



# BEVERAGE-AIR®

## **INSTALLATION AND OPERATING INSTRUCTIONS** **for all** **BF and RBS Blast Chiller Models**



809-159A 07/03/2024

3779 CHAMPION BLVD, WINSTON-SALEM, NC 27105

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**SEE BACK COVER FOR  
WARRANTY REGISTRATION**

**WELCOME**

Thank you for purchasing a Beverage-Air cabinet. This series has passed our strict quality control inspection and meets the high standards set by Beverage-Air Refrigeration! You have made a quality investment that with proper maintenance will give you many years of reliable service!

Please read the following installation and maintenance instructions before installing or using your unit. If you have any questions, Please call our Technical Service Department at **(800) 684-1199**. 8:00 AM to 5:00 PM EST.

**Important Information**

- PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR USING, IF RECOMMENDED PROCEDURES ARE NOT FOLLOWED, WARRANTY CLAIMS MAY BE DENIED.
- Your warranty registration information is located within this manual. Please complete the card and submit it to Beverage-Air Refrigeration within TEN days of installation. Failure to properly register equipment may limit or void the warranty.
- Beverage-Air Refrigeration reserves the right to change specifications and product design without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions, or replacements for previously purchased equipment.
- THE MANUFACTURER DECLINES LIABILITY FOR NON-DECLARED USE OF THE PRODUCT. THE REPRODUCTION OF THIS MANUAL OR ITS PARTS THEROF, IS PROHIBITED.

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## SAFETY

This appliance has been designed with your safety in mind. It has many features to keep you from being harmed. However, safe operation and maintenance are your responsibilities.



### Use: When using this unit, please:

- **Move it carefully.** If on casters be sure the casters do NOT run over the power cord.
- **Lock** the casters when in use.
- **Seek help.** This machine is heavy! Be sure to move with enough help to avoid tipping or dropping the cabinet.
- **Prevent children from playing in or on the cabinet.** Persons unable to use this product must be prevented access.
- **Follow all instructions.** There are many safety labels and directions on the unit. Heed them.
- **Watch your fingers.** There may be pinch points near the door hinges.



## Maintenance

### Do NOT:

- Clean a frozen evaporator with a sharp object
- Clean a dirty condenser with a sharp object.
- Store gasoline, kerosene or any other flammable material near the cabinet.

### Do ALWAYS

- Use a Beverage-Air recommended technician certified to repair R404 or R290 equipment.
- Use ONLY Beverage-Air factory service parts. Use of non OEM parts can be dangerous because of the design changes needed to safely use R404 or R290.
- Wear gloves to perform maintenance on the motor components or the evaporating unit inside the machine.

## Important Information to Add

Record the model number, serial number and the date of installation here for future reference. The model and serial numbers are on the unit's serial number dataplate, which is located on the left inside wall.

<b>Model Number</b>	
<b>Serial Number</b>	
<b>Date of Installation</b>	
<b>Purchased From</b>	



Observe the **Caution** and **Warning** notices. They are indicators of important safety information. Keep this manual for future reference.



**The manufacturer declines all liability:**

- 1) for any operation performed on the machine in disregard of the instructions provided in this manual**
- 2) for non-declared use of the product.**

**GENERAL SAFETY INSTRUCTIONS:**

- Before connecting the machine to the power supply, ensure that the voltage and frequency correspond to those indicated on the specifications plate.
- **Always connect the machine to an appropriate high sensitivity differential magnet circuit breaker switch (30 mA).**
- Before performing any cleaning or maintenance operation disconnect the machine from the power supply by:
  - 1) Positioning the master switch on OFF
  - 2) Remove the plug
- Wear gloves to perform maintenance on the motor compartment or on the evaporating unit positioned inside the machine.
- Do not insert screwdrivers or other devices between the guards (fan, evaporator, protections, etc.).
- Do not handle electrical parts with wet hands or without shoes.
- Ensure good functioning of the compressor unit and evaporator by never obstructing the air inlets.
- In the case of machines fitted with wheels, check that the rest surface is flat and perfectly horizontal.
- For machines fitted with locks and keys, it is recommended to keep the keys out of the reach of children.
- Use is only reserved for suitable, trained personnel. Installation routine and extraordinary maintenance (for example, cleaning and maintenance of the refrigeration system), must be performed by specialized and authorized technical personnel with a sound knowledge of the refrigeration and electrical systems.

**HAZARDS, AND AVOIDABLE RISKS:**

- The refrigerator equipment has been designed and manufactured with the appropriate devices to guarantee the health and safety of the user and does not contain dangerous edges, sharp surfaces or protruding elements.
- The stability of the machine is guaranteed even when the doors are open. **DO NOT PULL DOWN OR HANG ON THE DOORS.**
- For units with drawers, do not open more than one drawer at a time and do not lean or sit on an open drawer in order to avoid overturning or damaging the refrigerator.
- Units with glass doors, do not extract more than one basket or rack at a time in order to avoid compromising the stability. When adding items, gradually add starting from the bottom upwards; similarly, remove items starting from the top downwards.
- **THE MACHINE WAS NOT DESIGNED TO BE INSTALLED IN AN ATMOSPHERE WITH RISK OF EXPLOSION.** Do not store explosive substances, such as pressurized flammable propellant containers, inside the appliance.
- **MAXIMUM LOAD (UNIFORMLY DISTRIBUTED) PER BASKET, DRAWER, OR RACK = 40 KG (88 LBS).**

**Risks caused by moving parts:**

The only moving part is the fan, which presents no risk as it is isolated by a protection grill secured with screws. If the protection grill needs to be removed, disconnect the machine from the power supply before doing so.

**Risks caused by low/high temperatures:**

Warning labels indicating "TEMPERATURE WARNING" are located in the proximity of areas which constitute low/high temperature dangers.

**Risks caused by electrical power:**

Electrical risks have been eliminated by designing the electrical system in accordance with IEC EN 60204-1 and IEC EN 60335-1. Warning labels indicate "high voltage" areas which may present electrical risks.

In order to avoid any risks, damaged power supply cables must be replaced by the manufacturer, by an approved technical support center, or by a qualified individual.

### Risks caused by noise:

<70 dB (A) at the noisiest point at 1 m in operating conditions

<130 dB (C) at 1m in operating conditions

### Residual Risks:

Any liquids emanating from food or cleaning products are prevented from leaking outside by a drain positioned at the bottom of the unit. During cleaning operations, remove the plug and place a collection tray under the machine (Hmax=100mm or 4 inches).

**IT IS HIGHLY IMPORTANT THAT THE PLUG IS REFITTED INTO THE HOLE PROPERLY. IF THE MACHINE DOES NOT HAVE A DRAIN, THE UNIT MUST BE CLEANED THOROUGHLY ON A DAILY BASIS TO PREVENT THE STAGNATION OF LIQUIDS**

### Safety Devices:

**IT IS PROHIBITED TO TAMPER WITH OR REMOVE THE SAFETY DEVICES PROVIDED (PROTECTION GRILLS, WARNING LABELS, ETC.) THE MANUFACTURER DECLINES ALL LIABILITY IF INSTRUCTIONS ARE NOT FOLLOWED**

### Appliances with wheels:

When moving, take care not to forcefully push the unit in a way that avoids overturning and damage. Also, note any unevenness of the surface on which the refrigerator is being pushed. Appliances fitted with wheels cannot be leveled,

therefore, ensure that the surface on which they rest is perfectly horizontal and level.

**ALWAYS BLOCK THE WHEELS WITH THE STOPS PROVIDED.**

### Routine and programmed maintenance:

The information contained in this chapter addresses suitable, trained personnel in the case of routine maintenance; while specialized and authorized personnel is addressed for extraordinary and/or programmed maintenance.

- Before performing any intervention, disconnect the machine plug from the electrical power supply.
- In routine maintenance operations, the removal of protections/safety devices (grills, warning labels, etc.) is prohibited.



### Instructions in case of fire:

**DO NOT USE WATER IN THE CASE OF FIRE. USE CO<sub>2</sub> FIRE EXTINGUISHER (CARBON DIOXIDE) AND COOL THE MOTOR COMPARTMENT AREA AS QUICKLY AS POSSIBLE.**

**IMPORTANT INFORMATION**

This unit is intended to be used in a commercial application. That includes bars and restaurants.

If installed in a residence some commercial service companies may not be able to service it on site.

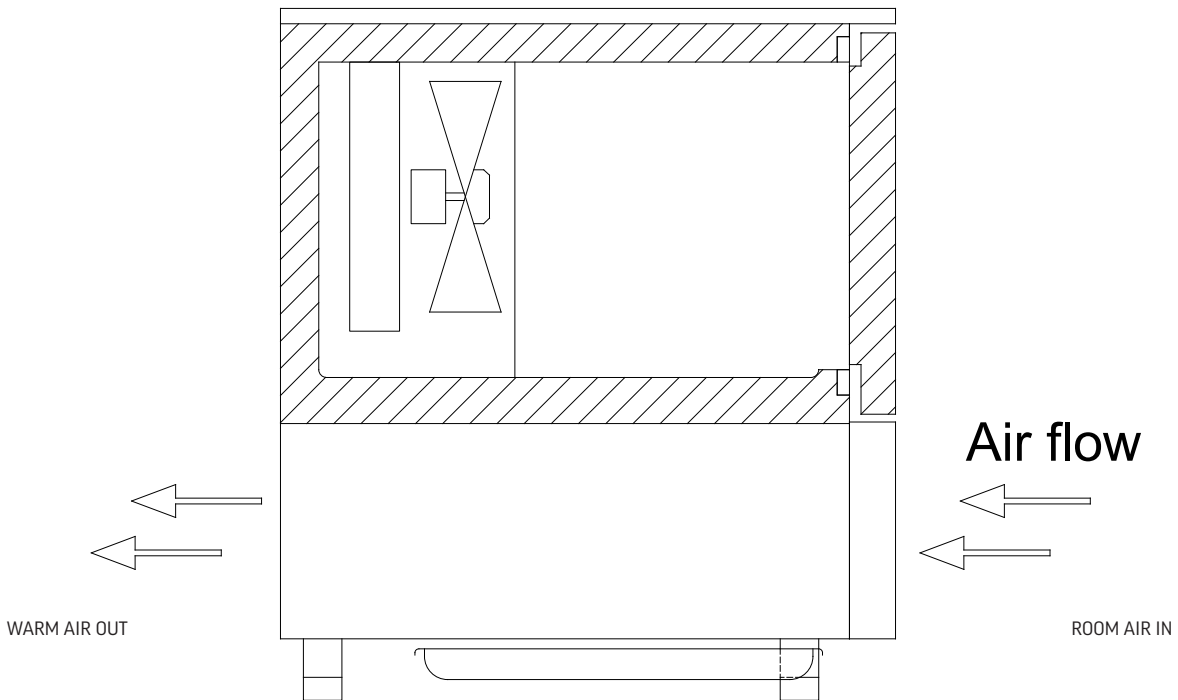
The manufacturer has designed and produced this machine with the finest in materials. The manufacturer assumes no liability for units that have been altered in any way. Alterations or part substitutions will void the warranty.

**Limitations**

The machine is designed for use indoors in a controlled environment. It must be kept dry, not overheated or subjected to excessive cold. May only be connected to a dedicated electrical circuit. Extension cords are not permitted.

	Minimum	Maximum
Voltage	208	240
Room Air Temp	60° F	104° F

**Air Flow**



**Agency Approvals**

These marks appear on the dataplate or serial tag, located in the inside of the left wall. The dataplate also contains the model and serial numbers as well as electrical requirements.



## PRODUCT INFORMATION

Model	Cabinet Dimensions w x d x h (Inches)	Door Count	Full Load Amps	Compressor HP	R-404 Refrigerant Charge (g) / (oz)	BTU/Hr (113°F/- 13°F)	Heat Rejection (W) (14°F/95°F) Hashare	Voltage	NEMA Plug
<b>Roll In Models (Remote)</b>									
BF201DP-1P	47.24 X 46.26 X 87.80	1	2.5	N/A	N/A	21598	N/A	208-240/60/1	N/A
BF201AP-1P	47.24 X 46.26 X 87.80		5.7	N/A	N/A	24551	N/A		N/A
BF202DP-1P	59.06 X 54.13 X 87.80		9	N/A	N/A	38611	N/A		N/A
BF202AP-1P	59.06 X 54.13 X 87.80		9	N/A	N/A	46736	N/A		N/A
BF402DP-1P	59.06 X 93.50 X 87.8		17	N/A	N/A	54898	N/A		N/A
BF402AP-1P	59.06 X 93.50 X 87.80		17	N/A	N/A	70933	N/A		N/A
BF602DP-1P	59.06 X 132.87 X 87.80		26	N/A	N/A	70933	N/A		N/A
BF602AP-1P	59.06 X 132.87 X 87.80		26	N/A	N/A	123979	N/A		N/A
<b>Roll Thru Models (Remote)</b>									
BF201DP-2P	47.24 X 51.77 X 87.80	1	2.5	N/A	N/A	21598	N/A	208-240/60/1	N/A
BF201AP-2P	47.24 X 51.77 X 87.80		5.7	N/A	N/A	24551	N/A		N/A
BF202DP-2P	59.06 X 59.65 X 87.80		9	N/A	N/A	38611	N/A		N/A
BF202AP-2P	59.06 X 59.65 X 87.80		9	N/A	N/A	46736	N/A		N/A
BF402DP-2P	59.06 X 99.02 X 87.80		17	N/A	N/A	54898	N/A		N/A
BF402AP-2P	59.06 X 99.02 X 87.80		17	N/A	N/A	70933	N/A		N/A
BF602DP-2P	59.06 X 138.39 X 87.80		26	N/A	N/A	70933	N/A		N/A
BF602AP-2P	59.06 X 138.39 X 87.80		26	N/A	N/A	123979	N/A		N/A

*Height includes legs.*

Model	Cabinet Dimensions w x d x h (Inches)	Door Count	Full Load Amps	Compressor HP	R-290 Refrigerant/ Charge (g) / (oz)	BTU/Hr (113°F/-13°F)	BTU/Hr (104°F/-14°F)	Voltage	NEMA Plug
<b>Reach In (Self Contained)</b>									
RBS-054-SA-HC	33.46 X 34.65 X 35.43	1	6.6	1	N/A / N/A	2985	6033	208-240/60/1	6-15P
RBS-122L-SA-HC	33.46 X 39.37 X 71.26		9.0	2	N/A / N/A	7208	15252		15-20P
RBS-162-SA-HC	33.46 X 39.37 X 77.17		13.2	2 1/2	N/A / N/A	9154	19485		

*Height includes legs.*

- **\*\*RAMPS ARE NOT INCLUDED IN THE PURCHASE OF THE UNITS, AND MUST BE REQUESTED AT THE TIME OF THE ORDER\*\***
- Blast Chilling Cycle rapidly lowers the temperature of the contents from 194°F to 37°F in 90 minutes
- Shock Freezing Cycle lowers the temperature from 194°F to 0°F in 240 minutes
- ALWAYS REFERENCE YOUR EQUIPMENT DATA PLATE AMPS, REFRIGERANT AND REFRIGERANT CHARGE FOR THE MOST UP TO DATE AND ACCURATE VALUES.

## INSTALLATION

### TRANSPORT AND HANDLING THE PRODUCT:

- The machine must be transported using suitable handling equipment and never manually.
- If lifting systems are used, such as a forklift or trans pallet, take particular care that the load is balanced.
- Normally the packaging is in expandable polystyrene on wood pallets, secured to the bottom of the equipment for greater safety during transport and handling.
- After removing the packaging from the machine, it is advisable to verify the integrity of the machine and the absence of damage due to transport. Any damage must be communicated to the carrier immediately. Damaged machines cannot be returned to the manufacturer under any circumstances unless prior notice and written authorization is received.
- Warnings are printed on the packaging, representing the instructions to be complied with to ensure that no damage is caused during loading, unloading, transport, and handling.

### Warnings printed on our packaging:



- The user must dispose of the packaging in accordance with the laws in force in the applicable country.
- When storing or transporting the machine, the maximum stacking limit is two machines, unless otherwise indicated with an appropriate adhesive label.
- SINCE THE CENTER OF GRAVITY OF THE MACHINE DOES NOT CORRESPOND TO ITS GEOMETRIC CENTER, BE AWARE OF INCLINATIONS DURING HANDLING.
- DURING HANDLING, DO NOT PUSH OR DRAG THE MACHINE TO PREVENT OVERTURNING OR DAMAGE TO PARTS (E.G. FEET).
- NEVER LEAN THE MACHINE ON THE DOOR SIDE.

### REQUIREMENTS (RESPONSIBILITY OF THE CUSTOMER):

- Provide a high sensitivity differential magnet circuit breaker switch (30mA).
- Provide a wall socket with grounding that meets the requirements of the country where the machine is being operated.
- Verify that the surface on which the machine rests is level.
- In the case of water-cooled machines or with equipment with direct humidity control, provide connection to a water system.

### CONNECTION:

Before connecting the machine to the power supply, ensure that the voltage and frequency correspond with those indicated on the specifications plate. A variation of +/-10% of the normal voltage is permitted. It is of utmost importance that the machine is connected to an efficient grounding connection.

### Grounding the machine is a mandatory safety measure that is required by law:

In order to protect the machine from any electrical overload or short circuit, the connection to the power supply is through a high sensitivity differential magnet circuit breaker switch (30 mA) with a manual re-set and with sufficient power. For dimensioning the protection device, consider the following:

$$I_{max} = 2.3 I_n \text{ (nominal current)}$$

$$I_{cc} \text{ (short-circuit current)} = 4500 \text{ A with } 230\text{v}/1\sim/50\text{Hz power supply.}$$

$$I_{cc} \text{ (short-circuit current)} = 6000 \text{ A with } 400\text{v}/3\sim/50\text{Hz power supply}$$

### Blast Chillers with Washing Kits:

The appliance must be connected to the water supply network using the supplied flexible pipe, suitable for high temperatures and pressure and with 3/4" GAS attachment. To prevent the excessive deposit of lime scale and therefore decrease maintenance, the use of a water softener is recommended. To increase efficiency the recommended water temperature must be between 40-60°C (104°F - 140°F). The optimum network pressure must be between 2-5 bar for the rotor to rotate regularly. If the water pressure should fall below 0.5 bar, a safety pressure switch will intervene that will immediately block the function with a signal on the alarm display





**IT IS FUNDAMENTAL NOT TO CHANGE THE DIRECTION OF THE ROTOR SPRAYING NOZZLES IN ORDER TO PREVENT COMPLETELY ALTERING THE SYSTEM'S FUNCTIONING FEATURES.**

**DO NOT USE PLUGS WITHOUT GROUNDING. THE MAIN SOCKET MUST COMPLY WITH REGULATIONS VALID IN THE APPLICABLE COUNTRY.**

**POSITIONING:**

- Position the machine in a well-aerated place and far from heat sources. Observe minimum gaps for operating functions, aeration and maintenance.
- A machine with wheels cannot be leveled, therefore, ensure that the surface on which it rests is perfectly horizontal and level.

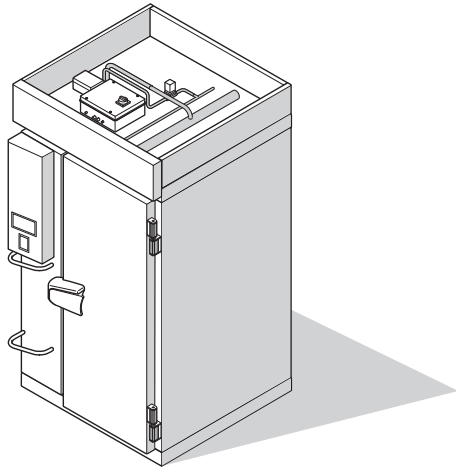
- THE MACHINE HAS NOT BEEN DESIGNED TO BE INSTALLED IN EXPLOSIVE ENVIRONMENTS.
- DURING HANDLING AND POSITIONING DO NOT PUSH FORCEFULLY OR DRAG THE MACHINE TO PREVENT OVERTURNING OR DAMAGE. PAY PARTICULAR ATTENTION TO UNEVENNESS OF SURFACES, NEVER LEAN THE MACHINE FROM THE DOOR SIDE
- IF THE MACHINE HAS WHEELS, ALWAYS LOCK THE WHEELS ONCE IT HAS BEEN INSTALLED.

