ARMADI FERMALIEVITAZIONE ARMOIRES DE FERMENTATION KÜHLSCHRÄNKE PROVER CABINET CABINAS FERMENTACION KOELKASTEN ХОЛОДИЛЬНЫЕ ШКАФЫ



ISTRUZIONI ORIGINALI - MANUALE D'USO E INSTALLAZIONE INSTRUCTIONS ORIGINALES - MANUEL D'UTILISATION ET D'INSTALLATION URSPRÜNGLICHE BEDIENUNGSANLEITUNG - BEDIEN- UND INSTALLATIONSHANDBUCH ORIGINAL INSTRUCTIONS - USE AND INSTALLATION MANUAL INSTRUCCIONES ORIGINALES - MANUAL DE USO E INSTALACIÓN OORSPRONKELIJKE INSTRUCTIES - GEBRUIKS- EN INSTALLATIEHANDLEIDING ОРИГИНАЛЬНЫЕ ИНСТРУКЦИИ - РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ И УСТАНОВКЕ



Leggere attentamente le avvertenze contenute nel presente libretto in quanto forniscono importanti indicazioni riguardanti la sicurezza, d'uso e di manutenzione.

Conservare con cura questo libretto per ogni ulteriore consultazione dei vari operatori.

Il costruttore si riserva il diritto di apportare modifiche al presente manuale, senza preavviso e responsabilità alcuna.



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.



Lesen Sie bitte aufmerksam diese Gebrauchsanweisung durch, die wichtige Informationen bezüglich der Sicherheit, dem Gebrauch und der Instandhaltung enthält.

Heben Sie sorgfältig diese Gebrauchsanweisung auf, damit verschiedene Anwender sie zu Rat ziehen können.

Der Hersteller behält sich das Recht, Änderungen dieser Gebrauchsanweisung ohne Ankündigung und ohne Übernahme der Verantwortung vornehmen zu können.



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.



Lea atentamente las advertencias contenidas en este manual pues dan importantes indicaciones concernientes la seguridad, la utilización y el mantenimiento del aparato.

Rogamos guarde el folleto de instalación y utilización, para eventuales futuros usuarios.

El constructor se reserva el derecho de hacer modificas al actual manual, sín dar algún preaviso y sín responsabilidad alguna.



Nauwkeurig de waarschuwingen in dit boekje lezen, aangezien zij belangrijke aanwijzingen verschaffen wat betreft de veiligheid, het gebruik en het onderhoud.

Dit boekje goed bewaren.

De fabrikant behoudt zich het recht voor om veranderingen in deze handleiding aan te brengen, zonder voorafgaande waarschuwing en zonder enkele aansprakelijkheid.



Внимательно читайте предупреждения, содержащиеся в настоящем руководстве, касающиеся надежности использования и обслуживания.

Конструктор сохраняет за собой право вносить изменения в настоящее руководство без предупреждения и любой ответственности.

	INDEX
MACHINE DESCRIPTION	2
ACCESSORIES	2
IDENTIFICATION TAG	2
GENERAL NOTES BY THE DELIVERY	3
SAFETY PRESCRIPTION	3
HACCP REGULATIONS	4
TECHNICAL SPECIFICATIONS	4
INSTALLATION	4
CONTROL PANNELS	6
STARTING	7
LOADING THE PRODUCT	7
OPERATION MANUAL CYCLE - AUTOMATIC CYCLE	7
STOPPING	12
DEFROSTING	13
SETTING TIME	13
SETTING STANDARD TIME	13
LANGUAGE	14
PROGRAMMING	14
ALARMS	20
WORKING IRREGULARITIES	21
DAILY CLEANING	21
FOOD STAINS AND HARDENED RESIDUES	22
PERIODIC CLEANING AND MAINTENANCE	22
USAGE INTERRUPTIONS	23
USEFULL ADVICES FOR THE CARE OF THE STAINLESS STEEL	23
MALFUNCTIONING	23
WASTE DISPOSAL AND DEMOLITION	24
INVERTING THE DOOR	24
REFRIGERANT MATERIAL SAFETY DATA SHEET	25

MACHINE DESCRIPTION

This appliance has been designed for refrigerating, heating and storing foodstuffs. Any other use is to be considered improper.

ATTENTION: the appliances are not suitable for installation outdoors or in environments subject to the action of the elements.

The manufacturer cannot be held liable for improper use of its products.

Appliances with steel doors are available.

Appliances are equipped with "REGULAR TEMPERATURE" and "LOW TEMPERATURE" refrigerating systems to allow food storing at different temperatures. (1)

Appliances are equipped with stainless fin evaporator, hermetic compressor, copper-aluminium condenser, humidification kit, inner resistance, humidity probe with control panel. (2)

Appliances are equipped with a control panel allowing different types of settings for the different types of systems (POSITIVE TEMPERATURE, LOW TEMPERATURE). (3)

The compressors are installed in the upper part of the cabinets for a better airing and heat dissipation. (4)

Located on the rear outer side of the appliance is a tray equipped with an automatic device for condensate evaporation. (5)

None of the refrigerated cabinets have a condensation collector basin.

According to the model, two different lighting systems are available. Inner lamps are protected to avoid accidental contact with foodstuffs and prevent them from breaking. (8)

The doors are provided with key to ensure a safe closing. (9)

The areas that come into contact with the product are in steel or covered in non-toxic plastic material.(10)

An HFC refrigerant fluid, approved by current legislation, is used in the refrigerating units.

ACCESSORIES

See picture 7.

IDENTIFICATION TAG

For any communication with the manufacturer, always mention the MODEL and the SERIAL NUMBER of the appliance which are reported on the technical feature plate. (11)

Appliance rating plate containing the following ratings (12)

- 1) MODEL
- 2) SUPPLIER'S NAME AND ADDRESS
- 3) CE MARK
- 4) YEAR OF MAKE
- 5) SERIAL NO
- 6) ELECTRIC INSULATING GRADE
- 7) ELECTRIC PROTECTION GRADE
- A) POWER SUPPLY VOLTAGE
- B) ELECTRIC CURRENT RATE
- C) POWER SUPPLY FREQUENCY
- D) RATED POWER
- E) TOTAL LAMP POWER

- F) FAUSE CURRENT
- G) REFRIGERATING SYSTEM TEMPERATURE GRADE
- H) REFRIGERATING GAS QUANTITY
- L) REFRIGERATING GAS
- M) MAX. WATER PRESSURE
- N) WATER TEMPERATURE
- O) WATER CONSUMPTION
- P) MIN. WATER PRESSURE
- R) WEEE SYMBOL
- W) HEATING SECTION POWER

GENERAL NOTES BY THE DELIVERY

At the delivery inspect that the packing is not injured and that it has not been damaged during the transport. (13)

After having unpacked the appliance verify that all the parts are present and that the characteristics and the condition correspond to the order specifications.

Otherwise contact immediately the retailer. (14)

We congratulate you on your choice and we hope that you can use our refrigerating cabinets to their utmost, by following the necessary instructions and precautions contained in this manual. (15)

But, remember that any reproduction of this manual is forbidden and that due to a constant pursuit of innovation and technological quality, the features hereby presented could change without notice.

SAFETY PRESCRIPTIONS

WARNING: before any maintenance or cleaning operation the machine must be insulated from the current.

