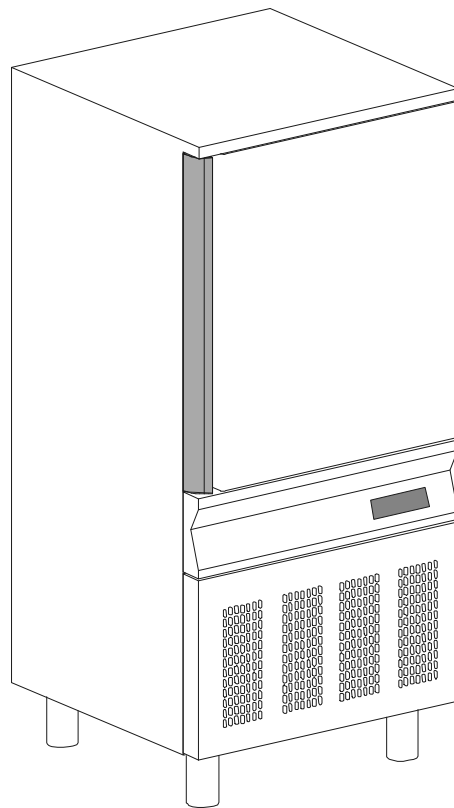
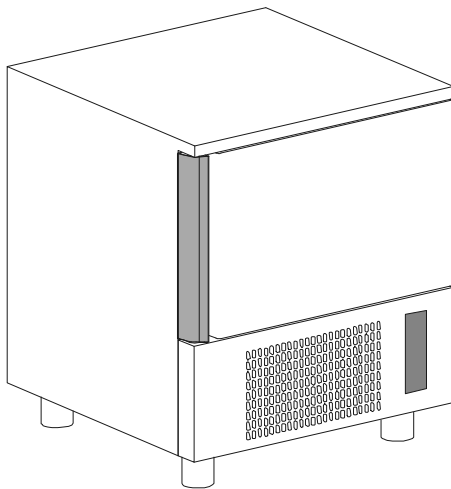


TECHNICAL DATA PLATE

***OPERATOR'S HANDBOOK***  
***MANUEL D'INSTRUCTIONS***  
***MANUAL DE USO***

**BAC5**  
**BAC10**  
**BAC12**



39C0970



**BEVERAGE-AIR**

by **ANGELO P.C.**

**BLAST CHILLERS**  
**CELLULES DE REFRIGERATION RAPIDE**  
**REFRIGERADORES RAPIDOS DE TEMPERATURA**



Carefully read the instructions contained in the handbook. You may find important safety instructions and recommendations for use and maintenance.

**Please retain the handbook for future reference.**

**The Manufacturer is not liable for any changes to this handbook, which may be altered without prior notice.**

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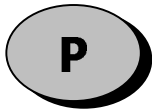


Lire avec attention les instructions contenues dans ce livret car elles fournissent d'importants renseignements pour ce qui concerne la sécurité, l'emploi et l'entretien.

**Garder avec soin ce livret pour des consultations ultérieures de différents opérateurs.**

**Le constructeur se réserve le droit d'apporter des modifications à ce manuel, sans préavis ni responsabilité d'aucune sorte.**

---



Leia com atenção as advertências contidas neste manual pois fornecem importantes indicações para a segurança, a utilização e a manutenção do aparelho.

**O construtor reserva-se o direito de modificar o manual sem dar aviso prévio e sem nenhuma responsabilidade.**

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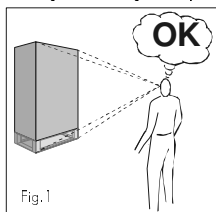
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# 1. GENERAL INSTRUCTIONS ON DELIVERY

## 1.1 GENERAL INSTRUCTIONS

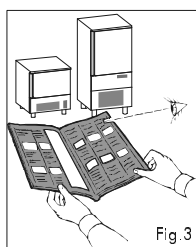
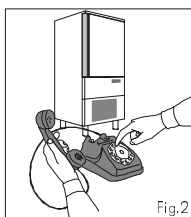
Make sure that the consignment has not been hampered with or damaged during transport. **(fig.1)**



After unpacking the chilling cabinet make sure all sections or components have been included and specifications and conditions are as to your order.

If not, please inform the retailer immediately. **(fig.2)**

We assure you have made the best choice in purchasing our products and hope you will be fully satisfied with our their performance. To this purpose, we recommend you strictly comply with the instructions and regulations contained in this handbook. **(fig.3)**



Please remember that no reproductions of this handbook are allowed. Due to our constant technological updating and research, the features described in this handbook may be altered without prior notice.

## 1.2 GENERAL INSTRUCTIONS

A chilling cabinet is a refrigerating machine which can cool cooked foodstuffs from a temperature of +160°F to +38°F in one and a half hours.

Machine capacity as to the quantity to be chilled depend on the model purchased.

## 1.3 TECHNICAL DATA

Please refer to the technical data of your own appliance. **(tab.1)**

## 1.4 LIST OF REGULATION REFERENCES

The chilling cabinet we manufacture fully complies with the following regulations:

UL Listed for electrical safety  
NSF standard 7 for sanitation

**Tab.1**

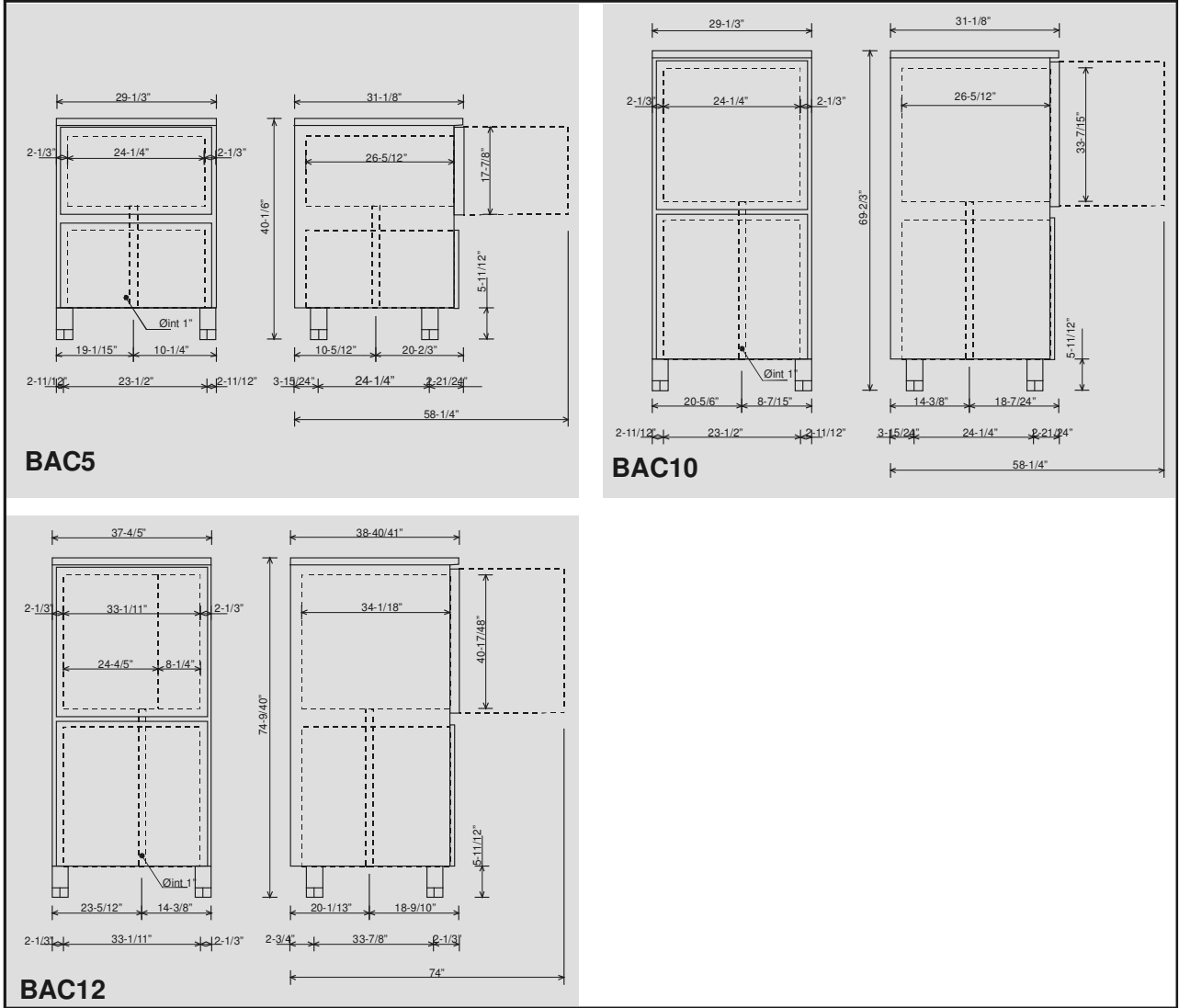
Model	BAC5	BAC10	BAC12
Gross weight [lb]	125	175	200
Net weight [lb]	115	155	170
<b>Capacity</b>			
Mass/cycle Chilling [lb]	40	80	112
Internal volume [cuft]	2,55	5,52	13,58
Grate of support [in]	20,8x15,75	20,8x15,75	20,8x15,75
Maximum wire shelves capacity	4	8	6+6
Wire shelves supplied	2	3	6+6
<b>Power supply</b>			
Voltage [V]	220	220	220
Frequency [Hz]	60	60	60
Amps [A]	4	5	6
Phase	1ph	3ph	3ph
<b>Refrigerating unit</b>			
Refrigerating power [W]	692	3325	3325
Evaporation temperature [°F]	14	14	14
Chilling temperature [°F]	+160÷+38	+160÷+38	+160÷+38
Chilling time [min]	90	90	90
Condensation temperature [°F]	+130	+130	+130
Max room temperature [°F]	+90	+90	+90
Compressor type	Hermetic	Hermetic	Hermetic
Coolant	R404a	R404a	R404a
Coolant qty [lb]	2.205	3.968	4.409
Condensation air	Air	Air	Air
Noise [db] (A)	72	72	72

**Chilling time increases by 20% if the machine is leaning against the wall.**

1.5 DIMENSIONS

Please refer to the dimensions of your own appliance. (fig.4)

Fig.4



## 1.6 DISPOSAL

### ▪ Safety Instructions

When discontinuing their use, all appliances are to be put out of working order. Remove the plug from power supply socket. Remove or destroy all locks in order to prevent children from being trapped inside while playing, which may prove lethally dangerous.

### ▪ Environmental protection instructions

All chilling cabinets contain halons which, once dispersed in the environment, may increase the green-house effect. Ask the relevant municipality department to dispose of the discarded appliance. Make sure all pipes in the appliance are not damaged until they are properly disposed of in compliance with environment protection regulations.

### ▪ Disposal of packaging material

All packaging materials used in new appliances are not dangerous upon disposal. Cardboard may be crushed and disposed of in the relevant waste paper bins. All polystyrene padding material is halon-free. The packaging material may be dumped at a waste collecting centre to be recycled. Ask town administration for information on the location of the most suitable dumping centre.

## 1.7 LAYOUT

New working systems are possible when using a chilling cabinet in the kitchen. (fig.5)

## 1.8 SETTING UP

Before setting to operation thoroughly clean the chilling cabinet with a suitable detergent or sodium bicarb dissolved in lukewarm water. Clean the appliance inside to remove any condensate caused by the Manufacturer's final testing.

Fast-chilling speed depends on the following factors:

- container shape, type and material;
- whether container lids are used;
- foodstuff features (density, water contents, fat contents);
- starting temperature;
- thermal conduction inside the foodstuffs.

Chilling and freezing time depends on the type of foodstuffs to be processed.

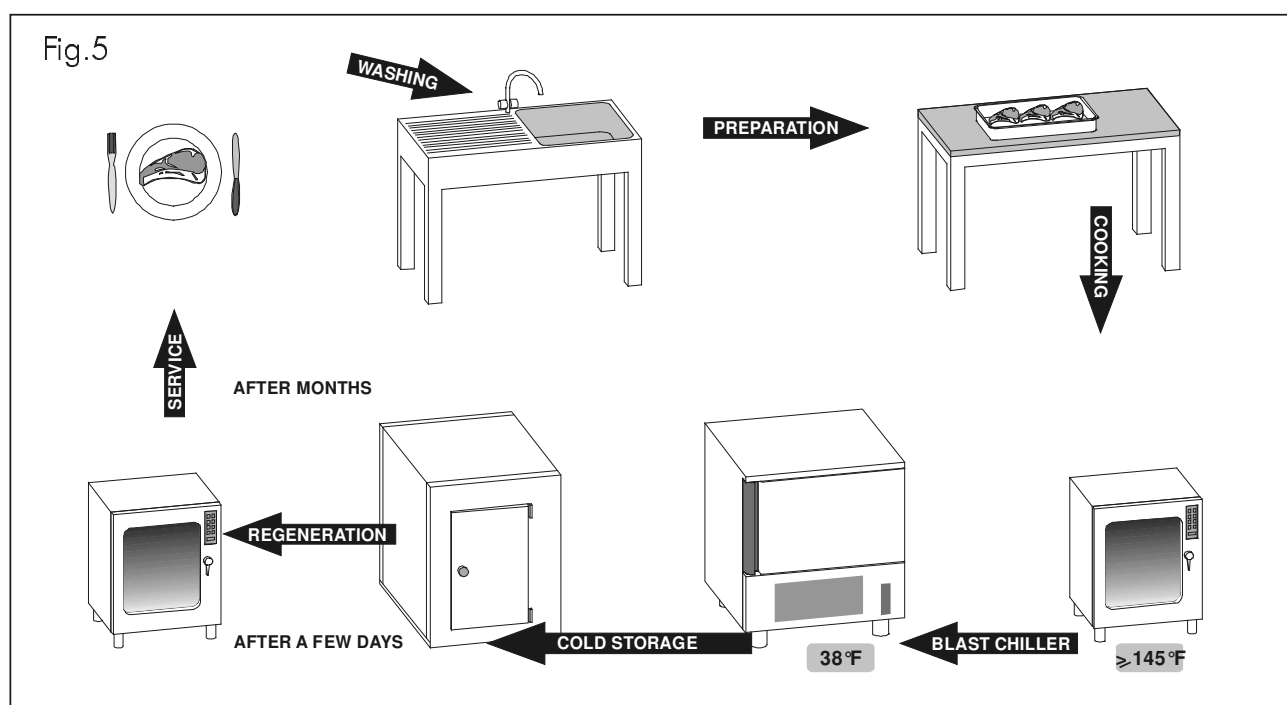
We recommend using the top-speed cycle (fans+evaporator) for high-density or large-sized foodstuffs. However, the following limits should never be exceeded: 7,1 [lb] load for 12"x20"x2-1/2" trays or 14 [lb] load for 18"x26" trays a 3" thickness for chilling.