**RE-INSTALLATION:**

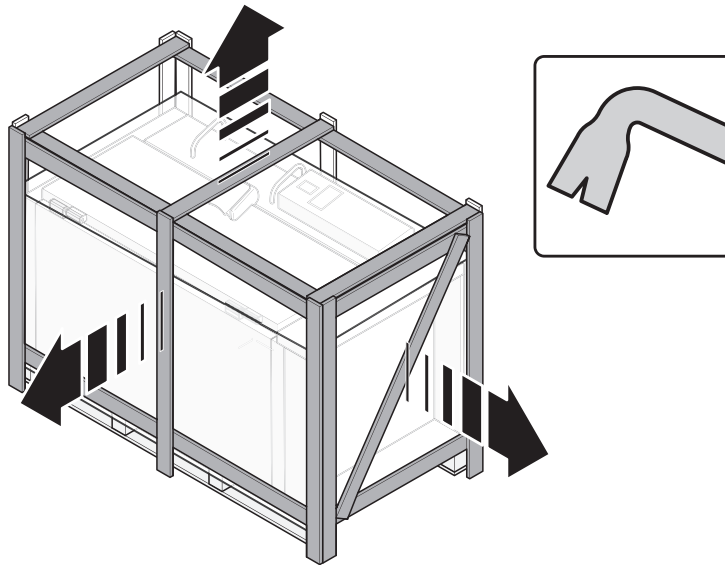
If re-installation is required, proceed as follows:

- Position the power supply switch to OFF
- Disconnect the plug from the power supply and wind up the cable
- Remove all contents from the interior of the cabinet and clean the cabinet and accessories thoroughly
- Re-pack the machine, taking care to re-position the protective polystyrene and secure the wooden base, in order to prevent damage during transport
- Proceed as previously described for new position and connection

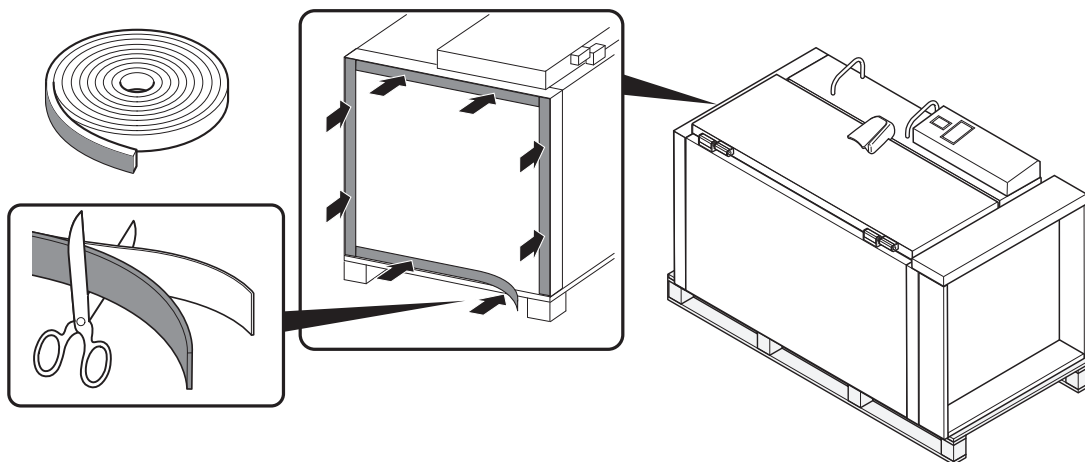
INSTRUCTIONS FOR PRE-ASSEMBLED SINGLE CHILLER



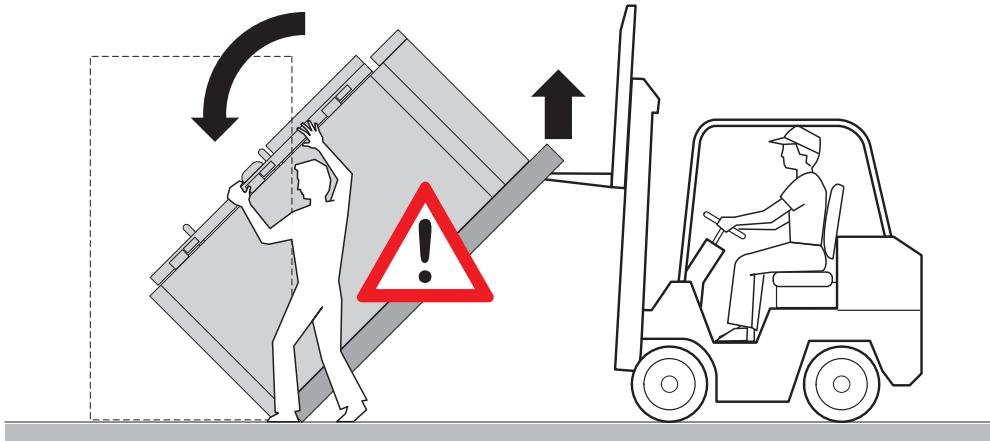
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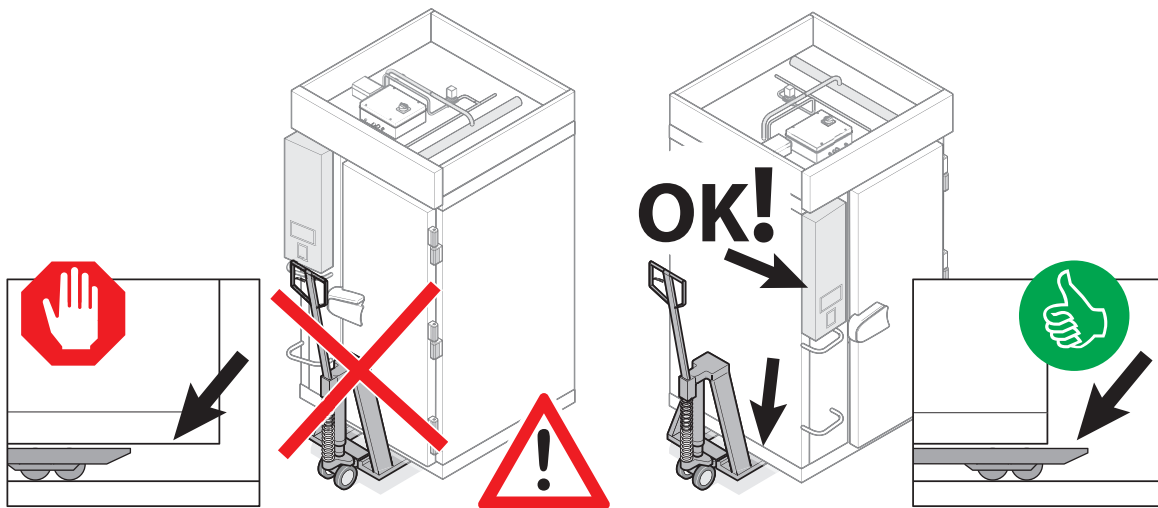
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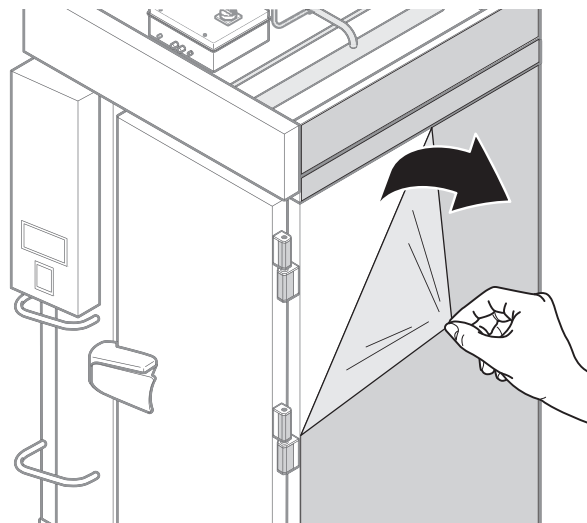
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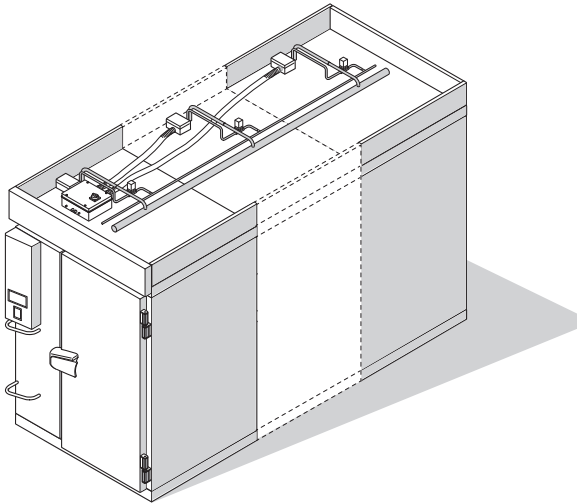
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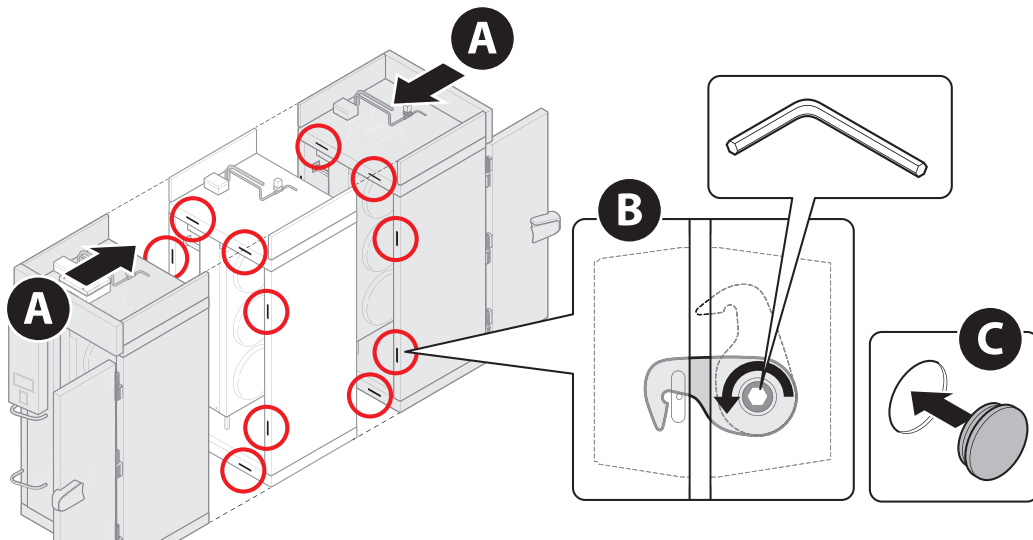


INSTRUCTIONS FOR PRE-ASSEMBLED TRIPLE CHILLER

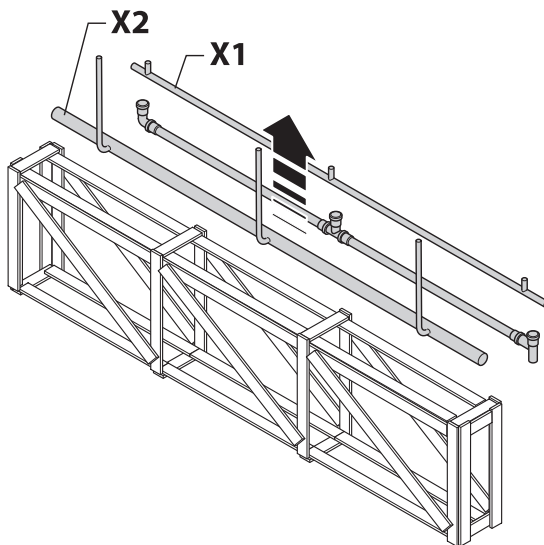


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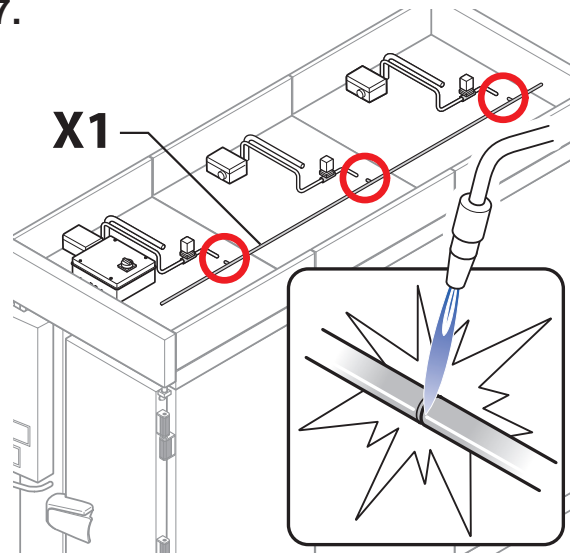
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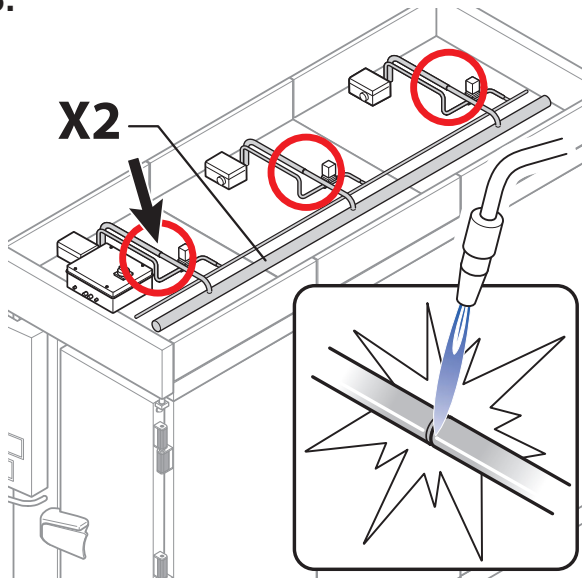
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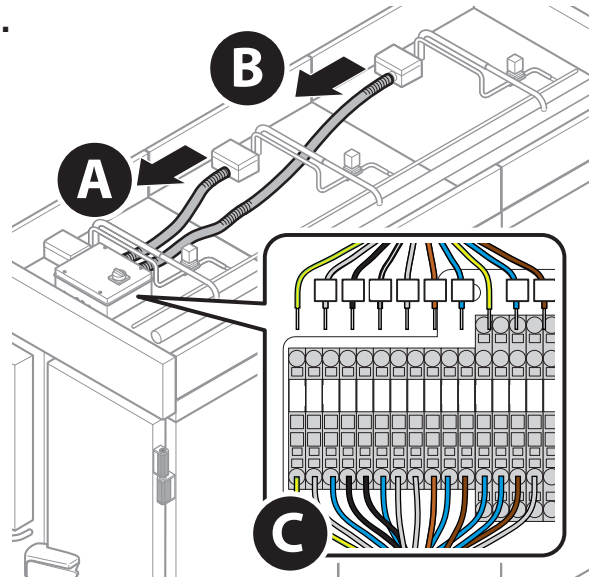
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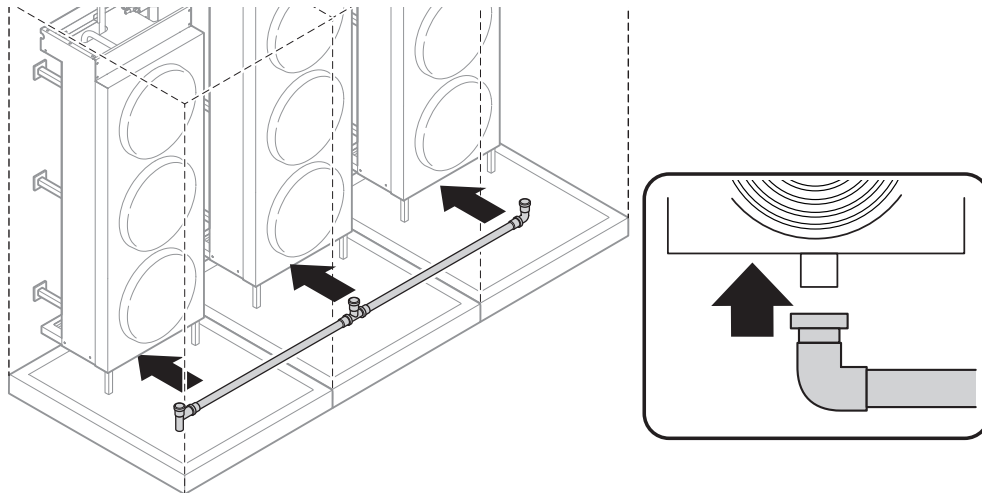
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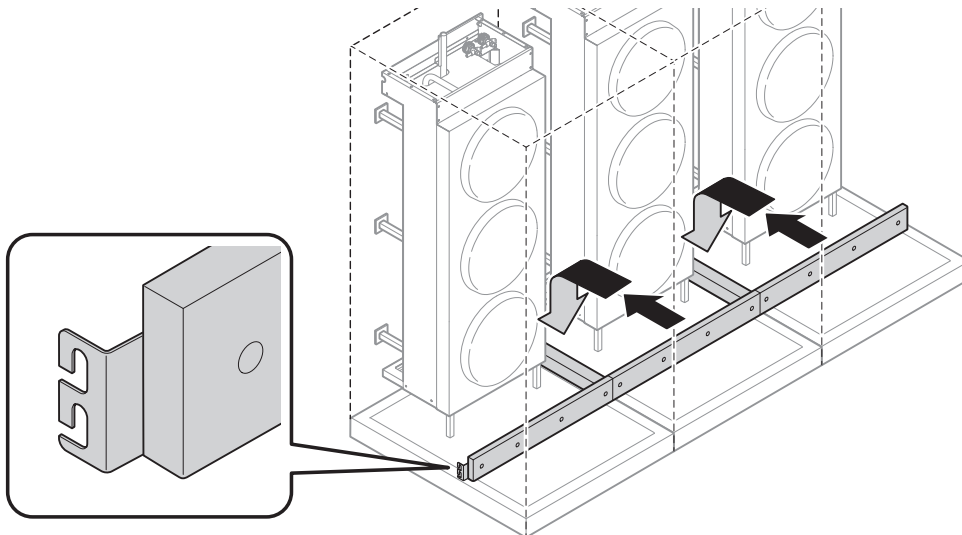
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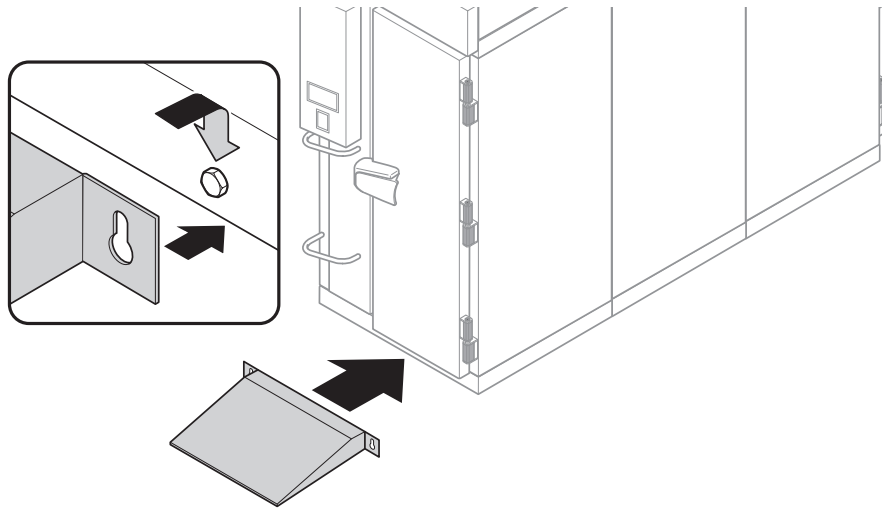
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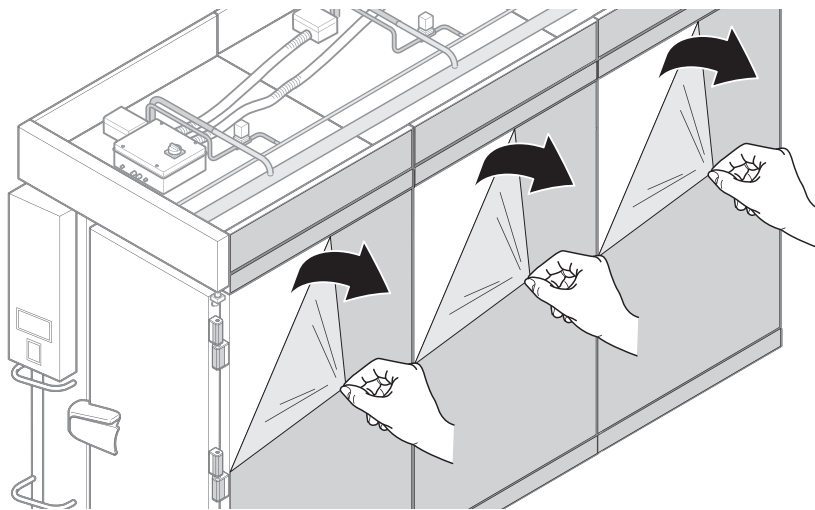
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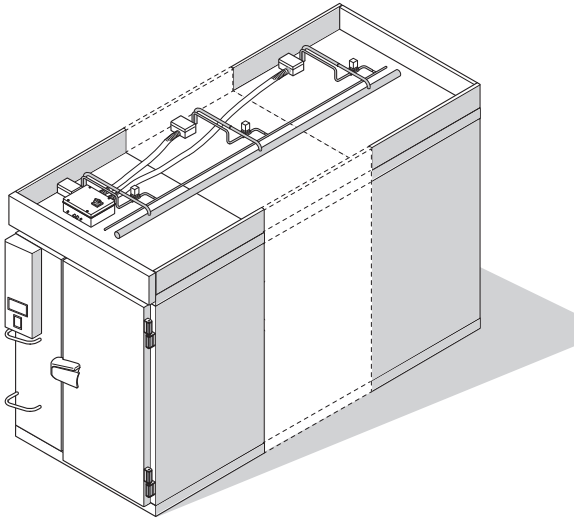
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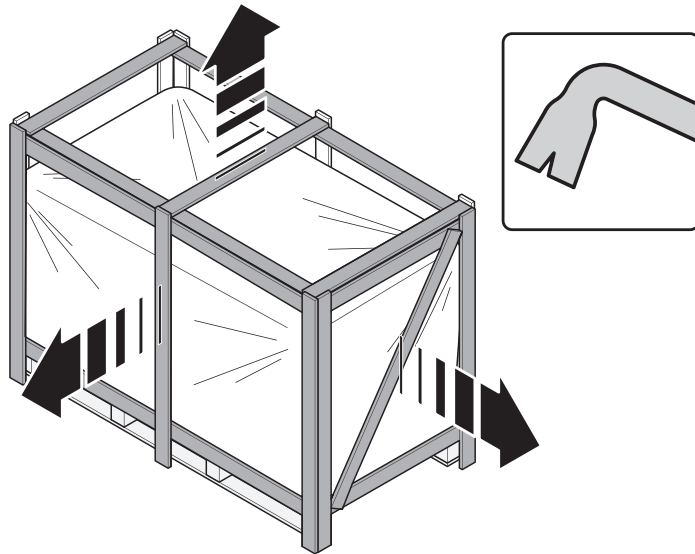
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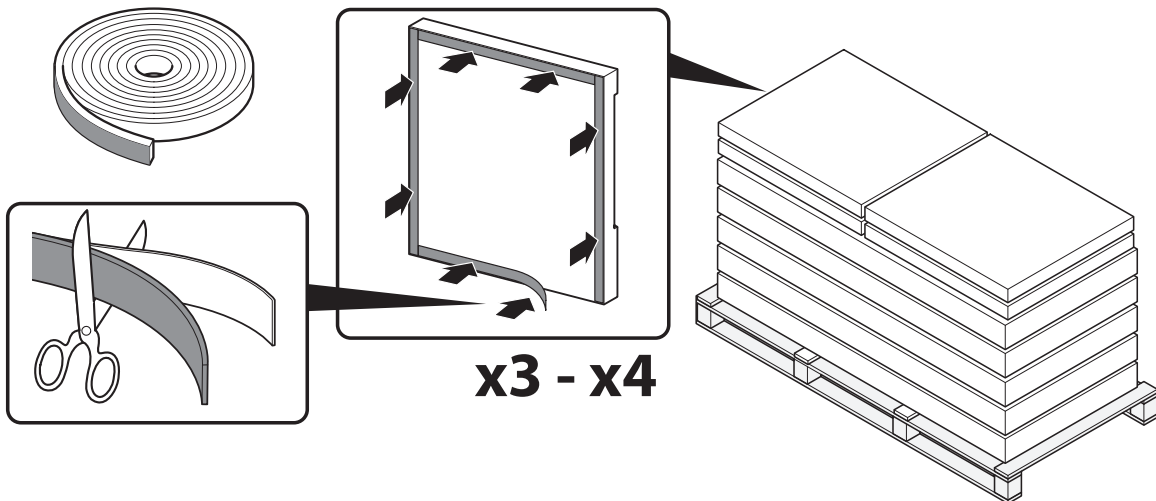
INSTRUCTIONS FOR TRIPLE/QUADRUPLE CHILLER - NOT ASSEMBLED



