

BROMIC[®] REFRIGERATION

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SB

MANUALE USO E MANUTENZIONE

USE AND MAINTENANCE INSTRUCTIONS

NOTICE DE MODE D'EMPLOI ET D'ENTRETIEN

GEBRAUCHS- UND WARTUNGSHANDBUCH

MANUAL DE USO Y MANUTENCIÓN

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Thank you for choosing Uniblock.
Please read these instructions carefully. They provide details and advice on the correct method of installing, using and maintaining this unit, in order to obtain maximum reliability, efficiency and long life.

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1 SAFETY RECOMMENDATIONS

When installing and using the unit please follow the recommendations listed here below.

- Installation shall be carried out in strict compliance with the diagrams and instructions supplied by the manufacturer.
- Damages due to improper connections are excluded.
- The electric system available where the unit is installed shall meet the relevant standards in force.
- Maintenance shall be effected by trained personnel or by the manufacturer according to the provisions supplied by EN378.



WARNING

Use safety gloves to protect your hands from possible cuts.

The user is strongly recommended to contact the manufacturer before attempting any intervention on the unit and any use not corresponding to the manufacturer's indications (in particular as for the field of application) and to enquire about the possible dangers and contra-indications connected with an improper use of the machine.

- The unit shall be used following these instructions and sticking to the destination of use indicated by the supplier. Any incorrect use can result in damages to the unit and represents a serious danger for people's health.



ATTENTION

The unit is not suitable for working in explosive environments. Therefore the use of the unit in an explosion-dangerous atmosphere is absolutely forbidden.



ATTENTION

The unit is not suitable for working in salty environments. In such a case protect condenser and evaporator with appropriate means.

When maintenance involves operations on the refrigerating circuit, empty the system and let it reach the atmospheric pressure.



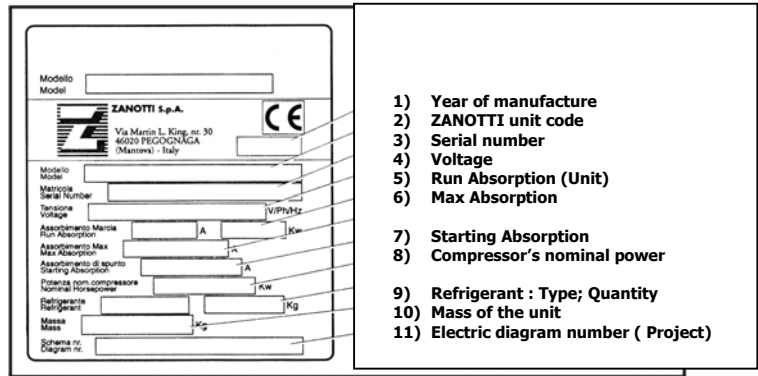
WARNING

Do not discharge the refrigerant in the atmosphere. It must be recovered by specialized technicians using suitable equipment.

- Quantity and quality of the refrigerant to be charged are indicated on the data plate.
- Do not use refrigerants of different kind (especially inflammable fluids, for example hydrocarbons) or air.
- Do not modify or alter the refrigerating circuit or its components (for example: welding on compressor body)
- The final user shall protect the system from external fire dangers.

2 Table of warning and attention plates

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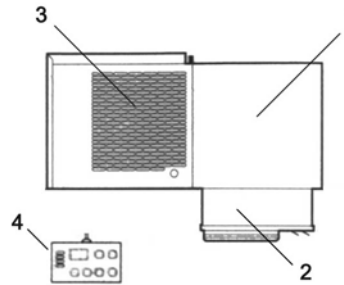


	<p>Refrigerant</p>
	<p>Condensate drain line</p>
	<p>Attention: hot or cold parts</p>
	<p>Attention: switch off before operating on the unit.</p>
	<p>Attention: danger of electrocution</p>
	<p>Connect this cable to a circuit breaker, never to the main line directly.</p>
	<p>Direction of rotation</p>
	<p>Colours of supply cable wires</p>
	<p>Attention - important : clean the condenser periodically by blowing air from the inside outwards. Stop the unit before cleaning.</p>
	<p>Room light cable</p>
	<p>Microdoor cable</p>
	<p>Door heater cable</p>

3 Description of the unit

The SB series includes air-cooled or water-cooled (optional) condensing units built on the basis of the single-block principle. They consist of:

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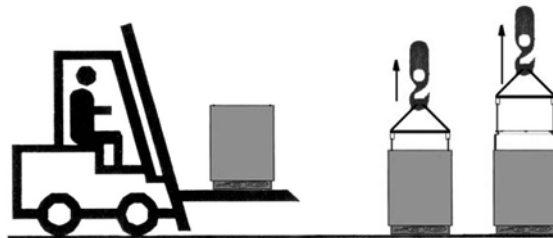
1. a condensing unit placed outside the cold room;
2. an evaporator placed in an insulated box and installed outside the cold room;
3. an electric control panel placed on the condensing unit;
4. a wall-mounted remote control panel.