Turn OFF the switch located on the panel. (16a) witch the general cut-out in OFF position. (16) remove the plug. (17)

WARNING: do not use current taps or plugs not provided with grounding. (18)

The socket must be provided with GROUNDING. (19)

WARNING: do not use adapters or patch cords for the connection to the electric line. (20)

WARNING: wait the time necessary to reach the setted temperature before to introduce the food to preserve. (21)

Always cover the food with the special film before to put it into the appliance. (22)

WARNING: do not introduce hot foods or drinks into the appliance. (23)

WARNING: Store the food to be preserved so as not to brim over the grids. Thus air flow will not be hampered. Do not obstruct fan intake area. (24)

WARNING: do not do the cleaning around the appliance when the door is open.

Do not wash the appliance by spraying high-pressure water on the machine. (26)

WARNING: do not use substances with base of chlorine (chlorine water, muriatic acid, etc.) or however toxic for the cleaning or near the appliances. (27)

WARNING: do not cover the upper side of the appliance or the air inlets when the machine is working or live. (28)

WARNING: do not place objects on the appliance bottom. Use the grids provided (29). The maximum weight on the grids is 48 kg.

The cleaning and mantainance of the refrigerating engine and the compressor area needs the intervention of a skilled technician, therefore it cannot be done by other persons. (30)

For a maintenance intervention or in case of anomaly disconnect completely the machine; ask for the TECHNICAL SERVICE to an entitled center and the use of original spare parts. (31) The unfulfilment of this above can endanger the safety state of the appliances.

HACCP REGULATIONS

WARNING: Easily perishable foodstuffs must be taken out of the refrigerated ambient as late as possible in order to be exposed to room temperature only the necessary time.

WARNING: Do not refreeze foodstuffs previously defrosted.

WARNING: Number the equipment and check twice a day the temperature taken by recording the figures on a proper sheet to be kept for 24 months.

WARNING: Any interruption of current to the appliances can be carried out by checking the downtime with an electric clock in order to eliminate the foodstuffs that could perish.

Maximum temperatures admitted for goods

Foodstuff	Normal storage temperature (°C)	Maximum temperature of carriage (°C)
Fresh pasteurized milk	0÷+4	9
Fresh cream	0÷+4	9
Yoghurt, ricotta, fresh cheese	0÷+2	9
Frozen fish	0÷+2	0÷+4

TECHNICAL SPECIFICATIONS

Last page on the handbook: technical specifications. (32)

INSTALLATION

The appliances are always send packed and on pallet. (33)

On receiving and after having unpacked in case of dammages or missing pieces act as described in the chapter "GENERAL NOTES BY THE DELIVERY".

All setting up and starting operations are to be carried out by skilled staff. (30)

Remove the packing box with care so as not to dent the equipment surface. (34)

WARNING: package parts (plastic bags, polystyrene foam, nails and the like) are dangerous for children and must not be left within their reach.

Using a fork truck lift the appliance and take it to his place paying attention not to unbalance the load. (35)

WARNING: never place the appliance horizontally during transport; this may cause serious structure and system damage. (36)

WARNING: whether for the positioning or for further isplacements do not push or pull the refriferator, to avoid to upset it or to dammage some parts. (37)

WARNING: do not install the appliance near heat sources or in rooms with high temperature, this would cause a lower efficiency with higher wear of it. (38)

WARNING: Distance from the ceiling should be 50 cm at least. Appliances can be placed next to each other, but in case of condensation space them out 20 cm at least.

Remove protective film from product.

This may cause unpleasant static electricity discharge which, however, is not dangerous.

The inconvenience is reduced or prevented by continuously holding the appliance with one hand or grounding the package. (39)

After having positionned the machine remove the pallet using a chisel and a hammer, paying attention not to dammage the feet under the blocks or the appliance. (40)

Draw the stiffening block from the port under the machine. (41)

The drain trap located under the appliance should be connected directly to the drainage system. (41a)

The water supply tube (attachment 3/4") located on the upper side of the appliance should be connected to the water mains by means of an intercepting valve, a cartridge filter and a no-return valve. (41b) The water supply temperature should range between 5°C and 40°C.

There should be enough water pressure to guarantee best operating conditions (>1bar).

If the water that is being used is full of impurities, we recommend using specific cleaning filters or depurators.

Now it is possible to regulate the feet. (42)

Put the appliance at level by keeping it slightly inclined at its back in order to allow the optimum self-closing door. (43)

Clean with tepid water and neutral soap (as written in the chapter "CLEANING") and mount the fittings placed ito the appliance.

The appliance is supplied with an electric plug, SHUKO type. Make sure if complies with EN60320 and national regulations. Otherwise, replace with a complying one. (44)

WARNING: The operation must be carried out by a skilled technician. (30)

Check that the line voltage corresponds to the one refered on the appliance's identification tag. (45)

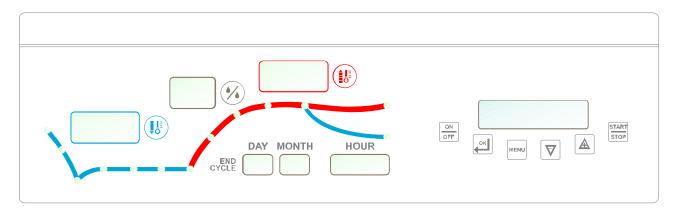
Then insert the plug into the current tap. (46)

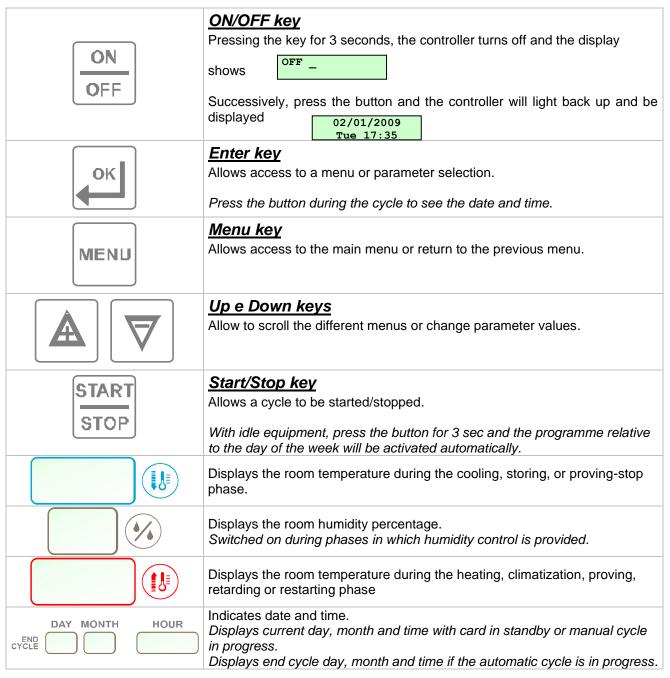
Now the installation has come to end.

The appliance must moreover be included in a unipotential system whose performance and conditions must comply with current regulations.

Connections must be carried out by means of a screw marked "Unipotential" and located in the compressor section. (47)

CONTROL PANNELS







Displays the progress of the selected cycle.

LED corresponding to already concluded phases remain switched on while following phases are run.

