

# IRINOX

U S E A N D  
M A I N T E N A N C E  
I N S T R U C T I O N S

## CP One

REV No.	REVISION DESCRIPTION	REV. DATE	PROOF READER
00	FIRST EMISSION	26/10/2015	L.B.
01	ADDED GAS R452A	10/09/2017	D.N.

**Dear Customer,**

Thank you for having chosen IRINOX.

Please take the time to read this manual carefully to make the most of all the potential and benefits of your new CP ONE.

We would like to remind you that the perfect operation of the machine also depends on its correct use.

Keep this manual close to the CP ONE so that it can be consulted easily by you and anyone else.

The graphic representations of the controls in the manual have been designed to make the machine easy and intuitive to use.

## Symbols key



suggestions and details for correct use of the blast chiller



standards for your safety



additional information in the manual

## Information regarding the warranty and assistance

Warranty validity: of the individual parts for 12 months from the date of invoicing, as stated in the price list in force.

### Contacts:

Customer service:	+39.0438.5844
User assistance	+39.0438.5844
Technical - spare parts after-sales	+39.0438.2020
Fax	+39.0438.2023
E-mail	service@irinox.com
Web site	www.irinoxprofessional.com

For every request relative to your product, always indicate:

- The model
- The serial number

stated on the label on the machine.

## SAFETY INFORMATION



Below are the main general Safety Standards:

- do not touch the machine with humid or wet hands or feet
- do not work on the machine with bare feet
- do not insert screwdrivers, kitchen tools or any other object between the protections and moving parts
- before performing any cleaning or routine maintenance operation, disconnect the machine from the electrical power supply by turning the main switch off and removing the plug
- do not pull the power supply cable to disconnect the machine from the power supply mains.



If the power supply cable is damaged it must be replaced by the manufacturer, by a service centre, or by qualified staff in order to avoid risks.

Non-mobile equipment, not equipped with disconnection devices from the power supply having a contact separation of all poles that provides disconnection in category III overvoltage conditions, must be equipped with a disconnection device incorporated in the fixed connection in compliance with the connection regulations.



Use gloves suitable for cold trays.



During cleaning operations, especially of the condenser, always wear protective gloves, glasses and masks for protection of the respiratory tract.



It is prohibited to remove the protections and safety devices in order to perform routine maintenance.



The responsibility of the operations performed on the machine, ignoring the indications stated in this manual, is implemented by the user.



### **Climatic class:**

**4** (environmental temperature 30°C with relative humidity 55% non-condensing) pursuant to Standards IEC EN 60335-1, IEC EN 60335-2-89, ISO 23953-2:2005(E)



Do not store explosive substances such as spray cans with flammable propellant inside the appliance.



Children should be supervised to ensure they do not play with the appliance.



Cleaning and maintenance by the user should not be performed by children without the supervision of an adult.



The machine is not intended for use in a potentially explosive environment. The manufacturer declines any liability if this note is not complied with.



Do not overload the machine beyond that indicated by the manufacturer (3.5.2. Loading the machine). Maximum load per shelf: 10 kg

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# 1. GENERAL DOCUMENTATION

## 1.1. GENERAL WARNINGS

- This manual is an integral part of the product, it supplies all of the indications necessary for correct installation, correct use and maintenance of the machine.
- It is mandatory for the user to read this manual carefully and always make reference to it. Moreover, it must be kept in a place that is known and accessible to the authorised operators (installer, user, maintenance technician)
- The holding cabinet is intended for professional use and therefore only qualified staff can use it.
- The holding cabinet is intended only for the use for which it has been designed, i.e. for storage of food products.
- Products that require constant temperature control and recording are excluded, such as:
  - heat reactive chemicals
  - medicines
  - blood products
- The manufacturer declines any liability for any damage caused by incorrect or unreasonable use, such as for example:
  - improper use by untrained staff.
  - modifications or interventions that are not specific for the model.
  - use of non-original spare parts or that are not specific for the model.
  - failure to comply, even partial, with the instructions in this manual.

## 1.2 INTRODUCTION

Installation must be carried out by authorised and specialised staff, respecting the instructions in this manual. The manufacturer declares and assigns to each individual machine a Declaration of Conformity to the 2006/42/EC Machinery Directive, to the 2006/95/EC Low Voltage Directive and to the 2004/108/EC Electromagnetic Compatibility Directive.

Whenever the machine is supplied with the remote condensing unit, it is the installer's responsibility to check all connections and issue a declaration of perfect execution that is in compliance with the provisions of the above-mentioned Directive. The joints made by IRINOX S.p.a. are in compliance with Standard EN14276-2.

**IMPORTANT NOTE:** IRINOX reminds you that all machines must be subjected to periodic inspections in compliance with the national standards in force.

In particular for the Italian market: a complete control of the plant must be carried out and especially an inspection of the integrity of the cooling circuits under pressure after ten years of operation as a set, as required in Italy by Annex B of the Italian Ministerial Decree no. 329 of 1 December 2004 for sets belonging to categories from I to IV containing group 2 fluids.

## 1.3 TRANSPORT AND HANDLING

- All necessary precautions must be adopted when handling the appliance in order not to damage it, respecting the indications on the packaging.

**Table 1**

	NET WEIGHT kg	CARDBOARD PACKAGING					CRATE PACKAGING				
		L (mm)	H (mm)	D (mm)	m <sup>3</sup>	kg	L (mm)	H (mm)	P (mm)	m <sup>3</sup>	kg
<b>Holding cabinet model</b>											
CP ONE	240	840	2270	1190	2,27	275	930	2320	1230	2,65	410
<b>Condensing unit (if remote)</b>											
Condensing unit	38	690	450	720	0,22	58	700	450	780	0,25	76

## 1.4. UNPACKING

- Remove the cardboard or wooden packaging or crate from the wooden base on which the machine is rested.  
Lift the machine using suitable means (forklift truck), remove the wooden base and position the machine in the envisioned place (see par. 2.2).
- After the packaging has been removed, check the integrity of the holding cabinet.
- Remove the protective PVC film from all sides (Fig.1).
-  When handling the packaging and the wooden base, use protective gloves.
- NOTE: all of the various packaging components must be disposed of according to the Standards in force in the Country where the appliance is used. In any case, nothing must be dispersed into the environment.

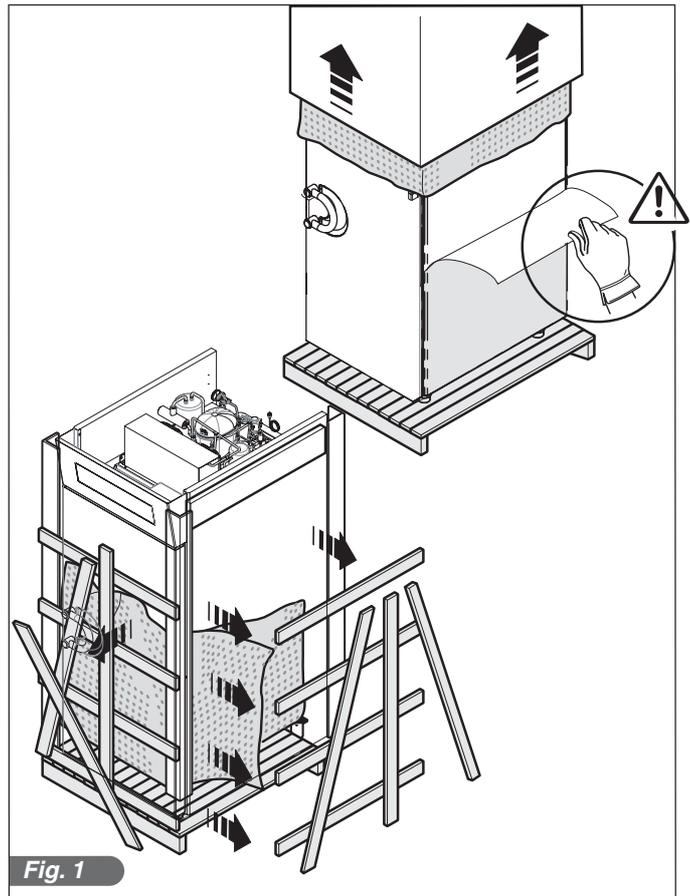


Fig. 1

## 2. INSTALLATION

### 2.1. PLATE DATA

- Check that the plate data and the characteristics of the electrical line correspond (V, kW, Hz, no. phases and power available).
- The plate showing the appliance's characteristics is affixed on the right side of the holding cabinet (fig.2) and under the control panel.

