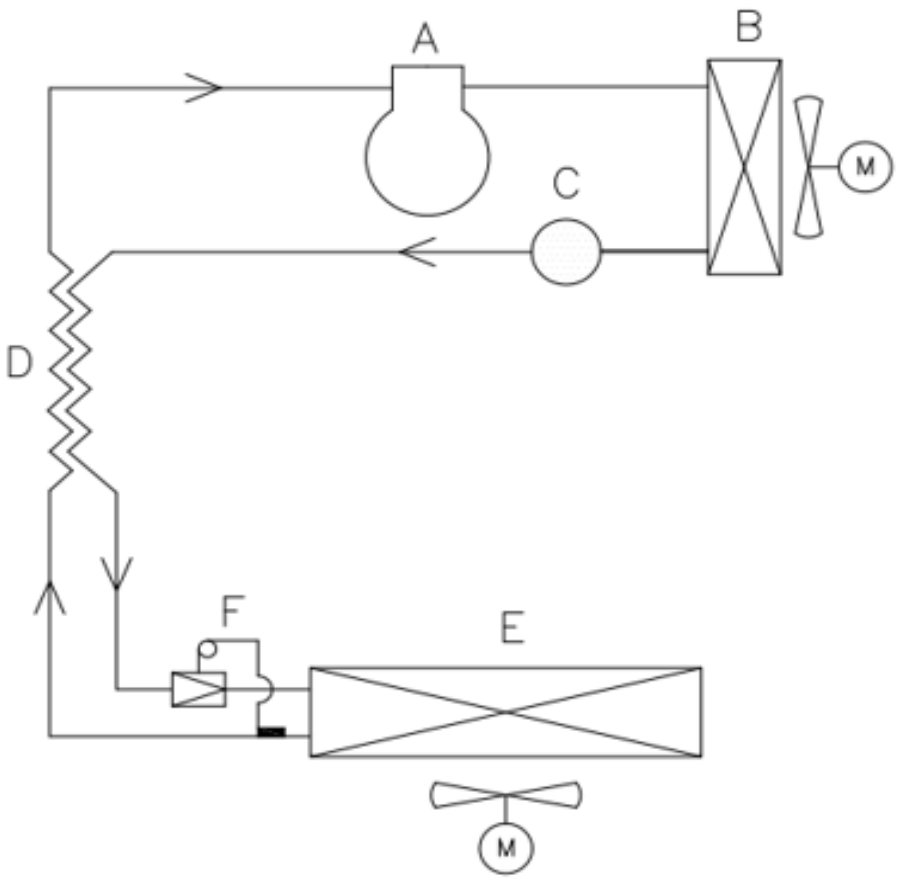




20) Wiring Diagram



21) Cooling Diagram



A	COMPRESSOR
B	CONDENSER
C	FILTER DRYER
D	HEAT EXCHANGER
E	EVAPORATOR
F	EXPANSION VALVE