The card allows to set automatic cycles or start manual cycles

Manual cycle: setting the 3 phases:

COOLING, HEATING AND CLIMATIZATION

Automatic cycles: (7 set and/or changeable cycles) featuring the following phases: PROVING-STOP, STORING, RESTARTING, PROVING AND RETARDING

STARTING

To start operation, follow this procedure:

- Insert the plug into the current tap; (50)
- -position the line switch on ON; (51)
- press the key OFF;

The display shows

02/01/2009 Tue 17:35

LOADING THE PRODUCT

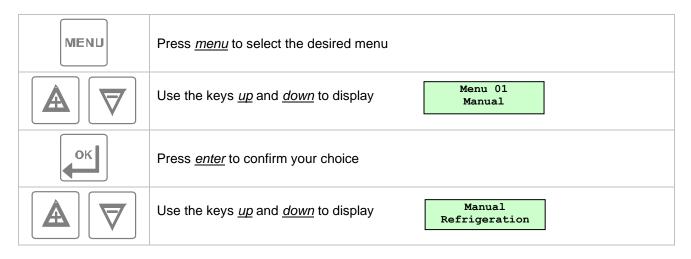
- Now and not before it is possible to put the food to conserve into the appliance.
- Place the products into the cell uniformly to allow a good internal air circulation across the cell.
- Avoid obstructing the ventilation areas inside the appliance. Stickers are to be found inside the cell indicating the loading limit of the shelves.
- Only leave the door open for the strict amount of time necessary to introduce or remove food.
- It is recommended that the keys be kept out of reach of children.

OPERATION

MANUAL CYCLE

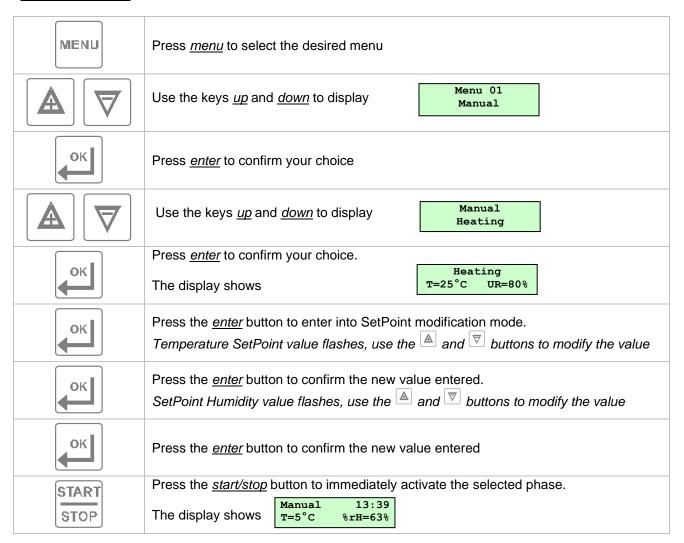
The manual cycle is made up of 3 independent phases. Switch from one phase to another is not automatic.

COOLING PHASE



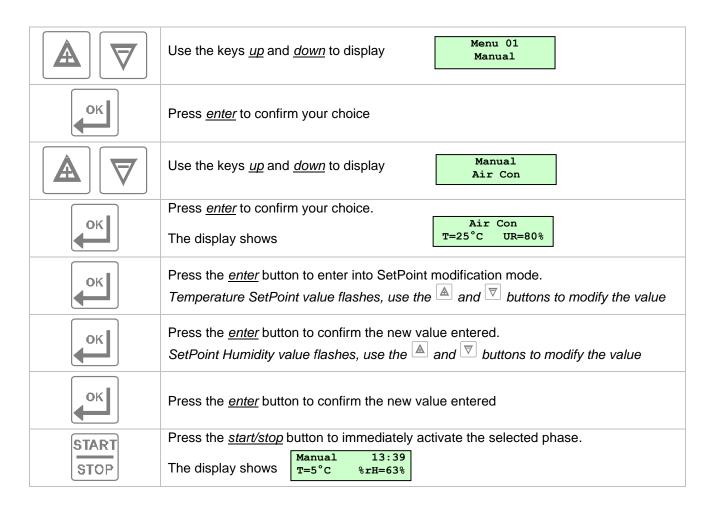
	Press <u>enter</u> to confirm your choice.
OK	The display shows Refrigeration T=25°C
ОК	Press the <u>enter</u> button to enter into SetPoint modification mode. Temperature SetPoint value flashes, use the and buttons to modify the value
ОК	Press the <u>enter</u> button to confirm the new value entered
START	Press the <u>start/stop</u> button to immediately activate the selected phase.
STOP	The display shows Manual 13:39 T=5°C

HEATING PHASE



CLIMATIZATION PHASE

MENU	Press <u>menu</u> to select the desired menu
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AUTOMATIC CYCLE

The electronic card has 7 automatic cycles memorized as follows

APPLIANCES -5°C/+30°C

CVCI	E	P1	P2	P3	P4	P5	P6	P7
CYCLE		Monday	Tuesday	Wednsday	Thursday	Friday	Saturday	Sunday
STOP	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
	Temperature	-5°C	-5°C	-5°C	-5°C	-5°C	-5°C	-5°C
STORAGE	Temperature	-1°C	-1°C	-1°C	-1°C	-1°C	-1°C	-1°C
	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
RESTARTING	Temperature	20°C	20°C	20°C	20°C	20°C	20°C	20°C
	Humidity	70%	70%	70%	70%	70%	70%	70%
	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
PROVER	Temperature	28°C	28°C	28°C	28°C	28°C	28°C	28°C
	Humidity	80%	80%	80%	80%	80%	80%	80%
END OF PROGRAMME	Hour	01:00	01:00	01:00	01:00	01:00	01:00	01:00
STOP	Temperature	6°C	6°C	6°C	6°C	6°C	6°C	6°C
3104	Humidity	80%	80%	80%	80%	80%	80%	80%

APPLIANCES -18°C/+30°C

CYCLE		P1	P2	Р3	P4	P5	P6	P7
		Monday	Tuesday	Wednsday	Thursday	Friday	Saturday	Sunday
STOP	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
310P	Temperature	-20°C	-20°C	-20°C	-20°C	-20°C	-20°C	-20°C
STORAGE	Temperature	-1°C	-1°C	-1°C	-1°C	-1°C	-1°C	-1°C
	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
RESTARTING	Temperature	20°C	20°C	20°C	20°C	20°C	20°C	20°C
	Humidity	70%	70%	70%	70%	70%	70%	70%

PROVER	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
	Temperature	28°C						
	Humidity	80%	80%	80%	80%	80%	80%	80%
END OF PROGRAMME	Hour	01:00	01:00	01:00	01:00	01:00	01:00	01:00
STOP	Temperature	6°C						
	Humidity	80%	80%	80%	80%	80%	80%	80%

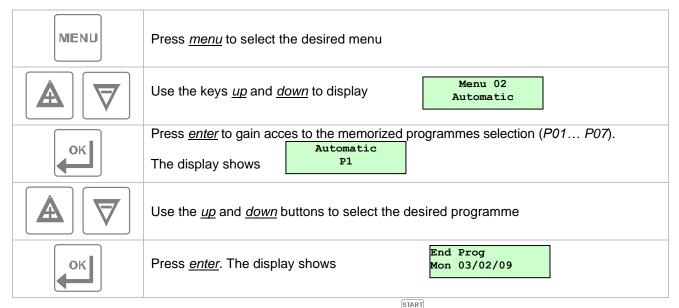
APPLIANCES -2°C/+30°C

CVC	· E	P1	P2	P3	P4	P5	P6	P7
CYCLE		Monday	Tuesday	Wednsday	Thursday	Friday	Saturday	Sunday
STOP	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
	Temperature	-2°C	-2°C	-2°C	-2°C	-2°C	-2°C	-2°C
STORAGE	Temperature	+2°C	+2°C	+2°C	+2°C	+2°C	+2°C	+2°C
RESTARTING	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
	Temperature	20°C	20°C	20°C	20°C	20°C	20°C	20°C
	Humidity	70%	70%	70%	70%	70%	70%	70%
	Duration	02:00	02:00	02:00	02:00	02:00	02:00	02:00
PROVER	Temperature	28°C	28°C	28°C	28°C	28°C	28°C	28°C
	Humidity	80%	80%	80%	80%	80%	80%	80%
END OF PROGRAMME	Hour	01:00	01:00	01:00	01:00	01:00	01:00	01:00
STOP	Temperature	6°C	6°C	6°C	6°C	6°C	6°C	6°C
	Humidity	80%	80%	80%	80%	80%	80%	80%

^{*}Note: Max. dough temperature 27°C - flour vxx 320 - increase 0,01 yeast - increase 0,01 salt for savoury products or sugar for sweet products

Each automatic cycle is made up of 5 phases.