The eventual preparation of machine rooms for positioning the condensing units must follow the Standards in force in the country of installation regarding fire prevention (contact the local fire department for the due indications).

**i** It must also be considered that any intervention of the safety valve or fuse caps, currently in the refrigerator circuit, leads to the immediate discharge of all coolant used in the environment. Consequently, realise appropriate means of disposal and first aid as indicated in the coolant safety sheet (8see par. 2.12).

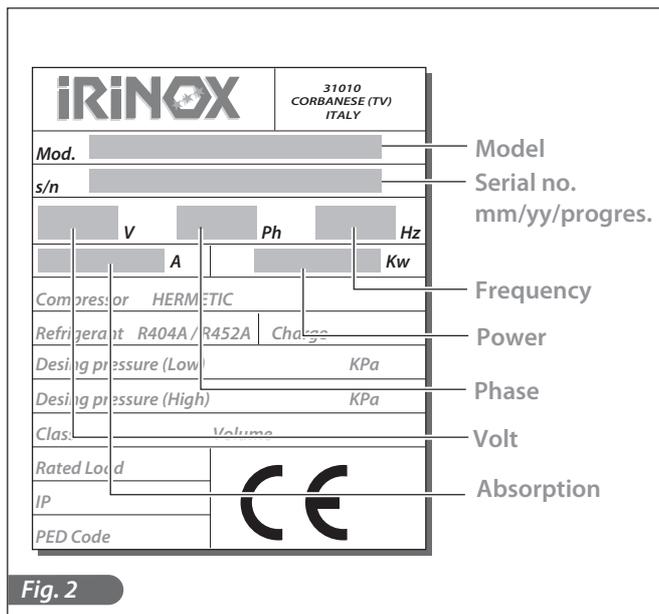


Fig. 2

### 2.2. POSITIONING

- The machine must be installed and inspected with complete respect of the accident-prevention legal Standards, traditional regulations and Standards in force.
- The installer must check any provisions on the subject of fire prevention (contact the local fire department for the due indications).
- Place the machine in the provided place.
- Use the adjustment feet to level the appliance. Do not use the forklift truck to straighten the machine as it could damage the basin guides on the bottom of the machine (Fig.3).
- If the appliances are not levelled, their functioning and the flow of condensate can be compromised.

To avoid (Fig.4):

- Places exposed to direct sunlight
- Enclosed places with high temperatures and poor air exchange. (► see **Table 2**).
- Do not install the machine near to any heat source.

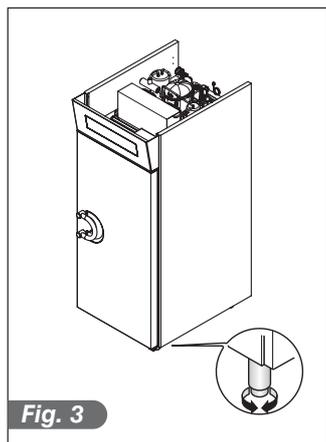


Fig. 3

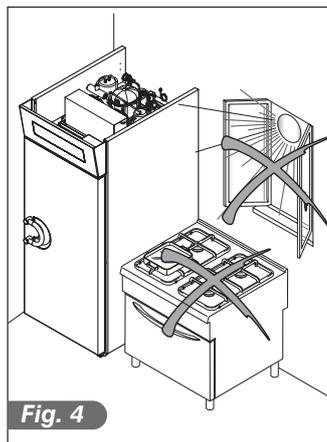
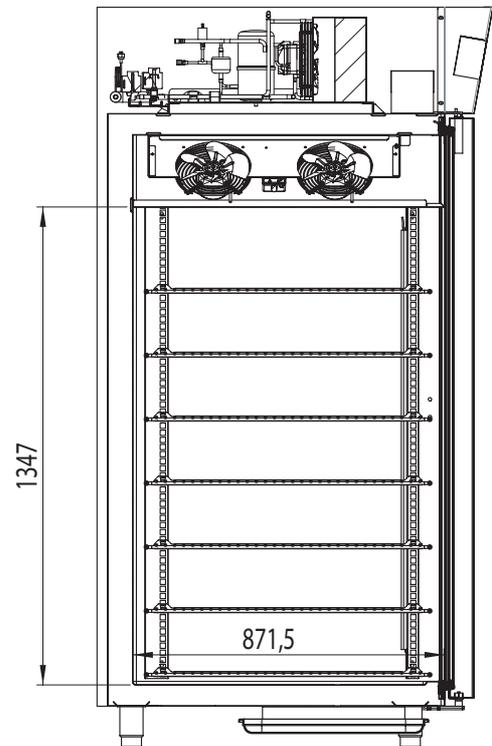
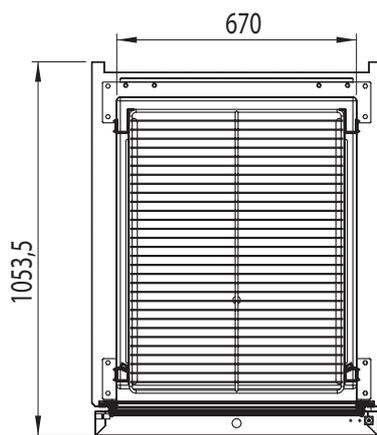
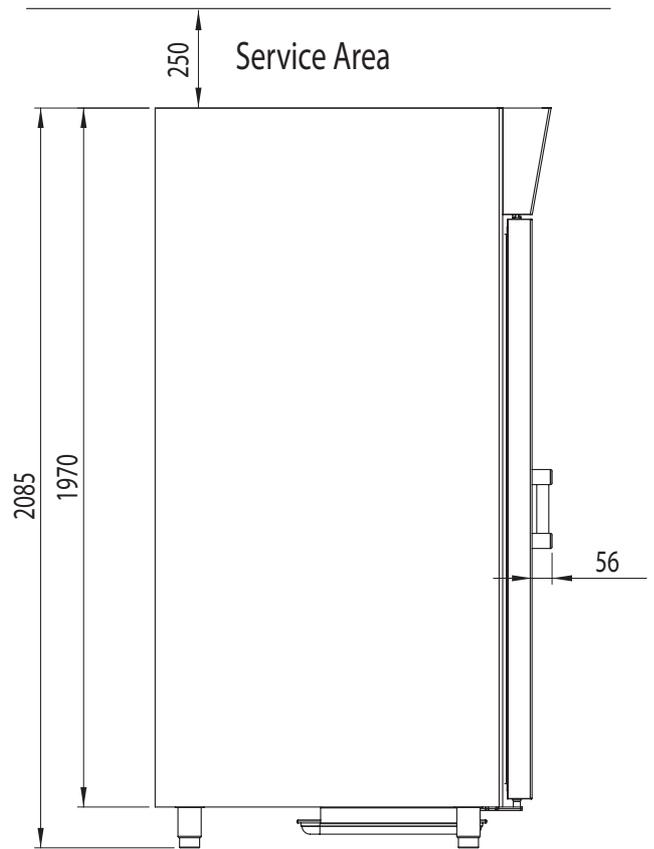
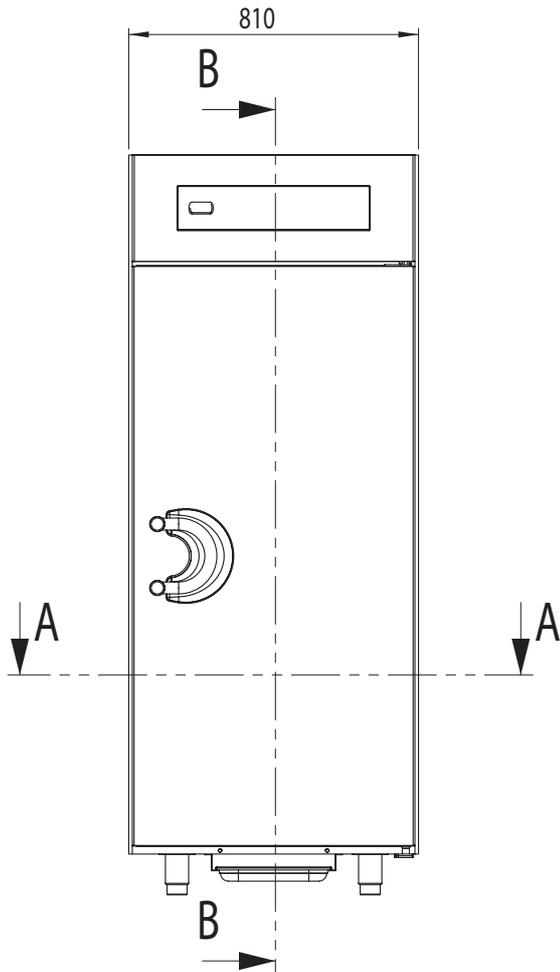


