



HOSHIZAKI EUROPE

# HOSHIZAKI SERVICE MANUAL

BAKER SF 950 + / SF 550



**As the user, please use the operating instructions.  
This service manual does not include operating instructions.  
It is only intended for the service technician.  
here.**



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## 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 intends for a trained service technician. As a result, many important safety instructions for the user are missing about 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 cabinet is intended for the storage of packaged foods at a constant temperature. This cabinet mustn't be used to cool down or freeze foods.

Area of application:

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

## 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 consider 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 50 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.

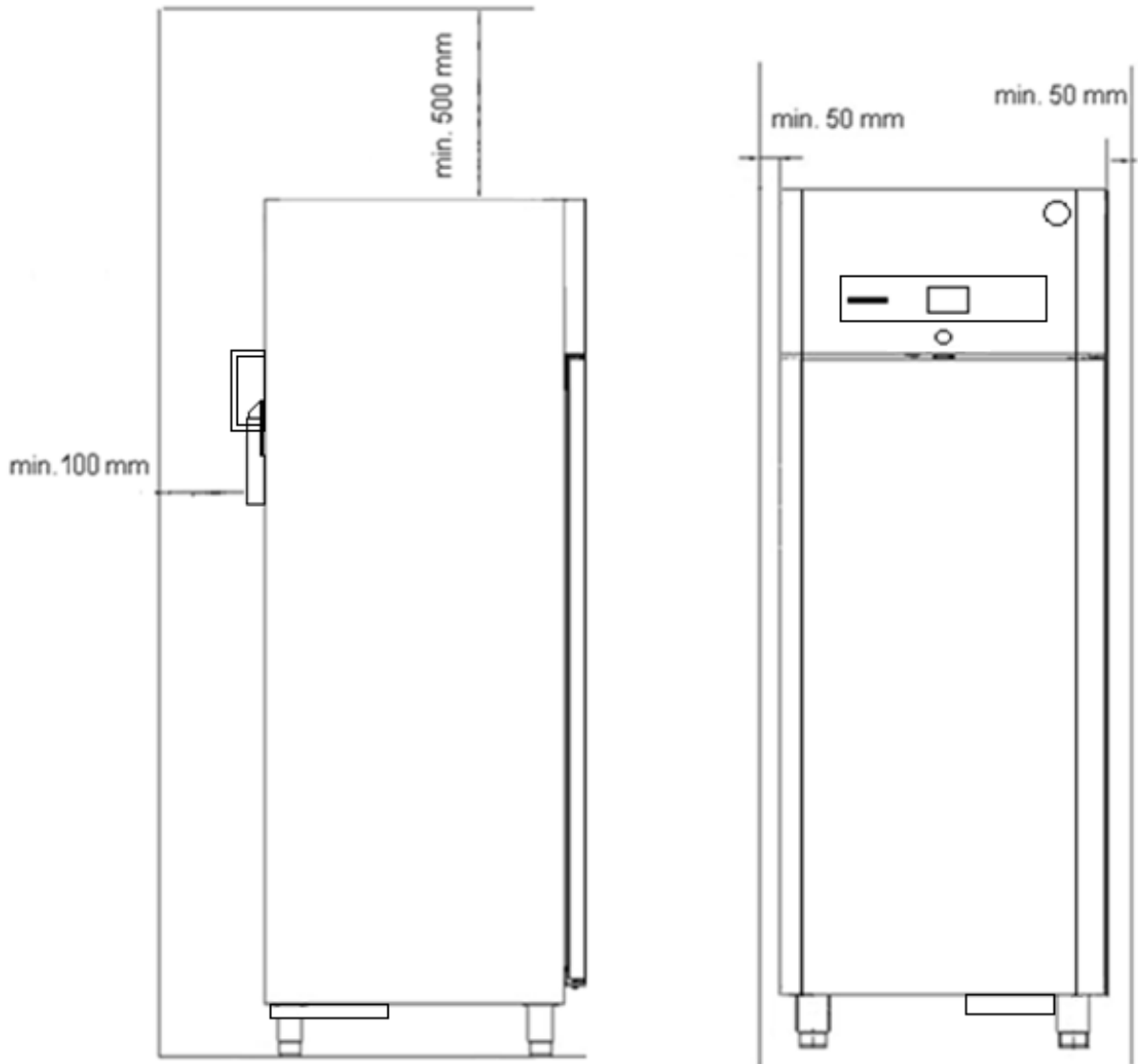
For electrical safety reasons, the cabinet must not be operated outside. The refrigeration technology of the cabinet does not function outside or in unheated rooms (particularly in colder seasons) and can be damaged by low temperatures.



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 50 mm from walls, furniture and other cabinets.





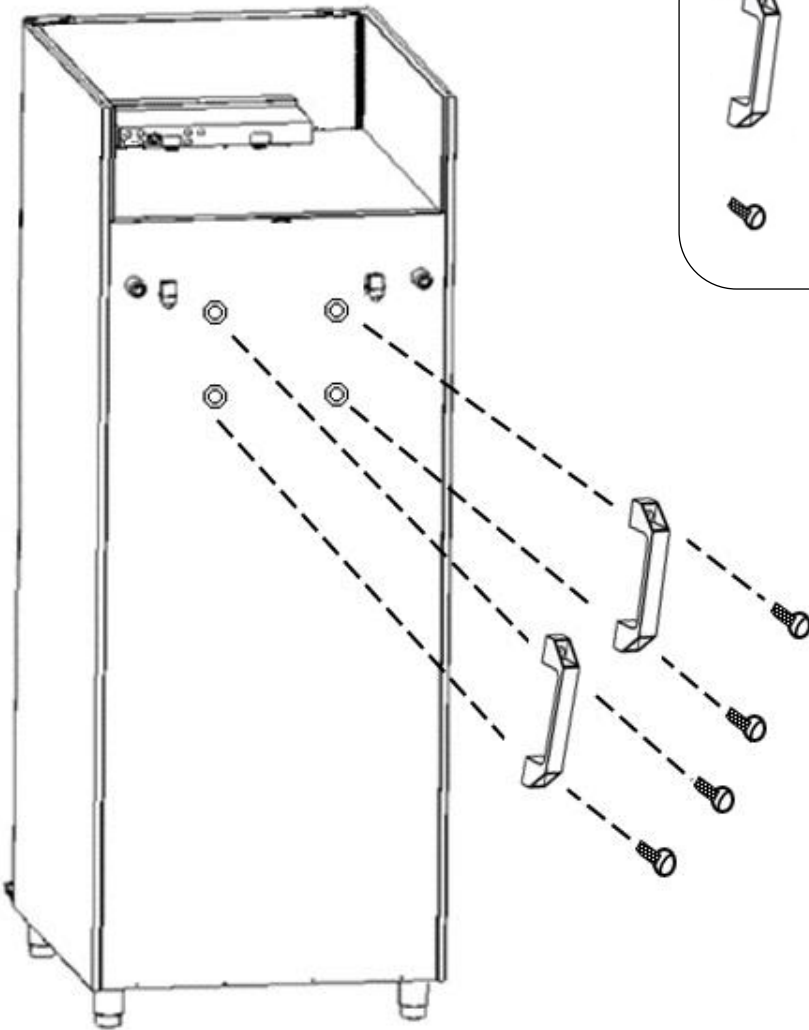
## ATTENTION

- The handle is an auxiliary part for fine-tuning the position of the product.
- Securely fix the bolts. Otherwise, the product may be damaged or the handle may come off and injure you.
- This product weighs approximately 200kg. Be careful when moving the product. If the product topples over or falls, the product may be damaged or injure you.



## IMPORTANT

- Damage and injury caused by carrying products using this handle is out of warranty and factory responsibility!



x 2



x 4

The specified materials are packaged in the cabinet as accessories!



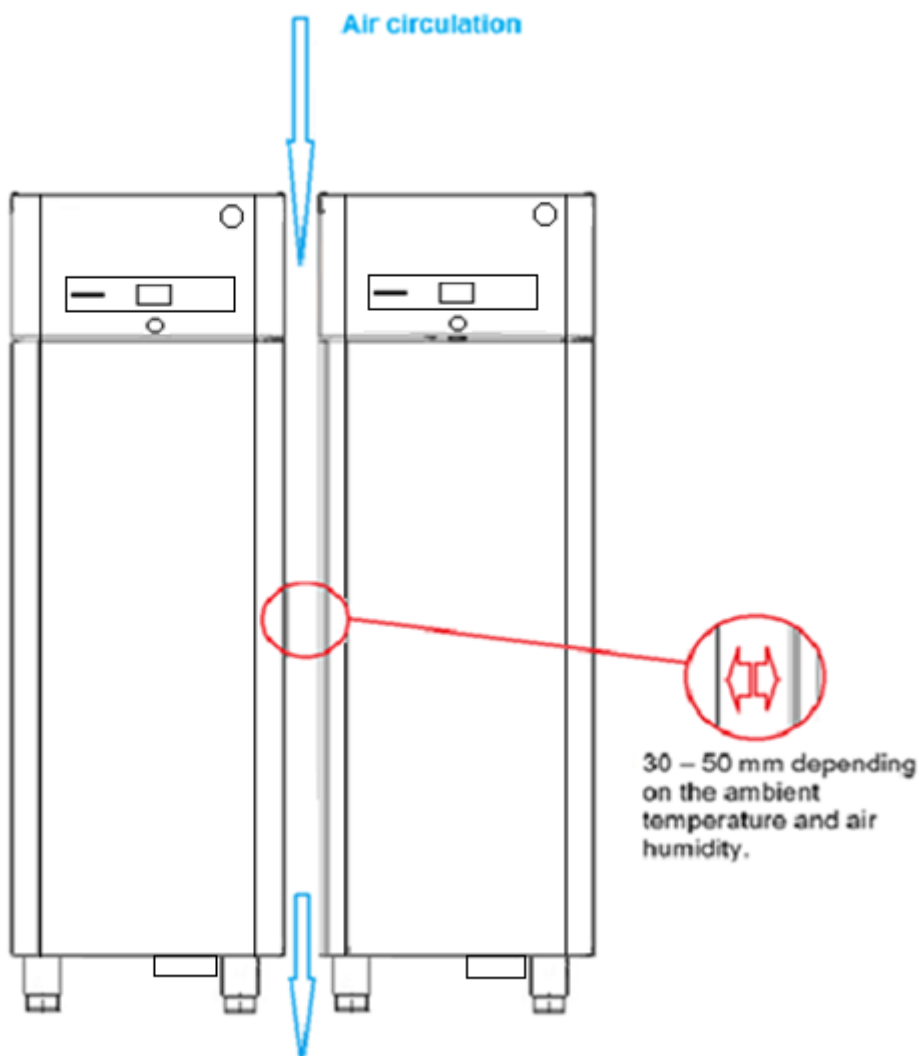
#### 4) Setting up Several Cabinets Side by Side