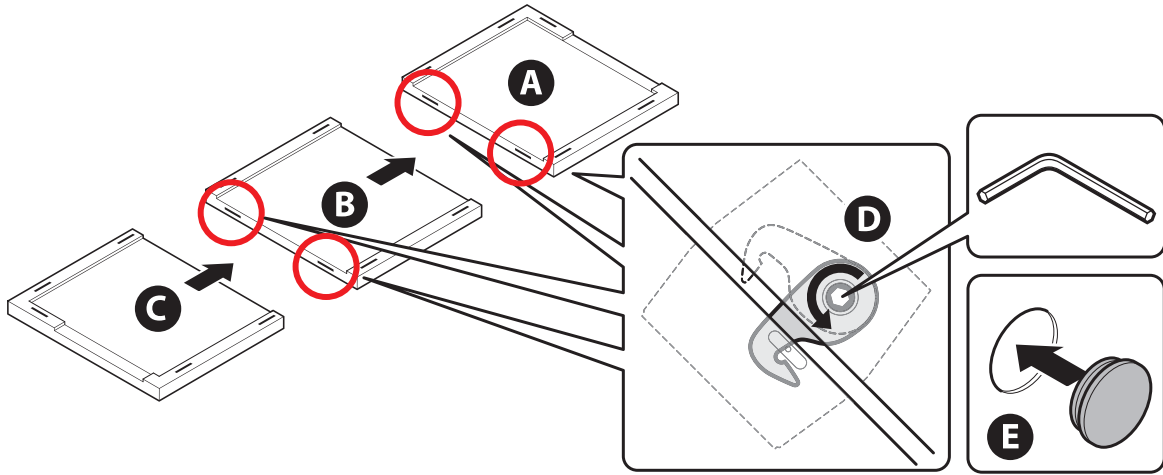
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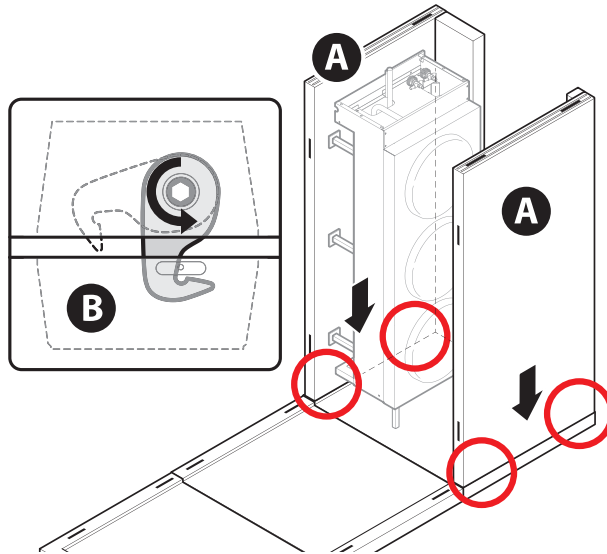
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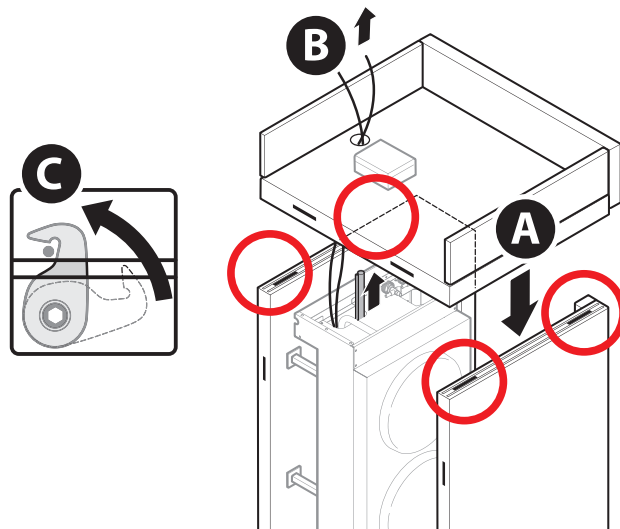
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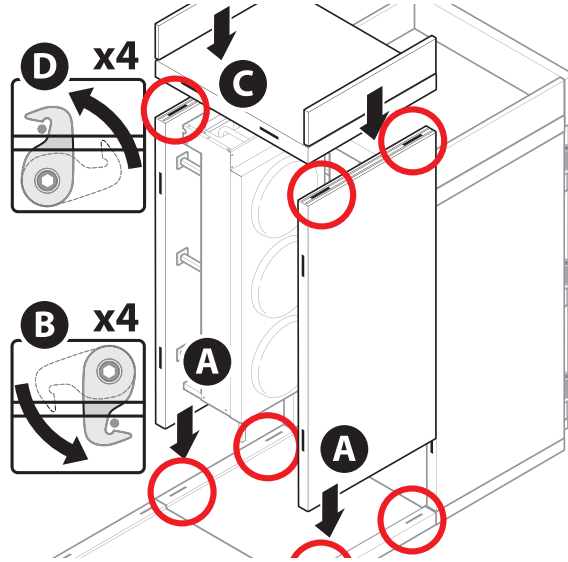


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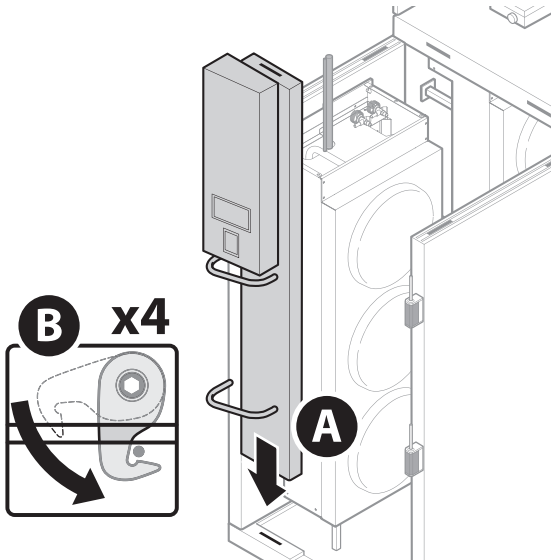




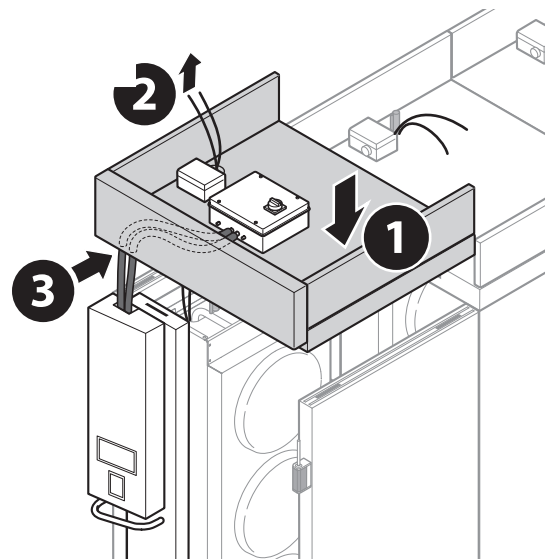
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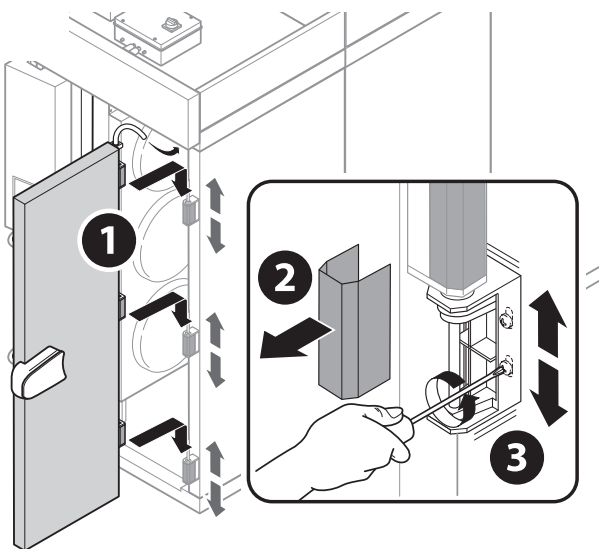
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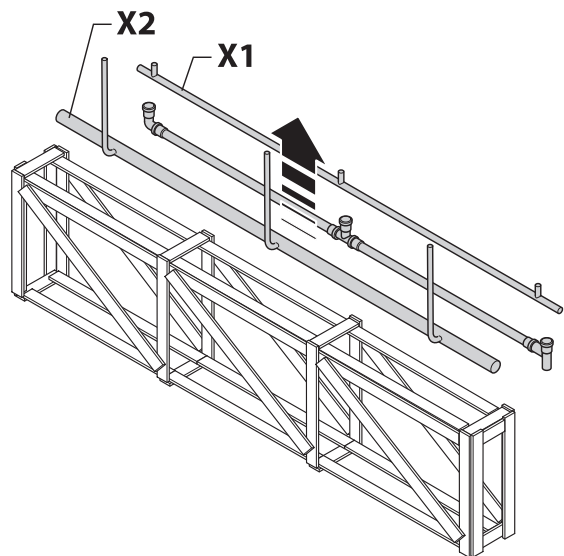
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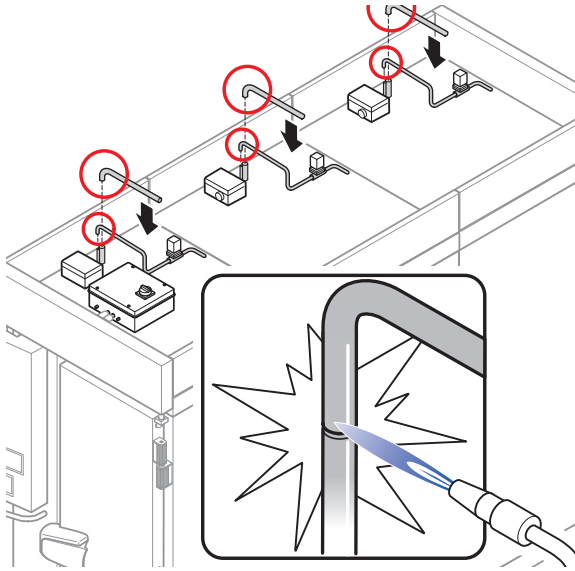
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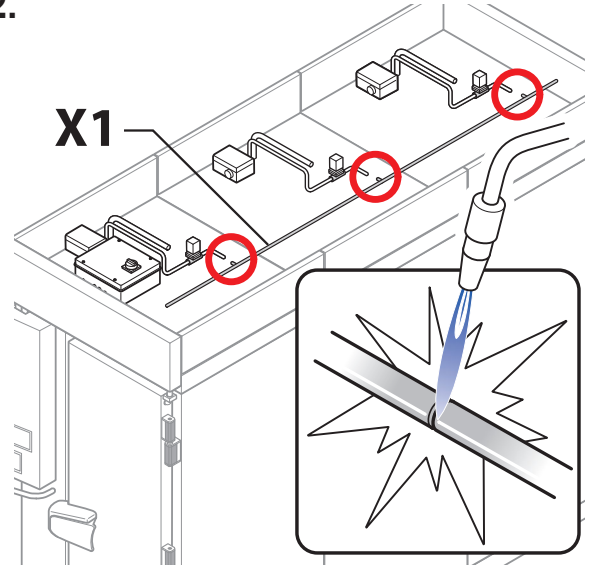
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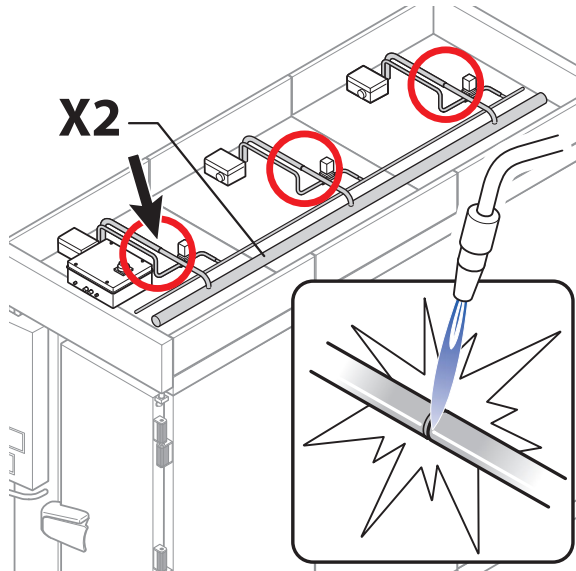
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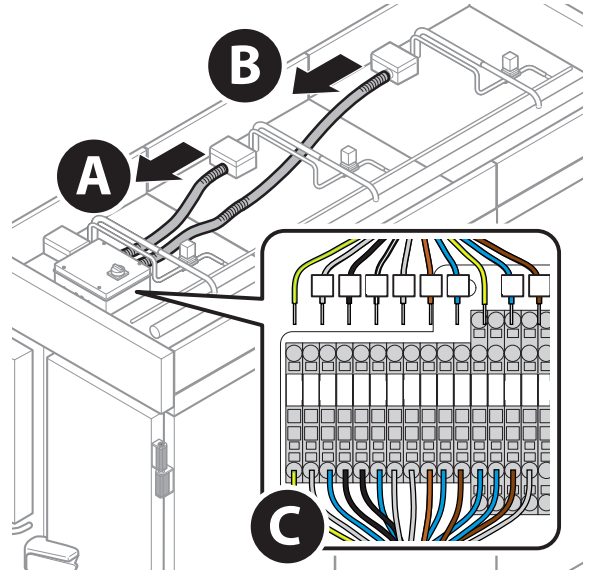
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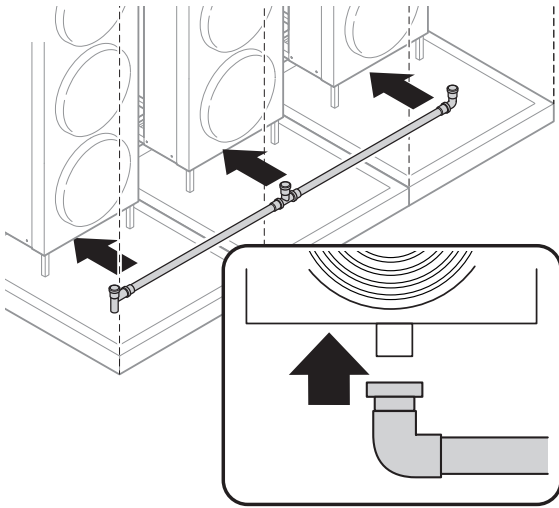
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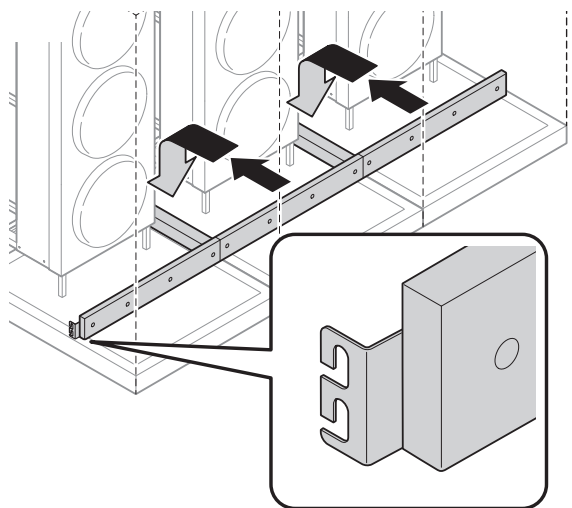
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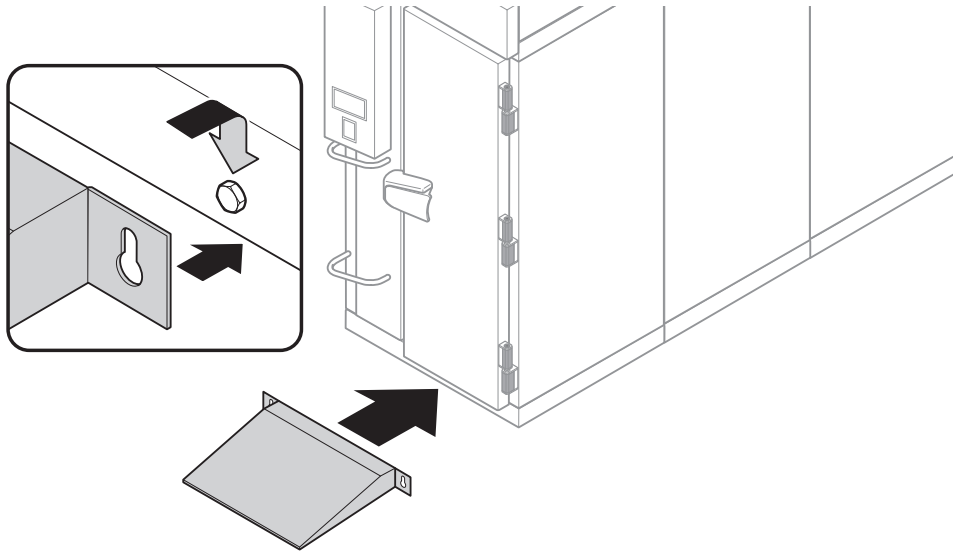
15.



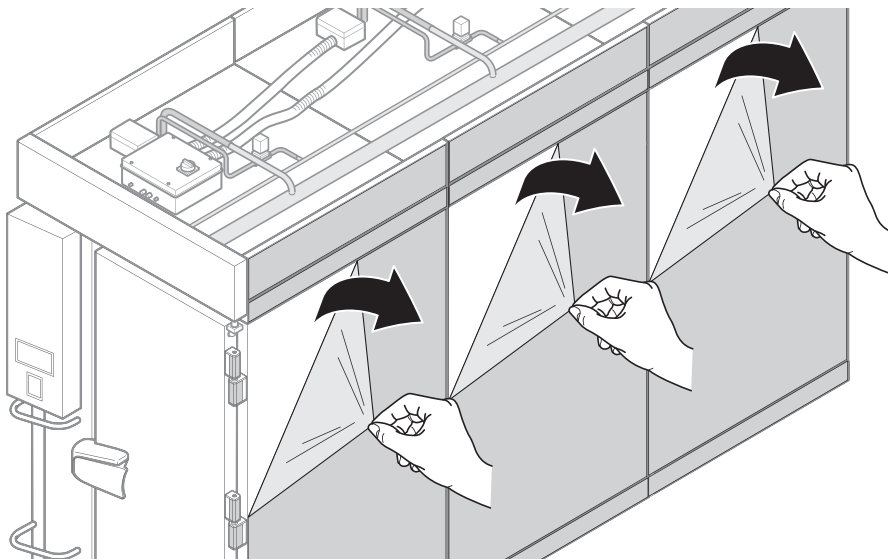
16.



17.



18.



## OPERATION

### Applications, purpose, unauthorized use, declared and non-declared use:

- These appliances are agri-food machines (EC regulation No. 1935/2004), intended for food related items.
- The machines are designed with the appropriate equipment to guarantee the health and safety of the user.
- They are not suitable for storing pharmaceuticals, chemicals, or any other non food products.
- Avoid appliance misuse. Do not place live animals, objects that aren't related to food, or corrosive products inside the unit.

### Application of the Blast Chiller-Shock Freezer:

The blast chiller-shock freezer is a machine which rapidly lowers the temperature of cooked or raw foods, in order to maintain the organoleptic properties (chemical, physical, and nutritional) of these foods unaltered.

COOLING OR FREEZING TIME IS A PARAMETER THAT IS DIFFICULT TO ESTABLISH WITH ANY PRECISION, SINCE THIS MAY VARY DEPENDING ON THE TYPE OF FOOD AND THE TYPE OF DISH USED FOR STORAGE.

THE DECLARED PERFORMANCE LEVELS WERE OBTAINED BY USING 25MM (1 INCH) THICK POTATO PUREE IN SHELF ALUMINUM TRAYS GN1/1 H=40MM (1 1/2 INCH)

### Blast Chilling temperature cycle:

- This cycle enables rapid lowering of the temperature of the cooked food (from +90°C/194°F to +3°C/37.4°F in 90 minutes) to avoid it remaining within the critical temperature range of +10°C/50°F to +65°C/149°F.
- The cooked and blast chilled food can then be stored in the refrigerator for up to 5 days.

### Shock Freezing temperature cycle:

- Shock freezing (from +90°C/194°F to -18°C/0.4°F) prevents the formation of macro crystals of ice on the food which

would result in a loss of liquids and vitamins. This cycle is suitable for cooked and raw food and then conserves the food for up to 2 months and 12 months respectively.

### Conservation cycle:

- At the end of every blast chilling or shock freezing cycle the machine envisions a conservation cycle during which the equipment functions as a normal refrigerator and the duration of which is at the user's discretion.

### FOOD STORAGE:

For the best performance of the appliance, the following indications should be observed.

### Blast Chilling/Shock Freezing cycle:

- do not open the door once the cycle has commenced, wait until the cycle is complete
- avoid wrapping, protecting, or closing containers with lids or insulating films
- do not use trays or containers taller than 65mm (2.5 inches)
- do not stack items
- use aluminum or stainless steel containers

### Conservation cycle:

- do not introduce hot foods or uncovered liquids inside the machine
- wrap or protect food, particularly if they contain aromas
- arrange the food inside in a way that does not limit air circulation, avoiding placing papers, cartons, boards, etc. on the racks that may obstruct the passage of air
- avoid opening the door frequently or for lengthy periods of time

## **ELECTRICAL**

The self-contained models are cord-connected units, and must be connected to their own **dedicated** power supply. Check the dataplate on the machine to confirm the voltage and per the dataplate use the correct fuses or HACR circuit breakers.

---

*Note: Do not connect to GFI / GFCI outlets. Connection to that type of outlet can result in product loss due to unsafe cabinet temperature when GFI device trips from moisture.*

---

### **Power Cord**

The voltages and plug type will vary by model, please check the data plate for confirmation.

If the power cord becomes damaged, it must be replaced with the identical cord.

### **Follow All National and Local Codes**

This Unit Must Be Grounded. Do not use extension cords and do not disable or by-pass ground prong on electrical plug.

### **Initial Start Up**

Plug the power cord into the proper power supply.
















The cabinet will soon begin to blow warm air out of the front grille area, and cool air will flow from the inside blower.