The cycle starts with the PROVING-STOP phase and then **automatically** switches to the following phases, according to the duration of each single phase, the day and time previously set for the end of cycle.



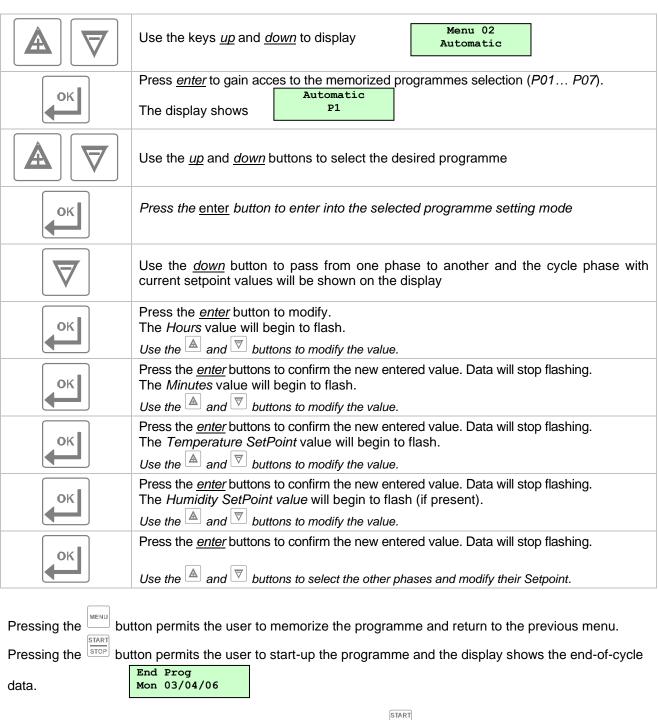
If end-of-cycle data indicated is the data desired, press the stop button to confirm and start up cycle.

Otherwise, press to modify end-of-cycle data.

AUTOMATIC CYCLE MODIFICATION

To change the pre-set cycles, observe the following instructions

MENU	Press <u>menu</u> to select the desired menu
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If end-of-cycle data indicated is the data desired, press the stop button to confirm and start up cycle.

Otherwise, press to modify end-of-cycle data.

The day flashes. Move data to the programme end with the button. Press the button to confirm new data entered and press the button to start up cycle.

AUTOMATIC CYCLE RUNNING

During automatic cycle running, the display will:

P2 Locking T=19°C

Indicate the programme number in progress, the phase in progress, current cell temperature and, if the phase also foresees humidity probe, it will show the percentage of humidity present.

Phase date and hour display

Press the button to see the end date and time of the phase in progress.

Press the button to see the end date and time of successive phases.

The display shows

End PH 0 09:00 Mon 03/04/09

Where PH0 indicates that programme phase 0 is in progress, precisely the Stopping phase.

Other phases are indicated with:

PH 1 which indicates Storage

PH 2 which indicates Restarting

PH 3 which indicates Prover

PH 4 which indicates Retarding

The display will show the following when the button is pressed or a timeout of 5 seconds takes place.

INPUT/OUTPUT status display

Press the button to see INPUT/OUTPUT status.

The display will show the following when the button is pressed or a timeout of 20 seconds takes place.

C D E R V H U 1 0 0 1 1 0 0

Date and hour display

Press the button to see the date and hour.

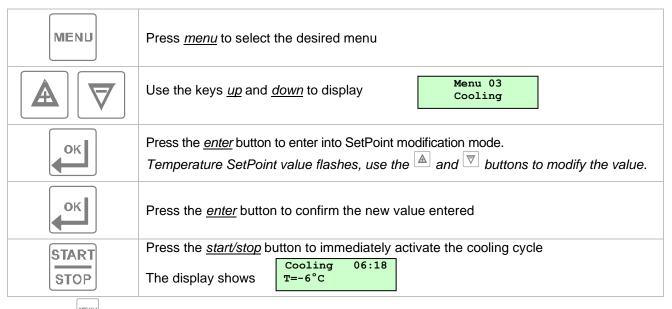
08/02/2007 Tue 17:35

The display will show the following when the button is pressed or a timeout of 5 seconds takes place.

Pressing the $\frac{\text{START}}{\text{STOP}}$ button at any time stops cycle running. The cycle will however remain selected.

COOLING CYCLE

Start-up of a cooling cycle before selecting any cycle is recommended.



Press the button to return to SetPoint modification.

STOPPING

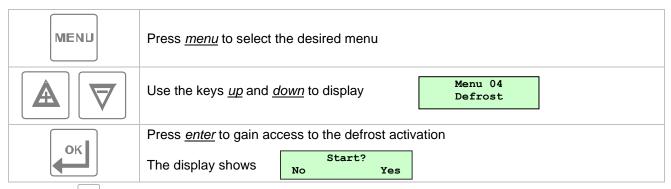
In any case, the appliance can be started by pressing the key

The display shows

ATTENTION: the key DOES NOT disconnect the appliance from the power supply.

To disconnect the appliance from the power supply, remove the plug from the socket. (17)

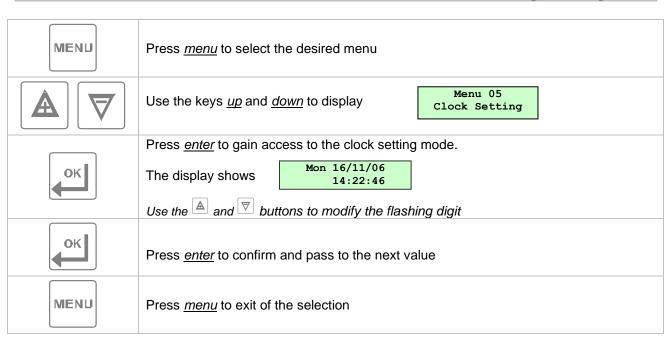
DEFROSTING



Press the button to exit from the menu and defrosting will not be activated.