The medium-speed cycle (fans+evaporator) is suitable to process delicate foodstuffs, such as vegetables, creamy products, creamy desserts or slim products.

We recommend making sure that any chilling cycles - up to +50 [°F] to the core of the foodstuff - are not longer than 90 mins.

The processing cabinet is to be chilled before starting the chilling and/or freezing cycle. Moreover, avoid covering the foodstuffs throughout the cycle; otherwise, cycle length will increase.

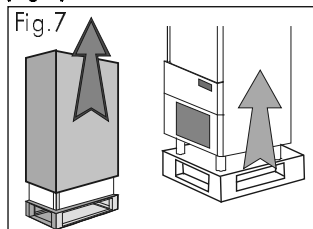
We recommend using the pin probe to reach the core of the foodstuffs in order to have the exact temperature reading. Do not discontinue the cycle before attaining a +50 [°F] temperature during fast chilling.



## 2. INSTALLATION

### 2.1 INTRODUCTION

After unpacking the appliance make sure it has not been damaged. (fig.7)



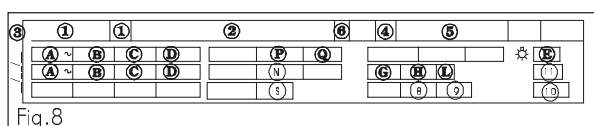
Make sure the technical wiring specifications comply with the ratings (i.e., V, kW, Hz, no. phases and mains power output).

Check the power supply type, adjustments, performance and

calibration of the device located before the appliance.

Check and record the coolant type inside the system and refer to the recorded data in any refill.

Please quote the product's serial number (shown on the rating plate) on any enquiry to the Manufacturer. (fig.8)



#### List of rates shown on the rating plate:

- 1) Model
- 2) Manufacturer's name and address
- 3) Date of make
- 4) Year of make
- 5) Serial number
- 6) Power insulation class
- 8) Maximum pressure of refrigerant
- 9) Minimum pressure of refrigerant
- 10) Minimum Circuitry Amp.
- 11) Max Fuse Size
- A) Input voltage
- B) Electric current intensity
- C) Frequency
- D) Number phases
- E) Total lamp power
- G) Refrigerant type
- H) Refrigerant quantity
- L) Class of temperature
- M) Max hydraulic supply pressure
- N) Condenser fan current and fans number
- P) Current rated compressor
- Q) Locked rotor compressor
- S) Evaporator fan current and fans number

### 2.2 MAX ROOM TEMPERATURE

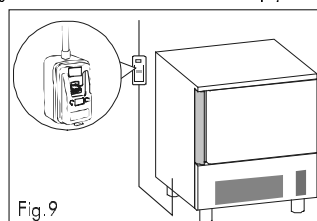
Air-condenser units should not operate if room temperature is over 100 [°F]. Above 90 [°F] amximum output is not guaranteed.

#### Min. air circulation

Model	Air q.ty [cfm]
BAC5	650
BAC10	2.060
BAC12	2.060

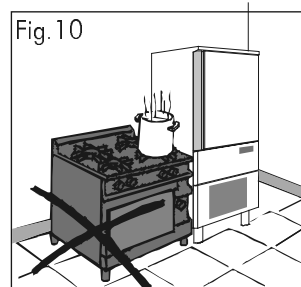
### 2.3 POSITIONING

The appliance must be installed and tested in full compliance with accident-prevention regulations contained in national law and current guidelines. Installers are to comply with any current local regulations.

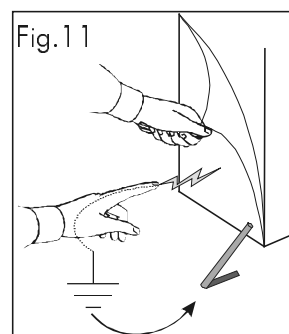


An omnipolar switch is to be installed before the appliance, in compliance with the current regulations applied in the country where the appliance is installed. (fig.9)

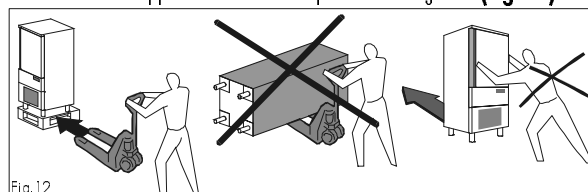
- Do not place the refrigerated compartment near heat sources. (fig.10)



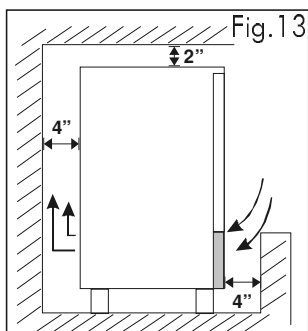
- Remove pvc protective film from all over the appliance. (fig.11)



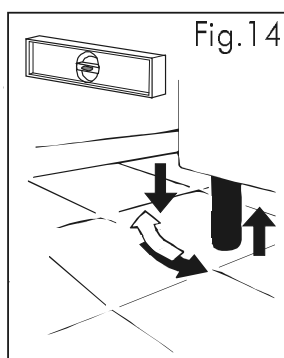
- Place the appliance onto the required working site. (fig.12)



- Avoid locations with exposure to direct sunlight.
- Do not place the appliance in hot, poorly-ventilated rooms.
- Leave a min. 4" clearance around the appliance on the sides where air inlet and outlet are located. **(fig.13)**



- Level the appliance by means of adjustable feet. **(fig.14)**

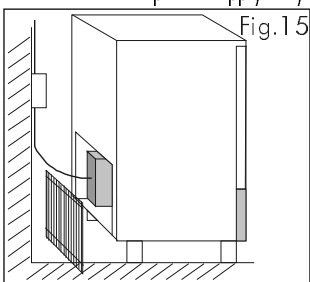


- Use suitable fork lift trucks to level heavier appliances (39 [lb] models onwards).

**WARNING: If the appliance is not properly levelled the performance and condensate drain may be hampered.**

## 2.4 WIRING

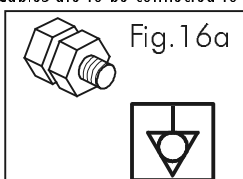
The connection to power supply may be carried out at the back of the appliance after removing the protection grid. **(fig.15)**



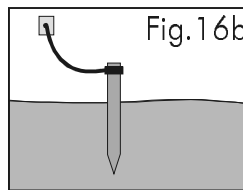
### Please use certified approved materials.

All wiring cables are to comply with the ratings shown on the technical specifications.