4 Operation

SB single blocks are compression units where cold is produced by vaporizing a liquid refrigerant (HFC type) at low pressure in a heat exchanger (evaporator). The resulting vapour is brought again into the liquid state by mechanical compression at a higher pressure, followed by cooling in another heat exchanger (condenser). The compressor is hermetic, with reciprocating motion, supplied with single-phase or three-phase power. Defrost takes place automatically in pre-set cycles; manual defrost is also possible.

5 Handling

The unit can be handled by lifting and transport means.



WARNING



Make sure that no one is in transit in the operating area of the lifting/transport means to prevent any possible accidents to people.



If the unit is in a wooden case or crate, sling the packing properly before handling it.



Lifting speed shall be such as not to make the packed unit oscillate dangerously and possibly fall.

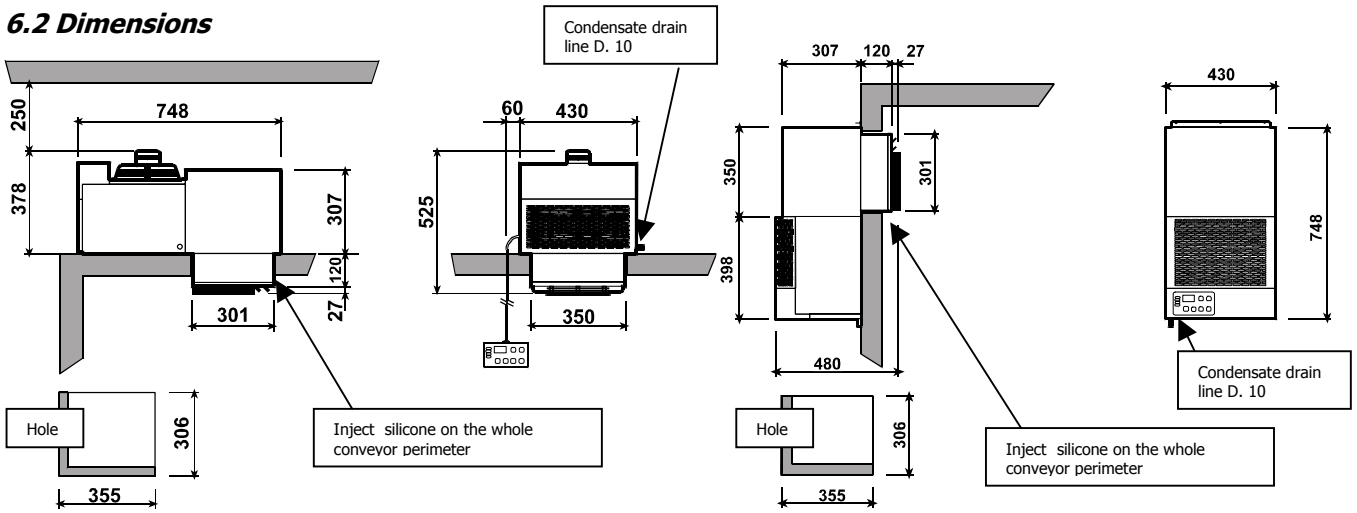
6 Installation

6.1 Plates

The unit is supplied with warning and attention plates as listed in the relevant table.