### **Cautions**

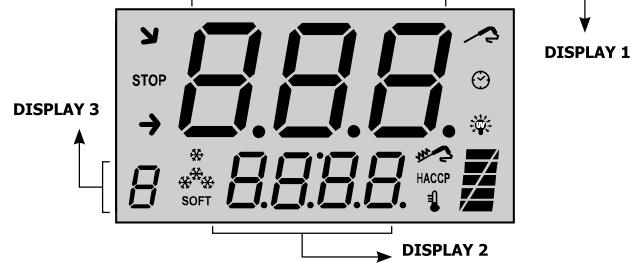
Care must be taken whenever moving or servicing the unit. The refrigerant is contained in a sealed system, but if released it is flammable.

## CONTROL PANEL














### DESCRIPTION OF CONTROL PANEL

-  **ON /OFF**  
On/off panel control
-  **START/STOP**  
This button is also used to start/interrupt operation during the blast chill/shock freeze/conservation cycle
-  **+37°F SOFT BLAST CHILL**  
Selection cycle blast chill +3 soft
-  **HARD BLAST CHILL +37°F**  
Selection cycle chill +3 hard
-  **-0°F SOFT SHOCK FREEZE**  
Selection cycle shock freeze -18 soft
-  **HARD SHOCK FREEZE -0°F**  
Selection cycle freeze -18 hard
-  **DEFROST**  
Start/stop defrost. By pressing the button for extended time, the temperature of the evaporator probe is displayed
-  **PROBE HEATING**  
Heating for extraction of core probe
-  **CORE PROBE**  
**(\*MULTI-POINT/MULTIPROBE optional)**  
Visualizes the temperature of the needle probe  
Extended pressing displays the 4 temperatures
-  **STERILIZATION**  
Start/stop sterilization process
-  **PROGRAM**  
Memory or recalls a blast chill/shock freeze cycle on memory
-  **HACCP**  
Enter/exit HACCP menu
-  **Decreases values**
-  **Increases values**
-  **Start/stop the precooling cycle of the room**  
Set fans speed during cycle



### Description of the display and symbols



- DISPLAY 1**  
Displays core probe temperature or time
- DISPLAY 2**  
Displays temperature of the cabinet
- DISPLAY 3**  
Displays the operational phase in progress (1-3)  
Number of core probe inserted in core

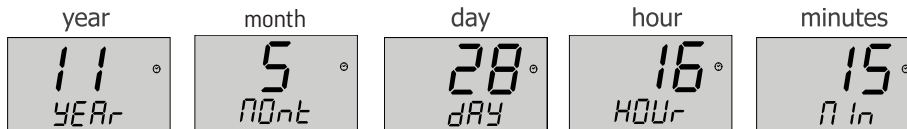
-  Cabinet temperature
-  Heating active core probe
-  Blast chill/shock freeze cycle with core probe  
(flashing in core probe insertion test)
-  Multipoint probe automatic freez./chill. cycle  
(flashing during pin insertion test)
-  Blast chill/shock freeze cycle with timer
-  Sterilization
-  Blast chill cycle function selected (+37°F)
-  Shock freeze cycle function selected (-0°F)
- SOFT**  
Soft phase selected
-  Blast chill in progress  
(flashing active compressor delay)
-  **STOP** Conservation phase in progress
- HACCP**  
Machine in Stop mode
-  HACCP alarm
-  Compressor activity indicator
-  Room fans activity indicator


### CLOCK PROGRAMMING ACCORDING TO HACCP

When machine is off, press simultaneously for extended time buttons  ( +37°F) and .

DISPLAY1 indicates the last figure of the year  
 DISPLAY2 indicates the letters "Year".

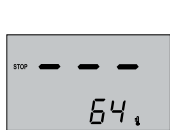
Pressing the button  and  the user can modify respectively:



By pressing the  to confirm the value entered and pass on to the next value.

Exit from the clock menu occurs automatically after 60 seconds or by pressing the  button.


### SWITCHING ON



(Fig.1)

By pressing the  button the board switches on.  
 No selection is visible in DISPLAY 1 (Fig.1).  
 DISPLAY 2 indicates the cabinet temperature.

### PRE-COOLING





After having selected a blast chilling or freezing cycle (even already executed), pressing the button  activates a PreCooling cycle that takes the room temperature to:


- +14°F if a blast chilling cycle has been selected
- 13°F if a freezing cycle has been selected


If no cycle has been selected previously, the room behaves as if a freezing cycle has been selected.

Once the PreCooling SetPoint has been reached, the Buzzer sounds for 3 seconds every 60 seconds to indicate that the room is ready to execute the blast chilling cycle.  
 During the PreCooling cycle:

DISPLAY 2 shows the temperature of the room.


The symbols ,  and  or  are lit.

At the start of the compressor and fan, the respective symbols  are also lit.

Opening the door or pressing the button  interrupts the cycle, and the card repropose the last cycle selected.

### +37°F SOFT OR HARD BLAST CHILL CYCLE AND 0°F SOFT OR HARD SHOCK FREEZING WITH CORE PROBE

#### BLAST CHILL/SHOCK FREEZE PHASE









Press the  button to select the +37°F soft blast chill cycle or the  button for the +37°F hard cycle.

Press the  button to select the -0°F soft blast chill cycle or the  button for the -0°F hard cycle.



(Fig.2)

DISPLAY 1 the core probe temperature.  
DISPLAY 2 indicates the cabinet temperature.  
DISPLAY 3 A for Automatic (Fig.2).

The following symbols light up: core probe , type of blast chill soft  or soft  + the symbol soft , or shock freeze hard , or soft  + the symbol soft , temperature  and **STOP**.



(Fig.3)

To start the selected cycle press the  button and the blast chill symbol  lights up (Fig.3).

Within the first 3 minutes, the electronic control performs a core probe insertion test to verify the effective application of the probe in the product to blast chill (flashing core probe symbol).

If the core probe is inserted badly or left in the holder provided, the cycle is automatically converted to timer.




(Fig.4)



During a timed blast chill cycle, DISPLAY 1 indicates the time to the end of the cycle itself (Fig.4); DISPLAY 2 indicates the cabinet temperature; DISPLAY 3 indicates the blast chill phase in progress.


If the core temperature has not been reached within the time determined, the time out alarm is activated.



(Fig.5)



The blast chill phase continues but the  and HACCP symbols flash and the alarm is memorized in the HACCP archives. The code AL5 flashes on DISPLAY 1 (Fig. 5). The alarm is automatically canceled when passing to the conservation phase and the symbol remains on HACCP.

Pressing the button  and , at any time during the cycle in progress, the time from the start

of blast chilling is indicated. Press for extended time the multi-point button  to display in position the temperature of the 4 sensors on DISPLAY 2 and the corresponding number of the sensor on DISPLAY 3.



The undetected inserted sensor is displayed in DISPLAY 3 with the symbol .



Upon termination of the blast chill cycle the machine automatically continues on to the conservation phase.

Pressing the button  and  it is possible to visualize the elapsed time from the beginning of the cycle.

### +37°F SOFT OR HARD BLAST CHILL CYCLE AND 0°F SOFT OR HARD SHOCK FREEZING WITH TIMER

#### HARD BLAST/SHOCK FREEZE PHASE

To select the timed +37°F soft blast chilling cycle, press the button  or the  button twice for the +37°F hard cycle.







To select the timed -0°F soft freezing cycle, press the button  or the  button twice for the -0°F hard cycle.





(Fig.6)

DISPLAY 1: indicates the total time foreseen for blast chilling/shock freezing (Fig.6).

DISPLAY 2: indicates the cabinet temperature.

The following symbols light up: time , type of blast chilling soft  or soft  + the symbol soft freezing or hard , or soft  + symbol soft, temperature  and **STOP**.



The duration of the cycle can be modified by pressing the buttons  and .


N.B.: It is possible to set a duration either shorter or longer than 90 min. for blast chill cycles or 240 min. for shock freeze cycles.



Maximum limit: 120 min. for a +37°F cycle.  
Maximum limit: 300 min. for a -0°F cycle.

Press the  button to start the cycle.



(Fig.7)

By pressing button  (Fig.7) the temperature read by the core probe is temporarily displayed (if inserted into the product, it will show the temperature of this product). At termination of the blast chill/shock freeze cycle the machine automatically progresses to conservation.

Pressing the button  and  it is possible to visualize the elapsed time from the beginning of the cycle.



### AUTOMATIC BLAST CHILL/SHOCK FREEZE CYCLE WITH MULTI-POINT CORE PROBE



Insert and in any case no further than the reference mark on the probe stem the core with the first sensor as far as possible into the core of the product.



(Fig.8)

Select the desired cycle +37°F soft or hard or -0°F soft or hard by using the appropriate buttons DISPLAY 3 indicates A for Automatic. (Fig.8)

When button  is pressed, the blast chill symbol  lights up, DISPLAY 3 indicates the number of the hottest sensor selected by the control, while DISPLAY 1 indicates the temperature of this sensor. Within the first 3 minutes, the electronic control performs a core probe insertion test to verify the effective application of the probe in the product to blast chill (flashing core probe symbol). If the core probe is inserted badly or left in the holder provided, the cycle is automatically converted to timer. Through functions controlled by the electronic probe, the cycle terminates when the temperature of the probe at the core reaches the value entered (+37°F for blast chilling, -0°F for shock freezing). Upon termination of the blast chill cycle the machine automatically continues on to the conservation phase.






Pressing the button  and  it is possible to visualize the elapsed time from the beginning of the cycle.

### BLAST CHILL OR SHOCK FREEZE CYCLE WITH 2-3-4 STANDARD CORE PROBES

This cycle can be run with several standard single-point core probes.



(Fig.9)

Select the cycle desired, e.g.:  or  (+37°F) or  or  (-0°F) then press the  button to start the cycle.

When the temperature of a probe reaches the value entered for the blast chill/shock freezer cycle selected, this is signalled with a buzzer, and DISPLAY 3 flashes the number of the relevant core probe (Fig.9). If in the meantime the other probes reach core temperature, the signal is placed in a queue. The signals terminate and the buzzer switches off only when the door is opened.



(Fig.10)

Once the door is closed and the other probes reach core temperature, a new signal appears on DISPLAY 3 (Fig.10) which indicates the number of the probe of the blast chilled/shock frozen product. If blast chilling is not complete within the determined time, the buzzer activates for one minute and can be switched off by pressing any button.





(Fig.11)

The blast chill phase continues but the clock and HACCP symbols flash and the alarm is memorized in the HACCP records. The code AL5 flashes on DISPLAY 1. (Fig.11).


The alarm cancels automatically when passing to the conservation phase and the HACCP symbol remains on.

Upon termination of the cycle the machine automatically proceeds to the conservation phase.

Pressing the button  and  it is possible to visualize the elapsed time from the beginning of the cycle.

**BLAST CHILL OR SHOCK FREEZE PERSONALIZE CYCLE "A"**

It is possible to modify the breakdown/freezing cycle:

automatic **A**, timed , probe , personalizing them as required.

The breakdown or freezing cycle is divided into three phases where it is possible to modify the following values:




**IN ORDER TO MODIFY THE DATA IN NOT PERMANENT WAY**



Press and hold the respective cycle button  /  /  (+37°F) /  (-0°F) for extended time.









(Fig.12)

Control displays (Fig.12):  
 SCREEN 1 - modifiable cell temperature  
 SCREEN 2 - no signal (off)  
 SCREEN 3 – the number of the phase (Fig

The cell temperature symbol  flashes, by pressing the button  and  the value of the set temperature is increased or decreased for the phase being modified and displayed on DISPLAY 3.

With a further pressing the "initially selected cycle button", by pressing the button  and  value of the set % value of the rotation speed of the fan/s of the cell increases or decreases for the phase being modified and displayed on DISPLAY 3.

With a further pressing the "initially selected cycle button" the pin symbol flashes , by pressing the button  and  value of the set pin temperature changes for the phase being modified and displayed on DISPLAY 3.

With a further pressing the "initially selected cycle button" the clock  symbol flashes, by pressing the button  and  value of the set time value increases or decreases.



Repeat the same procedure described for the later phases 2 and 3.


Phase 4 of conservation only involves setting the set temperature. To confirm the settings of all the phases described, press the relevant key With a further pressing the "initially selected cycle button"

 /  /  (+37°F) /  (-0°F) for extended time.

Press the  button to start the cycle.

At the end of the cycle the machine moves into conservation phase automatically,

By pressing the button  and  displays the duration of the cycle just finished, and it can be stored

The new sets of the personalized cycle will be lost when the machine is stopped with key .

See technical manual S __ = setpoint	BLAST CHILL OR SHOCK FREEZE			CONSERVATION
	PHASE 1	PHASE 2	PHASE 3	PHASE 4
SET CABINET	S01	S04	S07	S10
SET FAN SPEED	S50	S51	S52	S53
SET CORE	S02	S05	S08	--
SET TIME	S03	S06	S09	--

## INDEFINITE TIME CYCLE WITH CABINET SET POINT SETTING



(Fig.13)

Press the button to exit any program. Press the button once again and DISPLAY 1 will indicate the letters PO and the clock symbol (Fig.13).

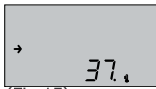


(Fig.14)

Select a blast chill or shock freeze program with the appropriate buttons +37°F soft or -0°F soft . DISPLAY 1 indicates the infinity symbol with the clock symbol , next to it, the type of blast chill or shock freeze , the temperature symbol and **STOP**. DISPLAY 2 indicates the default temperature of the selected cycle for blast chill (Fig.14).

Pressing the button and to increase or decrease the set temperature value shown in DISPLAY 2. To start or stop the machine press the button.

## CONSERVATION PHASE



(Fig.15)

The machine proceeds to conservation phase when the last core probe has reached core temperature at the end of the cycle. DISPLAY 2 indicates the cabinet temperature (Fig.15).

The conservation symbol light up.

Pressing the button and to view the time elapsed from the beginning of the conservation phase. This phase is terminated by pressing the button.

The machine sets itself on Stand-by and the user is asked whether the program is to be memo-

rized or the button must be pressed once more. Press the core probe heating button to facilitate extraction of the probe from the product (after shock freezing).

The symbol lights up on the display.

Core probe heating takes place only if the temperature of the probe is less than +23°F.

## STORING AN EXECUTED BLAST CHILLING/FREEZING PROGRAM



(Fig.16)

Press the button when the machine is in conservation mode. DISPLAY 1 indicates the number of the first free program. When the button is pressed, the cycle is memorized and the control positions itself to re-start with a new cycle (Fig.16).

It is possible to cancel a memorized program by overwriting it with a new blast chill/shock freeze cycle as follows: instead of memorizing a completed cycle on the first free program automati-

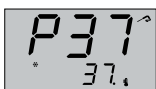
cally selected by the system, pressing the button and position it on the number of



(Fig.17)

the program to be cancelled and press the program button . If symbols appear on DISPLAY 2 (Fig.17), it means that there are no memorized programs.

## RECALL OF MEMORIZED BLAST CHILL/SHOCK FREEZE PROGRAM



(Fig.18)

To select a stored program, press the button , and then the buttons and to display the stored programs in succession (Fig. 18). Press button , to commence the selected blast chill/shock freeze program. If DISPLAY 2 (Fig.17) indicates symbols there are no memorized programs.

## EVAPORATOR FAN SPEED SETTING


With the cycle started it is possible to modify fan speed by pressing the key. The display will show the speed value as a percentage. Use or to set the new value (min 30% - max 100%) and then confirm using the key.

## DEFROSTING



(Fig.19)

Manual defrosting occurs if the cabinet temperature is below parameter P57 (see technical manual).


To start a defrosting cycle press the  button for extended time with the machine in **STOP** door open. DISPLAY 1 indicates the code **def** and DISPLAY 2 the cabinet temperature (Fig.19).


## STERILIZATION (OPTIONAL)

Sterilization can commence only if the temperature is above parameter P26 (see technical manual).



(Fig.20)

The cycle is activated with the machine in Stand-by by pressing the  button.

When the button is pressed again, the cycle is terminated. The  symbol lit up on the display indicates that the sterilization phase is in progress. DISPLAY 1 shows the time to the end of the process. If the door is opened or a blackout occurs, sterilization is interrupted (Fig.20).

## PRINTER (OPTIONAL)

If the printer is present, the following is recorded for every blast chill cycle: date, time, type of cycle, time elapsed from start of cycle and cabinet and core temperature sampled every 10 minutes. For recording lower or higher than 10 minutes, change the parameter P44 (see technical manual). Using parameter P86 (see technical manual) the language of the printer can be changed.

****HELLO****						
03/03/2007			10:15			
+37°F HARD						
Time	Ti	SP1	SP2	SP3	SP4	
00:00	25	54	52	51	49	
00:10	8	45	44	42	40	

**Time** = time elapsed

**Ti** = **CABINET** temperature

**SP1** = sensor 1 core probe point (\*multi-point optional)

**SP2** = sensor 2 core probe point (\*multi-point optional)

**SP3** = sensor 3 core probe point (\*multi-point optional)



**SP4** = sensor 4 core probe point (\*multi-point optional)

## USB RECORDER (OPTIONAL)

This is present only if there is the expression code EVC99E00X0XX00 (Optional).



Setting the parameter **P41 = 2** allows the user to connect the USB Recorder interface (code EVUS BRECO1). When the keypad detects the presence of the USB Recorder, the user can access the USB

menu which provides information on the state of the USB Recorder by pressing the buttons  or  for 2 seconds:

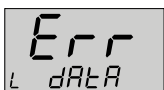


When the USB flash drive is inserted in the USB Recorder, the progress of the ongoing operations appears on the display. During a LOG DATA operation, the respective text with percentage of progress appears:



When the operation has been completed correctly, the end is signalled:

Otherwise error states are signalled:



Pressing the button  returns the user to the previous menu.



During the data Upload operation, the user can interrupt the process by pressing the button  for 2 seconds.

To reset the USB Recorder, press the button  for 2 seconds.

## ALARMS/ERRORS

### ALARM ABSENCE COMMUNICATION BETWEEN BASE AND KEYBOARD

**ALO**

====> **CONTACT TECHNICAL ASSISTANCE**

Verify connections, ignite and extinguish the machine detaching the feeding

### HIGH TEMPERATURE ALARM

**AL 1**

During the positive (negative), the alarm part when the temperature cabinet the values sets up.

Alarm code AL1 will flash on DISPLAY 1.

The buzzer sounds but can be stopped by pressing a button. When the temperature falls by below the alarm threshold, the alarm is automatically cancelled.

### LOW TEMPERATURE ALARM

**AL 2**

During the positive (negative), the alarm part when the temperature cabinet the values sets up.

Alarm code AL2 will flash on DISPLAY 1.

The buzzer sounds, but can be stopped by pressing a button. When the temperature rises above the alarm threshold, the alarm is automatically cancelled.

### DOOR OPEN ALARM

**AL 3**

If the door is open for more than two minutes after the start of the blast chill/shock freeze, the compressor stops and the code AL3 will flash on DISPLAY 1.

### PRESSURE SWITCH/ELECTRIC ALARM ====> CONTACT TECHNICAL ASSISTANCE

**AL 4**

When pressure switch alarm AL4 is activated, the blast chill cycle in progress will be immediately terminated.

### TIME-OUT ALARM

**AL 5**

If the blast chill or shock freeze phase in progress does not terminate within the set time, code AL5 will flash on DISPLAY 1.

### BLACKOUT ALARM

**AL 7**

If a blackout occurs during a blast chill cycle, the machine remembers the cycle and phase it was performing when it switched off. In cycles with core probes, the machine also remembers which probes were inserted or whether it is necessary to perform a probe insertion test.

Blast chill time tolerance is 10 minutes. Code AL7 will flash on DISPLAY 1. The buzzer sounds but can be stopped by pressing a button. If the button is pressed again, the display disappears.

### CABINET PROBE ALARM ====> CONTACT TECHNICAL ASSISTANCE

**Er 1**

The cabinet probe measures the temperature of the cabinet, which is indicated on DISPLAY 2.

If the probe is defective, a cabinet probe alarm and buzzer are activated and error code ER1 flashes on the DISPLAY 1. The buzzer sounds, but can be stopped by pressing a button.

Once the fault is remedied, the alarm cancels automatically.

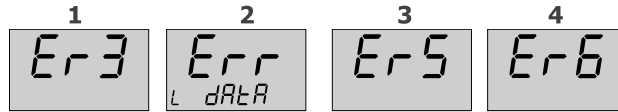
- In the case of a faulty cabinet probe, it is still possible to start or continue a blast chiller program with timer.
- A set temperature blast chill program not yet started, will convert the setting to time.
- If the core probe is not inserted, a set temperature blast chill program in progress will convert the setting to time and the compressor check will be performed on the core probe instead of the cabinet probe.
- A set temperature blast chill program in progress with core probe inserted, turns the compressor on and off on the basis of times memorized previously in blast chill or conversation phases.

### CORE PROBE ALARM ====> CONTACT TECHNICAL ASSISTANCE

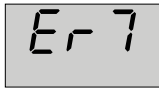
**Er 2**


The core probe is used for reading core temperature in blast chill cycles. A fault in the core probe causes an alarm only if a set temperature blast chill cycle is in progress. In this case the cycle automatically converts the setting to time and the buzzer is activated. Alarm code ER2 will flash on DISPLAY 1. The buzzer sounds, but can be stopped by pressing the button. The alarm code display disappears by pressing a button.

## CORE PROBE ALARM:



## EVAPORATOR PROBE ALARM ==> CONTACT TECHNICAL ASSISTANCE



The probe allows termination of defrosting based on temperature. Press and release button  to see the temperature of the evaporator which is shown on DISPLAY 2. If the probe is defective, an evaporator probe alarm and buzzer are activated, and error code ER7 flashes on the display. The buzzer sounds but can be stopped by pressing a button. Once the fault is remedied, the alarm cancels automatically. With the probe alarm on, defrosting terminates in time.

## HACCP

When the HACCP symbol flashes, it means that a new HACCP alarm has occurred.



In order to view the alarm, access HACCP alarm display by pressing the HACCP button .

DISPLAY1 indicates the alarm type 'AL1'

The DISPLAY 2 remains off.

DISPLAY3 indicates the position of alarm '4'

The HACCP symbol lights up.


If the alarm is for High/Low temperature, the thermometer symbol  lights up.

If the alarm is for Time-Out or Blackout, the clock symbol  lights up.

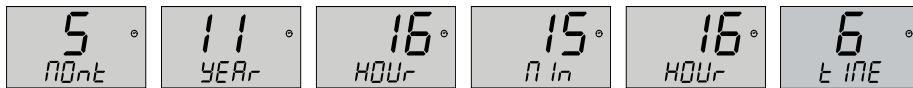
The illustration indicates that the last alarm was for high temperature and 4 is the position in the alarm memory. 10 HACCP alarms can be memorized and allocated to positions 0 to 9.