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

If several cooling or refrigeration units 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.

These gaps 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 panel 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 gaps cannot be sealed at the front.





## 5) Unpacking and Installing the Cabinet



**Warning**

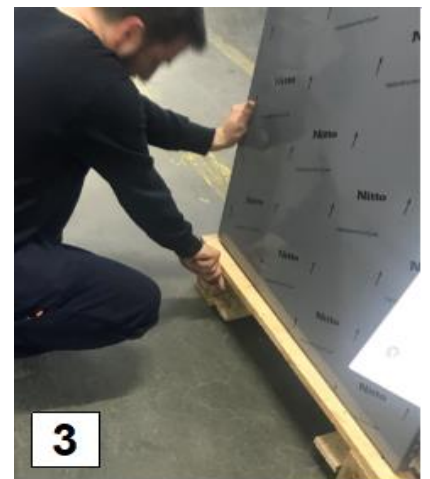
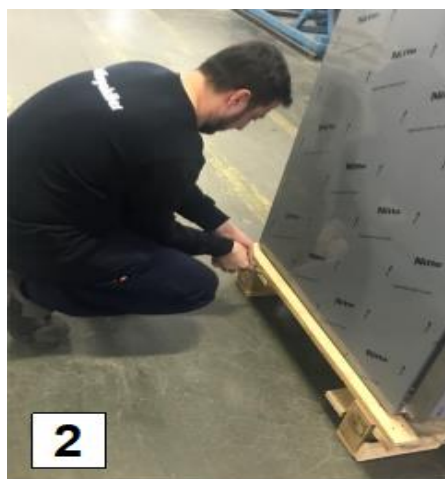
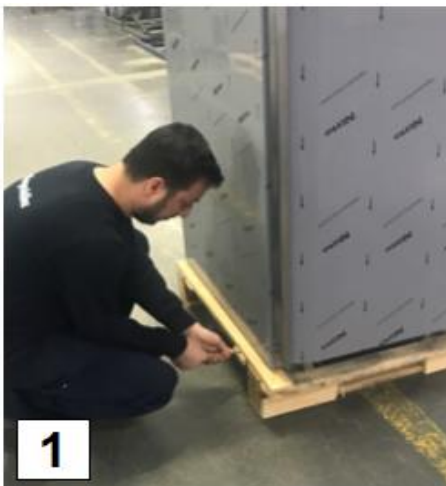
The refrigeration unit is located at the top of the cabinet. At least two people are required to lay down the cabinet and set it up right again.



**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.

Once the cabinet is on its back, the transport pallet must be removed by the following order;

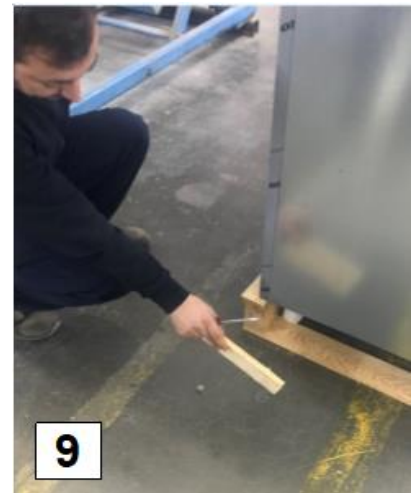
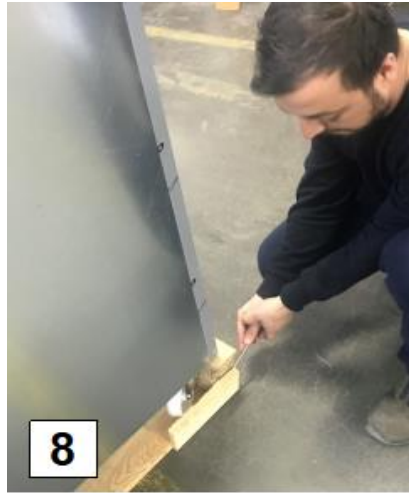
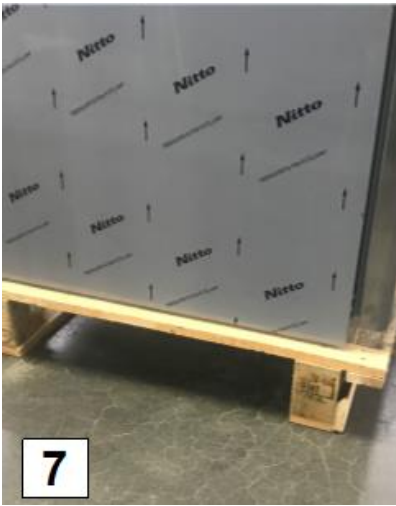


1-2-3) 2 pieces of long wooden pieces at the bottom of the pallet are detached from the lower part of the pallet with the help of a screwdriver from the left side of the refrigerator.



4-5-6) The other side of the long wooden pieces is moved to the right side of the refrigerator and detached from the bottom of the pallet with the help of a screwdriver.





7-8-

9)

Then, 2 pieces of short wooden pieces at the back of the pallet are removed by hand. Once the pieces of wood that hold the cabinet to the pallet are removed, it means the cabinet is no longer connected to the pallet.



10-11-12) With the help of a pallet truck or by means of 2 people, the cabinet is first tilted to one side from the pallet and then the pallet is removed from the bottom.



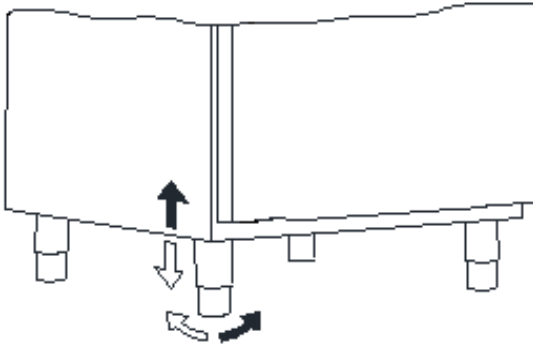
13-14) After the pallet leaves the refrigerator, the refrigerator is left slowly and with its feet evenly on the floor.





## Cabinets on legs:

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



## 6) Condensation Water Re-evaporation

The cabinets are equipped with a chamber for re-evaporation of the condensation water on top of the cabinets. This equipment is intended for the amount of condensation water that accumulates on average with a maximum of 72 door openings per day according to **ISO 22041**.

The actual amount of condensation water may vary depending on usage and ambient conditions. If the number of door openings per day exceeds 72, or the condensation water pan overflows due to other usage factors, the user must use the product strictly under the specified conditions to prevent overflow. If the amount of condensation increases despite not changing the usage or the ambient conditions, the cabinet may have a defective door seal or a door that does not close properly.

## 7) Electrical Connection

The 220-230 V/50 Hz mains connection is established by plugging the provided cable with appliance connector into a socket with earthed protective contact.

30 mA residual current circuit breaker is essential.

There may be special regulations from your local energy supply company regarding earthing measures that must be observed.