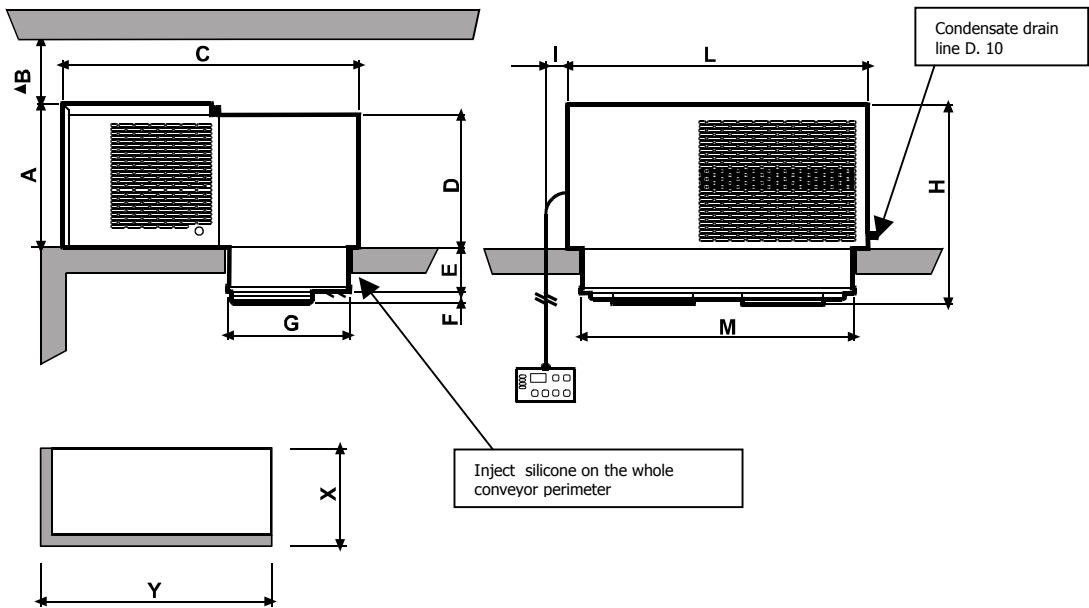
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6.2 Dimensions



SB120 O

SB120V



Mod.	A	B	C	D	E	F	G	H	I	L	M	X	Y
120-O	378	250	784	307	120	27	301	525	60	430	350	306	355
125	357	250	719	340	122	28	332	506	60	620	545	337	550
225	390	250	809	360	122	28	332	540	60	820	745	337	750
135	427	250	929	410	122	98	452	645	60	820	745	456	750

6.3 Location

To obtain optimal operation of the unit act as follows:

A) Place the unit in a well ventilated room, far from heat sources.

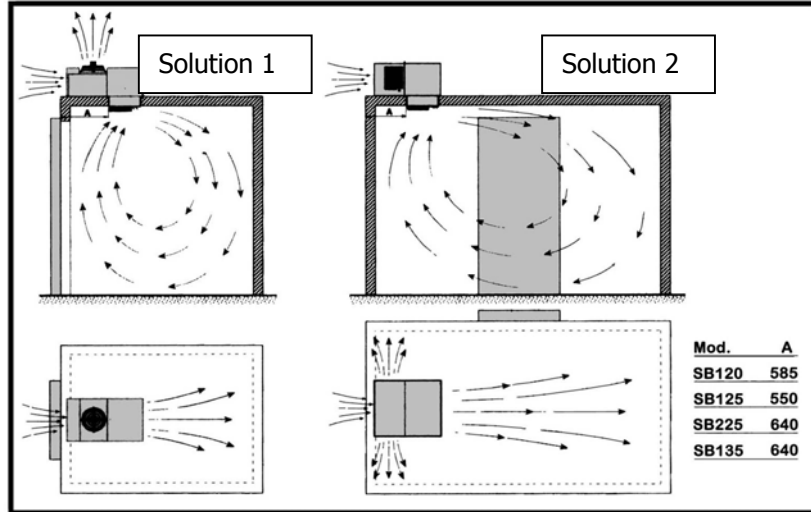
B) Limit the number of door openings.

C) Make sure that the unit has good air supply and discharge.

D) Fit a drain line to the defrost water drain connection in the lower part of the unit.

Note: SB units are equipped with automatic evaporation of defrost water; drain is just a precaution in case of troubles.

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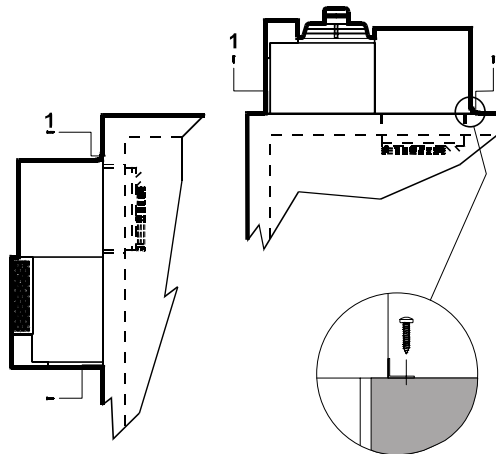


6.4 Free room

When installing the unit leave enough free room to allow opening, correct use and easy maintenance in safe conditions.

6.5 Installation

- C) Prepare a opening with suitable dimensions in the cold room wall (see pictures above).
- D) Position the unit onto the cold room wall inserting the evaporator section in the opening.
- E) Fix the unit using the screws supplied.