Cables are to be connected to the equipotential terminal. **(fig.16a)**

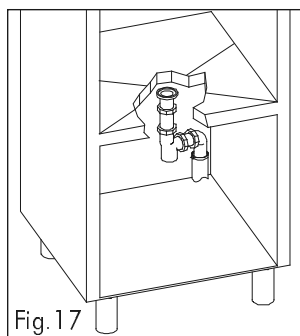


The grounding cable is to be directly connected to a good grounding system. **(fig.16b)**

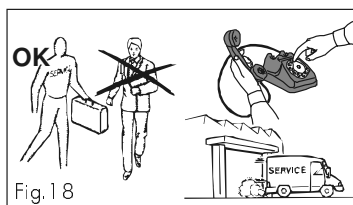


### Connection to condensate drain.

All models are to be equipped with a condensate-drain pipe (0,8" in diameter, "SAREL" or any similar type). The current general and local regulations as to drains are to be complied with. **(fig.17)**



**The guarantee will cease and the Manufacturer will not be liable for any damage to appliances or operators arising from the non-compliance with the and**



**tamperings to any part of the appliance (electric, thermodynamic or hydraulic plant). **(fig.18)****

## 2.5 TESTING

Carry out the following checkings:

- 1) Check power input
- 2) Carry out a full chilling cycle as a test.

Should the appliance have been transported horizontally instead of a vertical position **DO NOT START THE APPLIANCE IMMEDIATELY. WAIT FOR AT LEAST 4 HOURS BEFORE OPERATING.**

### Notes for installators:

Give customers exact, accurate instructions on appliance use with a view to the customer's specific requirements.

Installation and setting up are to be carried out by skilled staff.



## 2.6 RECOMMENDATIONS

Name and Surname	Address	Tel./fax no.

## 3. WORKING

### 3.1 USE DESTINATION

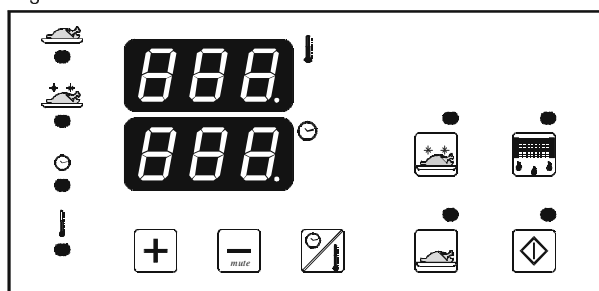
The appliance is set to operate

- Blast chilling from +160°F to +38°F in 90 minutes with temperature and time control.  
(See the **Programming** paragraph)

### 3.2 WORKING CYCLE

The control board on this appliance offers a wide selection of working cycles and processing modes. (fig.6)

Fig.6



Chilling (+160°F to +38°F) with to +23[°F] cabinet temperatures modifiable from the Customer.

After selecting the working cycle you may select the processing mode, either

- in-probe mode, i.e., by poking the pin probe inside the foodstuffs to be chilled or frozen, or
- without a pin-probe, for storing the foodstuffs.

## 3.3 CONTROL DESCRIPTION



### START/STOP

Starts the selected cycle if the appliance is stopped and stops operation if the appliance is working.




### Positive blast chilling (+ 160°F a +38°F)

Prepares the appliance for the blast chilling cycle at positive temperature or with a temperature close to zero. It is possible to select two temperature values:

- A** – Chamber temperature at the end of the blast chilling cycle (see the cb parameter in the **Programming** paragraph).
- B** – Product core temperature at the end of the blast chilling cycle (see the c2 parameter in the **Programming** paragraph).



### Conservation

Prepares the appliance for the conservation cycle. To use the appliance for standard conservation press key . If the conservation cycle is selected after the blast chilling cycle, the controller will set the temperature at +36°F approximately. To modify this value change the C3 parameter (see the **Programming** paragraph).



### Manual defrosting

Allows for activating the manual defrosting cycle. If the key is pressed for more than 5 [s] at the end of the blast chilling and/or conservation cycle, the controller will start the defrosting cycle by activating the fans inside the product treatment chamber.



### Temperature or time blast chilling selection key

Allows for selecting the temperature or time blast chilling cycle (the temperature or time blast chilling LED's turn on). Allows for viewing the time elapsed both during and at the end of the cycle on the display D2.



### Blast chilling time/temperature increase key

Allows for increasing the blast chilling time from 1 to 90 minutes and temperature of the cabinet.



### Blast chilling time/temperature decrease key

Allows for decreasing the blast chilling time from 90 to 1 minutes and temperature of the cabinet.



### Temperature blast chilling indicator light

When on, it indicates that the temperature blast chilling cycle has been selected.



### Time blast chilling indicator light

When on, it indicates that the time blast chilling cycle has been selected.



### Blast chilling indicator light

Indicates that the blast chilling cycle is in progress.



### Conservation indicator light

Indicates that the conservation cycle is in progress.



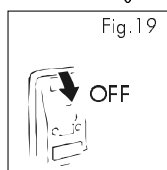
The **display** indicates the temperature and alarm values. (**DISPLAY D1**)



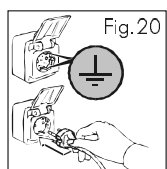
The **display** indicates the time values. (**DISPLAY D2**)

## 3.4 STARTING-USE

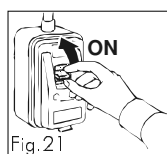
- Position the general switch on 0. (**fig.19**)



- Insert the plug into the mains socket. (**fig.20**)



- Position the line switch on I. (**fig.21**)



- The corresponding LED's or the controller keys will turn on for a few seconds. After that, the display D1 will indicate the chamber temperature.

Select the desired cycle before pushing key "PARTENZA/ARRESTO":

## EXAMPLES OF WORKING CYCLES.

### BLAST CHILLING FOR LARGE-SIZED MEAT, BIRDS AND FISH.

Stick the core probe in the food in the central part of the thickest portion. Select key . Select key to leave the food in the appliance in conservation cycle at the end of the blast chilling cycle (36°F thermostating chamber temperature). Select key to select the temperature blast chilling cycle. Go to (\*).

### BLAST CHILLING FOR DELICATE FOOD, SUCH AS CAKES WITH WHIPPED CREAM OR CUSTARD.





Do not stick the core probe in the food not to damage the external appearance. Select key . Select key to leave the food in the appliance in conservation cycle at the end of the blast chilling cycle (36°F thermostating chamber temperature). Select key to select the time blast chilling cycle. Press the and buttons to increase or decrease the blast chilling time. Go to (\*).

### BLAST CHILLING FOR COOKED VEGETABLES, PIZZAS.

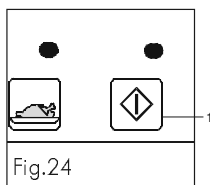
Do not stick the core probe in the food not to damage the external appearance. Select key . Select key to leave the food in the appliance in conservation cycle at the end of the blast chilling cycle (36°F thermostating chamber temperature). Select key to select the time blast chilling cycle. Press the and buttons to increase or decrease the blast chilling time and set it at 70 minutes. Go to (\*).

BLAST CHILLING FOR FOOD WITH REDUCED THICKNESS AND QUANTITIES, WITH TIME LOWER THAN STANDARD. (DELICATE FOOD SUCH AS COOKIES, CROISSANTS, FLAKY PASTRY).