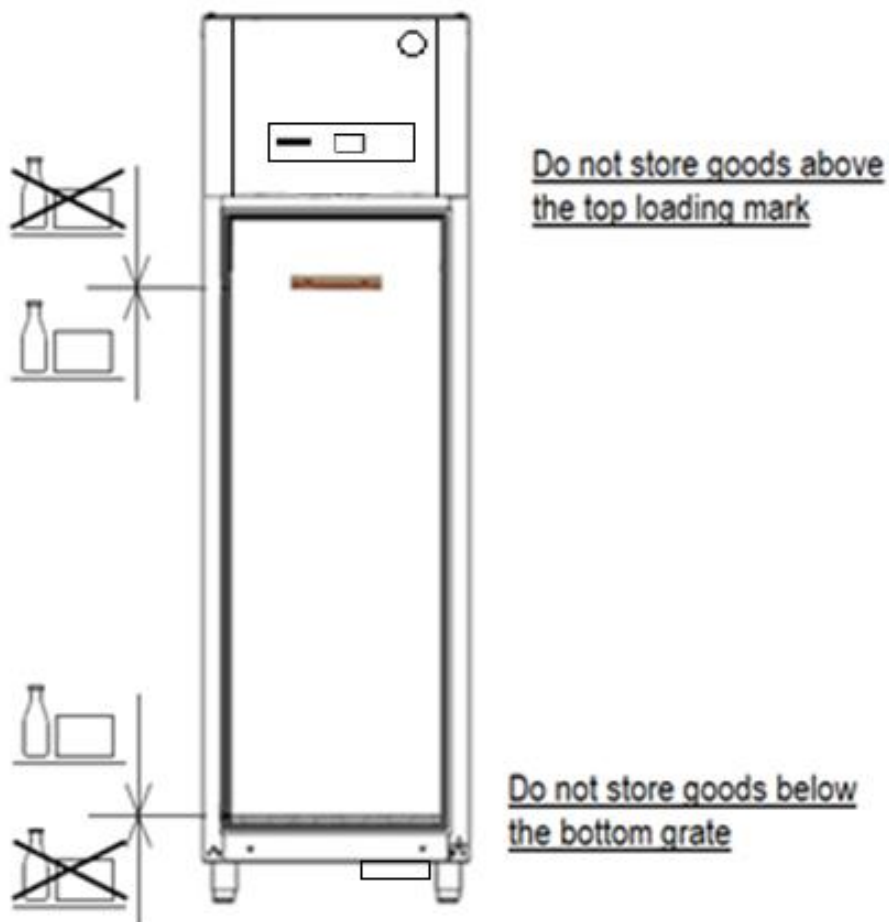
**During working with the electrical equipment, the cabinet must always be disconnected from the mains by pulling out the power plug. It is NOT sufficient to switch off the cabinet with the ON/OFF button as parts of the cabinet are still live**



## 8) Instructions for Daily Use

In order to achieve the necessary air circulation in the interior, only store goods within the corresponding markings (loading marks) and on the shelves (never on the floor or in front of the air outlets).

No electrical cabinets may be operated inside the cabinet.





## 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.

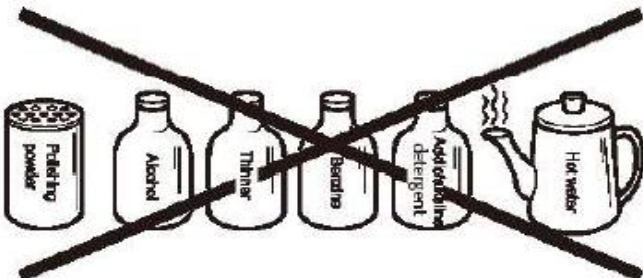


Any remaining detergent will damage metal or plastic surfaces. Use a soft cloth dampened with warm water to wipe it off.



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.



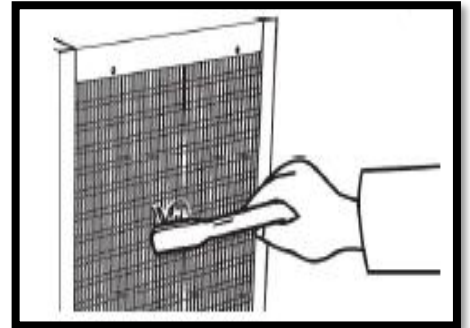
## Condenser



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



**Warning:** If users clean the condenser with hard brush, such as dishwasher brush, the coating of 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.

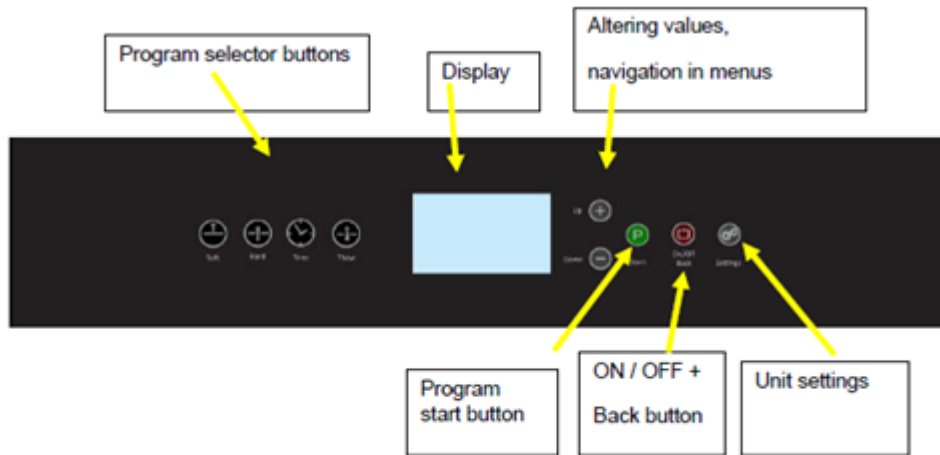


Check the filters at least twice a month. When clogged or when the temperature controller shows "cH" use warm water and a neutral cleaner to wash the filters. Don't operate the unit with the air filters removed, or the condenser will get clogged, resulting in failure.

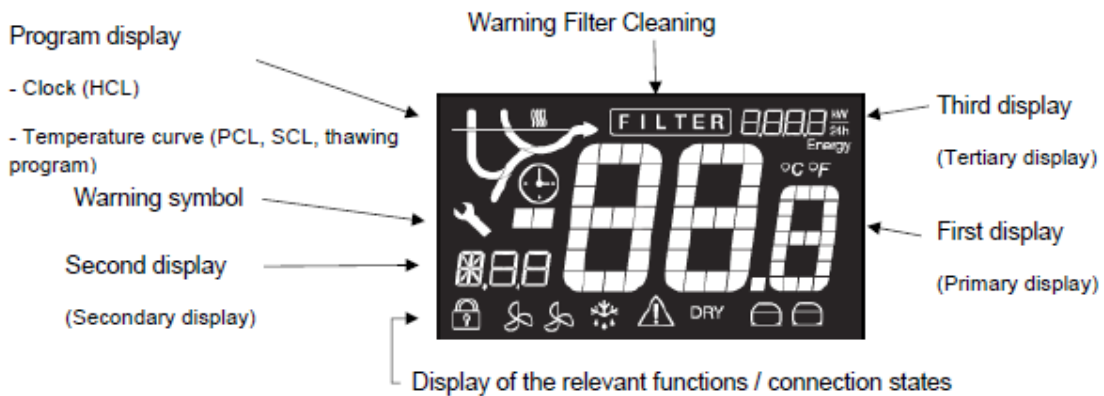
- 1) Open the front panel and remove the air filter. To prevent injury, don't touch the condenser fins directly.
- 2) Wash the air filter carefully with cold or warm water containing the proper amount of neutral cleaner. Rinse and dry the air filter thoroughly.
- 3) To refit the air filter, put the two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



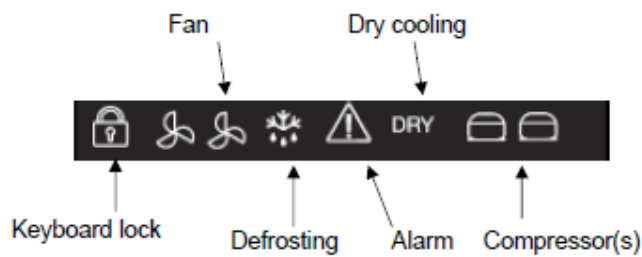
# 10) Control Elements



## Overview of the display:



## Function bar:



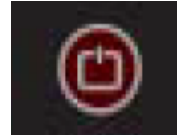
## ATTENTION

During maintenance and repairs, it must be ensured that the unit has no voltage applied to it. So take the plug out of the socket, or shut off the power! It is NOT enough to switch the unit off with the START/STOP button since the unit in such case still has the mains voltage applied to it.

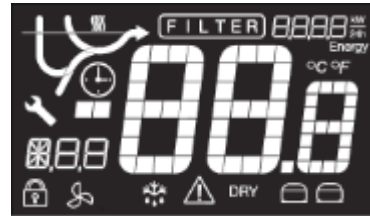


## CONNECTION, DISPLAY AND LOADING OF THE SOFTWARE

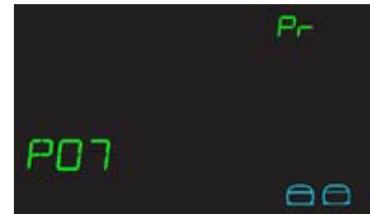
Switch the unit on with the on/off button:



Once the unit has been connected up, all segments in the display will light up in white for approx. 3 seconds (display test).



Subsequently, the selected program will be shown on the secondary display - "P07" in this case. The program "P07" controls 2 compressors. Hence both compressor symbols will light up in blue.



Afterwards, all used segments will be displayed in their respective colours. The secondary display will also show the software version - "4.0" in this case.



Finally, the secondary display will show yet another version number for the software. When this display ends, the unit is ready for operation, and the temperature is shown in the primary display.





## INITIAL DEFROSTING OF THE EVAPORATOR

If the unit is in use and it is cold in the room, the program starts with a defrosting cycle. In connection with this, the display shows the temperature internally within the unit. **(Do not use mechanical devices or other means to accelerate the defrosting process!)**

The defrosting symbol is lit up:



## STORAGE PROGRAM

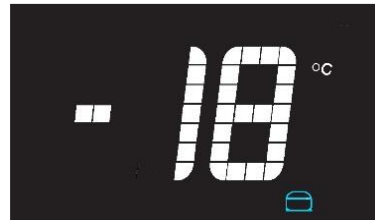
If the unit is started in a warm state (normal room temperature internally inside the unit), then it will immediately switch to the storage program. In connection with this, the display shows the temperature internally within the unit. When the storage program has been activated, only one of the compressors will be working. The fan will run at a low RPM figure. Hence only one of the two compressor symbols will be lit. In addition, the symbol for the evaporator fan will be displayed.