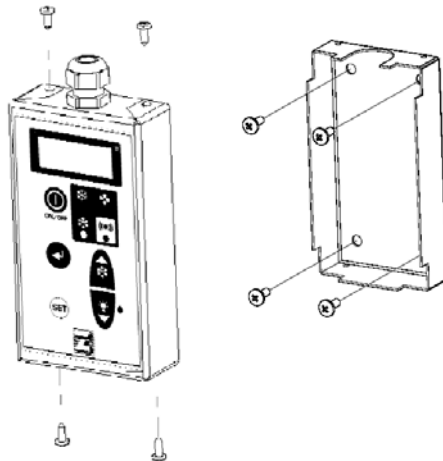


6.6 Fitting the remote panel:

Remove the side screws and lift the front cover.

Fix the back plate to the wall using the pre-drilled holes; be careful the panel is kept in a vertical position.

Close the panel by remounting the cover. Fit the connecting cable between panel and unit making sure not to bundle it with other cables.

**ATTENTION**

Check that the unit and its devices have suffered no damages during transport. Pay special attention to the components secured to the electric panel door and to the refrigerating circuit pipes. Mount the unit as shown in the drawings; make sure that the electric connections are carried out properly.

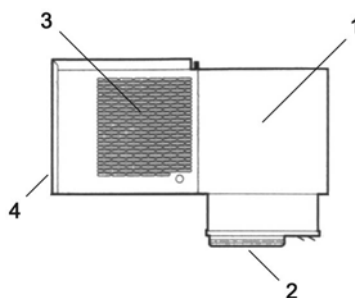
6.7 Safety devices

The following mechanical safety devices are supplied:

1. Fixed upper and side protections for evaporator and condensing unit, secured by locking screws.
2. External fan protections placed on the evaporating and condensing units, secured with screws.

The following electrical safety devices are supplied:

- a. Protection of fans (belonging to motors) against high power absorption; with automatic reset.
- b. High pressure switch (only for special components) to protect against excessive pressure; with automatic reset.

**WARNING**

Above devices have been developed to safeguard the operator's safety.

6.8 Cleaning

Clean the unit carefully. Remove any dust, foreign substances and dirt possibly deposited during handling. Use detergents and degreasers.

**ATTENTION**

Solvents are not allowed.

7 Connecting the unit

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ATTENTION

Before connecting the unit make sure that mains voltage and frequency correspond to the values shown in the data plate. Voltage tolerance: +/- 10% compared to nominal value.

7.1 Electric connection

Connect the unit after checking the panel components.

ATTENTION



Connection to the electric line shall be effected applying a suitable safety device (a circuit breaker or a ground fault interrupter) selected by the installer on the basis of the line involved and of the absorption indicated on the unit plate.

If a cold room includes more units, each unit shall be provided with its own safety device.

Connect the unit paying attention to the colours of the supply cable wires:

- | | |
|-----------------------------|--|
| a) 230V/1/50-60Hz 3 wires | Blue = Neutral
Yellow/Green = Ground
Brown = Phase |
| b) 230V/3/50-60Hz 4 wires | Blue = Phase
Yellow/Green = Ground
Brown = Phase
Black = Phase |
| c) 400/3/50 Hz 5 wires | Blue = Neutral
Yellow/Green = Ground
Brown = Phase
Black = Phase
Black = Phase |

We advise to install a microswitch (not supplied) on the cold room door which will

- switch on the light in the cold room, stop the unit and
- override the temperature alarm (for about one hour after door closing) every time the door is opened.

The necessary cable is available with the unit. Connect it keeping in mind the following:
microswitch closed = door closed.

ATTENTION



Above microswitch is not supplied with the unit. If the microdoor cable is disconnected or damaged, the same conditions will occur as in case of open door and connected microdoor.

"B" RANGE units (B = low temperature) are supplied with a cable for door heater connection, to be made using a fuse suitable for the door heater used.

The unit is also equipped with a cable for cold room lamp connection (lamp voltage should be 230 V and lamp max capacity 100 Watts).

ATTENTION



Do not connect microdoor, cold room light or door heater cables to the 230V line. Each cable is equipped with a plate showing how it should be connected.



WARNING

Any defective electrical part should be replaced by trained personnel exclusively.

The electric connection should be effected by qualified personnel.