The UP and DOWN buttons can be used to scroll through the memorized alarms.

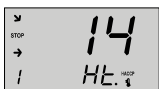


Press button  to view the date of alarm start:  
 DISPLAY1 indicates the day on which alarm '15' started  
 DISPLAY2 indicates 'day'  
 DISPLAY3 indicates the alarm number '4'

Pressing the button  and  to view the date and time:



"tt" max=999



If the alarm is for low or high temperature, the display after the date is the minimum or maximum temperature reached:


Display1 indicates maximum temperature '+14°F'

Display2 indicates 'H t' or 'L t'

Press button  to exit from the alarm start date view and return to view the alarms.

Memorized HACCP alarms constitute:

- High temperature alarms in conservation phase
- Blast chill cycle time-out alarms
- Low temperature alarms in conservation phase
- Blackout alarms




Press button  to exit the HACCP menu. Once the HACCP alarm has been viewed, the **HACCP** symbol no longer flashes and remains off until a new HACCP alarm occurs.

## HACCP ALARM RE-SET




To cancel HACCP alarm memory:

- Switch control board off with the  button
- Press simultaneously the  and  buttons for extended time
- The code 'RES HACCP' appears on the display
- Press simultaneously the  and  buttons for extended time



## SET POINT

With the machine turned off by the  button, it is possible to change the parameter setting by keeping the  and  buttons pressed simultaneously for five seconds.

- DISPLAY 1 indicates the setpoint value
- DISPLAY 2 the number of the setpoint '01', flashing.
- DISPLAY 3 flashing letter 'S'.

By using the  or  it is possible to select the setpoint. By pressing button  it is possible to change the parameters:

- DISPLAY 1 indicates the setpoint value flashing.
- DISPLAY 2 indicates the number of the parameter '-25'.
- DISPLAY 3 indicates the letter 'S'.




By using the  or  it is possible to select the setpoint.

Press button  to confirm the new parameter value and return to the parameter selection.



SetPoint	Description	Default	min	MAX
S01	Cabinet SetPoint PHASE 1 in +3°C soft blast chill	+32°F	-76°F	+212°F
S02	Core SetPoint PHASE 1 in soft +3°C blast chill	+50°F	-76°F	+212°F
S03	Time SetPoint PHASE 1 in +3°C soft blast chill	30 min	0 min	199 min
S04	Cabinet SetPoint PHASE 2 in +3°C soft blast chill	+32°F	-76°F	+212°F
S05	Core SetPoint PHASE 2 in +3°C soft blast chill	+41°F	-76°F	+212°F
S06	Time SetPoint PHASE 2 in +3°C soft blast chill	30 min	0 min	199 min
S07	Cabinet SetPoint PHASE 3 in +3°C soft blast chill	+32°F	-76°F	+212°F
S08	Core SetPoint PHASE 3 in +3°C soft blast chill	+37°F	-76°F	+212°F
S09	Time SetPoint PHASE 3 in +3°C soft blast chill	30 min	0 min	199 min
S10	Cabinet SetPoint in +3°C conservation	+35°F	-76°F	+212°F
<b>S11</b>	<b>Cabinet SetPoint PHASE 1 in +3°C hard blast chill</b>	<b>-13°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S12</b>	<b>Core SetPoint PHASE 1 in +3°C hard blast chill</b>	<b>+53°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S13</b>	<b>Time SetPoint PHASE 1 in +3°C hard blast chill</b>	<b>30 min</b>	<b>0 min</b>	<b>199 min</b>
<b>S14</b>	<b>Cabinet SetPoint PHASE 2 in +3°C hard blast chill</b>	<b>+10°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S15</b>	<b>Core SetPoint PHASE 2 in +3°C hard blast chill</b>	<b>+43°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S16</b>	<b>Time SetPoint PHASE 2 in +3°C hard blast chill</b>	<b>30 min</b>	<b>0 min</b>	<b>199 min</b>
<b>S17</b>	<b>Cabinet SetPoint PHASE 3 in +3°C hard blast chill</b>	<b>+28°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S18</b>	<b>Core SetPoint PHASE 3 in +3°C hard blast chill</b>	<b>+37°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S19</b>	<b>Time SetPoint PHASE 3 in +3°C hard blast chill</b>	<b>30 min</b>	<b>0 min</b>	<b>199 min</b>
S21	Cabinet SetPoint PHASE 1 in -18°C soft shock freeze	+14°F	-76°F	+212°F
S22	Core SetPoint PHASE 1 in -18°C soft shock freeze	+37°F	-76°F	+212°F
S23	Time SetPoint PHASE 1 in -18°C soft shock freeze	80 min	0 min	199 min
S24	Cabinet SetPoint PHASE 2 in -18°C soft shock freeze	-13°F	-76°F	+212°F
S25	Core SetPoint PHASE 2 in -18°C soft shock freeze	+23°F	-76°F	+212°F
S26	Time SetPoint PHASE 2 in -18°C soft shock freeze	80 min	0 min	199 min
S27	Cabinet SetPoint PHASE 3 in -18°C soft shock freeze	-40°F	-76°F	+212°F
S28	Core SetPoint PHASE 3 in -18°C soft shock freeze	-0°F	-76°F	+212°F
S29	Time SetPoint PHASE 3 in -18°C soft shock freeze	80 min	0 min	199 min
S30	Cabinet SetPoint in -18°C conservation	-4°F	-76°F	+212°F
<b>S31</b>	<b>Cabinet SetPoint PHASE 1 in -18°C hard conservation</b>	<b>-40°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S32</b>	<b>Core SetPoint PHASE 1 in -18°C hard conservation</b>	<b>-0°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S33</b>	<b>Time SetPoint PHASE 1 in -18°C hard conservation</b>	<b>80 min</b>	<b>0 min</b>	<b>199 min</b>
<b>S34</b>	<b>Cabinet SetPoint PHASE 2 in -18°C hard conservation</b>	<b>-40°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S35</b>	<b>Core SetPoint PHASE 2 in -18°C hard conservation</b>	<b>-0°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S36</b>	<b>Time SetPoint PHASE 2 in -18°C hard conservation</b>	<b>80 min</b>	<b>0 min</b>	<b>199 min</b>
<b>S37</b>	<b>Cabinet SetPoint PHASE 3 in -18°C hard conservation</b>	<b>-40°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S38</b>	<b>Core SetPoint PHASE 3 in -18°C hard conservation</b>	<b>-0°F</b>	<b>-76°F</b>	<b>+212°F</b>
<b>S39</b>	<b>Time SetPoint PHASE 3 in -18°C hard conservation</b>	<b>80 min</b>	<b>0 min</b>	<b>199 min</b>
S41	Cabinet SetPoint in +3°C hard blast chill multipoint	+32°F	-76°F	+212°F
S42	Core SetPoint in +3°C hard blast chill multipoint	+37°F	-76°F	+212°F


SetPoint	Description	Default	min	MAX
S43	Time SetPoint in +3°C hard blast chill multipoint	90 min	0 min	599 min
S44	Interesi SetPoint in +3°C hard blast chill multipoint	+34°F	+0°F	+50°F
S45	<b>Cabinet SetPoint in -18°C hard blast chill multipoint</b>	<b>-38°F</b>	<b>-76°F</b>	<b>+212°F</b>
S46	<b>Core SetPoint in -18°C hard blast chill multipoint</b>	<b>-0°F</b>	<b>-76°F</b>	<b>+212°F</b>
S47	<b>Time SetPoint in -18°C hard blast chill multipoint</b>	<b>240 min</b>	<b>0 min</b>	<b>599 min</b>
S48	Time SetPoint in P0 +32°F	∞ (600 min)	0 min	600 min
S49	Time SetPoint in P0 -0°F	∞ (600 min)	0 min	600 min
S50	<b>Fan speed PHASE 1</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>
S51	<b>Fan speed PHASE 2</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>
S52	<b>Fan speed PHASE 3</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>
S53	<b>Fan speed on conservation</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>
S54	<b>Cabinet fan speed in +3°C hard blast chill multipoint</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>
S55	<b>Cabinet fan speed in -18°C hard blast chill multipoint</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>
S56	Time SetPoint Max Time Blast Chill in P0 +32°F	900 min	0 min	900 min
S57	Time SetPoint Max Time Blast Chill in P0 -0°F	900 min	0 min	900 min
S58	<b>Cabinet SetPoint in Blast Chill +32°F infinite time</b>	<b>+32°F</b>	<b>-76°F</b>	<b>+212°F</b>
S59	<b>Cabinet SetPoint in Blast Chill -0°F infinite time</b>	<b>-31°F</b>	<b>-76°F</b>	<b>+212°F</b>
S60	<b>Room setpoint in +32°F blast chilling PreCooling cycles</b>	<b>+14°F</b>	<b>-76°F</b>	<b>+212°F</b>
S61	<b>Room setpoint in -0°F freezing PreCooling cycles</b>	<b>-13°F</b>	<b>-76°F</b>	<b>+212°F</b>

## PARAMETERS



With the machine turned off by the  button, it is possible to change the parameter setting by keeping the  and  buttons pressed simultaneously for five seconds.

- DISPLAY 1 indicates the parameter value
- DISPLAY 2 indicates the number of the param. flashing '01'.
- DISPLAY 3 indicates the letter 'P' flashing.

By using the  or  it is possible to select the setpoint.

By pressing button  it is possible to change the parameters:

- DISPLAY 1 indicates the value of the parameter selected flashing.
- DISPLAY 2 indicates the number of the parameter '15'.
- DISPLAY 3 indicates the letter 'P'.

By using the  or  it is possible to select the setpoint.

Press button  to confirm the new parameter value and return to the parameter selection.

Exit from the parameter menu occurs automatically after a time out of 60 seconds or manually by pressing the  button.

Param.	Description	Default	min	MAX
P01	Hysteresis for temperature alarm cancellation	+36°F	+32°F	+50°F
P02	Threshold of high temperature alarm in posit. conser. compared to the Set CONS	+45°F	+32°F	+122°F
P03	Threshold of low temperature in positive conservation	+32°F	+14°F	+32°F
P04	Threshold of high temperature alarm in neg. conser.n compared to the Set CONS	+43°F	+32°F	+122°F
P05	Threshold of low temperature alarm in neg. conser. compared to the Set CONS	+14°F	-58°F	+32°F
P06	Delay of temperature alarm at start of conservation or defrost	60 min	0 min	300 min
P07	Delay of temperature alarm	30 min	0 min	300 min
P08	Blackout max duration	2 min	0 min	300 min
P10	Temperature unit of measure (1 Celsius, 0 Fahrenheit)	1	0	1
P11	Cabinet probe offset	+32°F	+14°F	+50°F
P12	Polarity door 0: DI closed = Closed 1: DI closed = Open	0	0	1
P13	Delay door open alarm	2 min	0 min	60 min
P14	Probe Function: 0 = Standard; 1 = Multipoint; 2,3,4 = nr probes in Multitisonde	0	0	4
P15	Buzzer activation (0 Disabled; 1 Enabled)	1	0	1



Param.	Description	Default	min	MAX
P16	Duration of buzzer at end of blast chill cycle	10 sec	0	600 sec
P17	Duration of buzzer alarm	1 min	0 min	90 min
P18	Verification food probe insertion 0=No 1=Yes	1	0	1
P20	Relay function 0=Absent 1=Present	1	0	1
P21	Only blast chill cycles: 0=positive/negative 1=only positive	0	0	1
P22	Pressure switch alarm time	5 sec	0 sec	60 sec
P23	High pressure digital entry polarity 0: DI Open = Alarm HP active 1: DI closed = Alarm HP active	0	0	1
P24	Resistance SetPoint power	+50°F	+14°F	+68°F
P25	Duration of sterilisation	15 min	0 min	90 min
P26	Minimum temperature for sterilisation start	+59°F	+32°F	+212°F
P27	Minimum temperature for food probe heating start	+23°F	-58°F	+122°F
P28	Duration of food probe heating	90 sec	0 sec	600 sec
P29	Temperature at end of food probe heating	+86°F	+32°F	+212°F
P30	Hysteresis compressor OFF - ON	+34°F	+0°F	+68°F
P31	Min. time between OFF-ON compressor	2 min	0 min	30 min
P32	Delta SetPoint in food probe check with Cabinet Probe Error	+28°F	-50°F	+50°F
P33	Minimum temperature of probe for blast chill start	+158°F	+32°F	+194°F
P34	Duration of probe insertion test (0=test omitted)	3 min	0 min	240 min
P35	Fans ON with compressor OFF in conservation mode	30 sec	0 sec	999 sec
P36	Fans OFF with compressor OFF in conservation mode	300 sec	0 sec	999 sec
P37	Difference in core temperature in food probe insertion test	+39°F	+0°F	+50°F
P38	Difference in cabinet-core temperature in food probe insertion test	+41°F	+0°F	+50°F
P39	Compressor stop on probe test	2 min	0 min	60 min
P40	Location of the instrument	1	1	147
P41	Serial management: 0=Unused 1=Print 2=ModBus	1	0	2
P42	BaudRate: 0= 2400; 1 = 4800; 2 = 9600	2	0	2
P43	Parity: 0= no parity; 1= odd; 2 = even	2	0	2
P44	Sampling time	10 min	1 min	60 min
P50	Defrosting performed at start of blast chill 0=No; 1=Yes	0	0	1
P51	Temperature at defrost end	+46°F	+14°F	+86°F
P52	Maximum duration of defrost	15 min	1 min	90 min
P53	Interval between two defrosting phases in conservation mode (0=omitted)	0 hour	0	18 hour
P54	Type of defrosting: 0=air 1=hot gas 2=electrical	0	0	2
P55	Draining time	1 min	0 min	90 min
P56	Delay activation compressor with hot gas defrosting	0 sec	0 sec	600 sec
P57	Minimum temperature for defrosting start	+38°F	+14°F	+86°F
P58	Temperature differential for fan stop after defrosting	+41°F	+0°F	+50°F
P60	Time compressor ON in +3°C cycles with defective cabinet probe	3 min	0 min	60 min
P61	Time compressor OFF in +3°C cycles with defective cabinet probe	7 min	0 min	60 min
P62	Time compressor ON in -18°C cycles with defective cabinet probe	8 min	0 min	60 min
P63	Time compressor OFF in -18°C cycles with defective cabinet probe	2 min	0 min	60 min
P64	Time visualisation rotation probe	2 sec	0 sec	100 sec
P65	Delay in turning compressor power ON	2 min	0 min	60 min
P70	Fan speed min.	0%	0%	100%
P71	Fan speed max	100%	0%	100%
P72	Fan speed spurt	80%	0%	100%
P73	Fan time spurt	15 sec	0 sec	600 sec
P74	Program automatic Activation P00: 0= no; 1= si;	1	0	1
P75	Number spurt of encoder	3	1	24
P76	Fan speed % for stop	0%	0%	100%
P77	Fan speed % for max	100%	0%	100%
P80	Set temperatur it qualifies regulation fans	+77°F	-58°F	+122°F
P81	Offset evaporator sonde	+32°F	-50°F	+50°F
P82	Offset probe sonde 1	+32°F	-50°F	+50°F
P83	Offset probe sonde 2	+32°F	-50°F	+50°F
P84	Offset probe sonde 3	+32°F	-50°F	+50°F
P85	Offset probe sonde 4	+32°F	-50°F	+50°F
P86	Language of print: 0-ITA, 1GB, 2F, 3D, 4E, 5P, 6NL, 7FIN	0	0	7
P87	Compressor switch-off delay (PumpDown)	10 sec	0 sec	600 sec
P88	Solenoid switch-on delay	5 sec	0 sec	600 sec
P89	Buzzer sounding time at the end of the PreCooling cycle	60 sec	3 sec	600 sec
P90	Positive blast chilling proportional band	+50°F	+0°F	+68°F
P91	Negative blast chilling proportional band	+50°F	+0°F	+68°F
P92	Enable compressor inverter 0=no; 1=yes	0	0	1

## **MAINTENANCE AND CLEANING**

### **CLEANING THE UNIT:**

**Before any cleaning operation, disconnect the machine from the electrical power supply.**

### **Routine and Programmed Maintenance:**

Routine maintenance and cleaning should be performed by suitable, and trained personnel, while extraordinary and programmed maintenance should only be performed by specialized and authorized technicians.

### **Initial Installation:**

Before operating, wash the interior and accessories with a little water and neutral soap in order to remove the "new" odor. Arrange the accessories inside the cabinet in positions most appropriate for use.

### **Daily Cleaning:**

- Carefully clean the external surfaces of the machine using a damp cloth and following the direction of the finish.
- Use neutral detergents and not substances with a chlorine base and/or that are abrasive.
- Do not use utensils that may cause scratches, resulting in the formation of rust. Rinse with clean water and dry carefully.
- Clean the interior of the cabinet with neutral detergents which do not contain chlorine or abrasives, to avoid the formation of dirt residues. In the case of hardened stains, use soap and water or neutral detergents, and use a wooden spoon or plastic spatula if necessary.
- After cleaning, rinse with a little water and dry carefully.
- Do not wash the machine with direct water jets or streams, as any water leakage into electrical components may affect their correct functioning.
- Lower and adjoining areas of the machine must also be cleaned on a daily basis with soap and water and not with toxic or chlorine-based detergents.

### **WARNINGS FOR BLAST CHILLERS WITH WASHING KIT:**

- Always use the neutral detergent supplied by the manufacturer to guarantee maximum cleanliness without damaging the interior surface and the relative functional parts of the blast chiller (evaporator, fans, heating plug, etc).
- Before starting any washing program check, using the visual indicator positioned in the lower left side of the appliance, that the level of detergent is above the minimum accepted.

### **PERIODIC CLEANING AND GENERAL MAINTENANCE:**

- Cleaning and general maintenance operations must be carried out to ensure the consistent performance of the machine.
- The refrigerator unit (condenser) must be cleaned by specialized personnel.
- Regularly clean the drain to avoid any blockages.

**IT IS OF UTMOST IMPORTANCE THAT THE DRAIN HOLE IS CLOSED WITH THE APPROPRIATE PLUG.**

### **Periodic Checks:**

- that the power plug is correctly inserted into the power outlet
- the appliance isn't affected by heat sources
- the machine is perfectly level
- the door gasket seals perfectly
- the drain is not blocked
- the condenser battery is not covered with dust; should that be the case, request after-sales technical assistance

### **Extraordinary Maintenance (only by specialized personnel):**

- periodically clean the condenser
- check door gaskets to ensure perfect sealing
- make sure the electrical system is in order
- using an amperometric clamp, check the surround heating elements

**IN THE CASE OF REPAIRS OR REPLACEMENT OF PARTS, ALWAYS PROVIDE THE CODE AND SERIAL NUMBER OF THE MACHINE, VISIBLE ON THE SPECIFICATIONS PLATE.**

### **In case of extended periods of inactivity:**

If an extended period of inactivity of the machine is foreseen:

- switch the machine off by pressing the OFF button on the control panel
- remove the plug from the power supply socket
- empty the refrigerator and carefully clean it (see cleaning section)
- leave doors ajar to ensure air circulation

**METHODS FOR CLEANING STAINLESS STEEL**

Cleaning Needed	Cleaning Agent	Method of Application	Affect on Finish
Smears and fingerprints	Areal 20, Lac-O-Nu, Lumin Wash O’Cedar Cream Polish, Stainless Shine.	Rub with cloth as directed on the package.	Satisfactory for use on all finishes. Provides barrier film to minimize prints.
Stubborn Spots and Stains, Baked-On Splatter, and Other Light Discolorations	Allchem Concentrated Cleaner.	Apply with damp sponge or cloth. Rub with damp cloth.	Use in direction of polish lines on No. 4 (polished) finish. May scratch No. 2 (mill) and Nos. 7 and 8 (polished) finishes.
	Samae, Twinkle or Cameo Copper Cleaner	Rub with damp cloth.	
	Grade FFF Italian pumice, whiting, or talc.	Rub with dry cloth.	
	Liquid NuSteel Paste NuSteel or DuBois Temp. Copper’s Stainless Steel Cleaner Revere Stainless Cleaner Household cleansers, such as Old Dutch, Lighthouse, Sunbrite, Wyandotte, Bab-O, Gold Dust, Sapolio, Bon Ami, Ajax, or Comet Grade F Italian Pumice, Steel Bright, Lumin Cleaner, Zud, Restore, Sta-Clean, or Highlite. Penny-Brite or Copper-Brite.	Use small amount of cleaner. Rub with dry cloth using a small amount of cleaner. Apply with damp sponge or cloth. Rub with a damp cloth. May contain chlorine bleaches. Rinse thoroughly after use. Rub with a damp cloth. Rub with a dry cloth using a small amount of cleaner.	
Heat tint or discoloration	Penny-Brite or Copper-Brite. Past NuSteel, DuBois Temp, or Tarnite. Revere Stainless Steel Cleaner. Allen Polish, Steel Bright, Tenacious Deposits, Rusty Discolorations, Industrial Atmospheric Stains Wyandotte, Bab-O or Zud.	Rub with a dry cloth. Rub with a dry cloth or stain- less steel wool. Apply with damp sponge or cloth. Rub with a damp cloth.	
Burnt-On Foods and Grease Fatty Acids, Milkstone (where swabbing or rubbing is not practical)	Easy-Off, De-Grease-It, 4 to 6% hot solution of such agents as trisodium phosphate or sodium tripolyphosphate or 5 to 15% caustic soda solution	Apply generous coating. Allow to stand for 10-15 minutes. Rinse. Repeated application may be necessary.	Excellent removal, satisfactory for use on all finishes.
Tenacious Deposits, Rusty Discolorations, Industrial Atmospheric Stains	Oakite No. 33, Dilac Texo 12, Texo NY, Flash-Klenz, Caddy Cleaner, Turco Scale 4368 or Permag 57.	Swab and soak with clean cloth. Let stand 15 minutes or more according to directions on package, then rinse and dry.	Satisfactory for use on all finishes
Hard Water Spots and Scale	Vinegar. 5% oxalic acid, 5% sulfamic acid, 5 to 10% phosphoric acid, or Dilac, Oakite No. 33, Texo 12, Texo N.Y.	Swab or wipe with cloth. Rinse with water and dry. Swab or soak with cloth. Let stand 10-15 minutes. Always follow with neutralizer rinse, and dry.	Satisfactory for all finishes. Satisfactory for all finishes. Effective on tenacious deposits or where scale has built up.