Press the button to activate defrosting

SETTING TIME



SETTING STANDARD TIME

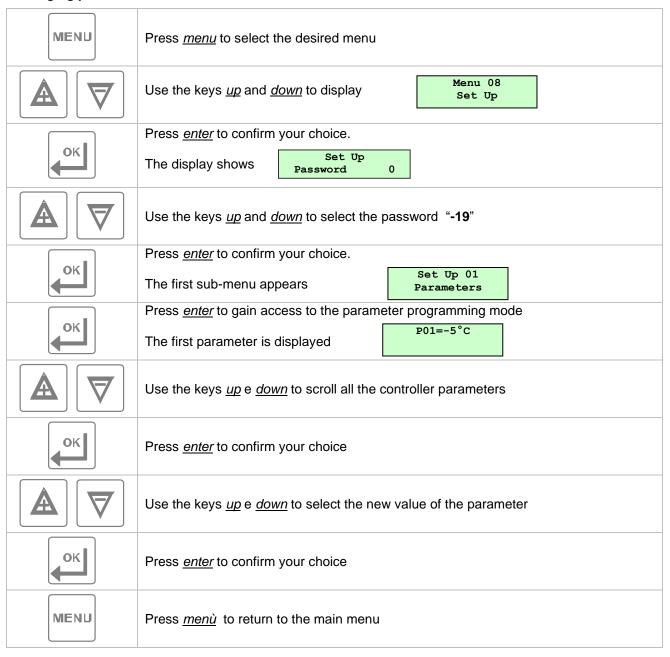
MENU	Press <u>menu</u> to select the desired menu
$\boxed{\textbf{A}}\boxed{\textbf{A}}$	Use the keys <u>up</u> and <u>down</u> to display Menu 06 SummerTime
	Press the <u>enter</u> button to enter into standard time setting mode.
ОК	The display shows Sun 17:52 +1
	Use the [▲] and [▽] buttons to modify the hour
ОК	Press the <u>enter</u> button to confirm the new value entered
MENU	Press <u>menu</u> to exit of the selection

LANGUAGE

MENU	Press <u>menu</u> to select the desired menu
$ \boxed{ \pmb{\mathbb{A}} } \boxed{ \pmb{\triangledown} }$	Use the keys <u>up</u> and <u>down</u> to display Menu 07 Language
	Press the enter button to see the currently used language.
OK	The display shows Language English
	Use the keys <u>up</u> and <u>down</u> to select the desired language
ОК	Press <u>enter</u> to confirm your choice
MENU	Press <u>menu</u> to exit of the selection

PARAMETERS

Changing parameters



Description of parameters

Nr.	Description	Default -2/+30°C	Default -5/+30°C	Default -18/+30°C	Min	Max	U.M.
	General Con	figuration					
P1	Power on display selection 0 = none 1= EVCO s.r.l.	1	1	1	0	1	
P2	0 = Celsius 1 = Farhenheit	0	0	0	0	1	
P3	Room probe offset	0	-2	-2	-15	15	°C/°F
P4	Evaporator probe offset	0	0	0	-15	15	°C/°F
P5	Humidity probe lower limit	0	0	0	0	P6	%
P6	Humidity probe upper limit	100	100	100	P5	200	%
P7	Door contact polarità input 0 = NO 1 = NC	0	0	0	0	1	

15

Nr.	Description	Default -2/+30°C	Default -5/+30°C	Default -18/+30°C	Min	Max	U.M.
P8	Thermostat polarità input BT 0 = NO 1 = NC	0	0	0	0	1	
P9	Power Duration down to reset automatic programme	15	15	15	1	60	minutes
P10	Mode selection after power down for an automatic programme 0 = an automatic cycle restarts only if the power down is under P9 minutes 1 = an automatic cycle restarts always	1	1	1	1	1	
P11	Durata Power down for manual programme reset	15	15	15	1	60	minutes
P12	Mode selection after power down for a manual programme 0 = a manual cycle restarts only if the power down is under P11 minutes 1 = a manual cycle restarts always	1	1	1	0	1	
P13	Min pathoint possible in cooling	-2	-5	-24	20	P14	°C/°F
P14	Min setpoint possible in cooling	10	10	5	-30 P13		°C/°F
	Max setpoint possible in cooling	2	2	2		90	°C/°F
P15	Cooling hystheresis	0			<u>1</u> 0	10	°C/°F
P16 P17	Cooling dead zone for refrigeration, stop and storage		0	0	0	10 10	°C/°F
P17	Cooling dead zone for climatization and retarding	0	0	0	0	10	°C/°F
	Cooling dead zone for climatization and retarding		-				
P19	Min setpoint possible in heating	5	5	5	0 P10	P20	°C/°F
P20 P21	Max setpoint possible in heating	30	30	30	P19	90	°C/°F
P21 P22	Heating hystheresis	1	1	1	1	10	
	Heating dead zone for heating, restarting and prover	1	1	1	0	10	°C/°F
P23 P24	Heating dead zone for per climatization and retarding				0	10	°C/°F
	Number of steps for resistances adjustment in restarting	9	9	9	1	10	
P25	Number of steps for resistances adjustment in proving Compressor	1 or Timos	1	1	1	10	
P26	Dealy between two compressor starts	3	3	3	0	60	minutes
P27	Dealy between compressor stop/start	2	2	2	0	60	minutes
P28	Compressor start delay from power on	1	1	1	0	255	minutes
	Compressor forced start-up duration to restarting, prover and		-				
P29	retarding phases Resistance	0 e Times	0	0	0	60	minutes
P30	Minimum restistance activation time	0	0	0	0	255	seconds
	Humidification and	Dehumidifi	cation				
P31	Inferior cell temperature limit for humidification/dehumidification	5	5	5	0	90	°C/°F
P32	Humidity control mode 0 = with humidity probe 1 = time cycles according to the percentage previously set 2 = steps of 1 minute	0	0	0	0	2	
P33	Pause if P32 = 2	10	10	10	0	60	minutes
P34	Humification cycle duration if P32 = 1	60	60	60	30	600	seconds
P35 P36	Humidification max. time if P32 = 1 Enables humidification in prover and storage stop phases 0 = disabled	0	30 0	30 0	0	P34 1	seconds
D27	1 = enabled	4	4	1	4	100	0/
P37 P38	Humidification hystheresis Humidification dead zone	1 4	4	1 4	<u>1</u> 0	100	%
P38	Band of Proportional Regulation for Humidification	4	4	4	0	100 20	%
P40	Cycle time for Humidification Prop. Reg.	1	1	1	1	255	seconds/ minutes
P41	Base times for Cycle Time 0 = seconds 1 = minutes	1	1	1	0	1	
P42	De-humidification hystheresis	1	1	1	1	100	%
P43	De-humidification dead zone	5	5	5	0	100	%
P44	Dehumidification Attempt Time with Solenoid Valve	1	1	1	1	255	seconds
	Ventila	tion	1				
P45	Evaporator Fan Proportional Regulation Enable 0 = regulation ON/OFF 1 = proportional regulation	0	0	0	0	1	
P46	Evaporator fans operation in proving-stop 0 = parallel operation 1 = continuous operation	1	1	1	0	1	
P47	Evaporator fans operation in storing 0 = parallel operation 1 = continuous operation	1	1	1	0	1	
P48	Evaporator fans operation in restarting 0 = parallel operation 1 = continuous operation	0	0	0	0	1	