## DISPLAY OF THE SETPOINT (TEMPERATURE SETTING) IN THE STORAGE PROGRAM

Press the **(P)** button, and hold it in.

The display then shows the "desired value" and thereby the temperature setting.



## SETTING OF THE SETPOINT (TEMPERATURE SETTING) IN THE STORAGE PROGRAM

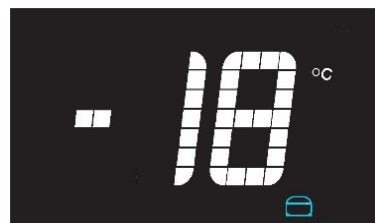
Press the **(P)** button, and hold it in.

The display then shows the "desired value" and thereby



the temperature setting. When the or button

is lightly pressed (the button continues to be held in), the value is increased or lowered.







When the **P** button is released, an auditory signal is issued and the value is saved. The display once again will show the internal temperature within the unit.



## Regulation in HCL, PCL, SCL

During storage, the evaporator fans run at low speed. In the programs HCL, PCL, and SCL compressor 2 is cut in immediately or delayed, and the fans start to run at high speed.

### Aggregates:

	Compressor 1	Compressor 2	Evaporator fan RPM
<b>Storage</b>	ON / OFF Temperature controlled	OFF	SF 950plus:0 / 50 % Temperature controlled
<b>HCL (time controlled)</b>	ON	ON	100 %
<b>PCL (Hardchill)</b>	ON	ON	100 %
<b>SCL (Softchill)</b>	ON / OFF Temperature controlled	ON / OFF Temperature controlled	50 % / 100 % Temperature controlled

### Relay Contacts:

	K1	K2	K5
<b>Storage</b>	ON / OFF Temperature controlled	ON / OFF Temperature controlled	OFF
<b>HCL (time controlled)</b>	ON	ON	ON
<b>PCL (Hardchill)</b>	ON	ON	ON
<b>SCL (Softchill)</b>	ON / OFF Temperature controlled	ON / OFF Temperature controlled	50 % / 100 % Temperature controlled










## TIME CONTROLLED COOLING "HCL"

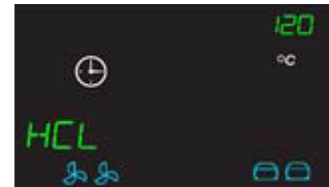
This program is time-controlled only. The air temperature and the temperature of the contents of the cabinet are not taken into account. Both compressors perform the cooling in parallel. The second compressor starts 15 seconds after the first one. When the proper evaporator temperature is attained, the fan will be running audibly with a very high RPM figure.



The program is selected by pressing the button :

When the  button is pressed, it will stay lit continuously, and the   and  buttons will blink. The symbol

for the clock will light up. The secondary display will show the program name "HCL" and the tertiary display the selected duration in minutes. The symbols for a high fan RPM figure and operation with 2 compressors will be blinking. The  and  buttons are used to change the time, and 

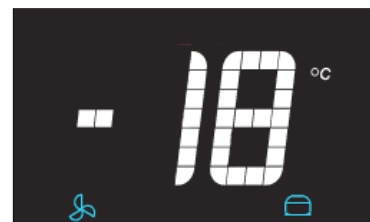
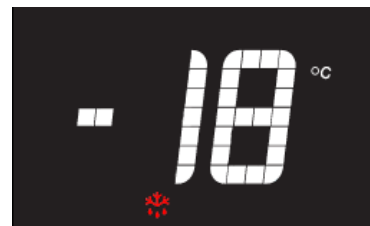


button for starting the program.

While the program is running, the time will count down on the tertiary display. The primary display will show the current temperature inside the unit. In addition, the connected elements will now be continuously lit: Both compressors, both fan symbols for a high fan RPM figure



When the desired value is attained, an acoustic signal is emitted. After the signal, defrosting is commenced (if such is required based upon the evaporator sensor's temperature). Then it subsequently switches to the storage program. Hence the desired value for the storage program must always be set and checked before starting "HCL"!






## TEMPERATURE CONTROLLED COOLING

This program cools down to the selected, desired value at full motor power (controlled with the use of the extra sensor). Both compressors perform the cooling in parallel. The second compressor starts 15 seconds after the first one. When the proper evaporator temperature is attained, the fan will be running audibly with a very high RPM figure. The program is selected by pressing the button:



After pressing the  button, it will be lit continuously. The "P" "+" and "-" buttons will be blinking. The curve symbol for **Hard Chill** will light up. The secondary display shows the program name "PCL", and the tertiary display the selected, desired temperature value. The "P" "+" and "-" buttons are used to change the desired value, and for starting the program. The primary display will now show the current temperature in the room, the secondary display the program name "PCL" and the tertiary display the selected, desired temperature value. The curve symbol is now continuously displayed. Both compressors, both fan symbols for a high fan RPM figure

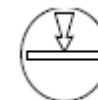


When the desired value is attained, an acoustic signal will be emitted. After the signal, defrosting is commenced (if such is required based upon the evaporator sensor's temperature). Then it subsequently switches to the storage program. Hence the desired value for the storage program must always be set and checked before starting "PCL"!




## TIME CONTROLLED COOLING (SOFT CHILL)

This program gently cools down to the selected, desired value (controlled using room sensor). Both compressors perform the cooling in parallel. The second compressor starts 15 seconds after the first one. The fan runs at a high RPM figure. The program is started by pressing the button:



**Temperature changes with Soft Chill:** The program is governed solely by the room sensor. The air temperature and goods being chilled are thus taken into account. The elapsed time has no effect on the course of the program. The cooling system works with start/stop cycles with a gradient up to the preset storage temperature. The process stops as soon as the temperature value reaches 0 °C, and the controls switch to the storage program.



After pressing the  button, it will be lit continuously.

The "P" "+" and "-" buttons will blink. The curve symbol for **Soft Chill** will light up. The secondary display shows the program name "SCL" and the tertiary display the selected desired temperature value. The "P" "+" and "-" buttons are used to change the desired value and button for starting the program.

The primary display will now show the current temperature in the room, the secondary display the program name "SCL" and the tertiary display the selected, desired temperature value. The curve symbol is now continuously displayed. In addition, the

connected elements will now be continuously lit: both compressors, both fan symbols for a high fan RPM figure.



When the desired value is attained, an acoustic signal will be emitted. After the signal, defrosting is commenced (if such is required based upon the evaporator sensor's temperature). Then it subsequently switches to the storage program. Hence the desired value for the storage program must always be set and checked before starting "SCL"!



## THAWING PROGRAM

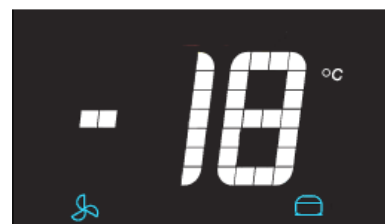
In connection with thawing, a defrosting heating element is used, which is governed by the temperature that the room sensor measures.

The thawing program is only able to start when the desired temperature value is set to between +2 °C and +8 °C.

The program is started by pressing the  button



When the desired value is attained, an acoustic signal will be emitted. After the signal, defrosting is commenced (if such is required based upon the evaporator sensor's temperature). Afterwards, the storage program is switched.







## MANUAL DEFROSTING OF EVAPORATOR



Manual defrosting is only possible as initial defrosting:

- 1) To start a program, press on  button and wait for 10 seconds.
- 2) Press on  in order to end/interrupt the program. This will allow defrosting to be commenced.



### ATTENTION

Do not use mechanical devices or other means to accelerate the defrosting process!

## AUTOMATIC DEFROSTING OF THE EVAPORATOR




The unit performs automatic defrosting 1 to 8 times daily, when the "PCL", "HCL" and "SCL" programs have finished. Defrosting cannot be concluded manually! In connection with this, the internal temperature inside the unit is shown before the defrosting process commences.