Do not stick the core probe in the food not to damage the external appearance

Select key . Select key  to leave the food in the appliance in conservation cycle at the end of the freezing cycle (36°F thermostating chamber temperature). Select key to select the time blast chilling cycle. Press the  and  buttons to increase or decrease the blast chilling time and set it at 30 minutes. Go to (\*).

(\*)Once the desired cycle has been selected, press key “START/STOP” to start the working CYCLE. (fig.24)





**WARNING: Always wear gloves when loading or unloading food.**

#### ▪ CORE TEMPERATURE CONTROL (core probe in the product).

The electronic board recognises the situation and handles the working CYCLE by controlling the core temperature set during programming. The working CYCLE ends when the set core temperature is reached (detected by the probe) and the appliance automatically switches to the conservation cycle, if selected.

#### ▪ TIME CONTROL (core probe not used).

If the core probe is not used, after the time blast chilling CYCLE has been selected, the appliance handles the working cycle through the time control.



To run a blast chilling cycle with a different time value use the  and  keys before starting the cycle.

During this phase the value shown in the **display D1** refers to the chamber temperature.

**N.B.**

**If the user selects the temperature blast chilling cycle (core probe and temperature blast chilling LED on) and forgets to insert the core probe or inserts it improperly,**

**the controller will activate the buzzer after 1 minute and the display D1 will show the message 0- alternated with the chamber probe temperature. The operating mode LED switches to time.**



**The user can now choose whether to confirm the time operation by pressing the  key or whether to select the temperature blast chilling cycle by pressing key .**

### 3.5 TEMPERATURE DISPLAY




The display D1 shows the core temperature during the blast chilling cycle with the core probe and the chamber temperature during the conservation cycle.





The display D2 shows the blast chilling time left before the end of the cycle during the time blast chilling cycle. No indication is shown on the display during the conservation cycle.



### 3.6 PROGRAMMING

To enter the programming mode hold the  and  keys pressed simultaneously for a few seconds. (fig.26)

The display shows the abbreviation PA for 5 seconds.

To scroll the other parameters press the  and  keys. To view the parameter value press key .

To change the value, hold key  pressed and press the  and  keys to reach the desired value. Release the  key to display the abbreviation of the memorised parameter.

The appliance will automatically save the entered data and exit the parameter programming mode if 50 seconds have elapsed with no user's action. To exit the parameter programming mode press the  and  key simultaneously.

### 3.7 PARAMETERS

The final letter in the parameter description indicates:

- c1** Maximum duration value of the blast chilling cycle (minutes).
- c2** Temperature value that determines the end of the blast chilling cycle (core probe).
- c3** Thermostating chamber value during the conservation cycle after blast chilling.
- c8** Temperature value that determines the start of the cycle.
- cb** Thermostating chamber value during the blast chilling cycle.


### Default values


The parameter list above includes the programming keys. ( **tab.2** )

### 3.8 DEFROSTING

This operation must be carried out before cleaning the internal chamber to eliminate the ice that forms in the evaporator because of the presence of steam during the blast chilling or freezing cycle.

Defrosting can be automatically started before starting the blast chilling or freezing cycle in order to take advantage of the entire refrigerating capacity of the installation during the next cycle.

Defrosting can be manually started at any time by holding key  pressed for more than 5 [secs] also when the appliance is stopped (the message DEF appears on the display D1).

No defrosting will take place during the blast chilling cycle. To start defrosting, open the door and hold key  pressed for more than 5 seconds. The cycle lasts max. 15 minutes or until the evaporator temperature reaches 46°F.

**WARNING: Keep the door open to accelerate defrosting time.**

**WARNING: Keep away from operating fans.**

**WARNING: Always wear gloves when loading or unloading food.**

### 3.9 ALARMS

The controller displays a series of alarm codes related to the status of the probes or to off-limit temperature.

“E0”: chamber probe interrupted or in short circuit. The signal flashes on the display.

“E1”: evaporator probe interrupted or in short circuit. The signal appears on the display alternated with the detected temperature value.

“E2”: activated if an error is detected in the EPROM. The signal flashes on the display.

“E3”: core probe interrupted or in short circuit. The signal appears on the display alternated with the detected temperature value.

#### ARMED PROBE EFFECT:

a) Chamber probe interrupted or in short circuit: the blast chilling cycle is interrupted immediately. The START function is blocked until the appliance is not TURNED OFF. During the conservation cycle the appliance continues to work according the factory-set time values.

b) Evaporator probe interrupted or in short circuit: the blast chilling cycle ends regularly. During the conservation cycle the appliance works with the evaporator fans OFF.

c) Core probe interrupted or in short circuit: neither the conservation or the time blast chilling cycle is affected. During the temperature blast chilling the cycle ends because of maximum time.



“E4”: compressor block alarm. The signal appears on the display alternated with the chamber temperature.

“AL”: temperature alarm. Activated when the appliance exceeds the limits set with the parameters.

“dEF”: defrosting cycle in progress.

“END”: indicates the end of the blast chilling cycle (the user decided not to select the conservation cycle after the blast chilling cycle and the appliance remains in stand-by mode).

“000”: indicates that the core temperature did not reach the value within the time allowed. Press key at the end of the blast chilling cycle to display the excess time.

“0--|”: indicates the passage to time control because the probe was not inserted or was inserted improperly. Press key  (down) to confirm the time blast chilling cycle. To run the temperature blast chilling cycle check that the core probe is inserted and press key .

Tab.2

Lab	Description	Set di0 field	Planned rate	Measurement unit
C0	Regular hysteresis (delta)	1...15	3	min.s
C1	Chilling time	+ 1...400	90	mins.
C2	Set chilling end (pin)	-67...+ 210	+ 38	°F
C3	Set positive temperature storing (cabinet)	-67...+ 210	+ 36	°F
C8	Set chilling start	-67...+ 210	+ 160	°F
Ca	Pin-probe reading	-	-	-
Cb	Set cabinet to chilling mode (cabinet)	-67...+ 210	14	°F
Da	Defrost probe reading	-	-	-

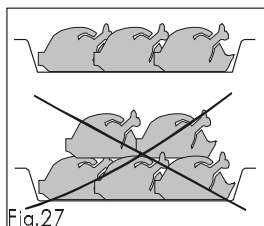
### 3.10 CONTAINERS

In order to improve the performance of our appliances we recommend the following max load for 12"x20"x2,5" containers: max food weight = 7,1 [lb] for 18"x26" containers: max food weight = 14 [lb] max thickness = 3" (when chilling).

Max thickness is to be reduced when processing hard or large-sized foodstuffs (**tab.3**).

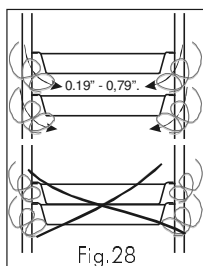
### 3.11 MACHINE LOADING

Do not pile up foodstuffs to be cooled.