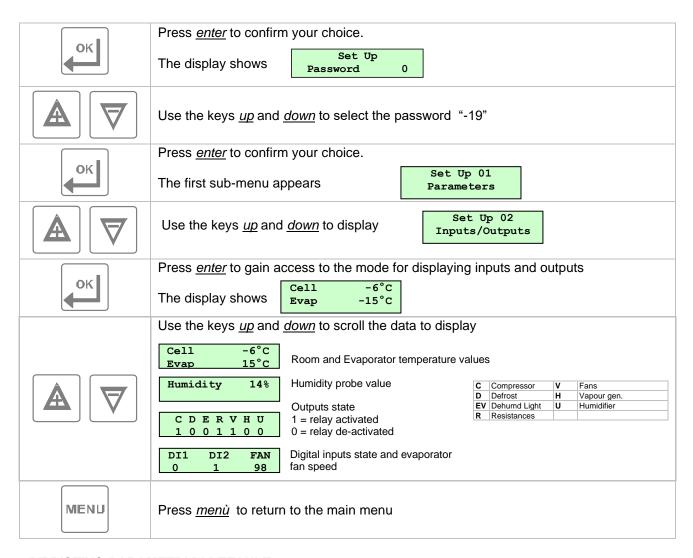
Nr.	Description	Default -2/+30°C	Default -5/+30°C	Default -18/+30°C	Min	Max	U.M.
P49	Evaporator fans operation in proving 0 = parallel operation 1 = continuous operation	0	0	0	0	1	
P50	Evaporator fans operation in retarding 0 = parallel operation 1 = continuous operation	0	0	0	0	1	
P51	Evaporator fans operation in cooling 0 = parallel operation 1 = continuous operation	1	1	1	0	1	
P52	Evaporator fans operation in heating 0 = parallel operation 1 = continuous operation	0	0	0	0	1	
P53	Fans operation in climatization 0 = parallel operation 1 = continuous operation	0	0	0	0	1	
P54	Evaporator fans de-activation delay in parallel operation	1	1	1	0	255	minutes
P55	Evaporator fans parallel operating time	1	1	1	0	255	minutes
P56	Evaporator fans pause in parallel operation	1	1	1	0	255	minutes
P57	Minimum Evaporator Fan Speed	0	0	0	0	P58	%
P58	Maximum Evaporator Fan Speed	100	100	100	P57	100	%
P59	Minimum Evaporator Fan Speed during dehumidification	20	20	20	P57	P58	%
	Defros					•	
P60	Evaporator Temperature for defrosting end	8	8	8	-40	99	°C
P61	Interval between two defrost cycles 0 = defrost is not repeated	8	8	6	0	10	ore
P62	Defrost max. duration	10	10	30	1	120	minutes
P63	Dripping time	2	2	3	0	30	minutes
P64	Fans state in defrost	0	0	0	0	1	
P65	Fan stop duration after dripping	2	2	2	0	15	minutes
	Cooling						_
P66	Minimum Setpoint for Cooling	-2	-5	-5	-30	P67	°C
P67	Maximum Setpoint for Cooling	10	10	10	P66	30	°C
P68	Preset Cooling	-2	-5	-5	P66	P67	°C
	·	Programme Setting and Modifications					
P69	Programme Setting Enable	1	1	1	0	1	
P70 P71	Programme Modification Enable K3 management: 0=Solenoid Valve; 1= Light; 2 = Dehumidification	1	1	1	0	2	
P72	Management of Compressor with Door Open: 0 = no effect; 1= compressor off	0	0	0	0	1	
P73	Defrosting type: 0 = Resistance; 1 = Hot Gas	0	0	0	0	1	
P74	High evaporator temperature alarm	55	55	55	0	70	°C
P75	High evaporator temperature alarm enable: 0= not enabled; 1= enabled	1	1	1	0	1	
P76	Dehumidification Enable 0= disabled 1= enabled in Restarting, Prover ,Retarding,Climatization,Heating 2=enabled also in Stop and Storage	0	0	0	0	2	
P77	Resistance Time ON	3	3	3	1	255	seconds/ minutes
P78	Resistance Time OFF (0= resistance always on)	1	1	1	0	255	seconds/ minutes

Note

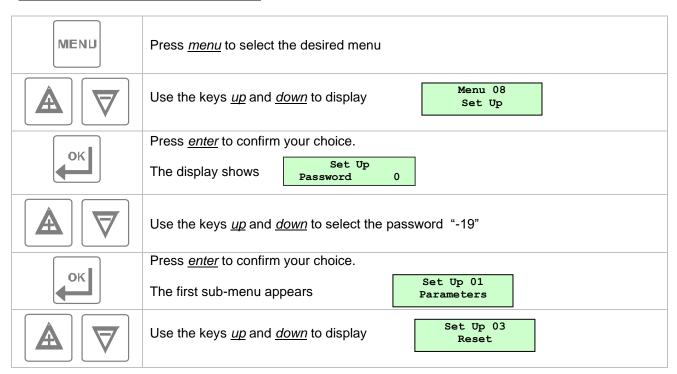
- Check compressor protection times as default is set to zero.
 P5 and P6 are used to define the humidity probe range. P5 should be set to humidity percentage equal to 4mA; P6 should be set to humidity percentage equal to 20mA.
- Whenever changing P32, check the humidity setpoint of automatic and manual programmes.

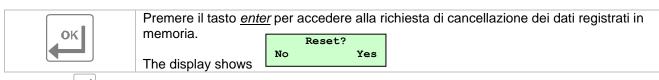
INPUTS/OUTPUTS





RIPRISTINO PARAMETRI DI DEFAULT



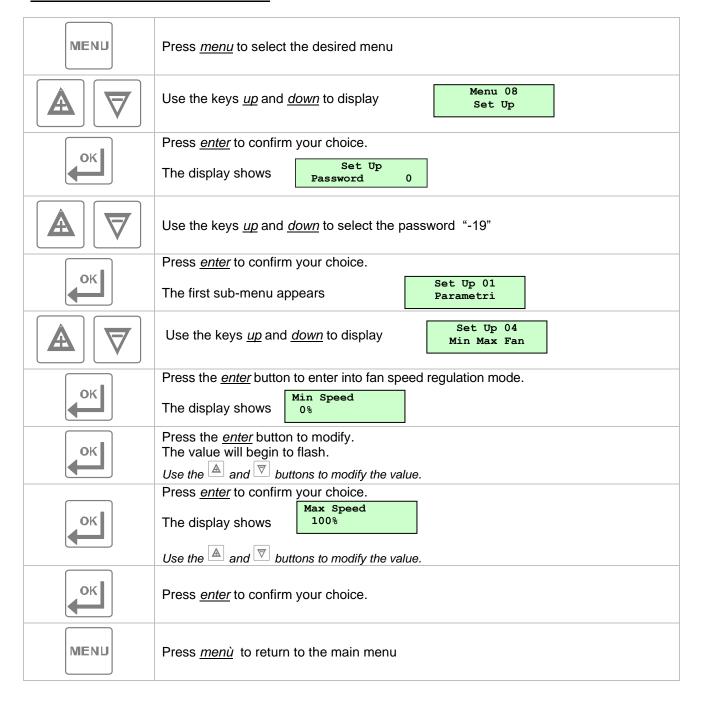


Press the button to exit from the menu without any resetting.

Press the button to reset original default parameters.

Press to return to the main menu.

REGOLAZIONE VELOCITA' VENTOLE



Acoustic signals and warning lights turn on in case of malfunctioning.



In case of a faulty probe, a Cell Probe Alarm will be set off. The buzzer will sound and an error message will flash on the display:

ALL CellSensor

Any cycles in progress will be interrupted all outputs are de-activated.

The buzzer can be turned off by pressing any button.

Once the alarm condition is over, the cycle will restart.

Safety thermostat

When the Thermostat alarm is detected on the card, the buzzer will sound and an alarm message will be displayed:

ALL Thermostat

Any cycles in progress will be interrupted all outputs are de-activated.

The buzzer can be turned off by pressing any button.

Once the alarm condition is over, press the button to reset the card.

Evaporator probe

A faulty probe can cause an Evaporator Probe Alarm. The buzzer will sound and an alarm message will flash on the display:

ALL EvapSensor

Any cycles in progress will be interrupted all outputs are de-activated.

The buzzer can be turned off by pressing any button.

Once the alarm condition is over, the cycle will restart.

High Evaporator Temperature

When the Evaporator Probe reaches a value set in parameter *P74*, a high temperature alarm will be activated on the Evaporator. The buzzer will sound and an alarm message will flash on the display:

ALL High T Evap

Any cycles in progress will be interrupted all outputs are de-activated.