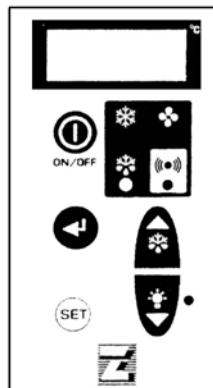
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7.2 Connection to water system (water condenser)

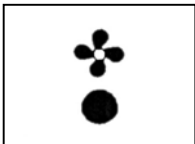
This connection is only necessary if the unit has a water-cooled condenser. It is effected by following the indications of the tags positioned by the inlet and outlet pipes. Connection pipes should never be smaller in diameter than those on the unit. A minimum water pressure of 1 bar is required for correct operation of the unit.

8 Electric controls

8.1 Control panel



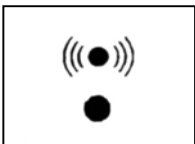
1. Control LED (GREEN)
ON : compressor is running, unit is refrigerating.
Flashing : compressor is in start delay mode.
OFF : compressor is off, room temperature is down to set value.



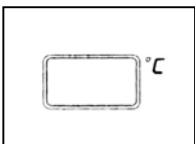
2. Control LED (GREEN)
ON : evaporator fan is running.
Flashing : evaporator fan is in start delay mode.
OFF : evaporator fan is off. Defrost is in course.



3. Control LED (YELLOW)
ON : Automatic or manual defrost is in course.



4. Alarm LED (RED)
ON : alarm has been activated because of a malfunctioning sensor, or pressure switch intervention, or cold room temperature exceeding allowed tolerances.
OFF : Unit is operating normally.



5. DISPLAY : on connection to the mains it shows OFF to indicate the condition of the unit. By pressing ON/OFF key for 3 seconds the unit is turned ON and the display shows the cold room temperature. In programming mode the parameters to be set are displayed; in alarm mode the alarm code is displayed.



6. "SET" key : when pressed for 2 seconds it lights up and allows room temperature to be set. During programming it is used to pass from a submenu to an upper one.

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7. "DOWN/ROOM LIGHT" key: in programming mode or when setting room temperature it is used to reduce the value displayed; otherwise it is used to switch on/off the cold room light.



8. "SB.M./UP" key: in programming mode it is used to increase the values displayed. If pressed for more than 5 seconds it enables manual defrost to be carried out.



9. "ON/OFF" key: when pressed for 2 seconds it turns the unit on or off.



10. "Enter" key: it gives access to programming menu and submenus. Access to the programming mode requires the installer's assistance and should be effected only if necessary.

9 Checks, regulations and adjustments

Before turning the unit on, check that:

- locking screws are tight
- electrical connections have been carried out correctly.

In the event that the unit has been opened:

- no tools were left inside
- assembly is correct
- there are no gas leaks
- front cover is secured correctly

9.1 Starting

Before starting the unit act as follows:

- Connect the unit to the mains. The display is turned on and shows OFF.
- If the unit has a preheating cycle, leave it in this condition for at least 3 hours.
- If the unit has a voltage monitor, leave it in this condition for at least 7 minutes to have the counting phase carried out
- Set the required cold room temperature.
- Press ON/OFF key to switch the unit on.



ATTENTION

Medium temperature range : +10 -5°C
Low temperature range : -15 -25°C

Setting room temperature:

- Connect the unit to the mains. OFF is displayed.
- Press SET for three seconds. The green led lights up and the previously set temperature is displayed.

To change this value press following keys:



UP to increase temperature



DOWN to decrease temperature

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Press SET key to confirm the set value.

Now the unit is operating and does not require any further programming. The refrigerating cycle is fully automatic according to the factory-set parameters, which can be modified by authorised personnel only.



ATTENTION

24 hours after starting check evaporator state. If ice has formed, defrost frequency should be increased. In low temperature units the evaporator condition should be checked every week during the first month of operation.

10. Wiring

A wiring diagram, specific for the units of the SB series, is enclosed with these use and maintenance instructions.

11. Maintenance and repairs

Suitable maintenance is crucial for obtaining longer life, perfect working conditions and high efficiency of the unit as well as for ensuring the safety features provided by the manufacturer.

12 Routine maintenance

Good operation of the unit requires the condenser to be cleaned periodically (frequency of cleaning depends on the environment where the unit is installed).

Turn off the unit and clean it by blowing air from the inside outwards. Should no air jet be available, use a long-haired brush and work on the outside of the condenser.

In case of water-cooled condensers have the unit cleaned by a plumber with special descaling agents.



WARNING

Use safety gloves to protect your hands from possible cuts.



WARNING

Disconnect the unit before working on it.