Fig. 4

- The remote units are designed to be installed in places protected from the weather. The plants must be positioned on a level cement or steel base and space for maintenance must be foreseen, as indicated in the technical data sheets. For installation on the roof or on floors, weight distribution beams should be arranged. The base must also be sufficiently strong and suitable to support the weight of the entire unit, as resulting from the technical data on the specific drawing. To avoid additional vibrations and noises we recommend use of neoprene anti-vibration mats placed under the corners of the unit's base.
- If the operating cabinet holder is to be installed below the floor level or underground, the installer will apply the clauses required by the Standard EN378-1:2008+A1:2010 ANNEX D to ensure that no person can remain locked in the cell at the end of the work shift.
- The cabinet holder can be installed underground or on a mezzanine as long as there are suitable emergency exits as provided for by the Standard EN378-1:2008+A1:2010 ANNEX C.
- The need for forced ventilation in a room where the cabinet holder is installed must be verified by the installer, as required by the Standard EN378-2:2008+A1:2009 in chapter 6.2.14.

### 2.3. DIMENSIONAL DATA



## 2.4. ENVIRONMENTAL TEMPERATURES AND AIR EXCHANGE

For air-cooled chiller units, the temperature of the operating environment must not exceed **30°C**. The performance declared is not guaranteed above this temperature.

The remote condensing units must be installed in opposite rooms or outdoors, in a place protected from direct sunlight. If the circumstances should make it necessary, the installer must evaluate whether the use of a cover or roof is required (in all cases sufficient air exchange must be guaranteed).

**i** For further details ► see **Table 2**.

**Table 2**

MINIMUM AIR EXCHANGE		
AIR	m <sup>3</sup> /h	700

**Table 3**

MAXIMUM WATER USE (when foreseen)		
Well water	(l/h)	220
<i>Values referring to the condensing power declared at -10/40°C in compliance with EN12900</i>		

## 2.5. COOLING CAPACITIES

**Table 4**

Cooling capacity [W]	Condensing power [W]
1458	2248
<i>Values declared at T.evap=-10°C and T.cond.=40°C. Over-heating in compliance with EN12900</i>	

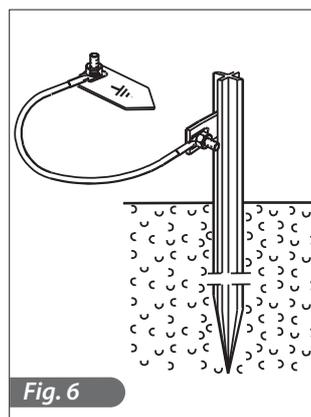
## 2.6. ELECTRICAL CONNECTION

Install an automatic differential circuit breaker switch upstream from every appliance, for omnipolar disconnection of the power supply, according to the Standards in force in the country of installation.

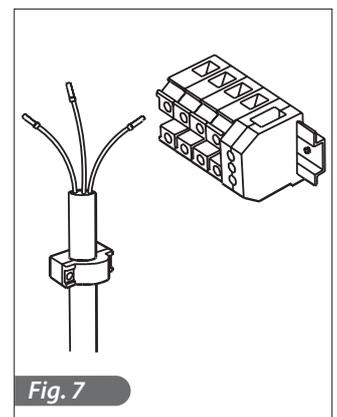
The dimensions of the connection cables must be in compliance with the information contained in the electrical data on the technical data sheets. The voltage of the systems must be within the limit of +10% and the voltage distortion of the phases must not exceed 3%. The electrical power connection must be performed by qualified staff, in compliance with the directives and laws in the country of installation. The power supply is to be taken to the electrical control panel of each single appliance, according to the data in **Table 5**.

- The electrical power supply cables must be correctly sized for the units installed;
- The electrical cables must be laid and blocked in the relevant cable gland and installed properly according to the place of installation;
- Every wire must be inserted into the corresponding terminal;
- The earth wire must be correctly connected to an efficient earthing system.

**!** *The manufacturer declines all liability and every warranty obligation, whenever the appliance or objects are damaged and persons are injured due to incorrect installation and/or failure to comply with the laws in force.*



**Fig. 6**



**Fig. 7**

**Table 5**

POWER SUPPLY			nominal POWER SUPPLY		defrosting ABSORPTION		POWER SUPPLY CABLE		POWER SUPPLY CABLE	
Voltage (V)	Frequency (Hz)	Poles	Power (kW)	Power (A)	Potenza (kW)	Current (A)	Type	Section	Type	Section
220-240	50	1P+N+PE	0,93	5,2	1,30	6,4	H07RN-F	3G1,5mm <sup>2</sup>	H07RN-F	3G1,5mm <sup>2</sup> +3G2,5mm <sup>2</sup>
220	60	1P+N+PE	0,85	4,5	1,60	7,2	H07RN-F	3G1,5mm <sup>2</sup>	H07RN-F	3G1,5mm <sup>2</sup> +3G2,5mm <sup>2</sup>
200	50/60	2P+PE	0,88	5,6	1,30	6,7	H07RN-F	3G1,5mm <sup>2</sup>	H07RN-F	3G1,5mm <sup>2</sup> +3G2,5mm <sup>2</sup>

NOTES: cable sized for a length of 7m with an industrial voltage drop  $\Delta V\% \leq 1\%$

## 2.7. REFRIGERATOR CONNECTION

### 2.7.1. Equal level installation

General criteria that must be satisfied in the installation of the remote units:

- 1) Slope of the pipes (Fig.8)
- 2) Fastening brackets onto the insulated pipes.  
The number of brackets to be applied to the refrigerator connection line of the remote units ► see **Table 6**.
- 3) Hermetic sealing (Fig.10).
- 4) Execution of the vacuum (0.03 mBar) in the connection pipes (flow and intake).
- 5) Check vacuum sealing of the pipes.
- 6) Opening of the shut-off valves on the condensing unit.
- 7) Leak check.
- 8) Check of the exact gas load via the liquid passage indicator light on the condensing unit.
- 9) Check of the circulation and pressure of the condensing water (systems with water cooling).

 The criteria indicated above are sufficient for installation at equal level (Fig.11).

The pipes must be installed so that their lengths may be varied, using supports so they can slide and that provide sufficient space near to the walls and other obstructions.

