



## OPERATION AND MAINTENANCE BOOK

# Glycol Deck 125

**Document Code: 0150GD12CEN.000**

**serial number:**



### PREAMBLE

The present handbook must be considered as integral part of the equipment, and it must always be available to the persons operating with the unit; this manual must always stay with the equipment, also in case the unit is transferred to another owner.

The operators must carefully read this handbook and follow all instructions herein contained, because VINSERVICE will not be liable for any damages occurred to persons and/or things, or suffered by the equipment itself, whenever any conditions here in described are not respected. Customers has the obligation of respecting the industrial trade secret, according which the following literature and its enclosures could not be altered, edited or sold to third parts, without the explicit authorization of VINSERVICE.

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## 1. RECOMMENDATIONS

This instruction manual should be read in its entirety before using the equipment. Complete knowledge of the information contained herein is essential to the proper functioning and operation of this equipment. The equipment has been designed and built with mechanical safety devices suitable to protect the skilled operator from physical damage. The skilled operator must be fully aware of the operation mechanisms of the equipment and it is the buyer's responsibility to make sure that only competent personnel are allowed to operate it.

The use of original spare parts is essential to the optimization of the equipment's potential and any modifications carried out are the sole responsibility of the skilled operator.

The skilled operator is responsible for all the operations necessary to maintain the equipment in good working order.

### CAUTION

Always disconnect the equipment's electrical socket from the mains before accessing its internal part. Do not remove protective covers or safety grids during operation. Keep hands away from moving part.

## 2. SUPPLY CONDITIONS

- VINSERVICE will not be held liable for any failure to comply with the standards governing correct.
- VINSERVICE will not be held liable for any loss in production, unless expressly shown in the purchase order.
- VINSERVICE will not be held liable for any defects or malfunction arising from; improper use of the equipment, alterations due to the transportation or peculiar environmental conditions, lack off or improper maintenance, manhandling or improper service; operation by unqualified personnel and the use of product accessories not belonging to the equipment.
- VINSERVICE will not be held liable for damages arising from inappropriate or imprudent operations not conforming to those described within this manual and in the attached documentation performed by both expert and inexperienced personnel.
- Since it is not possible to foresee all the installations and environments in which this equipment will be installed, therefore customer must check the following:
  - Environmental conditions where the equipment is installed;
  - Beverage feeding and pushing systems;
  - The capacities of the personnel entrusted with the installation and/or use of the machine.

N.B. Manufacturer accepts liability for commercial parts. If in doubt, ask for documentation.

- VINSERVICE will not be held liable for the disposal of equipment parts or materials needed to operate the machine: coolant gas, compressor or under pressure container, condensers, etc... Please remember that this is an electrical equipment and thus its components must be disposed in compliance with the regulations enforced in its country of installation.

### 3. GENERAL INFORMATION

#### 3.1. Equipment Description

This equipment is composed of a refrigerating unit assemble between a metal plate and a glycol bath.

#### 3.2 Appropriate Uses

This equipment is intended for the cooling of well insulated and carefully configured trunk lines. In operation, cold food grade liquid propylene glycol is pumped through cooling lines that are parallel to and in contact with the product line.

#### 3.3 Inappropriate Uses

This equipment is not intended for use other than that described above. This equipment has not been designed to operate in adverse environmental conditions, including excessive humidity and explosive atmosphere.

### 3.4. TECHNICAL SPECIFICATION

Cooling Distance	125 Feet, 45.7 m
Compressor	1/3 Hp
Refrigerant	R 134 A
Charge	0.25 Kg, 8.8 Oz
Voltage	115 V 60Hz
Current	7 Amp
Temperature control	Digital
Pump	184 Watt
Bath Capacity	50 Liters (13.2 Gallons)
Foam Insulation	1 inch
Inlet Barb	3/8"
Outlet Barb	3/8"
Dimensions.	
H x L x W	712 x 473 x 451 mm
	28 x 18,6 x 17.75"
Box Dimensions	
	750 x 610 x 650 mm

## 4. TRANSPORTATION

### 4.1 Packaging

The equipment is usually shipped in a cardboard box packaging, adequately protected on all its edges. The packaging in its dry and integral state is self-supporting and sturdy enough for machine lifting and handling. If packaging is in a wet state, pay attention while lifting and make sure lifting bands are placed in the centre.

### 4.2 Transportation and handling

Stacking of equipment over another is only allowed when packaging is in its integral and dry state. Equipment should be lifted one at a time. The lifting equipment (ropes, polyester belts, chains) must be designed to bear the weight of the machines: the opening angle must be the same as or less than 50°-60° in order to avoid crashing or damaging the packaging and/or the bodywork sheet metal.

## 5. ACCIDENT PREVENTION AND RESIDUAL RISKS

- Although this equipment has been manufactured under the strictest safety regulations, however for obvious reasons it is not possible to foresee all the installations and environments in which this equipment will be installed.

Therefore it is pertinent that customer should inform the manufacturer of peculiar installation conditions.

- The instructions set out in this manual do not replace the safety instructions and technical data on installation and operation of the equipment. It neither replaces common sense nor the safety regulations enforced in the country of installation.
- Operators must be given correct information. They must therefore read and follow the technical information set out in the manual and in the attached documentation.
- VINSERVICE will not be held liable if installation instructions are not followed.
- The equipment has been designed under strictest energy saving regulations enforced in the manufacturing country therefore customer should avoid unnecessary energy waste.