12.1 Periodical maintenance

Periodically check wear condition of electrical contacts and remote switches; if necessary replace them.

12.2 Service operations to be carried out by qualified technicians or by the manufacturer

Following operations shall be carried out by qualified technicians or by the manufacturer exclusively. Under no circumstances the user is allowed to:

- replace electrical components
- work on the electric equipment
- repair mechanical parts
- work on the refrigerating system
- work on the control panel, ON/OFF and emergency switches
- work on protection and safety devices.

12.3 Troubleshooting

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During operation following troubles may occur:

1. Compressor stops. The unit is equipped with an overtemperature device which stops the compressor every time the max. allowable temperature of motor windings is exceeded. Possible causes are:
 - insufficient ventilation of the room where the unit is installed;
 - anomaly in mains voltage;
 - faulty operation of condenser fan.Device reset is automatic.
2. Ice forms on the evaporator preventing air from flowing regularly. Possible causes are:
 - the door is opened too frequently;
 - faulty operation of evaporator fan;
 - faulty solenoid valve (in models with hot gas defrost);
 - faulty defrost heater (in models with electric defrost);
 - faulty defrost process. In this case some measures can be taken: increase defrost termination temperature by some degrees, increase number of defrosts.

ATTENTION



Do not use either hot water or any pointed, cutting, metal objects to remove ice blocks.

3. Display does not light up. Check:
 - if there is power to the unit;
 - if mains cable is connected properly;
 - fuses inside the electric panel
4. Unit does not start operating when pressing ON/OFF key (the display is turned on): check microdoor connection keeping in mind that the switch contact must be closed when the door is closed.

Unsatisfactory efficiency of the unit:

If no defects are found in the unit check that: cold room doors are perfectly tight; there is no cold dispersion; the cold room is used wisely; no unfrozen liquids or foodstuffs are placed in the low temperature room; the evaporator is ice-free.

We recommend installation of the machines far from the doors especially when the cold room is expected to be opened many times a day.



WARNING:

Removal of protections during machine operation is absolutely forbidden. They have been developed to safeguard the operator's safety.

12.4 Alarms

When the unit is in alarm mode, the control LED lights up, the buzzer (available if installed by the customer) starts operating and the display shows an alarm code allowing the immediate identification of the alarm.

ALARM	DISPLAY	CAUSE	REMEDY
High temperature	(HI) alternating with cold room temperature.	Excessive door openings. Too high temperature of products stored. Malfunction of the unit.	
Low temperature	(LO) alternating with cold room temperature.	Malfunction of electronic controller	Service intervention
Room sensor	Steady (E0).	Sensor not connected	Replace sensor
Evaporator sensor	(E1) alternating with cold room temperature	Sensor not connected	Replace sensor
High pressure	(HH) alternating with room temperature; LED (4) lights up each time the high pressure switch is tripped. If more than 10 trips occur in one hour, then (PP) alternating with cold room temperature is displayed and alarm relay is activated together with LED (4). In this situation all functions are interrupted.	Faulty operation of condenser fan. Dirty condenser.	Switch off the refrigerating unit, wait a few seconds and switch on again.
Voltage monitor	(AM) alternating with cold room temperature. The voltage monitor is an electronic device which checks the supply voltage of the unit when voltage variations exceed +/-12%. The unit stops for about 6 minutes and restarts automatically if voltage is within the prescribed limits. Warning: on first starting the monitor carries out a counting phase of 7 minutes, during which the unit should be left connected but in OFF condition.	Wrong supply voltage	

13 HOW TO ORDER SPARE PARTS

When ordering spare parts make reference to the number written on the unit plate.



WARNING

Worn parts should be replaced only by qualified personnel or by the manufacturer.

14 HOW TO DISPOSE OF THE PACKING

Wooden, plastic, polystyrene packing shall be disposed of according to the regulations in force in the country where the unit is used.

15 HOW TO DISPOSE OF THE UNIT

Do not discharge scrapped components in the environment. They should be disposed of by companies dealing with special waste collection and recovery, according to the regulations in force in the country where the unit is used.

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WARNING

Do not discharge the refrigerant in the atmosphere. It should be disposed of by companies dealing with special waste collection and recovery.