## THE USER MENU



	<b>The user menu is opened by pressing the  button for approx. 3 seconds.</b>
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Navigate through the menu using the using the “+” and “-” buttons, after which the selected menu item is opened with the “P” button. The “P”, “+” and “-” buttons increase or decrease the value. They are also used to navigate around in the submenu (“LAL”). The manner of procedure is the same in the submenu. Altered values are saved by pressing on (receipt acoustic signal!). Exiting menu items or the menu are done by pressing 

Menu item	Description	Settings Range	Factory Setting	
<b>DC</b>	Dry Cooling Function	Activation : “ON” Deactivation: “OFF”	OFF	
<b>LAL</b>	Local Alarm (display)			
	<b>LHL</b>	Upper boundary value for LAL	+25 ..... -35 °C	+ 25 °C
	<b>LHd</b>	Delay for LHL	1 ... 120 min / in steps of 5 minutes	60 min
	<b>DA</b>	Door Alarm	0 = OFF 1 = ON	1
	<b>Dad</b>	Delay for door alarm	0 ..... 15 min	1
	<b>BU</b>	Acoustic alarm for LAL	0 = OFF 1= ON	1
<b>CAL</b>	Temperature offset (sensor harmonistation)			
	<b>CA</b>	Temperature offset sensor input A (room sensor)	-5 ..... +5 K /steps of 0.5 K	0.0 K
	<b>CE</b>	Temperature offset sensor input A (room sensor)	-5 ..... +5 K /steps of 0.5 K	0.0 K
<b>ALL</b>	Relative (escorted) or absolute (fixed) alarm limits	ESC = Escorted FAS = Fixed	FAS	
<b>DEF</b>	Number of defrosting cylces for each 24 hours.	0 ..... 8	4	






## DRY COOLING

<b>DRY</b>	<p>Dry cooling  function may only be selected via the user menu. The user menu is opened by pressing the button for approx. 3 seconds. The function can now be switched in or out under the dc menu item, saved with "P" button after which the menu is exited with  button.</p>
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Menu Item	Description	Settings Range	Factory Setting
DC	Dry cooling function	Activation: "ON Deactivation: "OFF"	OFF

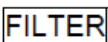


## DOOR MONITORING

<p>When the door is opened "OP" is shown in the primary display.</p>	
<p>An acoustic signal is emitted, and the "A1" message is shown on the secondary display, if the door at a minimum is open in "Dad", and "BU" is connected.</p> <p>The acoustic alarm is deleted by pressing  button The alarm indicator only or first shuts off once the door has also been closed.</p>	

## CLEANING THE CONDENSER FILTER



### Reminder of cleaning condenser air filter:

After 600 compressor running hours the filter must be cleaned and it is indicated by warning lights:

If the cleaning is not completed within 650 hours, the warnings continue, and an acoustic alarm    does sound.

### **Resetting the filter alarm after cleaning the condenser filter:**

After cleaning the air filter, the controller must be reset to remove the alarms. It can only be reset by using a certain key combination.

Push  button for three times followed by pushing  button for three times. FILTER alarm lights turn into green and will disappear after 1 minute.






## ALARMS


Code	Explanation
<b>OP</b>	The door is open (or the door switch is closed in another manner).
<b>A1</b>	Door alarm "dA" was activated.
<b>A2</b>	Local alarm, maximum value was activated ( <b>LHL</b> )
<b>F1</b>	Room temperature sensor is defective. The sensor must be replaced by the service department. The cabinet will still approximately maintain the preset temperature with the use of an emergency program.
<b>F2</b>	If "F2" is shown, the evaporator sensor is defective, or there is extreme icing up of the evaporator. Initially, the unit must be completely defrosted one single time (disconnected, after which the cabinet must stand with an open door for 24 hours), Important - condensation container under the unit may run over in connection with this!). If the fault subsequently continues to be displayed, then the service department must replace the sensor as quickly as possible. The pre-set temperature will continue to be maintained, and the defrosting phase will occur gradually without temperature restrictions.
<b>F3</b>	If "F3" is displayed, there are problems with the condensation sensor. This sensor only protects against overheating, and it has no influence on the temperature regulation in the cabinet. It ought however to be replaced as quickly as possible, so the protection against overheating is re-established
<b>F4</b>	Faults in the second condensation sensor in connection with units with two cooling motors (see fault message "F3").
<b>F5</b>	Fault in the temperature sensor for PCL (hard chill). The sensor must be replaced, contact the service department. Affects only hard chill
<b>F7</b>	Overheating of condenser or undercooling, filter mats or condenser fins plugged up, fan defective, ambient temperature too high or low (unit not in operation with ambient temperature of under +16°C) *does not apply for models with external cooling motors.


### DELETING ALARM MESSAGES


<b>A1</b>	The A1 alarm is deleted by pressing the  button. The door must be closed first.
<b>A2</b>	The A1 alarm is deleted by pressing the button. The temperature in the cabinet must first be under the desired max. temperature (25 °C default)




## PARAMETER LIST


ALARM SETTINGS 	Parameter	Description	Setting Range	Default
	<b>A1</b>	Temperature limit for condenser sensor (Compressor stop, Cond.alarm)	0...99 °C	65
	<b>A2</b>	Reset temperature	0...99 °C	40
	<b>A3</b>	Interval for alarm repetition	5...30 min	5

DISPLAY (PRESENTATION) SETTINGS 	Parameter	Description	Setting Range	Default
	<b>P1</b>	Display of setpoint after defrosting	0 ... 99 min	30
	<b>P2</b>	Tolerance for setpoint	00 = +0/-0 01 = +1/-1, 02 = +2/-2 03 = +3/-3 04 = +4/-4 05 = +5/-5	3
	<b>P3</b>	Display refreshing	0 ... 99 sec	10
	<b>P4</b>	Temperature scale	Celsius = C Fahrenheit = F	C


COMPRESSOR (PRESENTATION) SETTINGS 	Parameter	Description	Setting Range	Default
	<b>C1</b>	Hysteresis	1=0/-1, 2=+1/-1, 3=+1/-2, 4=+2/-2, 5=+2/-3, 6=+3/-3	2
	<b>C2</b>	Upper temperature limit	+25 ... -35 °C	+10
	<b>C3</b>	Lower temperature limit	+25 ... -35 °C	-30
	<b>C4</b>	Pause time for compressor restart	0 ... 30 min	5
	<b>C5</b>	Condenser sensor configuration	0 = no sensor; 1 = 1 sensor (C); 2 = 2 sensors (C, D)	2
	<b>C6</b>	Compressor stop at door opening	0....15 min	5






	Parameter	Description	Setting Range	Default
FAN (EVAPORATOR) SETTINGS 	F1	Evaporator fan start after defrosting	0 ... -10 °C	-1
	F2	Running- /pause time ratio for evaporator fan: Pause	0 ... 10 min	4
	F3	Running- /pause time ratio for evaporator fan: Running time	0 ... 99 sec	60

	Parameter	Description	Setting Range	Default
DEFROST SETTINGS 	D1	No. of defrosts / 24 hours	1...8	4
	D2	Defrost temperature limit	0 ...30 °C	12
	D3	("manual") initial defrosting	0 =On 1 =Off	0
	D4	Maximum defrost time	10 ... 60 min	30
	D5	Defrost mode	1 = automatic (depending on setting "d7") 2 = air 3 = electric (defrost heater)	3
	D6	Drip time	0...10 min	2
	D7	Temperature limit at automatic defrosting	at "d5" = 1: +2 ... +25°C	4
	D8	Evaporator monitoring, if exceeding, forced defrosting follows	-5 .. -50 °C	-40
	D9	Defrosting by termination of "PCL", "HCL", "SCL"	0 =On 1 =Off	1



	Parameter	Description	Setting Range
TEST RELAY SETTINGS 	TC	Test Compressor 1 + condenser fan	ON ("on") - OFF ("TC")
	TF	Test Evaporator fan	ON ("on") - OFF ("TF")
	Td	Test Defrost heater	ON ("on") - OFF ("Td")
	TL	Test Light	ON ("on") - OFF ("TL")
	tC2	Test Compressor 2	ON ("on") - OFF ("tC2")
	TdP	Test Display and Piezo buzzer, then display of software version at the secondary display.	ON (Start)

SENSOR DISPLAY		Sensor	Description
		P-A	Temperature sensor A (room sensor)
		P-b	Temperature sensor B (evaporator sensor)
		P-C	Temperature sensor C (condenser sensor 1)
		P-d	Temperature sensor D (condenser sensor 2)
		P-E	Temperature sensor E (extra sensor)
		Sensor defective or not connected	

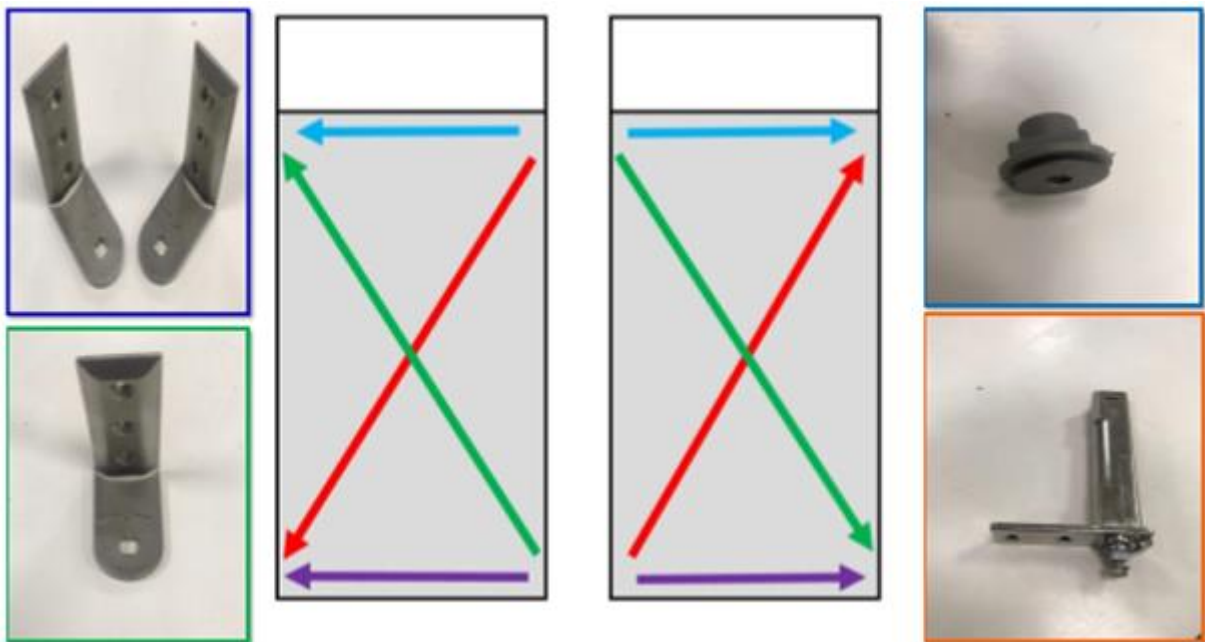


## 11) Switching the Door Hinge Side

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:





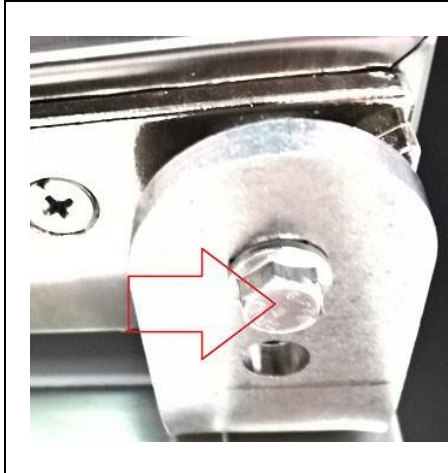

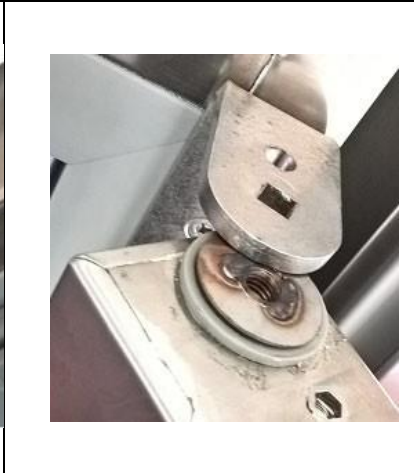
The door is turned by 180°, then the hinge brackets are moved diagonally, rotated by 180°. The door closer is moved from the bottom right to the bottom left; the square with M8 internal thread is moved from the top right to the top left.

### 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.



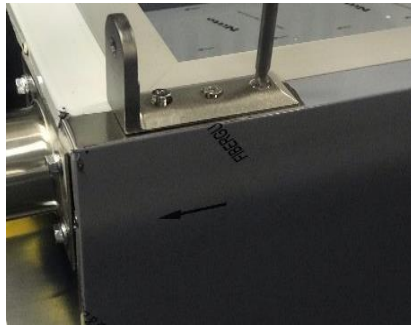
The following description applies to the modification from right to left. In the opposite situation, the corresponding procedure is reversed.

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

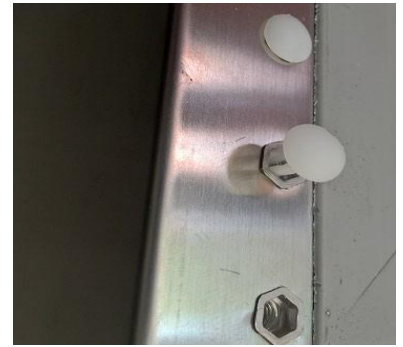




7. Remove the door closer without turning the door closer square.



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.



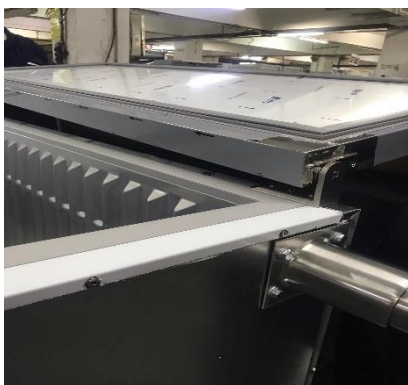
10. Move the lock fitting from the former top edge to the intended top edge of the door.



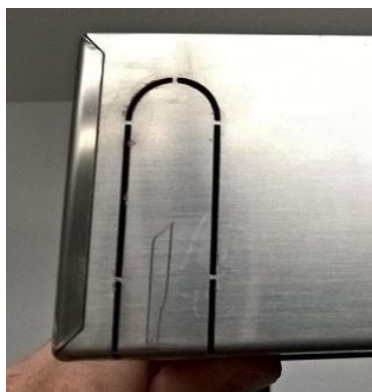
11. Place the door closer at the bottom left at an opening angle of 180°, and put the bottom left corner of the door over the door closer with the recess provided.



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.

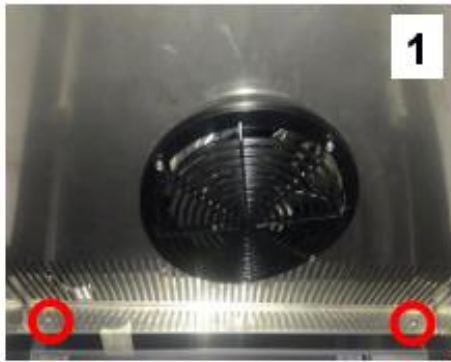


15. Close and screw on the canopy.

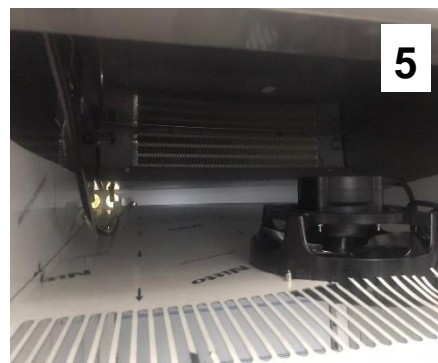




## 12) Reaching the Evaporator Unit for Service



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



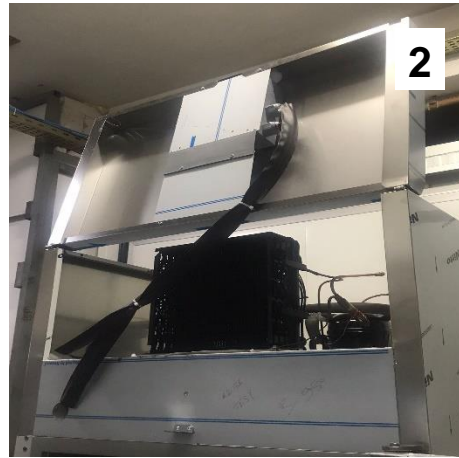
4) To easy work, sheet place can put on the top of the rail.

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) 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.

## 15) 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.





## 16) 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](mailto:uksales@hoshizaki.co.uk)

#### **Hoshizaki Deutschland - Germany, Switzerland, Austria**

TEL: +49 (0)5121 697370  
[vertrieb@hoshizaki.de](mailto:vertrieb@hoshizaki.de)

#### **Hoshizaki Benelux - Netherlands, Belgium, Luxembourg**

TEL: +31 (0)85 0188370  
[info@hoshizaki.nl](mailto:info@hoshizaki.nl)

#### **Hoshizaki France - France**

TEL: +33 (0)1 48 63 93 80  
[info@hoshizaki.fr](mailto:info@hoshizaki.fr)

#### **Hoshizaki Iberia - Spain, Portugal**

TEL: +34 (0)93 478 09 52  
[info@hoshizaki.es](mailto:info@hoshizaki.es)

#### **Hoshizaki Denmark - Denmark**

TEL.: +45 89 88 53 50  
[salg@hoshizaki.dk](mailto:salg@hoshizaki.dk)

#### **Hoshizaki Norway - Norge**

TEL.: +47 22 88 17 50  
[salg@hoshizaki.no](mailto:salg@hoshizaki.no)

#### **Hoshizaki Sweden - Sverige**

TLF.: +46 108 84 87 47  
[OrderSE@hoshizaki.dk](mailto:OrderSE@hoshizaki.dk)

#### **Hoshizaki Italia – Italia**

TEL: +39 348 3022156  
[commerciale@hoshizaki.it](mailto:commerciale@hoshizaki.it)

#### **Hoshizaki Europe B.V – All other countries in Europe and Africa**

TEL: +31 (0)20 691 84 99  
[sales@hoshizaki.nl](mailto: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.**



**17) 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	

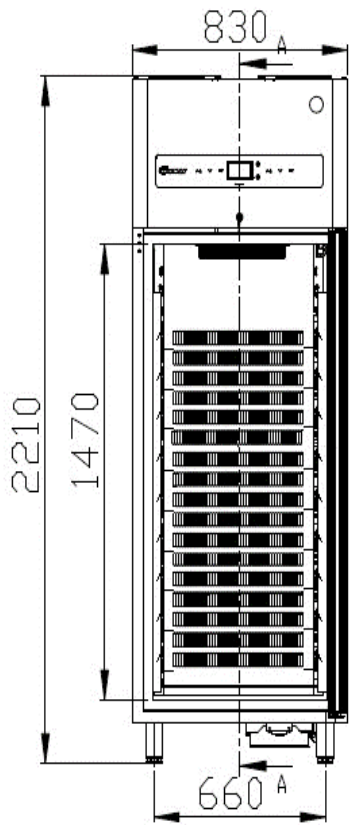


TRADE MARK			HOSHIZAKI
<b>MODEL NAME</b>			BAKER SF 950 Plus
Intended Use			Cooling / Shock Freezing
Chilled Operating Temperature			
Frozen Operating Temperature			
Multiuse Cabinet			X
Vertical Cabinet			X
Counter Cabinet			
Parameter	Symbol	Unit	
Gross Volume	$V_{nT}$	litre	950
Climate Class	CC		5/T (5L1)
Refrigerant			R290
Charge		kg	2 X 0,232
GWP			3
CO2 Equivalent			1,392
Heavy-duty; This appliance is intended for use in ambient temperatures up to 40°C			X
Contact Details:			<b>HOSHIZAKI EUROPE B.V.</b>
			Address: Burgemeester Stramanweg 101 1101 AA Amsterdam, The Netherlands
			Tel.: +31 (0)20 691 84 99 - <a href="http://hoshizaki.europe.com/">http://hoshizaki.europe.com/</a>