## TROUBLESHOOTING

### IN THE EVENT OF EQUIPMENT MALFUNCTION:

- If the equipment does not work, or if functional or structural defects are noted, disconnect it from the power and water mains, and contact a service center authorized by the manufacturer without attempting to repair on your own.
- Original parts are recommended; the manufacturer may not be held liable if original parts are not used.
- We recommend that the device be maintained and serviced by an authorized technician at least once a year to ensure safe and efficient operation.

Often operating difficulties are a result of causes which may be corrected in house. Therefore, before requesting assistance from a technician, perform the following checks.

#### If the machine stops operating:

- check that the plug is inserted correctly into the electrical socket.

#### If the cabinet temperature is insufficient:

- look for nearby heat sources that could be the cause
- ensure that the doors close perfectly
- check that the condenser filter is not blocked
- make sure the ventilation grills of the control panel are not obstructed
- look for items inside the cabinet that could be obstructing ventilation

#### If the machine is noisy:

- look for loose contacts between the machine and other objects
- make sure the machine is perfectly level
- look for loose screws (visible screws only), and tighten if found

#### If the problem isn't resolved after the checks above, request technical assistance indicating the following:

- the nature of the problem
- the code and serial number of the machine appearing on the specifications plate (this is located outside of the unit, either on the side or at the rear, and inside the motor compartment).

### TESTING PERFORMED:

The product is dispatched after visual, electrical, and operating tests have been passed. The technical data plate is located outside on the side or at the rear, and inside the motor compartment.

- Testing was performed in a rectangular showroom with no sound absorption. Significant obstacles were absent in the area surrounding the machine.
- Testing was performed under the most severe condition which corresponds to the start-up phase called "PULL DOWN".
- Noise testing was performed in compliance with Legislative Decree 277 and in accordance with methods described in ISO 230-5, in order to obtain the data required by 2006/42/EC Directive.

#### Noise Level:

- <70 dB(A) at the noisiest point at 1m in operating conditions
- <130 dB(C) at 1m in operating conditions

#### Materials and Fluids Used:

- Respecting the environment, all the used materials comply with Legislative Decree no. 151, July 25, 2005, in the implementation of directives RoHS (2002/95/EC) and WEEE (2002/96/EC and 2003/108/EC), concerning the reduction in use of hazardous substances in electrical and electronic equipment, as well as waste disposal.
- The refrigerant gases or the foaming agents of the polyurethane foams used are in compliance with Regulation EC 842/2006.

## DISMANTLING AND DISPOSAL

### DISCONNECTION:

The disconnection of this machine must be done by qualified technicians

- Avoid spilling or leakage of refrigerants into the environment
- Before disconnecting the unit, the below should be collected if present:
  - refrigerant gas
  - non-freezing solutions present in hydraulic circuits

### STORAGE:

While waiting for dismantling and disposal, the appliance can be temporarily stored outdoors provided that the unit's electrical, refrigeration, and plumbing circuits are intact and closed. The country's laws on environmental protection are still to be observed.

### THE UNIT MUST BE DISMANTLED BY QUALIFIED PERSONNEL.

### DISMANTLING:



This symbol identifies the units as returning units in directive RAEE 2002/96/CE.

Due to the presence of hazardous substances, information regarding the potential effects on the environment and human health can be obtained from the following:

- the manufacturer
- the distributor/importer
- organization in charge of collecting and processing waste
- the retailer where the appliance was purchased
- local services in charge of waste disposal

### DISPOSAL:

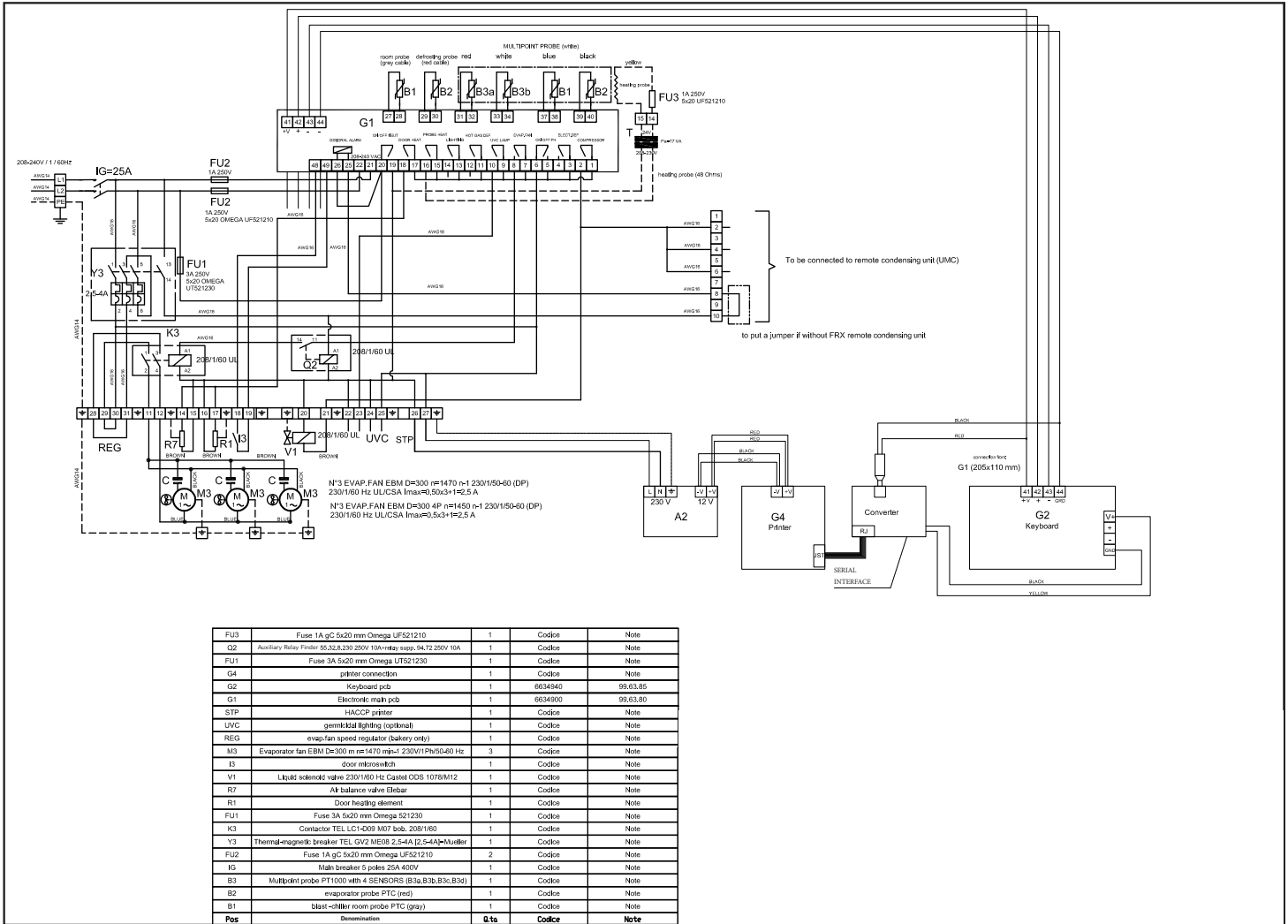
- WEEE Directive requires that electrical and electronic equipment disposal and recycling must be handled through a dedicated collection, in suitable approved facilities, and separate from mixed domestic waste disposal.
- The user has the option of not disposing of the appliance at the end of the useful life as domestic waste, but to deliver it to designated collection facilities authorized as required by regulations, or as specified by the distributor.
- All materials are to be retrieved or disposed of in compliance with the national regulations concerning the subject.
- For further information on the appliance disposal, contact the manufacturer.

## FOR THE SERVICE TECH - WIRING DIAGRAM - BF201DP-1P

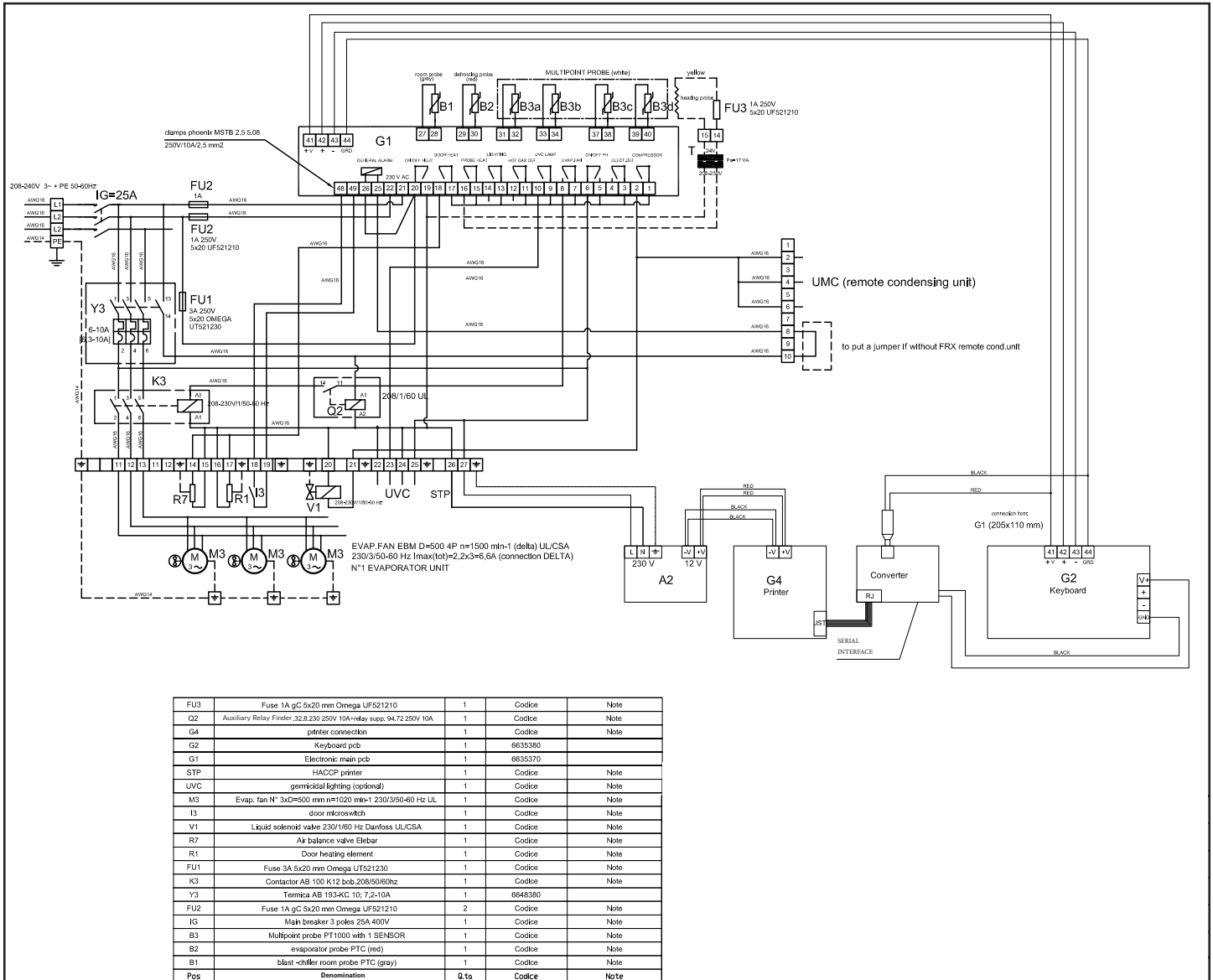
BF201AP-1P

BF201DP-2P

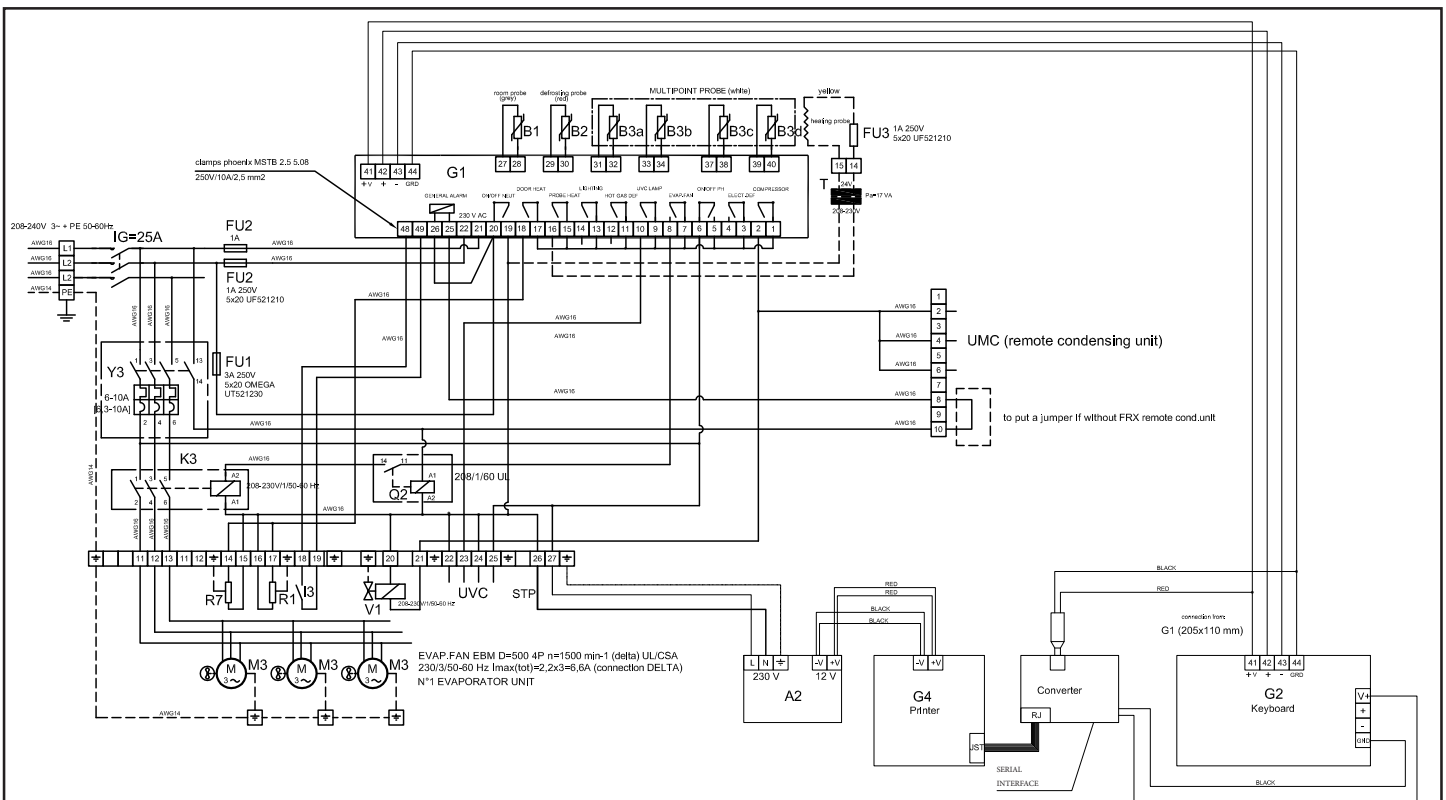
BF201AP-2P



## FOR THE SERVICE TECH - WIRING DIAGRAM - BF202DP-1P BF202AP-1P BF202DP-2P BF202AP-2P



## FOR THE SERVICE TECH - WIRING DIAGRAM - BF402DP-1P BF402AP-1P BF602DP-1P BF602AP-1P BF402DP-2P BF402AP-2P BF602DP-2P BF602AP-2P



Pos	Denomination	Q.ty	Codice	Note
FU3	Fuse 1A gC 5x20 mm Omega UFS21210	1	Codice	Note
Q2	Auxiliary Relay Finder 55.32.8.230 250V 10A-volby supp. 94.72 250V 10A	1	Codice	Note
G4	printer connection	1	Codice	Note
G2	Keyboard pcb	1	6635380	
G1	Electronic main pcb	1	6635370	
STP	HACCP printer	1	Codice	Note
UVC	germicidal lighting (optional)	1	Codice	Note
M3	Evap. fan N° 3xD=500 mm n=1020 min-1 230/350-60 Hz UL	1	Codice	Note
H	door microswitch	1	Codice	Note
V1	Liquid solenoid valve 230/160 Hz Danfoss ULCSA	1	Codice	Note
R7	Air balance valve Elekar	1	Codice	Note
R1	Door heating element	1	Codice	Note
FU1	Fuse 3A 5x20 mm Omega UFS21230	1	Codice	Note
K3	Contacto AB 100 K12 bob.230/50/60Hz	1	Codice	Note
Y3	Termica AB 1934CC 10. 7.2-10A	1	6648380	
FU2	Fuse 1A gC 5x20 mm Omega UFS21210	2	Codice	Note
I3	Main breaker 3 poles 25A 400V	1	Codice	Note
B3	Multipoint probe PT1000 with 1 SENSOR	1	Codice	Note
B2	evaporator probe PTC (red)	1	Codice	Note
B1	blast -chiller room probe PTC (gray)	1	Codice	Note
Pos	Denomination	Q.ty	Codice	Note

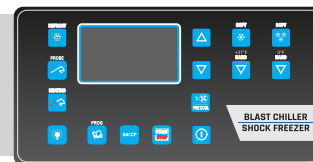


## FOR THE SERVICE TECH - GENERAL KEY FOR WIRING DIAGRAMS

<b>A</b>	Power supply unit
<b>A1</b>	Lamp power supply unit
<b>A2</b>	Printer power supply unit
<b>B</b>	Probe
<b>B1</b>	Temperature probe
<b>B2</b>	Defrosting probe
<b>B3</b>	Core probe
<b>B4</b>	Condenser probe
<b>B5</b>	Vacuum probe
<b>B6</b>	Humidity probe
<b>C</b>	Electric condenser
<b>CK</b>	Buzzer
<b>D</b>	Voltage variator
<b>E</b>	Thermostat
<b>E1</b>	Safety thermostat
<b>E2</b>	Control thermostat
<b>FU</b>	Fuse
<b>G</b>	Thermostat
<b>G1</b>	Power card
<b>G2</b>	Command card
<b>G3</b>	Auxiliary card
<b>G4</b>	Printer + IF RICS
<b>G5</b>	Fan control
<b>G6</b>	Encoder
<b>H</b>	Indicator light
<b>H1</b>	Power indicator light
<b>H2</b>	Alarm indicator light
<b>H3</b>	Defrosting indicator light
<b>H4</b>	Cycle indicator light
<b>IG</b>	Main switch
<b>I1</b>	Switch
<b>I2</b>	Switch
<b>I3</b>	Door microswitch
<b>I4</b>	Float
<b>I5</b>	Selector
<b>K1</b>	Compressor contactor
<b>K2</b>	Condenser contactor
<b>K3</b>	Evaporator contactor
<b>K4</b>	UVC contactor
<b>K5</b>	Defrosting contactor
<b>K6</b>	Delayed contact
<b>K8</b>	Room heating contactor
<b>L</b>	Line
<b>L1</b>	3-phase line #1
<b>L2</b>	3-phase line #2
<b>L3</b>	3-phase line #3
<b>M</b>	Electric motor
<b>M1</b>	Compressor
<b>M2</b>	Condenser fan
<b>M3</b>	Evaporator fan

<b>M4</b>	Additional motorised fan
<b>M5</b>	Linear actuator
<b>M6</b>	Heating and dehumidification fan
<b>N</b>	Neutral
<b>O</b>	Timer
<b>P</b>	Pressure switch
<b>PE</b>	Earth point
<b>P1</b>	Pressure transducer
<b>P2</b>	Pressure transducer
<b>Q</b>	Relay
<b>Q1</b>	Power relay
<b>Q2</b>	Relay with 2 contacts
<b>Q3</b>	Thermal protection relay for compressor
<b>Q4</b>	Water supply relay
<b>Q5</b>	Detergent supply relay
<b>Q6</b>	Detergent pump relay
<b>Q7</b>	Drain valve relay
<b>Q8</b>	Heating relay
<b>Q9</b>	Drain safety relay
<b>R</b>	Resistance
<b>R1</b>	Frames resistance
<b>R2</b>	Defrosting resistance
<b>R3</b>	Evaporation resistance
<b>R4</b>	Heating resistance
<b>R5</b>	Guard resistance
<b>R6</b>	Discharge resistance
<b>R7</b>	Pressure balancing valve resistance
<b>R8</b>	Frame heating glass doors (on the glass)
<b>R9</b>	Perimetrical heater for glass doors
<b>R10</b>	Humidify heating element
<b>S</b>	Starter
<b>T</b>	Transformer
<b>T1</b>	Automatic transformer
<b>T2</b>	Ballast
<b>U</b>	Thermometer
<b>V1</b>	Solenoid-valve
<b>V2</b>	Water solenoid-valve
<b>V3</b>	Solenoid-valve warm gas
<b>W</b>	Lamp
<b>W1</b>	Neon lamp
<b>W2</b>	UVC lamp
<b>X</b>	Terminal
<b>X1</b>	Terminal board
<b>Y1</b>	Compressor thermal-breaker
<b>Y2</b>	Condenser thermal-breaker
<b>Y3</b>	Evaporator thermal-breaker
<b>Y5</b>	Defrosting thermal-breaker
<b>Z</b>	Noise prevention filter

## ABBATTITORE / CONGELATORE BLAST CHILLER / SHOCK FREEZER

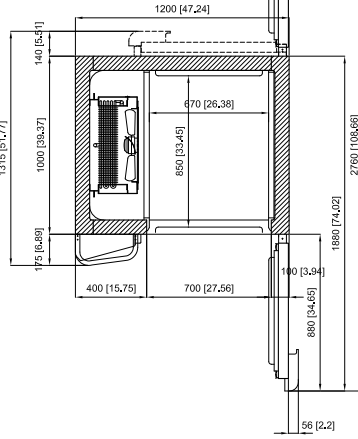
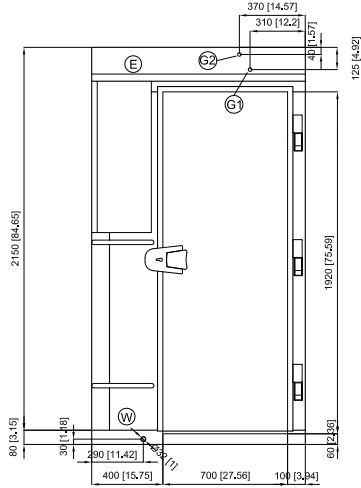