**LEGENDA SCHEMA ELETTRICO - WIRING DIAGRAM
LEGENDE SCHEMA ELECTRIQUE – SCHALTPLANLEGENDE
LEYENDA ESQUEMA ELECTRICO - LEGENDA ESQUEMA ELECTRICO**

BA	RESISTÊNCIA DO CARTER COMPRESSOR M1
SONDA TEMPERATURA AMBIENTE	
ROOM SENSOR	EP
SONDE CHAMBRE FROIDE	RESISTENZA PORTA
RAUMSONDE	DOOR HEATER CIRCUIT
SONDA CAMARA	RESISTANCE PORTE
SONDA TEMPERATURA AMBIENTE	TÜRHEIZUNG
	RESISTENCIA PUERTA
	RESISTÊNCIA DA PORTA
BC	
SONDA CONDENSATORE	ER1
CONDENSER ALARM SENSOR	RISCALDATORE QUADRO
SONDE ALARME CONDENSEUR	CONTROL BOARD HEATER
KOND-LÜFTER- ALARMSONDE	RESISTANCE TABLEAU CONTROLE
SONDA ALARMA CONDENSADOR	SCHALTAFELHEIZUNG
SONDA ALARME CONDENSADOR	RESISTENCIA CUADRO ELECTRICO
	AQUECIMENTO DO QUADRO
BS	
SONDA SBRINAMENTO	ER2
DEFROST SENSOR	RISCALDATORE MONITOR
SONDE DEGIVRAGE	VOLTAGE REGULATOR HEATER
ABTAUUNGSONDE	RESISTANCE MONITEUR
SONDA DESCARCHE	MONITORHEIZUNG
SONDA DEGELO	RESISTENCIA MONITOR
	AQUECIMENTO DO MONITOR
BVR	
VARIATORE DI VELOCITA'	ES
SPEED REGULATOR	RESISTENZA SCARICO CONDENSA
VARIANT VITESSE	CONDENSATE DRAIN HEATER
GESCHWINDIG- KEITSREGLER	RESISTANCE ECOULEMENT CONDENSE
VARIADOR DE VELOCIDAD	KONDENSWASSERABLAUFHEIZUNG
VARIADOR DE VELOCIDADE	RESISTENCIA DESAGÜE CONDENSACION
	RESISTÊNCIA DO DRENO DE CONDENSAÇÃO
BVRS	
SONDA VARIATORE VELOCITA'	F13
SPEED REGULATOR SENSOR	FUSIBILE MONITOR
SONDE VARIATEUR VITESSE	VOLTAGE REGULATOR FUSE
GESCHWINDIGKEITSREGLERSONDE	FUSIBLE MONITOR
SONDA VARIADOR VELOCIDAD	MONITORSICHERUNG
SONDA VARIADOR DE VELOCIDADE	FUSIBLE MONITOR
	FUSÍVEIS DO MONITOR
E	
RESISTENZE SBRINAMENTO	F1
DEFROST HEATER	FUSIBILE COMPRESSORE
RESISTANCES DEGIVRAGE	COMPRESSOR FUSE
ABTAUHEIZUNGEN	FUSIBLE COMPRESSEUR
RESISTENCIAS DESCARCHE	KOMPRESSORSICHERUNG
RESISTÊNCIAS DE DEGELO	FUSIBLE COMPRESOR
	FUSIVEIS COMPRESSOR
E1	
RESISTENZA CARTER COMPRESSORE M1	F1E
COMPRESSOR CRANKCASE HEATER	CENTRALINA ELETTRONICA
RESISTANCE CARTER COMPRESSEUR	ELECTRONIC CONTROL CAB
KOMP.-ÖLSUMPFFHEIZUNG	PANNEAU DE CONTRÔLE ELECTRONIQUE
RESISTENCIA DEL CARTER DEL COMPRESOR	

ELEKTRONENKONTROLL- PANEEL
PANEL DE CONTROL ELECTRONICO
F20

FUSIBILE AUSILIARIO
AUXILIARY FUSE
FUSIBLE AUXILIAIRE
HILFSICHERUNG
FUSIBLE AUXILIAR
FUSÍVEIS AUXILIARES

FL
FUSIBILE LUCE CELLA
ROOM LIGHT FUSE
FUSIBLE LUMIERE CHAMBRE
ZELLELICHTSICHERUNG
FUSIBLE LUZ CAMARA
FUSÍVEL LUZ DA CAMARA

FM
MONITOR
VOLTAGE REGULATOR
MONITOR
MONITOR
MONITOR
MONITOR

FTE
THERMOSTATO EMERGENZA
EMERGENCY 'STAT
THERMOSTAT EMERGENCE
NOTSTANDE- THERMOSTAT
THERMOSTATO DE EMERGENCIA
THERMOSTATO EMERGÊNCIA