If the cabinet holder's heat exchangers can be shut-off from the rest of the plant via valves, these exchangers must be protected by suitable safety devices as foreseen by the Standard EN378-2:2008+A1:2009 in chapter 6.2.6.8.

For water-cooled units or units with heat recovery: for the choice and installation of the water pipes, the local provisions and regulations regarding constructions and the safety standards must be followed.

The installer must provide mechanical coupling of the appropriately sized connections to the system and make sure that the water inlet and outlet connections are compliant with the dimensional drawing and with the labels on the connections. The pipes must be supported to reduce weight and strain on the connections. A filter that can be inspected for filtering solid bodies must be installed on the inlet pipe to the exchanger. If the noise and vibrations are critical, anti-vibration joints must be installed on the water inlet and outlet pipes from the exchangers.

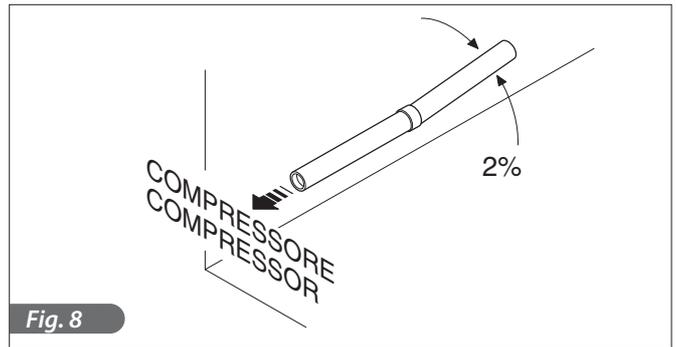


Fig. 8

Tabella 6

DISTANCE Cell -> Remote unit	NUMBER OF BRACKETS
5 metres	2
10 metres	3
15 metres	5
20 metres	7
25 metres	8

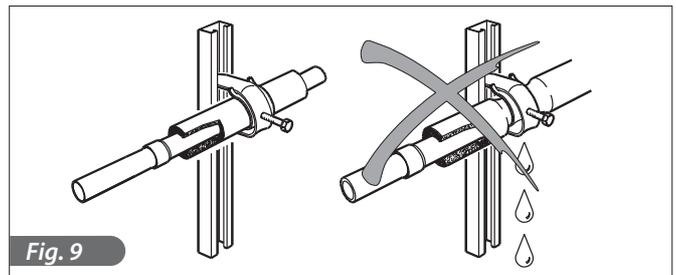


Fig. 9



Fig. 10

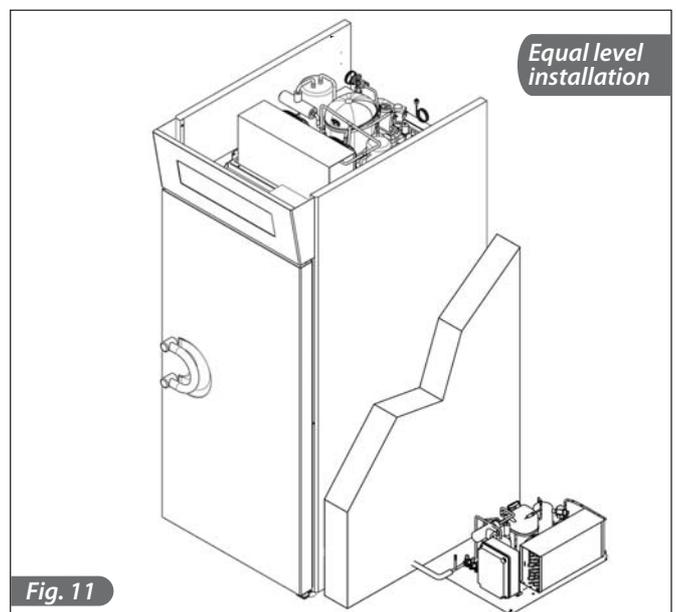
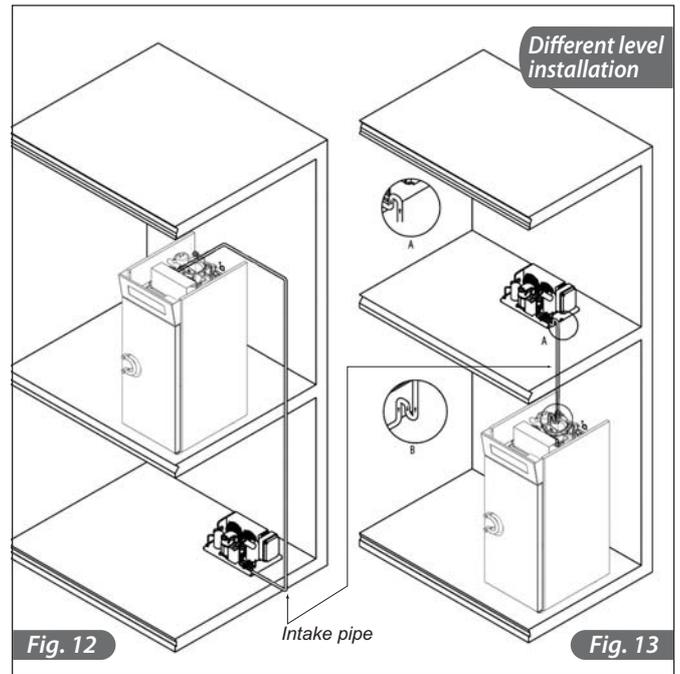


Fig. 11

### 2.7.2. Different level installation

If the remote unit is installed higher with respect to the appliance (fig. 13), a siphon must be installed at every branch or return (a), every 1.8 metres of difference in level along the return pipe and at every delivery (b).

If the remote unit is installed lower compared to the appliance, no siphon is required (fig.12).



### 2.7.3. Refrigerator-remote units connection

The diameters of the appliance power supply pipes are sized for installation distances up to 15 metres (► see **Table 7**).

For greater distances, contact IRINOX Spa.

**Table 7**

Flow line Ø mm	Intake line Ø mm	Hot gas line Ø mm
6	12	10

Pipes maximum length: 15 m

 L'isolamento della linea di aspirazione e del gas caldo dovrà essere fatto con isolante del tipo a cellule chiuse di buona qualità, dello spessore minimo di 19 mm.



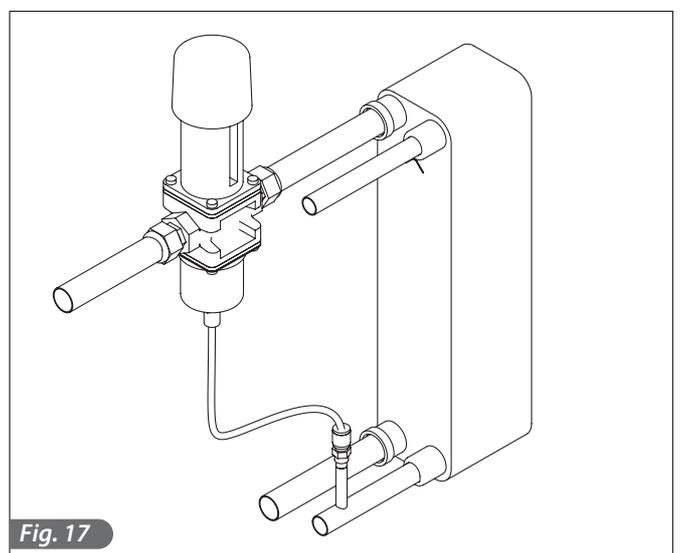
## 2.8. CONDENSATE DRAIN

CP ONE has a basin for collecting the condensate. The basin can be extracted from the bottom part of the cabinet holder.