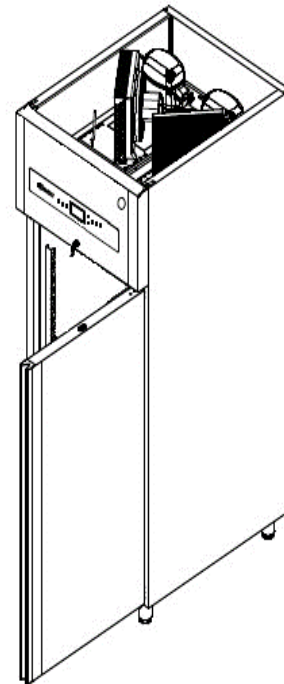
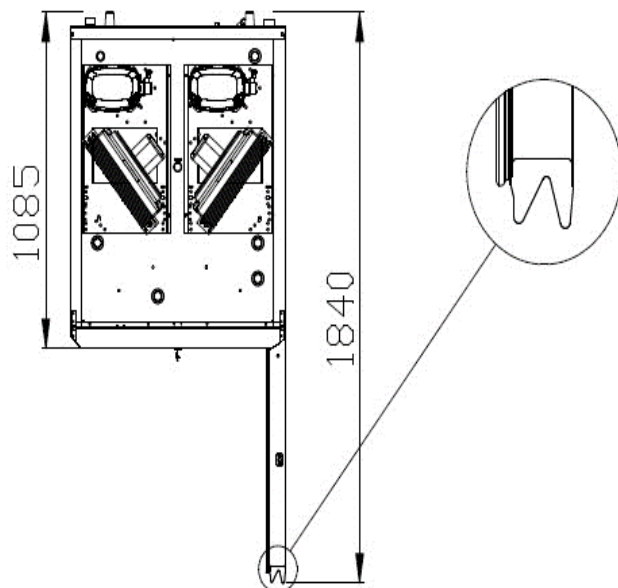
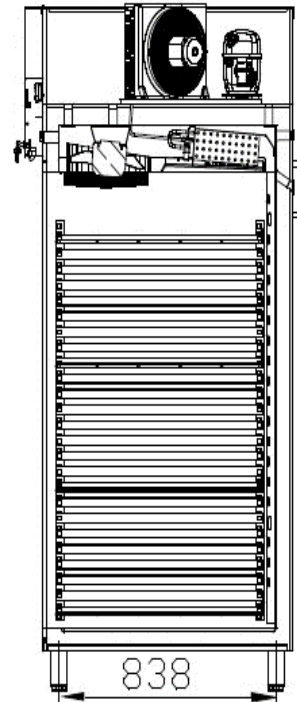


18) Dimensions

BAKER SF 950

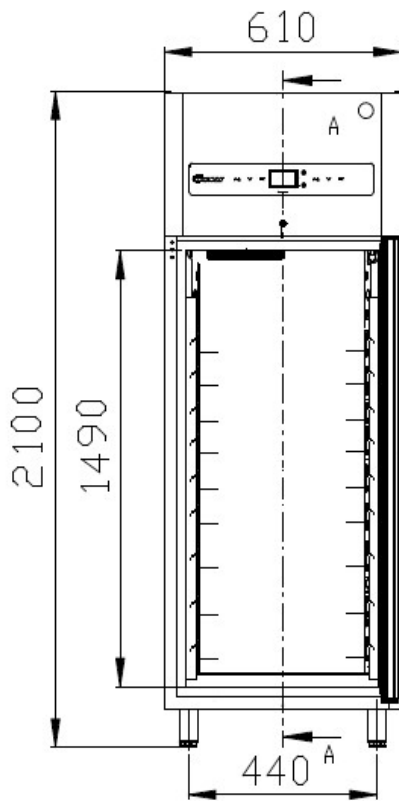


SECTION A-A

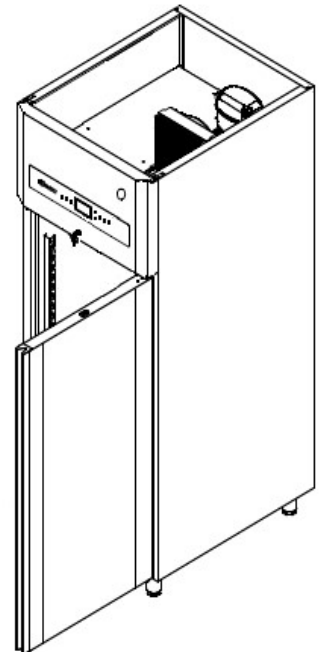
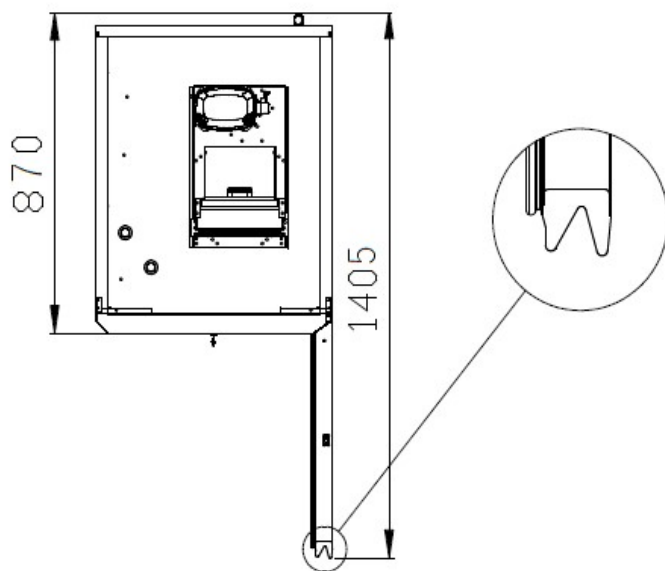
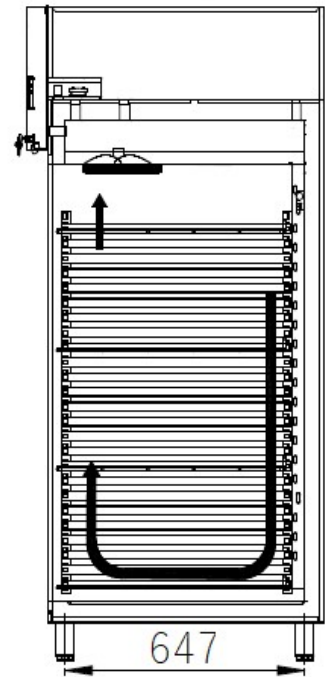