HI
SUONERIA ALLARME TEMPERATURA
ACUSTIC TEMPERATURE ALARM
SONNERIE ALARME TEMPERATURE
TEMP.- ALARMWECKER
ALARMA SONORA DE TEMPERATURA
SINALEIRA ALARME DE TEMPERATURA

K1
THERMUTTORE COMPRESSORE M1
COMPRESSOR M 1 CONTACTOR
THERMUTTEUR COMPRESSEUR M 1
KOMPRESSORFERNSCHALTER M 1
CONTACTOR COMPRESOR M 1
INTERRUPTOR COMPRESSOR M1

K11
THERMUTTORE SBRINAMENTO
DEFROST CONTACTOR
THERMUTTEUR DEGIVRAGE
ABTAUFERNSCHALTER
CONTACTOR DESCARCHE
INTERRUPTOR DE DEGELO

M1
MOTORE COMPRESSORE n°1

COMPRESSOR MOTOR Nr.1
MOTEUR COMPRESSEUR Nr.1
KOMPRESSORMOTOR Nr.1
MOTOR COMPRESOR N°1
MOTOR COMPRESSOR n°1

MPC
MICRO PORTA CELLA
DOOR MICROSWITCH(ROOM)
MICROPORTE CHAMBRE
TÜRMIKROSCHALTER(KÜHLZELLE)
MICROPUERTA(CAMARA)
MICRO PORTA CAMARA

MVC
MOTORE VENTOLA CONDENSATORE
CONDENSER FAN MOTOR
MOTEUR VENTILATEUR CONDENSEUR
KOND.-VENTILATORMOTOR
MOTOR VENTILADOR CONDENSADOR
MOTOR VENTILADOR CONDENSADOR

MVE
MOTORE VENTOLA EVAPORATORE
EVAPORATOR FAN MOTOR
MOTEUR VENTILATEUR EVAPORATEUR
VERDMF.-VENTILATORMOTOR
MOTOR VENTILADOR EVAPORADOR
MOTOR VENTILADOR EVAPORADOR

P1MX
PRESSOSTATO INSERZIONE VENTOLA COND.
COND. FAN STARTING PRESSURE SWITCH
PRESSOSTAT MISE EN MARCHE VENTILATEUR
COND.
KOND.-VENTILATORANLAUFPRESSOSTAT
PRESOSTATO INSERCIÓN VENTILADOR COND.
PRESSOSTATO ACIONADOR VENTILADOR COND.

PMI
PRESSOSTATO BASSA PRESSIONE
L/P SWITCH
PRESSOSTAT BASSE PRESSION
NIEDERDRUCKPRESSOSTAT
PRESOSTATO BAJA PRESSION
PRESSOSTATO BAIXA PRESSÃO

PMX
PRESSOSTATO ALTA PRESSIONE
H/P SWITCH
PRESSOSTAT HAUTE PRESSION
HOCHDRUCKPRESSOSTAT
PRESOSTATO ALTA PRESSION
PRESSOSTATO ALTA PRESSÃO

Q1
INTERRUTTORE GENERALE
MAIN SWITCH

INTERRUPTEUR GENERAL
HAUPTSCHALTER
INTERRUPTOR GENERAL
INTERRUPTOR GENERAL

Q3

INTERRUPTORE ESCLUSIONE VAR. VELOCITA'
COND. FAN SPEED REGULATOR "OFF" SWITCH
INTERR. EXCLUSION VARIATEUR VITESSE VENT.
COND.
KOND.-VENTILATORGESCHW. REGLER "AUS"
INTERR. EXCLUSION VARIADOR VELOCIDAD VENT.
COND.
INTERRUPTOR DESLIGA VAR. VELOCIDADE

T

TRASFORMATORE
TRANSFORMER
TRANSFORMATEUR
TRANSFORMATOR
TRANSFORMADOR
TRANSFORMADOR

X

MORSETTIERA-CONNETTORE
TERMINAL BOARD-CONNECTOR
PLAQUE DE JONCTION-CONNECTEUR
KLEMMKASTEN-VERBINDER
REGLETA-CONECTOR
TERMINAL-CONECTOR

YG

SOLENOIDE GAS
REFRIGERANT SOLENOID
SOLENOIDE REFRIGERANT
KÄLTEMITTELMAGNETVENTIL
SOLENOIDE GAS
SOLENÓIDE Gás

YS

SOLENOIDE GAS CALDO SBRINAMENTO
HOT GAS SOLENOID
SOLENOIDE GAZ CHAUD
HEISSGASSOLENOID
SOLENOIDE GAS CALIENTE
SOLENÓIDE Gás QUENTE DEGELO

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