## 2.9. WATER COOLING UNITS CONNECTION

- During testing (mains water), with the machine at a standstill and water network ready, check that the condenser drain pipe does not allow water to escape. If this is not the case, regulate the pressure valve until the leak stops (Fig.17).
- It is recommended to supply a gate valve and an inspectionable filter in the water flow line. The condenser water flow and drain pipes are indicated by relevant plates. Both connections are 3/8" F and threaded.
- See **Table 3** for maximum water consumption

FEATURES OF THE LINE FOR WATER-COOLED CONDENSING UNITS	
Maximum pressure of the inlet water	1600 KPa
Minimum pressure of the inlet water	50 KPa
Maximum temperature of the inlet water in order to guarantee normal functioning of the appliance	25°C (well water)



## 2.10. NOTES FOR THE INSTALLER

Verification of correct installation and testing:

- Check for any gas leaks from the seals or joints made during the installation phase.
- Check the good insulation of the connection pipes between cabinet holder and remote condensing unit (when foreseen).
- Check the electrical connection.
- Check absorption.
- Check the standard pressures.
- Check the water connection by regulating the pressure valve during operation and the good circulation of the condensing water (when the holding cabinet is water-cooled).
- Perform at least one complete preservation cycle (reach the set temperature), and one manual defrosting cycle.



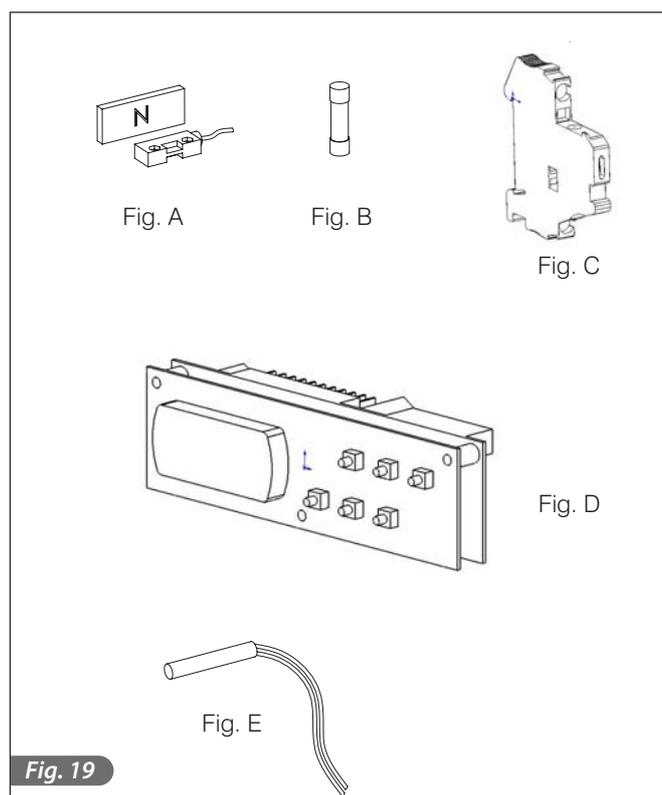
**Inform the customer regarding the exact use of the appliance with specific reference to use and the requirements of the customer him/herself.**



**Installation and the start-up must be performed by authorised staff.**

## 2.11. SAFETY AND CONTROL SYSTEMS

- Door micro switch (A): blocks operation of the fans in the cell when the door is opened.
- Protection fuses (B): protect the circuits from short circuit and overloads.
- Fuse holders (C): they contain the fuses and they allow the opening and isolating of the circuits.
- Electronic boards (D): depending on the parameters acquired, they command and control the various devices connected to the machine.
- Temperature control in the cell and at defrosting end (E): it is managed by the electronic board via NTC probe.



## 2.12. R404A / R452A GAS SAFETY SHEET

### • Identification of dangers

High exposure to inhalation can have anaesthetic effects. Very high exposure can cause anomalies of the heart beat and cause sudden death. The nebulised or sprayed product can cause cold burns to the eyes or skin. Dangerous for the ozone layer.

### • First aid measures

#### *Inhalation*

Move the accident victim away from exposure and keep him/her warm and rested. Give oxygen if necessary.

Perform artificial respiration if breathing stops or gives signs of stopping. In the case of cardiac arrest, perform external cardiac compression.

Request immediate medical assistance.

#### *Contact with the skin*

Thaw the affected areas using water.

Remove contaminated clothing.

Attention: clothing can stick to the skin in the case of cold burns. In the case of contact with the skin, wash immediately with plenty of warm water. If symptoms occur (irritation or the formation of blisters) request medical assistance.

#### *Contact with the eyes*

Wash immediately with an eyewash or clean water, keeping the eyelids open for at least 10 minutes.

Request immediate medical assistance.

#### *Ingestion*

Do not induce vomiting.

If the accident victim is conscious, rinse the mouth with water and make him/her drink 200-300 ml of water.

Request immediate medical assistance.

#### *Further medical care*

Symptomatic treatment and support therapy when indicated. Do not give adrenalin and similar sympathomimetic drugs following exposure, due to the risk of cardiac arrhythmia with possible cardiac arrest.

### • Fire-prevention measures

Not inflammable.

The heat decomposition causes the emission of very toxic and corrosive vapours (hydrogen chloride, hydrogen fluoride). In the case of fire, use respiratory aids and suitable protective clothing.

#### *Extinguishers*

Use extinguishing agents that are appropriate for the fire.

### • Use extinguishing agents that are appropriate for the fire.

#### *Inhalation*

Higher atmospheric concentrations can cause anaesthetic effects with possible loss of consciousness.

Very high exposure can cause anomalies of the heart beat and cause sudden death.

Higher concentrations can cause asphyxia due to the reduced content of oxygen in the atmosphere.

#### *Contact with the skin*

Sprays of liquid and the nebulised liquid can cause cold burns.

It is improbable that it is dangerous due to cutaneous absorption.

Repeated and prolonged contact can cause the removal of sebaceous matter, with consequent dryness, cracking and dermatitis.

### • Ecological information

It decomposes relatively quickly in the lower atmosphere (troposphere). The decomposition products are highly dispersed and therefore have a very low concentration. Does not affect photochemical smog (i.e. it does not lie within the volatile organic compounds -VOC- according to that established by the UN/ECE agreement).

The ozone destruction potential (ODP) is 0 for both R404A and R452A measure in comparison with a standard ODP equal to 1 for the cfc11 (according to uNeP definitions). The Global Warming Potential of the gas is 3260 for R404A and 2141 for R452A.

The substance is governed by the Montreal Protocol (revision dated 1992).

The discharges of the product into the atmosphere do not cause contamination of waters in the long term.

### • Considerations regarding disposal

The best solution consists in recovery and recycling of the product.

If this is not possible, destruction must take place in an authorised plant equipped to absorb and neutralise the acid gases and the other toxic products.

### • Measures in the case of accidental leaks

Ensure adequate personal protection (with the use of means of protection for the respiratory tract) during the elimination of spills.

If the conditions are sufficiently safe, isolate the source of the leak. In the presence of spills of modest size, leave the material to evaporate on the condition that there is suitable ventilation.

Large leaks

-ventilate the area;

-contain the leaking material with sand, earth or other suitable absorbent material;

-prevent the liquid from penetrating drains, sewers, basements and work holes, because the vapours can create a suffocating atmosphere.

### • Handling

Avoid the inhalation of high concentrations of vapours.

The atmospheric concentrations must be reduced to a minimum and kept at the minimum level reasonably possible, below the professional exposure limit.

The vapours are heavier than the air and therefore the formation of high concentrations near to the ground is possible, where ventilation is usually low. In these cases, ensure adequate ventilation or wear suitable protection devices for the respiratory tract with air reserve. Avoid contact with naked flames and hot surfaces as irritant and toxic decomposition products can be formed. Avoid contact between the liquid and the eyes/skin.

## 2.13 DISPOSING OF THE MACHINE

The machine must be demolished and disposed of in compliance with the Standards in force in the country of installation, especially regarding the compressor coolant gas and lubricant oil.