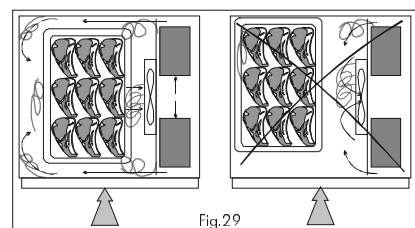


Max thickness is 2" when chilling. (**fig.27**)

Make sure air circulation is not hampered between food trays. (**fig.28**)



The grid-holding frame (included in those models which include trolleys) is to be located at the centre of the cabinet. (**fig.29**)

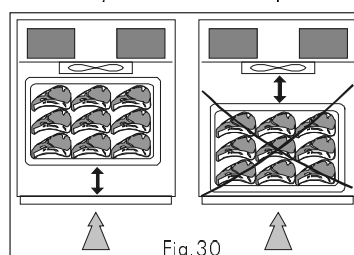


### Chilling time

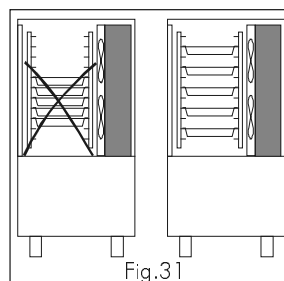
Food	Weight (oz)	Core temperature		Chilling time (mins)
		Start	Stop	
Stewed beef	48	168	48	52
Stuffed roast turkey	23	163	48	50
Vegetable soup with rice	42	180	41	34
Gravy	21	165	36	20

### 3.12 POSITION OF TRAYS

Place the trays as close to the evaporator as possible. (**fig.30**)



If the cabinet is not full place the trays at equal distance from one another. (**fig.31**)



**Tab.3**

Model	Performance	Capacity	
		n° max	
BAC5	40 [lb]	5	12"x20"x1,5"
		4	12"x20"x2,5"
BAC10	80 [lb]	14	12"x20"x1,5"
		8	12"x20"x2,5"
BAC12	112 [lb]	26	12"x20"x1,5"
		14	12"x20"x2,5"
		13	18"x26"x1,5"
		7	18"x26"x2,5"

### 3.13 LENGTH

Chilled processed foodstuffs may be stored in a refrigerator for 5 days of processing with no quality alterations.

For best results we recommend keeping temperature constant throughout the storing  $32^{\circ}\text{F} \div 39^{\circ}\text{F}$ , according to the various commodities.

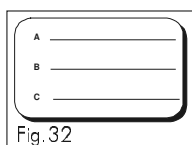
Storing time may be increased to approx. two weeks by using vacuum processing.

Do not leave cooked food at room temperature before chilling or freezing.

Avoid any loss of moisture, which will affect food freshness.

Start the chilling and/or freezing cycle at a core temperature of  $160^{\circ}\text{F} \div 149^{\circ}\text{F}$ .

The chilled and/or frozen food must be wrapped in film (better still, vacuum stored) and provided with a sticker where the contents [A], date of processing [B] and expiry date [C] have been written in permanent type ink. **(fig.32)**



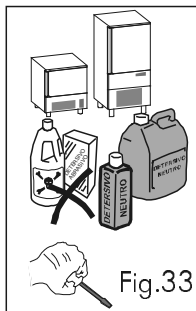
vacuum stored) and provided with a sticker where the contents [A], date of processing [B] and expiry date [C] have been written in permanent type ink. **(fig.32)**

## 4. MAINTENANCE AND CLEANING

### 4.1 CLEANING THE CABINET

Clean inside the chilling cabinet daily.

Both the cabinet and all the internal components have been designed and shaped to allow washing and cleaning all parts easily.

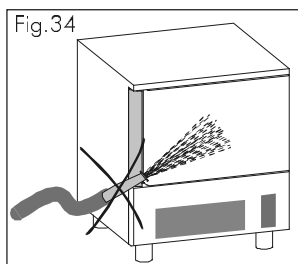


Before cleaning, defrost the appliance and remove the internal drain.

Disconnect the master switch.

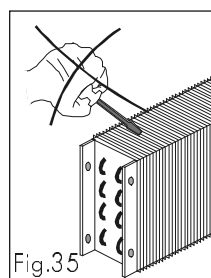
Clean all components (stainless-steel, plastic or painted parts) with lukewarm water and detergent. Then rinse and dry without using abrasives or chemical solvents. **(fig.33)**

Do not wash the appliance by spraying high-pressure water on the machine. **(fig.34)**

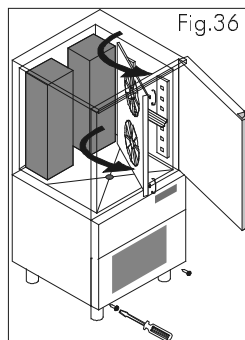


Instructions for cleaning stainless-steel components are given in the paragraph below. These instructions are to be carefully complied with.

Do not rinse with sharp or abrasive tools, especially the evaporator. **(fig.35)**

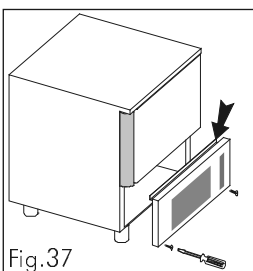


You may clean inside the evaporator after loosening the knobs and rotating the protection component. **(fig.36)**



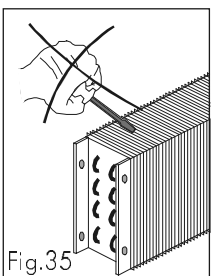
Wash the door gasket with water. Accurately dry with a dry cloth. We recommend wearing protecting gloves throughout the operations.

Remove the front control board with a tool and clean the raceway to remove all dirt. **(fig.37)**

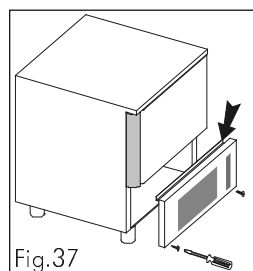


### 4.2 CLEANING THE AIR CONDENSER

The air condenser should be kept clean to ensure the appliance's performance and efficiency, as air should freely circulate inside the appliance. **(fig.35)**



The condenser should therefore be cleaned every 30 days, using non-metal brushes to remove all dust and dirt from condenser blades.



Access to the condenser is obtained by removing the front panel. **(fig.37)**

### 4.3 STAINLESS-STEEL MAINTENANCE

By stainless steel we mean INOX AISI 304 steel.

We recommend following the instructions below for the maintenance

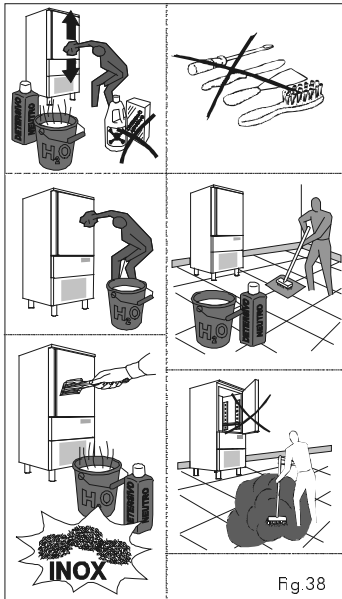


Fig.38

and cleaning of stainless-steel parts. This is of the utmost importance to ensure the non-toxicity and complete hygiene of the processed foodstuffs.

Stainless-steel is provided with a thin oxide layer which prevents it from rusting. However, some detergents may destroy or affect this layer, therefore causing corrosion.

Before using any cleansing product, ask your dealer about a neutral chloriness cleansing product, as to avoid steel corrosions.