BAKER SF 550



SECTION A-A

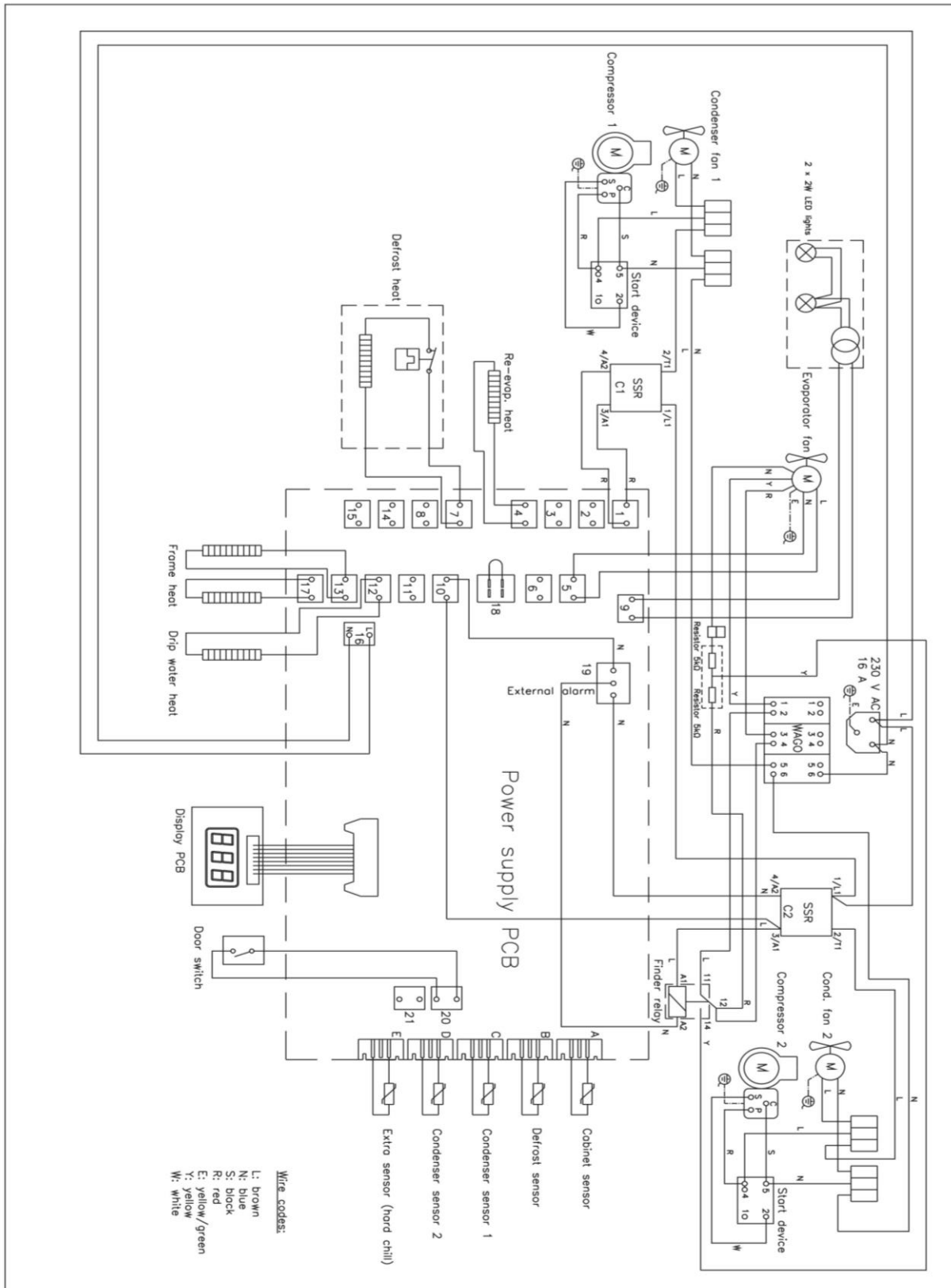






19) Wiring Diagram

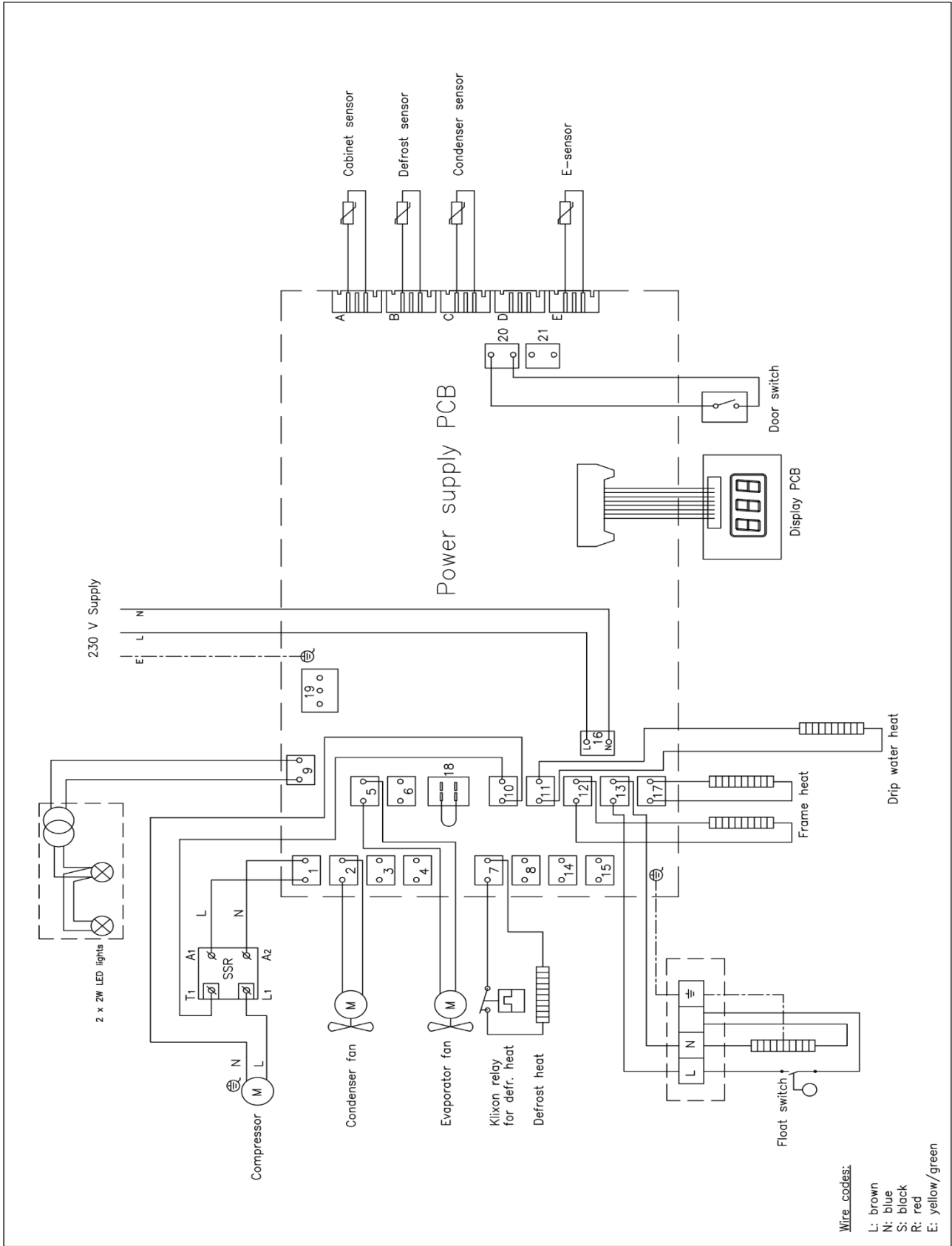
SF 950+ DIAGRAM







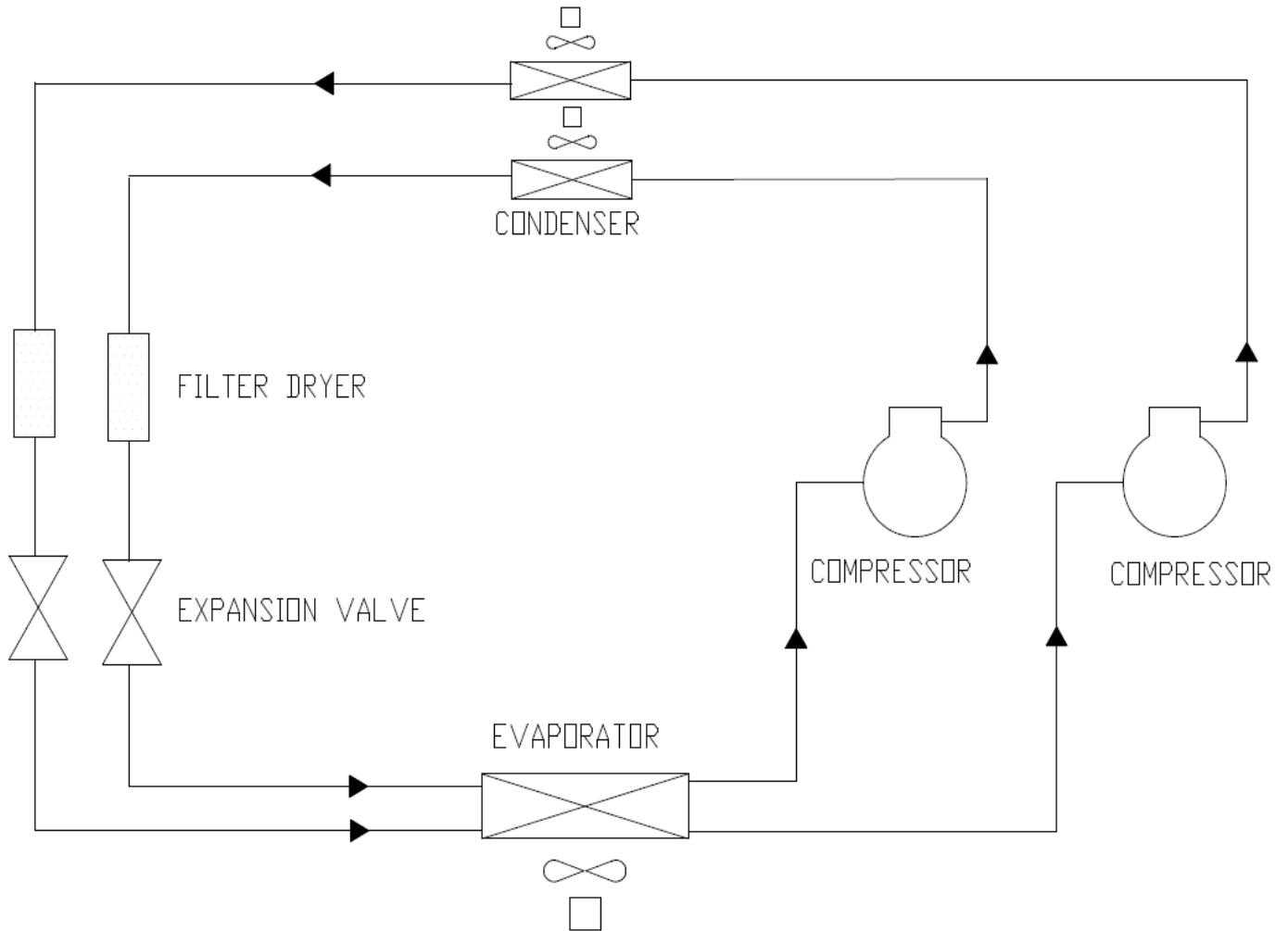
SF 550 DIAGRAM





## 20) Cooling Diagram

SF 950 COOLING DIAGRAM





SF 550 COOLING DIAGRAM