Prevent coolant gas from leaking into the environment by using suitable pressure containers and instruments for pouring the fluid under pressure. This operation must be entrusted to staff competent with refrigeration plants.

### INFORMATION FOR THE USERS



On implementation of the 2002/95/EC and 2002/96/EC Directives, relative to the reduction of use of dangerous substances in electrical and electronic appliances, as well as disposal of waste.

The barred bin symbol on the appliance or package indicates that at the end of the product's life it must be collected separately from other waste.

The separate waste collection of this appliance at the end of its life is organised and managed by the manufacturer. The user that wishes to dispose of this equipment must therefore contact the manufacturer and follow the system that has been adopted to allow the separate collection of the appliance at the end of its life span. The suitable separate collection for successive start-up of the appliance abandoned for recycling, treatment and compatible environmental disposal contributes to preventing possible negative effects on the environment and favours the re-use and/or recycling of the materials of which the appliance is made.

The abusive disposal of the product by the owner leads to the application of administrative sanctions envisioned by the Standard.

## 3. OPERATION

### 3.1. USE

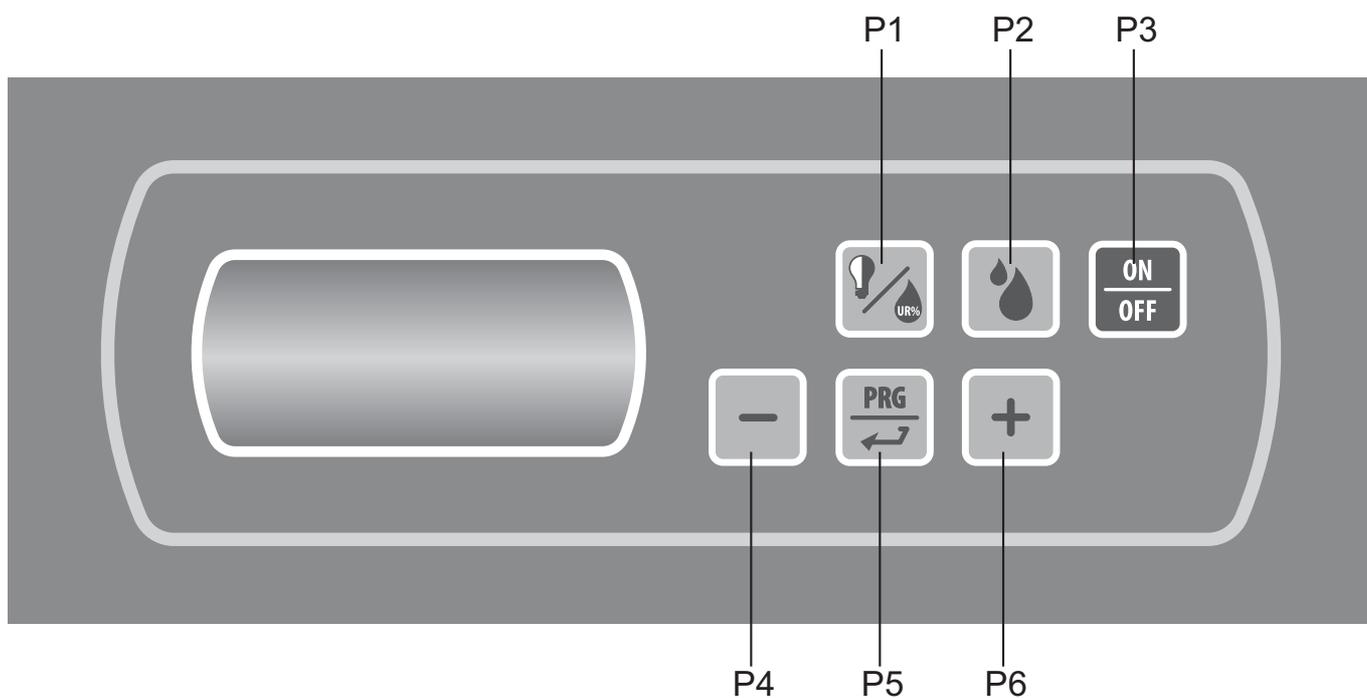
The CP ONE cabinet holder is designed for preservation of food products.

CP ONE can work at +15 / -25°C.

Especially:

- POSITIVE mode (3°C), suitable for the preservation of fresh products, or for brief periods, of cooked food;
- NEGATIVE Mode (-20°C), suitable for the preservation of frozen products also for long periods of time;
- CHOCOLATE Mode (14°C), suitable for the preservation of chocolate based products (for example pralines).

### 3.2. CONTROL PANEL



**P1:** Light/humidity key

**P2:** Manual defrosting key

**P3:** ON/Stand By key

**P4:** Values decrease key

**P5:** Programming key

**P6:** Values increase key

## DATE AND TIME ADJUSTMENT

Phase	Description
1	Press P4  for 1 second
2	Use P4  or P6  to select "rtc" on the display
3	Press P5  to confirm and access the clock setting menu. The indicator  flashes
4	Use P4  or P6  to select the current year (last 2 digits e.g. 2011 = 11)
5	Press P5  to confirm and move on to the following setting. In sequence: - YEAR (display: "YY 01") - MONTH (display: "nn 01") - DAY (display: "dd 01") - HOUR (display: "hh 01") in 24 hour format - MINUTES (display: "nn 01")
6	After setting the minutes, press P5  to confirm and save the clock setting. "rtc" appears on the display. The indicator  goes off.
7	Press P3  to exit the menu.

## 3.3. DESCRIPTION AND OPERATION

### Preservation cycle

Phase	Description
1	With the cabinet holder in Stand-by, select the operating mode. See paragraph Common functions  Operating mode selection.
2	Press P3  for 2 seconds to start preserving. – The display shows the detected cell temperature
3	<b>Changing set temperature:</b> Press P5  : – The indicator flashes  – The display shows the setpoint Use P4  and P6  to change the setpoint – Do not press any key for 15 seconds or press P5  to exit and save the modification. – The indicator  stops flashing – The display shows the detected cell temperature
4	<b>Finish preserving</b> Press P3  for 2 seconds – The display turns off  cabinet holder Stand-by – The indicator turns on 

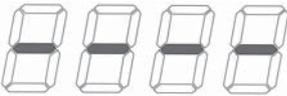
## Common functions

Function	Description
<p>Operating mode selection.</p>	<p>Put the cabinet holder in Stand-by by pressing P3 .</p> <p>Press P5 for 4 seconds  . The display shows the set operating mode.</p> <p>Use P4  and P6  to set the desired operating mode where: POS = POSITIVE mode NEG = NEGATIVE mode CIOC = CHOCOLATE mode</p> <p>Press P5  to confirm the data entered and exit the menu.</p> <p>If no key is pressed, after a pre-set time one automatically exits the menu and the entered data is saved.</p>
<p>Humidity control (for POSITIVE or CHOCOLATE mode)</p>	<p>Press P1  for 4 seconds.</p> <p>Use P4  and P6  to set the relative humidity level desired, where: Ur1= low humidity Ur2= average humidity Ur3= high humidity</p> <p>Press P1  to confirm the data entered and exit the menu.</p> <p>If no key is pressed, after a pre-set time one automatically exits the menu and the entered data is saved.</p>
<p>Overcooling</p>	<p>Press P6  for 4 seconds to start up the Overcooling cycle.</p>
<p>Manual defrost</p>	<p>Press P2  for 4 seconds to start up the Manual defrost cycle.</p>
<p>Switching on of cell light</p>	<p>Upon door opening, the light inside the cell is automatically switched on.</p> <p>With the light off, press P1  to switch the light on inside the cell.</p> <p>With the light on, press P1  to switch the light off inside the cell.</p>
<p>Key locking</p>	<p>To lock operation of the keys:</p> <p>Press P3  + P4  simultaneously for 1 second. The display shows "Loc" for 1 second.</p> <p>To unlock operation of the keys:</p> <p>Press P3  + P4  simultaneously for 1 second. The display shows "UnL" for 1 second.</p>