Modello / model Controllo / control		BF201DP	BF201AP
Dimensioni <i>Dimensions</i>	LxPxH [WxDxA] mm [in]	1200x1175x2230 2 porte: P → +140 [47.2x46.26x87.8] 2 doors: D → [+5.5]	
Profondità con porta 90° <i>Depth with 90° door</i>	mm [in]	1880 [74.02]	
Larghezza luce porta <i>Door opening width</i>	mm [in]	700 [27.6]	
Luce porta <i>Door opening</i>	LXH [WxA] mm [in]	670x1920 [26.4x75.6]	
Profondità interna <i>Internal depth</i>	P [D] mm [in]	850 [33.5]	
Spessore <i>Thickness</i>	mm [in]	80 [3.1]	
Classe climatica <i>Climatic class</i>		T	
Ciclo abbattimento <i>Chilling cycle</i>	°C °F	+90 → +3 +194 → +37	+90 → +3 +194 → +37
Ciclo congelamento <i>Freezing cycle</i>	°C °F	+90 → -18 +194 → 0	+90 → -18 +194 → 0
Capacità abbattimento <i>Chilling capacity</i>	90' lb	175	230
Capacità congelamento <i>Freezing capacity</i>	240' lb	115	150
Capacità refrigerazione <i>Refrigeration capacity</i>	(*) BTU/h	21598	24551
Alimentazione elettrica <i>Electric power supply</i>	V~/Hz	208-240/1/60	
Potenza elettrica <i>Input electric power</i>	(°) W	403	918
Corrente max <i>Max. absorbed current</i>	(°) A	2,5	5,7
Allestimento <i>Setting up</i>		1 carrello GN1/1 1 GN1/1 trolley	
Dimensioni imballo <i>Packing dimensions</i>	LxPxH [WxDxA] mm [in]	2334x1284x1802 2 porte: P → +140 [91.9x50,56x70,95] 2 doors: D → [+55]	
Volume <i>Volume</i>	m³ ft³	4,18 147.6	
Peso Netto <i>Net weigh</i>	kg lb	336,5 742	

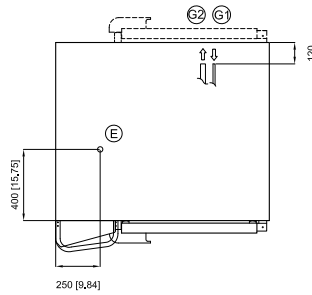
mod BF (°) Temp. evap. -13°F Temp. cond. +113°F / (°) Temp. evap. +14°F Temp. cond. +95°F

### ALLACCIAMENTI / CONNECTIONS

Allacciamenti - distanza max Connections - max distance	m [ft]	20 [66]	
Cavi elettrici / Electrical cables	n° x mm²	5 x 1,5	
Tubi liquido / Liquid tubes	Ø mm [in/SAE]	12 [1/2]	
Tubi gas / Gas tubes	Ø mm [in/SAE]	22 [7/8]	
Connex. idrica UMC ad acqua Drain connection water UMC	Ø pollici	out coil 3/4 1/2 conn. H2O	
Consumo max acqua Max water consumption	( ) l/min	9,9	11,3
Tubi scarico Drain tubes	Ø mm Ø [in]	32 [1.3]	
Set LP-HP (differenziale) LP-HP set (differential)	bar	0 (0.5) - 26 (3)	
Parzializzazione ventilat. HP (diff.) Fans choking HP (diff.)	bar	14 (2)	

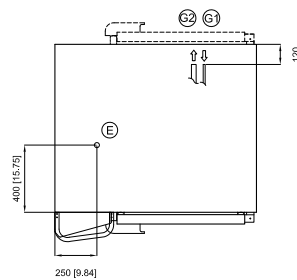
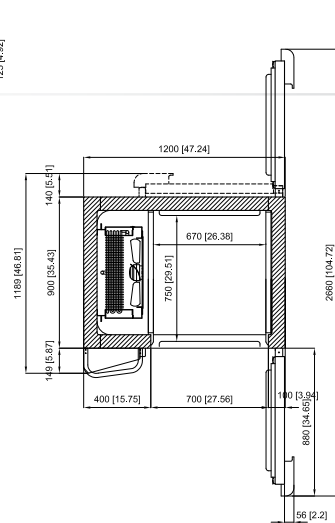
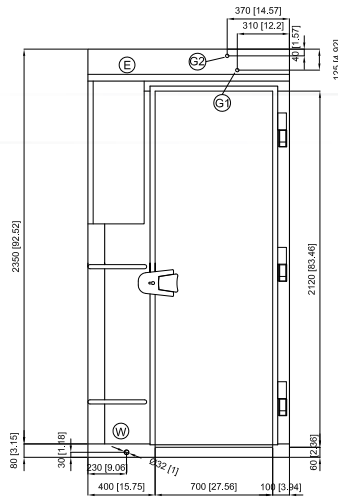


Catering



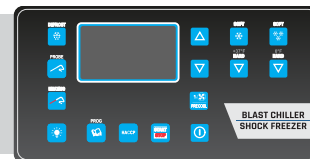
- Ⓜ1 INGRESSO REFRIGERANTE  
REFRIGERANT INLET
  - Ⓜ2 USCITA REFRIGERANTE  
REFRIGERANT OUTLET
  - Ⓜ3 CONNESSIONE ELETTRICA  
ELECTRICAL CONNECTION
  - Ⓜ4 CONNESSIONE IDRICA  
DRAIN CONNECTION
- DIMENSIONI mm  
DIMENSIONS [in]

Baking



- Ⓜ1 INGRESSO REFRIGERANTE  
REFRIGERANT INLET
  - Ⓜ2 USCITA REFRIGERANTE  
REFRIGERANT OUTLET
  - Ⓜ3 CONNESSIONE ELETTRICA  
ELECTRICAL CONNECTION
  - Ⓜ4 CONNESSIONE IDRICA  
DRAIN CONNECTION
- DIMENSIONI mm  
DIMENSIONS [in]

## ABBATTITORE / CONGELATORE BLAST CHILLER / SHOCK FREEZER



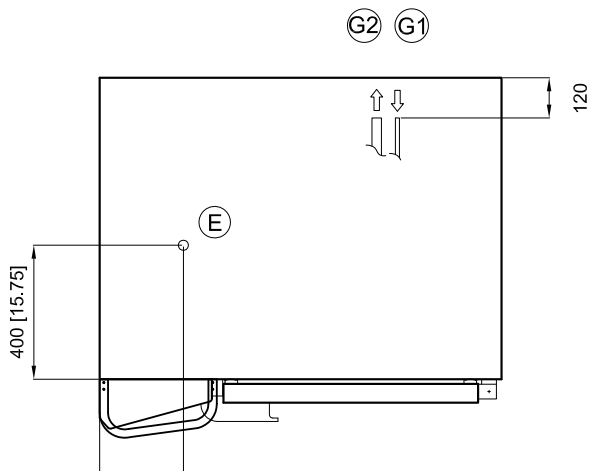
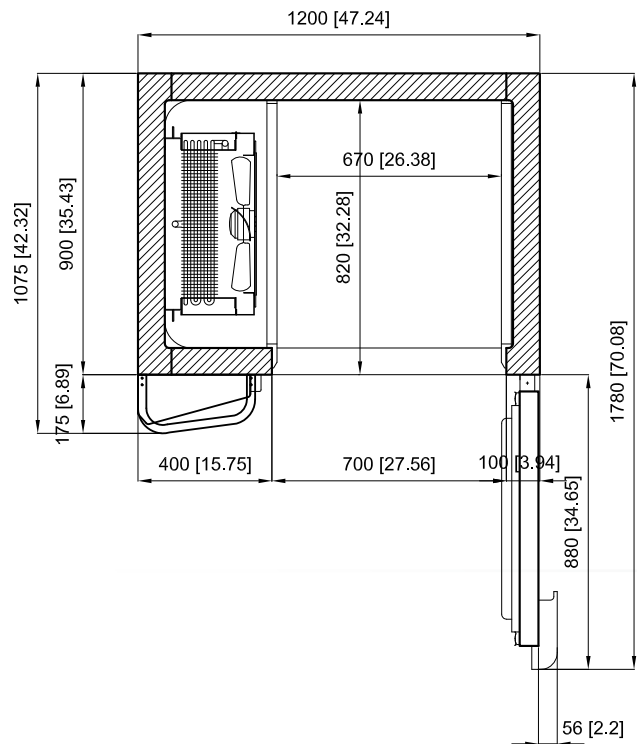
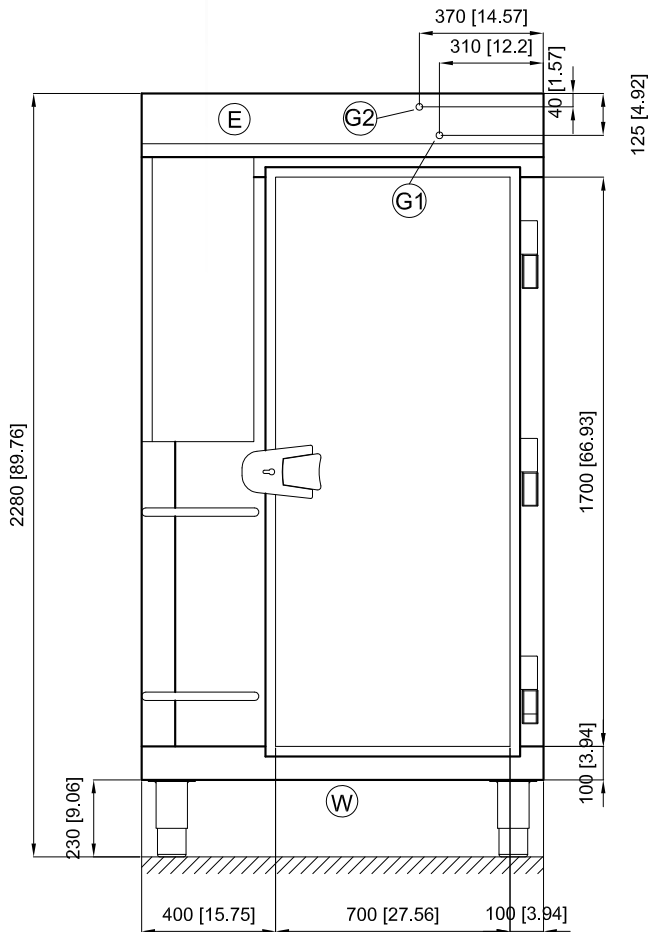
Modello / model Controllo / control		BF201DP-2P	BF201AP-2P
Dimensioni <i>Dimensions</i>	LxPxH [WxDxA] mm [in]	1200x1150x2230 2 porte: P → +140 [47.2x45.3x87.8] 2 doors: D → [+5.5]	
Profondità con porta 90° <i>Depth with 90° door</i>	mm [in]	1880 [74]	
Larghezza luce porta <i>Door opening width</i>	mm [in]	700 [27.6]	
Luce porta <i>Door opening</i>	LXH [WxA] mm [in]	670x1920 [26.4x75.6]	
Profondità interna <i>Internal depth</i>	P [D] mm [in]	850 [33.5]	
Spessore <i>Thickness</i>	mm [in]	80 [3.1]	
Classe climatica <i>Climatic class</i>		T	
Ciclo abbattimento <i>Chilling cycle</i>	°C °F	+90 → +3 +194 → +37	+90 → +3 +194 → +37
Ciclo congelamento <i>Freezing cycle</i>	°C °F	+90 → -18 +194 → 0	+90 → -18 +194 → 0
Capacità abbattimento <i>Chilling capacity</i>	90' lb	175	230
Capacità congelamento <i>Freezing capacity</i>	240' lb	115	150
Capacità refrigerazione <i>Refrigeration capacity</i>	(*) BTU/h	21598	24551
Alimentazione elettrica <i>Electric power supply</i>	V~/Hz	208-240/1/60	
Potenza elettrica <i>Input electric power</i>	(°) W	403	918
Corrente max <i>Max. absorbed current</i>	(°) A	2,5	5,7
Allestimento <i>Setting up</i>		1 carrello GN1/1 1 GN1/1 trolley	
Dimensioni imballo <i>Packing dimensions</i>	LxPxH [WxDxA] mm [in]	2330x1250x1350 2 porte: P → +140 [91.7x49.2x53.1] 2 doors: D → [+55]	
Volume <i>Volume</i>	m³ ft³	4,18 147.6	
Peso Netto <i>Net weigh</i>	kg lb	310 683	

mod BF (°) Temp. evap. -13°F Temp. cond. +113°F / (°) Temp. evap. +14°F Temp. cond. +95°F

### ALLACCIAMENTI / CONNECTIONS

Allacciamenti - distanza max <i>Connections - max distance</i>	m [ft]	20 [66]	
Cavi elettrici / Electrical cables	n° x mm²	5 x 1,5	
Tubi liquido / Liquid tubes	Ø mm [in/SAE]	12 [1/2]	
Tubi gas / Gas tubes	Ø mm [in/SAE]	22 [7/8]	
Connex. idrica UMC ad acqua <i>Drain connection water UMC</i>	Ø pollici	out coil 3/4 1/2 conn. H2O	
Consumo max acqua <i>Max water consumption</i>	( ) l/min	9,9	11,3
Tubi scarico <i>Drain tubes</i>	Ø mm Ø [in]	32 [1.3]	
Set LP-HP (differenziale) <i>LP-HP set (differential)</i>	bar	0 (0.5) - 26 (3)	
Parzializzazione ventilat. HP (diff.) <i>Fans choking HP (diff.)</i>	bar	14 (2)	

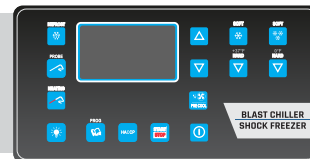
Rational



- Ⓒ G1 INGRESSO REFRIGERANTE  
REFRIGERANT INLET
- Ⓒ G2 USCITA REFRIGERANTE  
REFRIGERANT OUTLET
- Ⓒ E CONNESSIONE ELETTRICA  
ELECTRICAL CONNECTION
- Ⓒ W CONNESSIONE IDRICA  
DRAIN CONNECTION

DIMENSIONI mm  
DIMENSIONS [in]

## ABBATTITORE / CONGELATORE BLAST CHILLER / SHOCK FREEZER



Modello / model Controllo / control			BF202DP	BF202AP
Dimensioni <i>Dimensions</i>	LxPxH [WxDxA]	mm [in]	1500x1350x2230 2 porte: P → +140 [59,1x53,1x87.8] 2 doors: D → [+5.5]	
Profondità con porta 90° <i>Depth with 90° door</i>		mm [in]	2180 [85,8]	
Larghezza luce porta <i>Door opening width</i>		mm [in]	800 [31,5]	
Luce porta <i>Door opening</i>	LXH [WxA]	mm [in]	770x1920 [30,3x75.6]	
Profondità interna <i>Internal depth</i>	P [D]	mm [in]	1050 [41,3]	
Spessore <i>Thickness</i>		mm [in]	80 [3.1]	
Classe climatica <i>Climatic class</i>			T	
Ciclo abbattimento <i>Chilling cycle</i>		°C °F	+90 → +3 +194 → +37	+90 → +3 +194 → +37
Ciclo congelamento <i>Freezing cycle</i>		°C °F	+90 → -18 +194 → 0	+90 → -18 +194 → 0
Capacità abbattimento <i>Chilling capacity</i>	90'	lb	350	465
Capacità congelamento <i>Freezing capacity</i>	240'	lb	230	310
Capacità refrigerazione <i>Refrigeration capacity</i>	(*)	BTU/h	38611	46736
Alimentazione elettrica <i>Electric power supply</i>		V/~Hz	208-240/1/60	
Potenza elettrica <i>Input electric power</i>	(°)	W	837	1272
Corrente max <i>Max. absorbed current</i>	(°)	A	5,2	7,9
Allestimento <i>Setting up</i>			1 carrello GN 2/1 1 GN 2/1 trolley	
Dimensioni imballo <i>Packing dimensions</i>	LxPxH [WxDxA]	mm [in]	2330x1250x1350 2 porte: P → +140 [91.7x49.2x53.1] 2 doors: D → [+55]	
Volume <i>Volume</i>		m³ ft³	5,86 206,9	
Peso Netto <i>Net weigh</i>		kg lb	380 838	

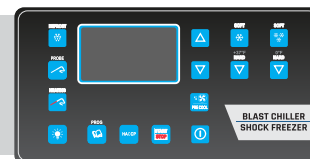
mod BF (°) Temp. evap. -13°F Temp. cond. +113°F / (°) Temp. evap. +14°F Temp. cond. +95°F

### ALLACCIAMENTI / CONNECTIONS

Allacciamenti - distanza max Connections - max distance	m [ft]	20 [66]		
Cavi elettrici / Electrical cables	n° x mm²	5 x 1,5		
Tubi liquido / Liquid tubes	Ø mm [in/SAE]	12 [1/2]		
Tubi gas / Gas tubes	Ø mm [in/SAE]	28 [1" 1/16]		
Connessione idrica UMC ad acqua Drain connection water UMC	Ø pollici	out coil 3/4 1/2 conn. H2O		
Consumo max acqua Max water consumption	( ) l/min	15,8	19,9	
Tubi scarico Drain tubes	Ø mm Ø [in]	32 [1.3]		
Set LP-HP (differenziale) LP-HP set (differential)	bar	0 (0.5) - 26 (3)		
Parzializzazione ventilat. HP (diff.) Fans choking HP (diff.)	bar	14 (2)		



## ABBATTITORE / CONGELATORE BLAST CHILLER / SHOCK FREEZER



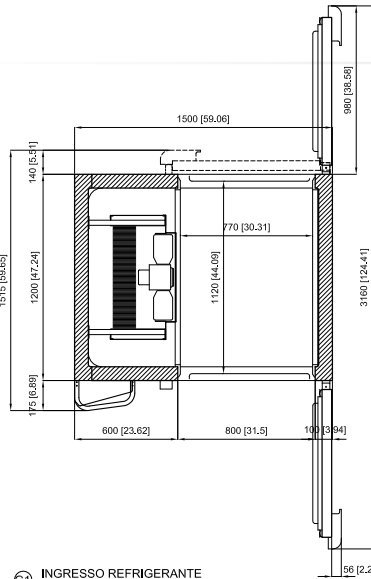
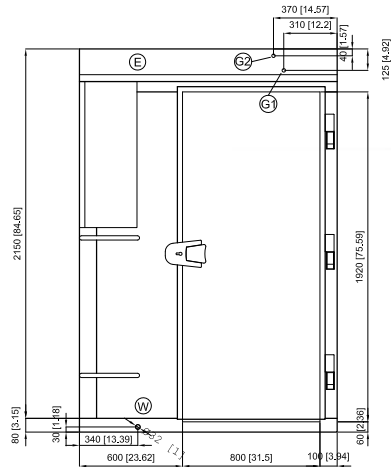
Modello / model Controllo / control		BF202DP-2P	BF202AP-2P
Dimensioni <i>Dimensions</i>	LxPxH [WxDxA] mm [in]	1500x1374x2230 [59,1x54,1x87.8]	2 porte: P → +140 2 doors: D → [+5.5]
Profondità con porta 90° <i>Depth with 90° door</i>	mm [in]	2180 [85,8]	
Larghezza luce porta <i>Door opening width</i>	mm [in]	800 [31,5]	
Luce porta <i>Door opening</i>	LXH [WxA] mm [in]	770x1920 [30,3x75.6]	
Profondità interna <i>Internal depth</i>	P [D] mm [in]	1050 [41,3]	
Spessore <i>Thickness</i>	mm [in]	80 [3.1]	
Classe climatica <i>Climatic class</i>		T	
Ciclo abbattimento <i>Chilling cycle</i>	°C °F	+90 → +3 +194 → +37	+90 → +3 +194 → +37
Ciclo congelamento <i>Freezing cycle</i>	°C °F	+90 → -18 +194 → 0	+90 → -18 +194 → 0
Capacità abbattimento <i>Chilling capacity</i>	90' lb	350	465
Capacità congelamento <i>Freezing capacity</i>	240' lb	230	310
Capacità refrigerazione <i>Refrigeration capacity</i>	(*) BTU/h	38611	46736
Alimentazione elettrica <i>Electric power supply</i>	V~/Hz	208-240/3/60	
Potenza elettrica <i>Input electric power</i>	(°) W	837	837
Corrente max <i>Max. absorbed current</i>	(°) A	5	75
Allestimento <i>Setting up</i>		1 carrello GN 2/1 1 GN 2/1 trolley	
Dimensioni imballo <i>Packing dimensions</i>	HxLxP [HxWxD] mm [in]	2284x1405x1802 [89,93x55,32x70,95]	2 porte: P → +140 2 doors: D → [+55]
Volume <i>Volume</i>	m³ ft³	5,78 352,9	
Peso Netto <i>Net weigh</i>	kg lb	400 882	

mod BF (°) Temp. evap. -13°F Temp. cond. +113°F / (°) Temp. evap. +14°F Temp. cond. +95°F

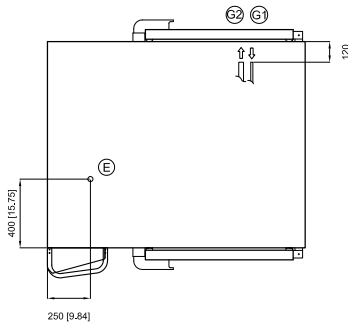
### ALLACCIAMENTI / CONNECTIONS

Allacciamenti - distanza max Connections - max distance	m [ft]	20 [66]
Cavi elettrici / Electrical cables	n° x mm²	5 x 1,5
Tubi liquido / Liquid tubes	Ø mm [in/SAE]	12 [1/2]
Tubi gas / Gas tubes	Ø mm [in/SAE]	28 [1" 1/16]
Conness. idrica UMC ad acqua Drain connection water UMC	Ø pollici	out coil 3/4 1/2 conn. H2O
Consumo max acqua Max water consumption	( ) l/min	15,8 19,9
Tubi scarico Drain tubes	Ø mm Ø [in]	32 [1.3]
Set LP-HP (differenziale) LP-HP set (differential)	bar	0 (0.5) - 26 (3)
Parzializzazione ventilat. HP (diff.) Fans choking HP (diff.)	bar	14 (2)