The buzzer can be turned off by pressing any button.

Once the alarm condition is over, press the button to reset the card.

Humidity Probe

A faulty probe can cause a Humidity Probe Alarm. The buzzer will sound and an alarm message will flash on the display:

ALL Humsensor

Any cycles in progress will be interrupted all outputs are de-activated.

The buzzer can be turned off by pressing any button.

Once the alarm condition is over, the cycle will restart.

MicroDoor

Each time the door is opened, a flashing Door Open message will appear:

Door Open

Opening the door during a chilling cycle will stop the Fans, Resistances and Humidifier. The Compressor and Vapour Generator will remain on.

The buzzer will sound, but can be turned off by pressing any button and signalling will return automatically once the door is closed again.

The Light will switch on each time the Door is opened.

RTC Malfunction

Whenever RTC malfunction is detected, an RTC alarm is signalled. The buzzer will sound and an alarm message will flash on the display:

ALL RTC

Any cycles in progress will be interrupted all outputs are de-activated.

The buzzer can be turned off by pressing any button.

It is possible to enter the Time settings menu and set current RTC values after the card returns to standby.

EEPROM Alarm

Whenever corrupted data is memorised in Eeprom, an Eeprom alarm will be signalled. The buzzer will sound and an alarm message will flash on the display:

ALL EEprom

Any cycles in progress will be interrupted all outputs are de-activated.

The buzzer can be turned off by pressing any button.

To reset card, press the button. After resetting, the card will return to standby.

NOTE: after an Eeprom alarm, all parameters will be reset to default values.

WORKING IRREGULARITIES

In case of working irregularities, before to call the technical service in zone verify that:

the main switch 1 is lighting and the current is present;(63)

the regulated temperature is the wished one; (65)

the doors are perfectly closed;

the machine is not near heat sources; (38)

the condenser is clean and the fan works regularly;

there is not excessive frost on the evaporating battery.

In case of negative result, contact the nearest service centre indicating the model and the serial number shown on the rating placed on the appliance instrument panel. (11)

DAILY CLEANING

To guarantee a perfect hygiene and conservation of the refrigerated cabinet (66) it is recommended to carry out often and/or daily the cleaning operations as indicated hereunder:

Carefully wash the external parts only through the satin finish, wiping with a squeezed sponge previoulsy soaked in mild detergent.

The detergents must not contain chlorine and must not be abrasive. (67)

The kind of detergents recommended are the ones indicated hereunder:

Composite action disinfecting detergent; (containing non-ionic surfactants, benzalkonium chloride, chelating agents and pH buffer)

Laboratory, neutral detergent for hand washing; (containing anionic and non-ionic surfactants)

Food environments degreasant; (containing anionic surfactants and EDTA)

Before using the detergents, dilute them, if needed, following the instructions on the label.

Leave the detergents act for at least 5 minutes.

Rinse carefully the fridge walls with a sponge drenched in running water. (69) Dry carefully using a clean sponge.

WARNING: absolutely do not use utensils or materials which could cause cuts and consequently rust formations. (68)

Remove any leftovers or food marks from the inside of the machine (see next paragraph)

FOOD STAINS AND HARDENED RESIDUES

In case there are food or waste stains in the fridge, wash the surfaces with water and clean them off before they might harden.

If the wastes have already hardened, please follow the instructions hereunder:

Use a soft sponge drenched with lukewarm water and neutral detergent (you can use the detergents for the daily cleaning operations, at the highest concentration estimated by the label). (72)

Dampen the hardened waste so as to maintain it damp for at least 30 minutes passing on it every five minutes the sponge drenched with water and detergents on the hardened dirty area. At the end of this soaking operation remove the waste with the sponge drenched with water and neutral detergents.

If needed, use a wooden spatula or a fine stainless-steel sponge, taking care of not damaging the fridge surface. (70)

At the end of this process it is recommended a daily cleaning operation cycle of all the internal surfaces of the fridge.

When the cleaning operations are over, rinse carefully with a sponge drenched with running water.

Dry carefully using a clean sponge.

The space around and under the appliance must also be cleaned and held in perfect hygiene. Clean using water and neutral soap or detergent. (71)

Protect the sheet metal parts with silicon wax.

PERIODIC CLEANING AND MAINTENANCE

For regular performance of the appliance, periodic cleaning and maintenance operations are recommended.

Before to begin with the operations proceed as following: set the general cut-out in OFF position. (16) remove the plug from the socket and wait till the complete entfrosting of the appliance. (17)

After removing all protections, carefully clean the condenser of the refrigerating unit with either a vacuum cleaner or a non-metallic brush. (73)

WARNING: The cleaning and mantainance of the refrigerating engine and the compressor area needs the intervention of a skilled technician, therefore it cannot be done by other persons. (30)

Clean the inner/outer surfaces of the machine as suggested in the "daily cleaning" paragraph.

The appliances with positive temperature "NORMAL TEMPERATURE" are provided with a drain hole in the bottom.

Verify that the hole is not obstructed and eventually clean it. (75)

After opening the vapour generator kit cover, remove the vapour tube and decalcify using running water. Disassemble the boiler from the kit and decalcify with running water. Reassemble. (76a) The cleaning and mantainance operations have now come to end.

USAGE INTERRUPTIONS

In case of longer inactivity of the appliance and for maintaining it in the best state act as following:

set the general cut-out in OFF position. (16) remove the plug from the socket. (17) empty the appliance and clean it as described In the chapter "CLEANING". (76) drain the water from the vapour generator boiler after removing the clamp and tube. (76a) let the doors open to avoid the forming of bad smell. (77) cover compressor set with a nylon sheet to protect it from dust. (78)

USEFULL ADVICES FOR THE CARE OF THE STAINLESS STEEL

The appliances are built with STAINLESS STEEL AISI 304. (79)

For the cleaning and mantainance of the parts of stainless steel follow the advices written below, bearing in mind that the first and fundamental rule is to guarantee the non toxicity and best hygiene of the dealed products.

The stainless steel has a thin oxide coat that prevents rust formation.

But there are substances or detergents that can destroy this coat and give origin to corrosions. Before using any detergent product ask always your dealer about which neutral detergent is the most qualified and does not cause corrosions on the steel. (73)

In case of scratches on the surfaces it is necessary to smooth them using thin STAINLESS STEEL wool or an abrasive sponge in synthetic fibrous material, wiping in the direction of the satin. (80)

WARNING: for the cleaning of the STAINLESS STEEL never use iron wool and never let them rest on the surfaces because little iron deposits could remain on the surfaces and cause rust formations by contamination and endanger the hygiene. (81)

MALFUNCTIONING

Malfunctioning during operation is often due to banal causes, whitch may nearly all be resolved without the help of a specialised technician. Consequently, before getting in touch with a service centre, check the following:

PROBLEM	POSSIBLE CAUSES		
The appliance does not start	Check that the plug is properly inserted into the socket.		
	Check that there is voltage at the socket		
The internal temperature is too high	Check the electronic card adjustment		
	Check for a heat source in the vicinity		
	Check that the door closes properly		
The appliance is excessively noisy	Check that the appliance is standing level. A lopsided appliance could		
	set off vibrations		
	Check that the appliance is not touching other appliances or parts		
	which could resonate		
There are unpleasant smells inside	There are foodstuffs with a particularly strong smell (for example		
the appliance	cheese and melon), placed in non-sealed containers		
	Internal surfaces must be cleaned		
Some condensation is produced on	Room humidity is very high		
the appliance	Doors are not well-closed		

Upon completion of the above checks, if the fault persists, contact an authorised service centre. Always indicate:

the nature of the fault

• the model and the serial number that can be found on the technical feature plate, placed under the appliance instrument panel.