## Signals

Indicator	Meaning	
	Steady	Flashing
	Compressor command	Change temperature set point Compressor run requested but pending safety time end
	Defrosting in progress	Defrosting in progress but pending compressor safety time end
	Evaporating fan command	During evaporating fan stop time
	Light inside cell manually switched on by pressing P1 	Internal cell light switched on for door opening
	Liquid line solenoid valve command	NOT USED
	NOT USED	Date and time change in progress
<b>HACCP</b>	All information regarding the HACCP alarms	At least one new HACCP alarm was recorded.
	NOT USED	NOT USED
	NOT USED	NOT USED
	OverCooling cycle in progress	NOT USED
	Alarm or error is in progress	NOT USED
	The temperature unit of measurement is °C	NOT USED
	The temperature unit of measurement is °F	NOT USED
	The instrument is in standby	NOT USED

## Indications

Display	Meaning
	Key lock activated
	Running set point locked
	Operation required not available

### 3.4. STOP MODES

In case of emergency, to switch off the cabinet holder, press P3  for 2 seconds and disconnect power supply.

**ATTENTION!** Press P3  with machine running to place the cabinet holder in Stand-by: all the commands are removed from the various components; the cabinet holder IS NOT DISCONNECTED FROM THE POWER SUPPLY.

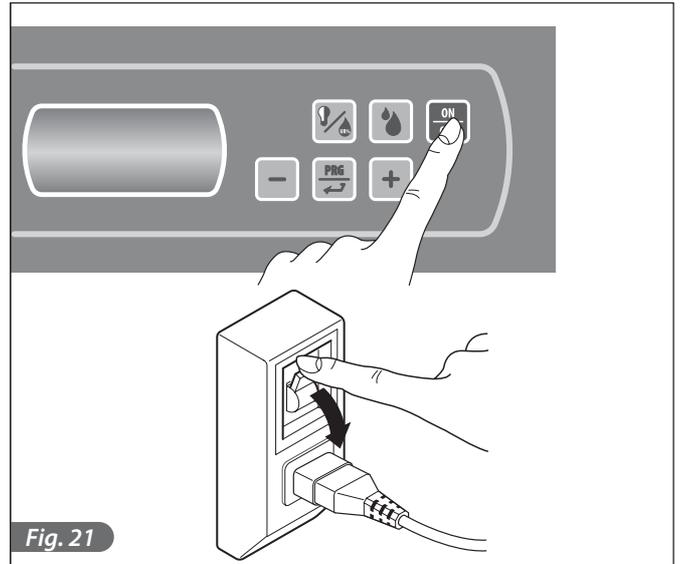


Fig. 21

### 3.5. RECOMMENDATIONS FOR USE

Before starting the machine, clean the inside of the cell thoroughly (► see par. 4.2).

#### 3.5.1. Pre-cooling

Before using the cabinet holder for the first time or after a period of downtime, pre-cool the cell by running the machine on empty until the operating temperature is set.



In order to have good machine performance and not have deterioration of food, we recommend you:

- do not put hot foods or liquids in containers without lids into the cell.
- arrange the products in order to favour cold air circulation throughout the cell.
- avoid opening the door for a prolonged time and frequently.

#### 3.5.2. Loading the machine

Maximum load per shelf: 35 kg



Make sure that a sufficient space is left between the trays for suitable air circulation.



If the machine is not completely loaded, distribute the trays and the load over the entire useful height avoiding accumulation.



When the CP ONE is used in Positive mode ( $20\pm 0^{\circ}\text{C}$ ), run the cabinet holder on empty for at least 4 hours in order to work at the desired relative humidity.

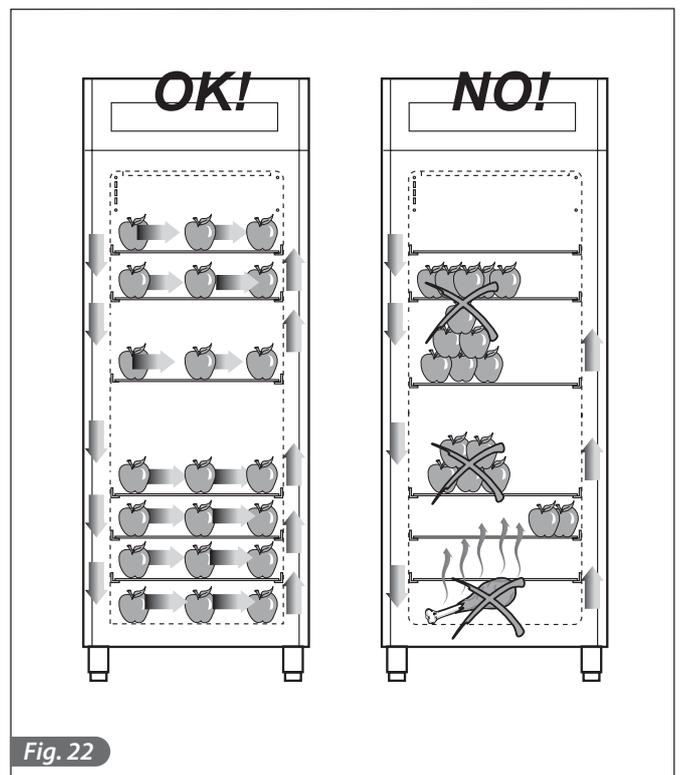


Fig. 22

## 4. MAINTENANCE

### 4.1. ROUTINE MAINTENANCE:

The information and the instructions in this chapter are intended for all staff operating the machine: the user, the maintenance technician and the unskilled staff.

#### *Elementary Safety Standards*

To carry out routine cleaning and maintenance safely, follow the safety regulations of (►►Fig.23) :

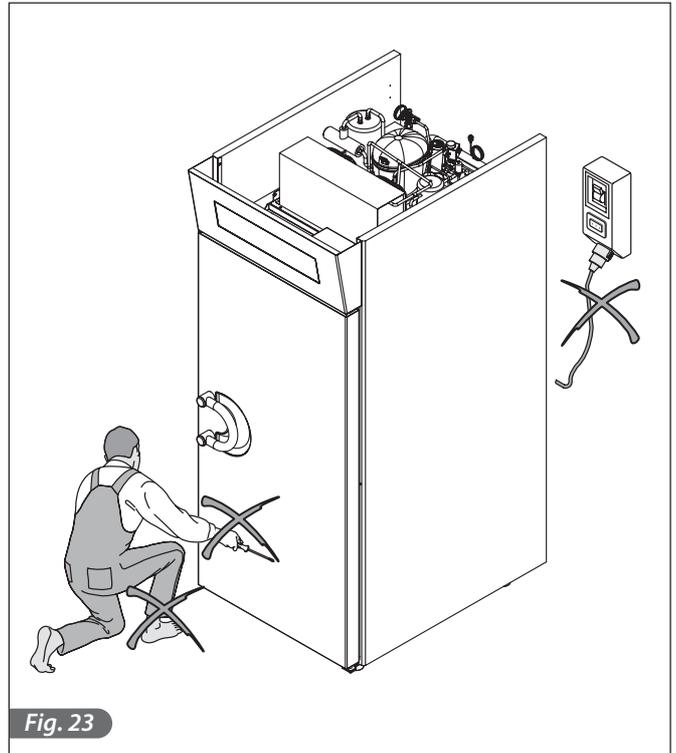
- do not touch and operate the machine with humid or wet hands or feet,
- do not insert screwdrivers, kitchen tools or any other object between the protections and moving parts
- before performing any cleaning or routine maintenance operation, disconnect the machine from the electrical power supply by turning the main switch off and removing the plug.
- do not pull the power supply cable to disconnect the machine from the power supply mains.