If the surface has been scratched polish it with fine STAINLESS-STEEL wool or a synthetic-fibre abrasive sponge. Always rub in the direction of the silking. (fig.38)

**WARNING:** Never use iron wool for cleaning STAINLESS STEEL. Furthermore, avoid leaving iron wool on the appliance surface as tiny iron deposits may cause the surface to rust by contamination and affect the hygiene of the appliance.

### 4.4 MAINTENANCE OF PANEL BOARD

The following operations are to be carried out by skilled staff only.

Turn the mains switch OFF. (fig.39)

Disconnect the plug. (fig.40)

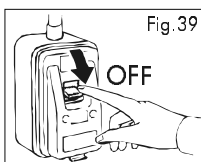


Fig.39

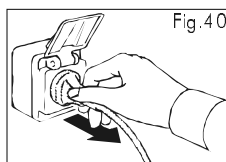


Fig.40

Use a tool to remove the front panel (fig.37) and reach the panel board. Move the power box along the rails. (fig.41)

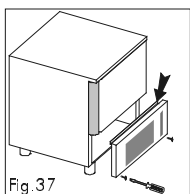


Fig.37

Use a tool to remove the lid and reach the

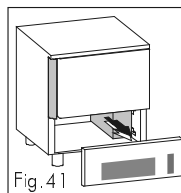


Fig.41

internal components.

Refer to the enclosed wiring diagram to identify the components. No. 2

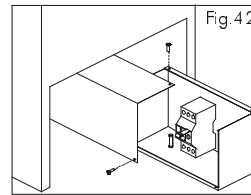


Fig.42

10-A delayed fuses are included in the power supply line. To replace them, unscrew the fastening screws and remove the lid, take the blown fuse out and replace with a similar one. (fig.42)

### 4.5 DISCONTINUED USE

Should the machine be disconnected over long periods, follow the instructions below to maintain the appliance in good condition:

Turn the mains switch OFF. (fig.39)

Disconnect the plug. (fig.40)

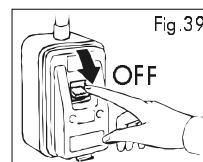


Fig.39

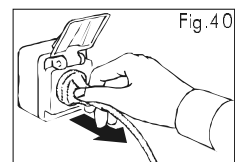


Fig.40

Empty the appliance and clean it in accordance with the instructions given in the chapter "CLEANING".

Leave the door ajar to prevent a bad smell.

Cover the compressor unit with a nylon cloth to protect it from dust. (fig.43)

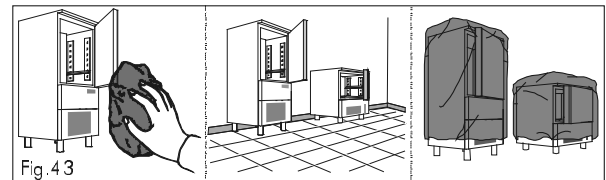


Fig.43

### 4.6 CONTROL AND SAFETY SYSTEMS

The following information concerns skilled staff only:

- Overall protection fuses:  
Protect the whole power circuit from and short-circuits and overloads
- Compressor thermal relay:  
Operates in case of an overload or working failures
- Motor-fan thermal relay:  
Operates in case of an overload or working failures
- Safety pressure-switch:  
Operates in case of coolant over-pressure
- Cabinet temperature control:  
Is run by PTC probe through the relevant electronic card
- Core temperature control:  
Is run by PTC probe through an electronic card

## 4.7 TROUBLESHOOTING (tab.5)

If the fault is not corrected by following the above instructions ask for skilled assistance and avoid carrying out any other operations, especially on the electricals. When informing the servicing company of the fault, state **1** and **5** numbers (fig.8).

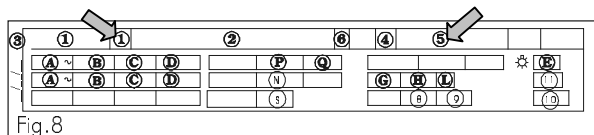


Fig.8

## 5. FITTINGS

Stainless-steel rails, located inside the chilling cabinet, facilitate disassembly of the appliance to thoroughly clean. (fig.44)

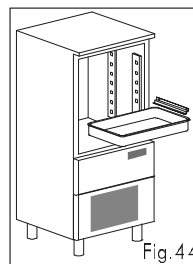


Fig.44

Tab.5

FAULT	CAUSE	REMEDY
No voltage on Anomalous stop	No power supply Blown fuse Loosened connections	Restore power supply Replace fuses Check connection fitting
Compressor failure	High-pressure pressure-switch on Motor-protection on Contactor failure Compressor thermal relay on	Ask for skilled assistance Ask for skilled assistance Ask for skilled assistance Ask for skilled assistance
The compressor is working but the cabinet is not chilling	Frosted evaporator No coolant inside the refrigerating system Delivery solenoid valve failure	Open the door and carry out defrost cycle Ask for skilled assistance Ask for skilled assistance
Evaporator fans are not working	Fan failure or short-circuit Door micro failure	Ask for skilled assistance Ask for skilled assistance
The cycle cannot start	Wrong cycle programming	Check time and temperature parameters
E4 card alarm	Pressure-switch on	Ask for skilled assistance
E0 card alarm	Cabinet probe failure	Ask for skilled assistance
E1 card alarm	Evaporator probe failure	Ask for skilled assistance
E3 card alarm	Pin probe failure	Ask for skilled assistance
O alarm flashing	Cycle over time limit	Reduce load Air the room Carry out defrost cycle
	Chilling cabinet door open	Close the door