WASTE DISPOSAL AND DEMOLITION

WASTE STORAGE

At the end of the product life, avoid release to the environment. The doors should be removed before disposal.

Temporary storage of special waste is permitted while waiting for disposal by treatment and/or final collection. Dispose of special waste in accordance with the laws in force with regard to protection of the environment in the country of the user.

PROCEDURE FOR ROUGH DISMANTLING THE APPLIANCE

All couintries have different legislation; provision laid down by the laws and the authorised bodies of the countries where the demolition takes place are therefore to be observed.

A general rule is to deliver the appliance to specialised collection and demolition centres. Dismantle the appliance grouping together the components according to their chemical nature. The compressor contains lubricating oil and refrigerant, which may be recycled. The appliance components are considered special waste, which can be assimilated with domestic waste.

Make the appliance totally unusable by removing the power cable and any door locking mechanisms in order to avoid the risk of anyone being trapped inside.

DISMANTLING OPERATIONS SHOULD BE CARRIED OUT BY QUALIFIED PERSONNEL.

THE SAFE DISPOSAL OF WASTE FROM ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE DIRECTIVE 2002/96/EC)

Do not dump pollutant material in the environment. Dispose of it in compliance with the relevant laws.

Under the WEEE (Waste Electrical and Electronic Equipment) Directive 2002/96/EC, when scrapping equipment the user must dispose of it at the specific authorised disposal centres, or reconsign it, still installed, to the original seller on purchase of new equipment.

All equipment which must be disposed of in accordance with the WEEE Directive 2002/96/EC is marked with a special symbol (12).

The improper disposal of Waste Electrical and Electronic Equipment is liable to punishment under the relevant laws in the countries where the offence is committed.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT MAY CONTAIN HAZARDOUS SUBSTANCES WITH POTENTIAL HARMFUL EFFECTS ON THE ENVIRONMENT AND HUMAN HEALTH. YOU ARE URGED TO DISPOSE OF THEM PROPERLY.

INVERTING THE DOOR(82)

Appliance cabinets are normally supplied with opening to the right.

To invert the door (hinge on the left side) follow this procedure:

- Rotate the instrument panel on the side heads by removing the "F" screw.
- Remove the two fixing screws of the bracket "A" and the holding screw of the hinge "B".
- Extract the door, remove the hinge "B" and the component "E" and invert their position.
- Remove the lower bracket "D" and install it in its housing on the opposite side.
- Place the door by introducing the hole of the lower component "E" into the pin of the bracket "D".
- Fix the bracket "A" to the structure on the opposite side by tightening the fixing screws.
- Before tightening the bracket screws, check the hinge height (12 mm approx.) and the door perpendicular position with respect to the structure.
- Move the micro located on the control panel to the opposite side, using the pre-arranged holes.
- Replace the instrument panel.

NOTE: Keep the door closed when removing and installing the brackets.

REFRIGERANT MATERIAL SAFETY DATA SHEET

R404A: fluid components

trifluoroethane (HFC 143a) 52% pentafluoroethane (HFC 125) 44% tetrafluoroethane (HFC 134a) 4%

GWP = 3750ODP = 0

R452A: fluid components

pentafluoroethane (HFC 125) 59% tetrafluoropropene (HFC 1234yf) 30% difluoromethane (HFC 32) 11%

GWP = 2141 ODP = 0

Hazard identification

Overexposure through inhalation may cause anaesthetic effects. Acute overexposure may cause cardiac rhythm disorders and sudden death. Product mists or sprays may cause ice burns of eyes and skin.

First aid procedures

Inhalation:

keep injured person away from exposure, warm and relaxed. Use oxygen, if necessary. Give artificial respiration if respiration has stopped or is about to stop. In case of cardiac arrest give external cardiac massage. Seek immediate medical attention.

• Skin:

use water to remove ice from affected areas. Remove contaminated clothes.

CAUTION: clothes may adhere to skin in case of ice burns.

In case of contact with skin, wash with copious quantities of lukewarm water. In case of symptoms (irritation or blisters) seek medical attention.

• Eyes:

immediately wash with ocular solution or fresh water, keeping eyelids open for at least 10 minutes. Seek medical attention.

• Ingestion:

it can cause vomit.. If conscious, rinse mouth with water and drink 200-300 ml of water. Seek medical attention.

• Other medical treatment:

symptomatic treatment and support therapy when indicated. Do not administer adrenaline or sympatheticomimetic drugs after exposure, due to the risk of arrhythmia and possible cardiac arrest.

Environmental data

Persistence and degradation

• HFC 143a:

slow decomposition in lower atmosphere (troposphere). Duration in atmosphere is 55 years.

HFC 125:

slow decomposition in lower atmosphere (troposphere). Duration in atmosphere is 40 years.

• HFC 134a:

relatively rapid decomposition in lower atmosphere (troposphere). Duration in atmosphere is 15.6 years.

• HFC 143a, 125, 134a:

does not affect photochemical smog (not included in volatile organic components – VOC – as established in the UNECE agreement). Does not cause ozone rarefaction.

Product exhausts released in the atmosphere do not cause long-term water contamination.

THE INSTRUCTION HANDBOOK CONTAINS A WIRING DIAGRAM ON THE LAST PAGE

POS	DESCRIPTION	POS	DESCRIPTION
1	COMPRESSOR UNIT	44	RELAY COMPRESSOR
2	COMPRESSOR FAN	44A	RELAY PTC
3	GENERAL TERMINAL BOARD	44B	RELAY MAGNETIC MICRO-SVWITCH
6	MAIN SWITCH WITH PILOT	56	FILTER
8	PLUG	69	GROUNDING TERMINAL
9	EVAPORATOR FUN	70	HIGHT-PRESSURE SAFETY PRESSUR SWITCH
9A	EVAPORATOR FUN	75	SOLENOID VALVE
9B	EVAPORATOR FUN	76	MAGNETIC MICRO-SVWITCH
10	INTERNAL LIGHTING LAMP	85	CONNECTION BOX
10A	INTERNAL LIGHTING LAMP	86	CONDENSER PROBE
12	SOLENOID VALVE DEFROSTING	90	DIGITAL THERMOREGULATOR
14	HUMIDITY VARIATOR WITH PILOT	91	PTC RESISTOR
15	MICRO FAN-SWITCH	96	ELECTRONIC CARD
15A	MICRO FAN-SWITCH	101	BUFFER RESISTANCE
18	SECURITY THERMOSTAT PILOT	102	BIMETALLIC SAFETY THERMOSTAT
19	THERMOSTAT PILOT	103	HUMIDITY PROBE
20	DOOR ANTICONDENSING RESISTOR	104	LEVEL ADJUSTER
20A	DOOR ANTICONDENSING RESISTOR	105	LEVEL PROBE
21	TRY BOTTOM RESISTOR	106	VAPOR GENERATOR SAFETY THERMOSTAT
22	RESISTANCE FOUND BASIN	107	CHAMBER ELECTRIC RESISTANCE
25	TRANSFORMER	108	VAPOR GENERATOR RESISTANCE
28	INTERNAL LIGHTING SWITCH	109	RETARDER-PROVER PANEL CARD
29	TL LAMPS BALLAST	110	RETARDER-PROVER CONTROL CARD
30	STARTER	111	RETARDER-PROVER REALY EXPANSION CARD
31	TL LAMP	112	HUMIDIFICATION WATER ELECTROVALVE