It is prohibited to remove the protections and safety devices in order to perform routine maintenance. The Manufacturer declines any liability for accidents caused by failure to comply with the aforementioned obligation.



Before starting the machine, clean the inside of the cell thoroughly, as indicated in paragraph 4.2.



### 4.2. CLEANING THE CELL

In order to guarantee hygiene and protection of the quality of the foodstuffs treated, the internal cleaning of the cell must be performed frequently, depending on the type of food preserved.

Weekly cleaning is recommended.

The conformation of the cell and the internal components can be washed using a cloth or sponge.

Clean using water and non-abrasive neutral detergents.

Rinsing can be done with a cloth or sponge soaked in water, or with a moderate jet of water (not exceeding the mains pressure).



Do not scrape the surfaces with sharp or abrasive bodies.



Do not use abrasives or solvents and thinners.



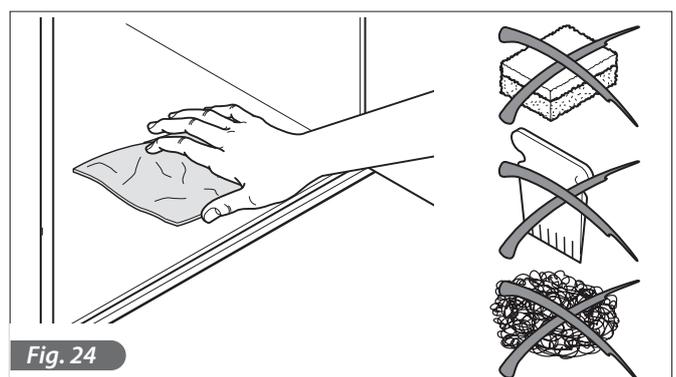
Always wear protective gloves during the cleaning operations.



Do not use cleaning agents containing acetic acid and derivatives or ammonia;



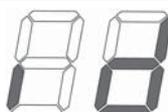
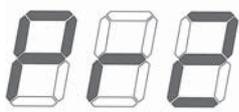
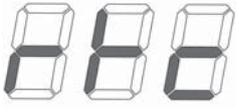
Do not use the holding cabinet in direct contact with products emanating acetic acid and derivatives or ammonia



### 4.3. TROUBLESHOOTING

The machines' electronic control is supplied with a sound and visual signal system which signals the presence of an alarm; **press a key to silence the sound alarm.**

#### *Diagnostics managed by the electronics:*

Display	Meaning
	Minimum temperature (HACCP alarm)
	Maximum temperature (HACCP alarm)
	Open door (HACCP alarm)
	No voltage (HACCP alarm)
	Defrosting ended due to maximum duration
	Faulty chamber probe
	Faulty evaporator probe
	Clock error

**Diagnostics NOT managed by the electronics:**

<b>MALFUNCTION</b>	<b>POSSIBLE CAUSE</b>	<b>POSSIBLE SOLUTION</b>
<b>The cell front board does not switch on</b>	No power supply	Check the connection to the electrical line
	Protective fuses triggered	Fuse replacement by an authorised technician
<b>The cell fans do not turn</b>	No power supply	Check the connection to the electrical line
	Faulty fan	Technician intervention to replace the board
	Faulty board	Technician intervention to replace the board
<b>The compressor does not function</b>	No power supply	Verificare l'allacciamento alla linea elettrica
	Intervention of the internal Klixson due to overloads	Intervento di un tecnico
	No electronic board consent	Check the connection to the electrical line
<b>The compressor functions but does not cool the cell</b>	No coolant gas	Technician intervention
	Faulty solenoid valve	Technician intervention
	Dirty condenser	Clean condensing battery
	Faulty liquid line solenoid valve	Intervention of a technician to replace the solenoid valve or coil
	Faulty defrost line solenoid valve	Intervention of a technician to replace the solenoid valve or coil
<b>The condenser fan does not function</b>	No power supply	Check the connection to the electrical line
	Faulty fan	Intervention of a technician to replace the fan
	No electronic board consent	Technician intervention to replace the electronic board
<b>No evaporator defrosting</b>	Defrosting cycle incorrect programming	Control defrosting cycles programming
	Faulty defrosting line coil or solenoid valve	Intervention of a technician to replace the solenoid valve or coil

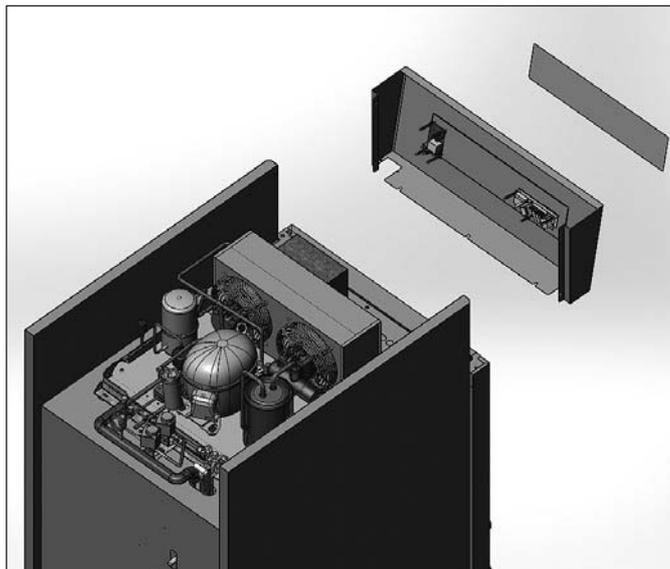
## 4.4. EXTRAORDINARY MAINTENANCE

The information and instructions in this paragraph are destined exclusively to the specialised staff authorised to intervene on the electrical and refrigerator components of the machine.

### ***4.4.1. How to access the electronic boards and the electrical control panels.***

The electronic boards and the electrical control panels are located on the top part of the machine, protected by a metal sheet. Remove the electrical power supply before intervening for maintenance. Then remove the steel cover, unscrewing the locking screws.

At the end of maintenance operations, accurately reassemble the covers and tighten the locking screws.

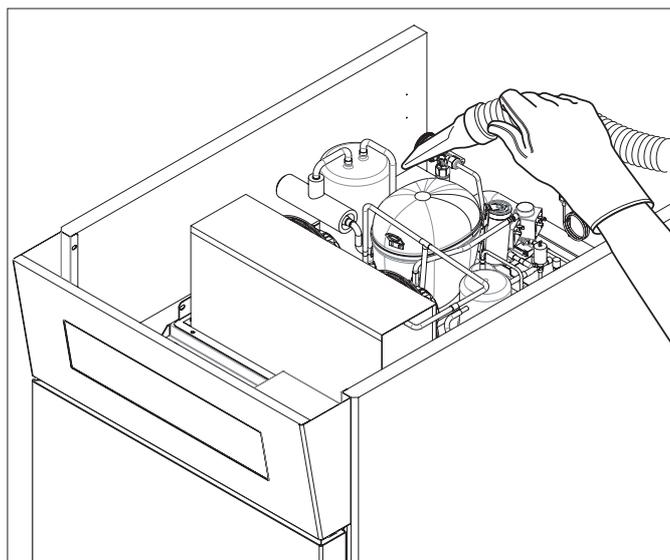


### ***4.4.2. Cleaning the condenser***

For correct and efficient functioning of the cabinet holder, the air condenser must be kept clean in order to allow the free circulation of the air. This operation must be performed every 30 days maximum. It can be carried out using non-metal brushes in order to remove all of the dust and soot from the condenser fins themselves. The use of a suction device is recommended in order to prevent the dispersion of the dust removed into the environment. Whenever there are greasy deposits, use a brush soaked in alcohol.

 Do not scrape the surfaces with sharp or abrasive bodies.

 During the above-mentioned operations, always wear protective gloves, glasses and masks for protection of the respiratory tract.





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