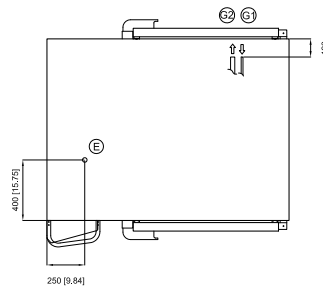
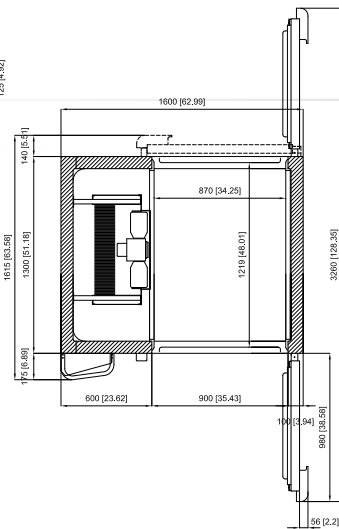
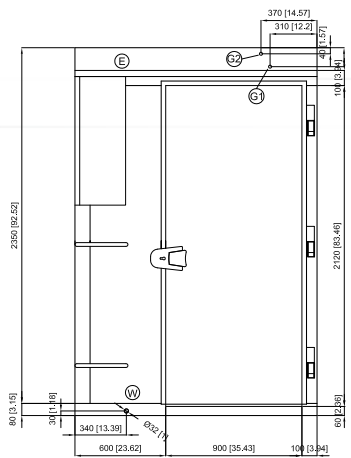


Catering



- Ⓜ INGRESSO REFRIGERANTE  
REFRIGERANT INLET
  - Ⓝ USCITA REFRIGERANTE  
REFRIGERANT OUTLET
  - ⓔ CONNESSIONE ELETTRICA  
ELECTRICAL CONNECTION
  - Ⓦ CONNESSIONE IDRICA  
DRAIN CONNECTION
- DIMENSIONI mm  
DIMENSIONS [in]

Baking



- Ⓜ INGRESSO REFRIGERANTE  
REFRIGERANT INLET
  - Ⓝ USCITA REFRIGERANTE  
REFRIGERANT OUTLET
  - ⓔ CONNESSIONE ELETTRICA  
ELECTRICAL CONNECTION
  - Ⓦ CONNESSIONE IDRICA  
DRAIN CONNECTION
- DIMENSIONI mm  
DIMENSIONS [in]

## ABBATTITORE / CONGELATORE BLAST CHILLER / SHOCK FREEZER

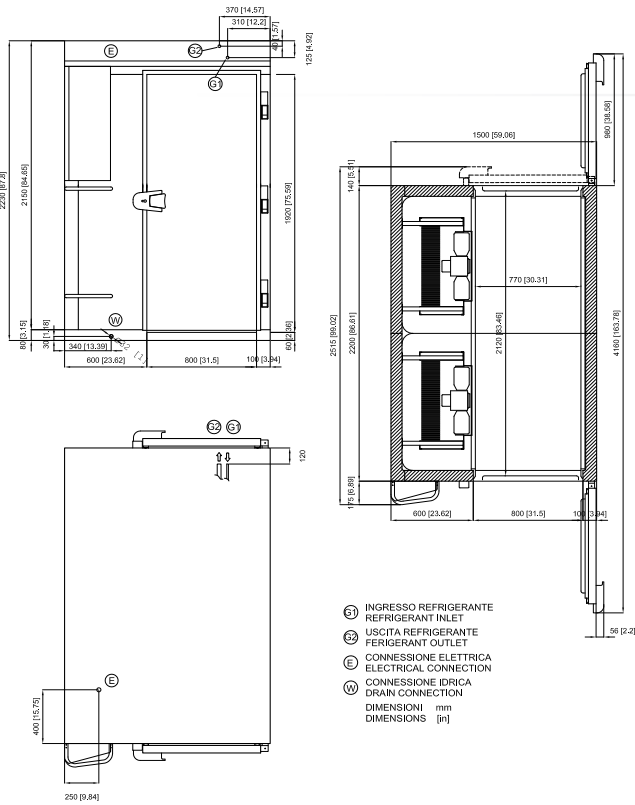


Modello / model Controllo / control		BF402DP	BF402AP
Dimensioni <i>Dimensions</i>	LxPxH [WxDxA] mm [in]	1500x2375x2230 2 porte: P → +140 [59,1x93,5x87.8] 2 doors: D → [+5.5]	
Profondità con porta 90° <i>Depth with 90° door</i>	mm [in]	3180 [125,2]	
Larghezza luce porta <i>Door opening width</i>	mm [in]	800 [31,5]	
Luce porta <i>Door opening</i>	LXH [WxA] mm [in]	770x1920 [30,3x75.6]	
Profondità interna <i>Internal depth</i>	P [D] mm [in]	2120 [83,5]	
Spessore <i>Thickness</i>	mm [in]	80 [3.1]	
Classe climatica <i>Climatic class</i>		T	
Ciclo abbattimento <i>Chilling cycle</i>	°C °F	+90 → +3 +194 → +37	+90 → +3 +194 → +37
Ciclo congelamento <i>Freezing cycle</i>	°C °F	+90 → -18 +194 → 0	+90 → -18 +194 → 0
Capacità abbattimento <i>Chilling capacity</i>	90' lb	660	925
Capacità congelamento <i>Freezing capacity</i>	240' lb	440	615
Capacità refrigerazione <i>Refrigeration capacity</i>	(*) BTU/h	54898	70933
Alimentazione elettrica <i>Electric power supply</i>	V/~/Hz	208-240/3/60	
Potenza elettrica <i>Input electric power</i>	(°) W	1674	2544
Corrente max <i>Max. absorbed current</i>	(°) A	17	17
Allestimento <i>Setting up</i>		2 carrello GN 2/1 2 GN 2 / 1 trolley	
Dimensioni imballo <i>Packing dimensions</i>	LxPxH [WxDxA] mm [in]	2x 2284x1405x1802 porte: P → +140 2x [89,93x55,32x70,95] 2 doors: D → [+55]	
Volume <i>Volume</i>	m³ ft³	2x 5,78 2x 352,9	
Peso Netto <i>Net weigh</i>	kg lb	640 1412	644 1420

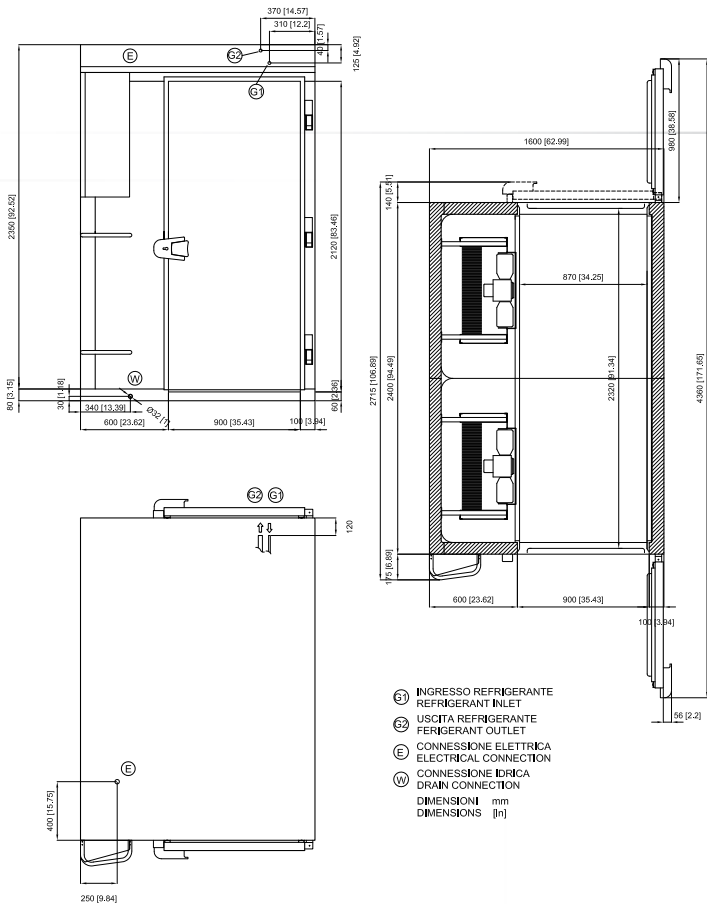
mod BF (°) Temp. evap. -13°F Temp. cond. +113°F / (°) Temp. evap. +14°F Temp. cond. +95°F

### ALLACCIAMENTI / CONNECTION S

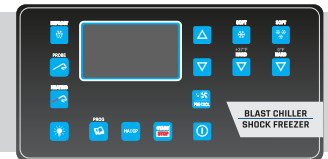
Allacciamenti - distanza max <i>Connections - max distance</i>	m [ft]	20 [66]	
Cavi elettrici / <i>Electrical cables</i>	n° x mm²	5 x 1,5	
Tubi liquido / <i>Liquid tubes</i>	Ø mm [in/SAE]	18 [3/4]	
Tubi gas / <i>Gas tubes</i>	Ø mm [in/SAE]	42 [1" 5/8]	
Conness. idrica UMC ad acqua <i>Drain connection water UMC</i>	Ø pollici	out coil 1 1/2 conn. H2O	
Consumo max acqua <i>Max water consumption</i>	( ) l/min	28,5	32,6
Tubi scarico <i>Drain tubes</i>	Ø mm Ø [in]	32 [1.3]	
Set LP-HP (differenziale) <i>LP-HP set (differential)</i>	bar	0 (0.5) - 26 (3)	
Parzializzazione ventilat. HP (diff.) <i>Fans choking HP (diff.)</i>	bar	14 (2)	



## Baking



## ABBATTITORE / CONGELATORE BLAST CHILLER / SHOCK FREEZER

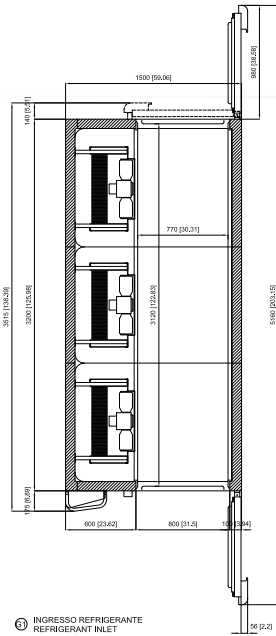
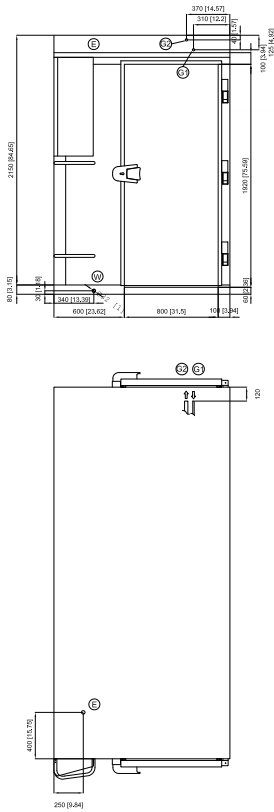


Modello / model Controllo / control		BF602DP	BF602DP
Dimensioni <i>Dimensions</i>	LxPxH mm [WxDxA] [in]	1500x3375x2230 2 porte: P → +140 [59,1x132,9x87.8] 2 doors: D → [+5.5]	
Profondità con porta 90° <i>Depth with 90° door</i>	mm [in]	4180 [164,6]	
Larghezza luce porta <i>Door opening width</i>	mm [in]	800 [31,5]	
Luce porta <i>Door opening</i>	LXH mm [WxA] [in]	770x1920 [30,3x75.6]	
Profondità interna <i>Internal depth</i>	P mm [D] [in]	3120 [122,8]	
Spessore <i>Thickness</i>	mm [in]	80 [3.1]	
Classe climatica <i>Climatic class</i>		T	
Ciclo abbattimento <i>Chilling cycle</i>	°C °F	+90 → +3 +194 → +37	+90 → +3 +194 → +37
Ciclo congelamento <i>Freezing cycle</i>	°C °F	+90 → -18 +194 → 0	+90 → -18 +194 → 0
Capacità abbattimento <i>Chilling capacity</i>	90' lb	1000	1350
Capacità congelamento <i>Freezing capacity</i>	240' lb	665	900
Capacità refrigerazione <i>Refrigeration capacity</i>	(*) BTU/h	70933	123979
Alimentazione elettrica <i>Electric power supply</i>	V/~/Hz	208-240/3/60	
Potenza elettrica <i>Input electric power</i>	(°) W	2512	3816
Corrente max <i>Max. absorbed current</i>	(°) A	26	26
Allestimento <i>Setting up</i>		3 carrello GN 2/1 3 GN 2/1 trolley	
Dimensioni imballo <i>Packing dimensions</i>	LxPxH mm [WxDxA] [in]	2x 2284x1405x1802 porte:P → +140 2x [89,93x55,32x70,95] 2 doors: D → [+55]	
Volume <i>Volume</i>	m³ ft³	3 x 5,86 3 x 209,6	
Peso Netto <i>Net weigh</i>	kg lb	11 2503	352 2776

mod BF (°) Temp. evap. -13°F Temp. cond. +113°F (°) Temp. evap. +14°F Temp. cond. +95°F

### ALLACCIAMENTI / CONNECTIONS

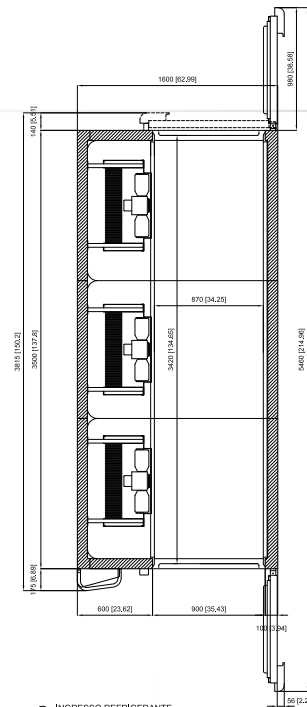
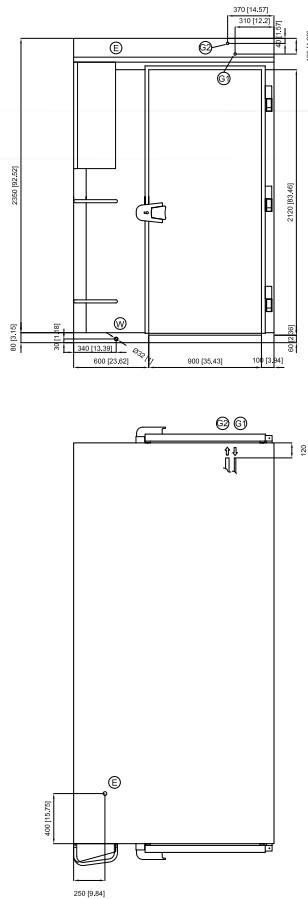
Allacciamenti - distanza max <i>Connections - max distance</i>	m [ft]	20 [66]	
Cavi elettrici / <i>Electrical cables</i>	n° x mm²	5 x 1,5	
Tubi liquido / <i>Liquid tubes</i>	Ø mm [in/SAE]	22 [7/8]	
Tubi gas / <i>Gas tubes</i>	Ø mm [in/SAE]	54 [2" 2/16]	
Connessione idrica UMC ad acqua <i>Drain connection water UMC</i>	Ø pollici	out coil 1 1/2 conn. H2O	
Consumo max acqua <i>Max water consumption</i>	( ) l/min	40,6	47,8
Tubi scarico <i>Drain tubes</i>	Ø mm [in]	32 [1.3]	
Set LP-HP (differenziale) <i>LP-HP set (differential)</i>	bar	0 (0.5) - 26 (3)	
Parzializzazione ventilat. HP (diff.) <i>Fans choking HP (diff.)</i>	bar	14 (2)	



- A INGRESSO REFRIGERANTE  
REFRIGERANT INLET
  - B USCITA REFRIGERANTE  
REFRIGERANT OUTLET
  - C CONNESSIONE ELETTRICA  
ELECTRICAL CONNECTION
  - D CONNESSIONE IDRICA  
DRAIN CONNECTION
- DIMENSIONI mm  
DIMENSIONS [in]

## Catering

## Baking



- A INGRESSO REFRIGERANTE  
REFRIGERANT INLET
  - B USCITA REFRIGERANTE  
REFRIGERANT OUTLET
  - C CONNESSIONE ELETTRICA  
ELECTRICAL CONNECTION
  - D CONNESSIONE IDRICA  
DRAIN CONNECTION
- DIMENSIONI mm  
DIMENSIONS [in]

## LIMITED WARRANTY

### WARRANTY (Warranty valid in USA and Canada)

#### THREE (3) YEAR PARTS AND LABOR WARRANTY:

Beverage-Air Corporation warrants to the original purchaser of Beverage-Air branded equipment, including all parts thereof, that such equipment is free from defects in material and workmanship, under normal use, proper maintenance, and service as indicated by Beverage-Air installation and operation instructions, for a period of three (3) years from the date of installation, or thirty-nine (39) months from the date of shipment from the manufacturer, whichever is earlier.

#### ADDITIONAL TWO (2) YEAR COMPRESSOR PART WARRANTY\*:

In addition to the warranty set forth above, Beverage-Air warrants the hermetically/semi-hermetically sealed compressor (part only) for an additional TWO (2) years beyond the first THREE (3) years warranty period; not to exceed sixty-three (63) months from the date of shipment from Beverage-Air, provided upon receipt of the compressor, manufacturer examination shows the sealed compressor to be defective. This extended warranty does not cover freight for the replacement compressor or freight for the return of the failed compressor.

\* Units shipped after 07/01/2024. Previous warranty applies to units shipped prior.

#### EXCEPTIONS:

- CT96 and CF3 models carry a ONE (1) year parts and labor warranty, limited to fifteen (15) months from date of shipment from Beverage-Air. These are excluded from additional compressor warranty.
- SR/SF (Slate) models carry a TWO (2) year parts and labor warranty, limited to twenty-seven (27) months from date of shipment from Beverage-Air.
- BZ, VM, CDR, DPCR, MT and Blast Chillers carry a THREE (3) year parts and labor warranty; additional TWO (2) years compressor part only.
- Units installed in Residential applications will be not covered under this warranty. Units are intended for Commercial use only.

Also, this compressor-part only warranty does NOT apply to any electrical controls, condenser, evaporator, fan motors, overload switch, starting relay, capacitors, temperature control, filter/drier, accumulator, refrigeration tubing, wiring harness, labor charges, or supplies which are covered by the warranty above.

Note: 3rd party extended warranties are not covered by this warranty statement.

Normal wear parts, as deemed by Beverage-Air, such as but not exclusive to, light bulbs/lamps and gaskets are not covered by this warranty. For the purpose of this warranty, the original purchaser shall be deemed to mean the individual or company for who the product was originally installed.

Units that utilize variable speed compressor technology can experience nuisance tripping on Class A GFCI outlets which have a trip limit of 4 mA to 6 mA. To avoid this issue in a location that requires GFCI circuit protection, Beverage-Air & Victory recommends using a HUBBELL Model Number GFRST83W 20A Heavy Duty Hospital Grade Self-Test GFCI Receptacle. Nuisance tripping not covered under warranty.

Our obligation under this warranty shall be limited to repairing or replacing, including labor, any part of such product, which proves thus defective. Beverage-Air reserves the right to examine any product claimed to be defective and request photos of the unit prior to dispatching service. Moisture or water damage is not covered under warranty. If service is deemed non-warranty, Beverage-Air reserves the right to bill the end user for service.

The labor warranty shall be for self-contained units only and for standard straight time, which is defined as normal service rate time, for service performed during normal working hours. All warranty labor will be covered at standard time. Any service requested outside of a servicer's normal working hours including weekends and any additional overtime will be at the responsibility of the equipment purchaser. Any part or accessory determined to be defective in the product should be returned to the company within thirty (30) days under the terms of this warranty and must be accompanied by a record of the cabinet model, serial number, and identified with a return material authorization number (RMA#) issued by the manufacturer.

**Special installation/applications, including remote locations, are limited in coverage by this warranty. Any installation that requires extra work, and/or travel, to gain access to the unit for service is the sole responsibility of the equipment purchaser.**

Improper operation resulting from factors, including but not limited to, improper or negligent cleaning and maintenance, improper installation, low voltage conditions, inadequate wiring, outdoor use (unless otherwise specified) and accidental damage are not manufacturing defects and are strictly the responsibility of the purchaser.

**LIMITED WARRANTY (CONTINUED)**

With the exception of Blast Chillers, the product is designed for maintaining temperature and not bringing food to a desired temperature and therefore cannot be held responsible for this function under warranty. Units must be in a conditioned environment or warranty will be void. Non-standard use of unit can also be subject to reduced or voided warranty.

Condensing coils must be cleaned at regular intervals as a part of preventative maintenance for optimal performance. Failure to do so is subject to a voided warranty. Although cleaning requirements vary in accordance with operation of various products, Beverage-Air recommends a minimum monthly cleaning.

**NO CLAIMS CAN BE MADE AGAINST THIS WARRANTY FOR SPOILAGE OF FOOD, PRODUCTS, LOSS OF SALES OR CONSEQUENTIAL DAMAGES.**

THE FOREGOING WARRANTIES ARE EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED, ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART, AND WE NEITHER ASSUME, NOR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US, ANY OBLIGATION OR LIABILITY IN CONNECTION WITH THE SALE OF SAID REFRIGERATION UNITS OR ANY PARTS THERE OF.

This warranty shall not be assignable and shall be honored only in so far as the original purchaser. This warranty does not apply outside the limits of the United States of America and Canada, nor does it apply to any part that has been subject to misuse, neglect, alteration, accident, or to any damage caused by transportation, flood, fire, acts of terrorism, or acts of God.

**LIMITATION OF LIABILITY:**

Beverage-Air Corporation or their affiliates shall not be liable for any indirect, incidental, special or consequential damages, or losses of a commercial nature arising out of malfunction equipment or its parts components thereof, as a result of defects in material or workmanship.

THE ORIGINAL OWNER'S SOLE AND EXCLUSIVE REMEDY AND BEVERAGE-AIR'S SOLE AND EXCLUSIVE LIABILITY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF PARTS OR COMPONENTS CONTAINED IN THE EQUIPMENT IDENTIFIED ABOVE WHICH UNDER NORMAL USE AND SERVICE MALFUNCTION AS A RESULT OF DEFECTS IN MATERIAL OR WORKMANSHIP, SUBJECT TO THE APPLICABLE PROVISIONS AND LIMITATIONS STATED ABOVE.

Note: Additional Terms and Conditions of sale may apply. Notice: Specifications are subject to change without notice. Contact Beverage-Air for specific model agency approval. All prices are ex-works Brookville, PA. July 1, 2024

**Warranty Registration**

Register your product online at [Beverage-Air.com/parts-service](http://Beverage-Air.com/parts-service) or fill out and mail the form below.

Cabinet Model Number: \_\_\_\_\_ Date Of Installation: \_\_\_\_\_

Cabinet Serial Number: \_\_\_\_\_

**Location Of Product**

Business Name: \_\_\_\_\_

Business Street: \_\_\_\_\_

Business City: \_\_\_\_\_ State: \_\_\_\_\_ Postal Code: \_\_\_\_\_

**Mail to:** Beverage-Air, 3779 Champion Blvd, Winston-Salem, NC 27105

Rev. 07/24