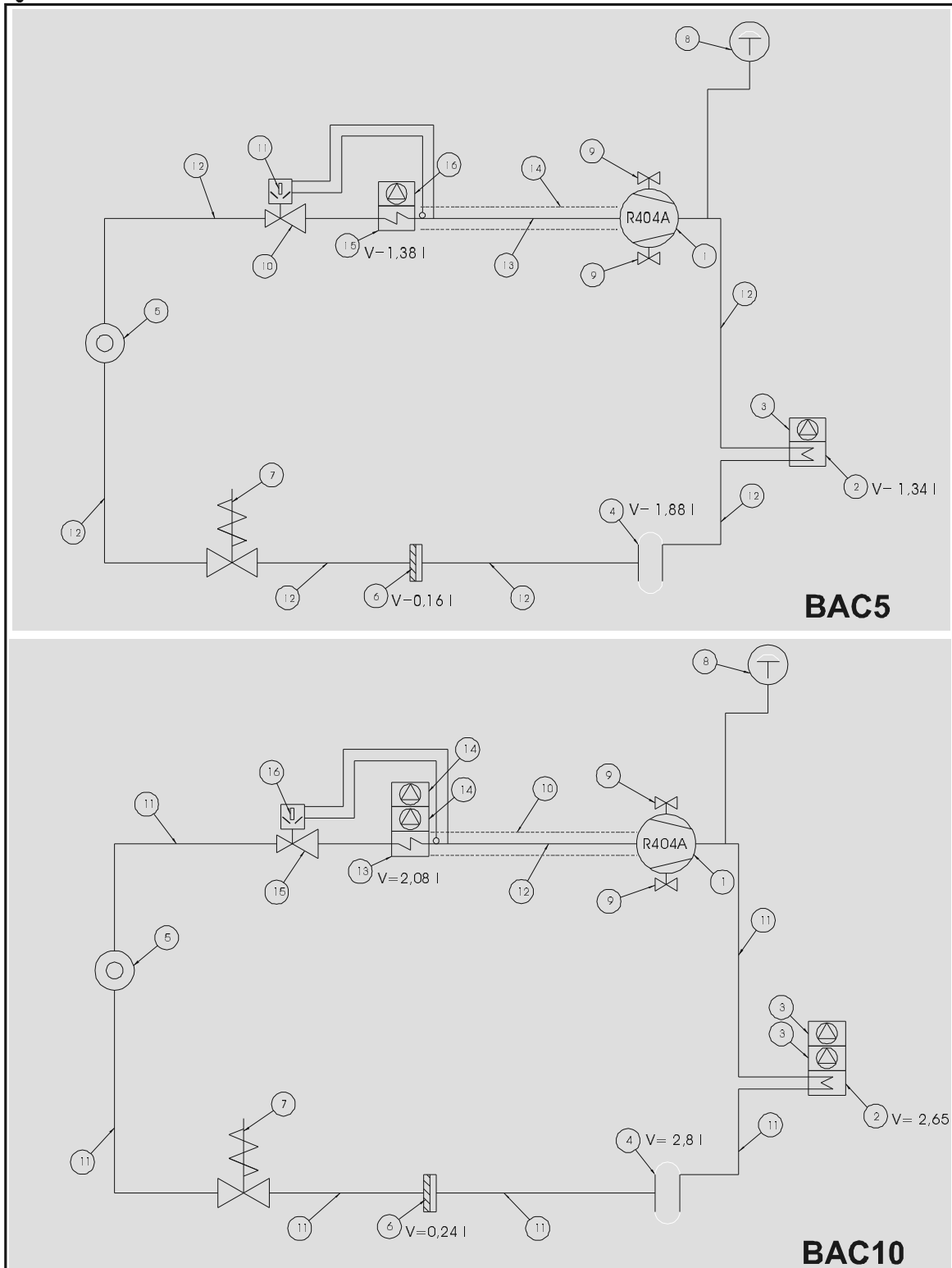


## 6.THERMODYNAMIC SYSTEM

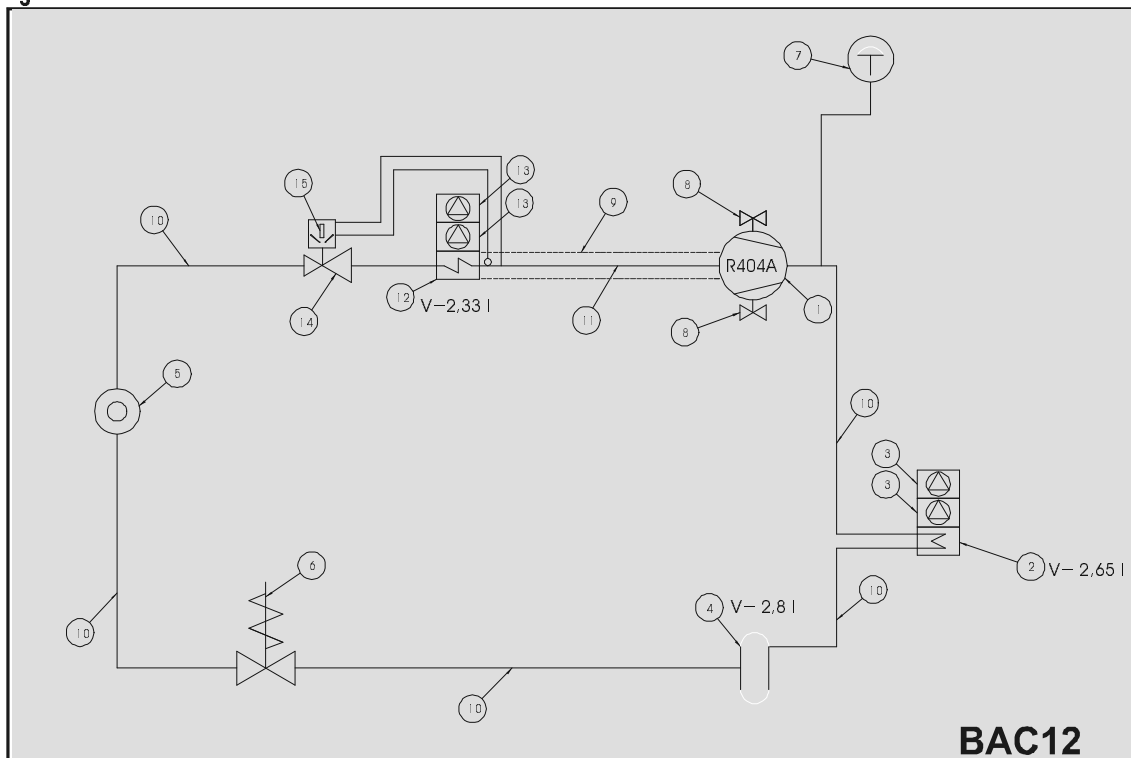
The thermodynamic system is located at the bottom of the appliance.

**fig.45a- fig.45b** shows the rating plate of the thermodynamic system.

**Fig.45a**



**Fig.45b**



No.	DESCRIPTION	No.	DESCRIPTION
1	COMPRESSOR	10	THERMOSTAT VALVE W/EQUALIZER
2	AIR CONDENSER	11	FLOW PILOT LIGHT
3	WATER CONDENSER	12	DEHYDRATING FILTER
4	CONDENSER PRESSURE VALVE	13	SOL. VALVE W/COIL
5	CONDENSER FAN	14	PRESSURE SWITCH
6	TANK	15	COPPER PIPE
7	EVAPORATOR	16	INSULATING PIPE
8	EVAPORATOR FAN	17	HEAT EXCHANGER
9	THERMOSTAT VALVE		

## 7. WIRING DIAGRAM PLATE

The diagram is shown on **fig.46**..

Fig.46

No.	DESCRIPTION	No.	DESCRIPTION
1	COMPRESSOR	73	FUSE HOLDER + BIPOLAR FUSE
2	CONDENSER FAN	74	FUSE HOLDER + 3-POLE FUSE
3	TERMINAL BOARD	75	SOLENOID VALVE
9	SINGLE- SPEED EVAPORATOR FAN	77	CABINET PROBE
9A	SINGLE- SPEED EVAPORATOR FAN	78	EVAPORATOR/DEFROST PROBE
44	RELAY FINDER	79	PIN PROBE
65	CONTACTOR	81	COOLER ELECTRONIC CARD
66	THERMAL RELAY	85B	COMPRESSOR JUNCTION BOX WITH TERMINAL BLOCK
67	4uF RUNNING CONDENS. X EVAP. FAN	87	RUN CAPACITOR FOR EVAPORATOR FAN MOTOR
67A	4uF RUNNING CONDENS. X EVAP. FAN	A	COMPRESSOR RUN RELAY
69	GROUNDING TERMINAL	B	COMPRESSOR START CAPACITOR
70	HIGHT-PRESSURE SAFETY PRESSUR SWITCH	C	COMPRESSOR RUN CAPACITOR