## 6. INSTALLATION AND ADJUSTMENTS

### 6.1 Installation

After removing the machine from its packaging, check that:

A -The area where the machine is to be installed is solid and perfectly level;

B -The cooler is positioned far from heat or humidity sources.

C -The condenser and the grills are free. It is recommended to leave a 20-30 space cm from wall to grant a good air circulation in the condenser.

### 6.2 Filling of the glycol bath

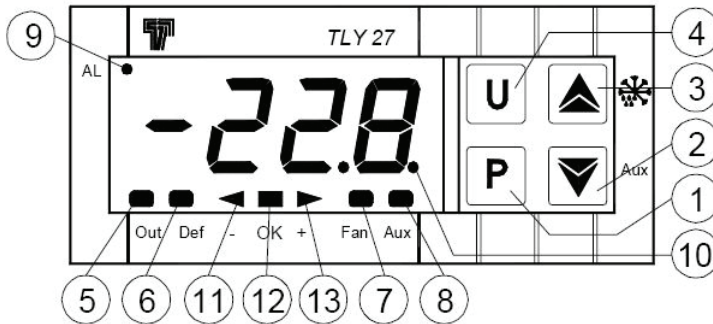
After settling the cooler as indicated proceed with bath filling. Remove the equipment's top cover and then fill the bath with a glycol water solution without added additives up to 1" from the bath top. After filing, replace the top cover. Connect a plastic hose to the overflow pipe and then to the nearest drain. We recommend the use of food grade propylene glycol, mixed in a ratio of 25 % glycol and 75 % water. We also recommend the use of a refractometer to check the mixing ration. The correct mixing ratio should be 16 BRIX. This control operation should be done every 2 months. In the case of values lower than 16, mixing ratio should be corrected by adding more propylene glycol.

### 6.3 Hydraulic connection

- Connect one line from isolated trunk line to pump outlet;
- Connect second circulation line to the inlet of the tub.
- Make sure all re-circulation lines are properly connected and turn the pump motor on.
- Liquid level will drop until circulation lines are full;
- Refill with water approximately 1" from cover.
- Temperature will slowly drop to 30°F on thermostat/outlet gauge;

### 6.4 Regulating the thermostat

#### FRONT PANEL DESCRIPTION



#### KEYS DESCRIPTION

- Key **P** : Used for setting the Set point and for programming the function parameters.
- Key **↓** / Aux: Used for selecting the parameters and for decreasing the values to be set.
- Key **↑** / **☼** : Used for selecting the parameters and for increasing the value to be set. Also used for activating manual defrost.
- Key **U** : Used for visualizing the read temperatures.

#### LED INDICATORS

- Led OUT:** Indicates the compressor or temperature device output status. Led on= (ON), Led off = (OFF), Led blinking = (INHIBITED)
- Led DEF:** Indicates defrost status. Led on= DEFROSTING IN PROGRESS. Led blinking= DRIPPING.
- Led FAN:** Indicates fan status. Led on = (ON), Led off = (OFF) Led blinking = DELAYED AFTER DEFROSTING.
- Led AUX:** Indicates AUX output status. Led on = (ON), Led off = (OFF), Led blinking = (INHIBITED).

**9.Led AL:** Indicates the alarm status. Led on = (ON), Led off = (OFF), Led blinking = (SILENCED or MEMORIZED).

**10.Led SET:** Indicates access to programming mode and programming level of parameters. It also indicates standby status.

**11.Led - :** when (ON), it indicates that a low temperature alarm is in progress. When (BLINKING), it indicates that a low temperature alarm has been memorized.

**12.Led OK:** Indicates that no alarms are in progress

**13.Led +:** when (ON), it indicates that a high temperature alarm is in progress. When (BLINKING), it indicates that a high temperature alarm has been memorized.

#### SETTING THE SET POINT

Press **P** and release it and SP1 or SP2 will be visualized on display depending on the active set.

Use **↑** and **↓** to modify.

Press **P** to exit the set mode or press no key for 15 seconds.

#### SETTING CONFIGURATION PARAMETERS:

Switch on the cooler and make sure no procedure is running. To access function parameters;

##### TO SELECT A PARAMETER GROUP

Keep **P** pressed for about 5 seconds, after which the Led SET comes on and SP is visualized on display.

Press **↑** and **↓** to select the parameters group to be modified.

Press **P** and the code that identifies the parameter in the selected group will be visualized.

#### SETTING CONFIGURATION PARAMETERS:

##### TO SELECT A PARAMETER

Using **↑** and **↓** to select the desired parameter.

##### TO MODIFY A PARAMETER



When the display shows the parameter you would like to modify

Press **P** to memorize new value and display will only show the abbreviation of the selected parameter.



## 6.4 Regulating the thermostat

### SETTING CONFIGURATION PARAMETERS:

#### TO MODIFY OTHER PARAMETERS

Use  and  to select and modify other parameters, and repeat steps as earlier described.

#### TO QUIT THE PROCEDURE

Keep  and  pressed until programming mode is exited or leave no key pressed for about 20 seconds.

### THERMOSTAT PROGRAMABLE PARAMETERS

#### PARAMETER GROUPS DESCRIPTION

SP	PARAMETERS RELATING TO SET POINT
InP	PARAMETERS RELATING TO MEASURING INPUTS
rEG	PARAMETERS RELATING TO TEMPERATURE CONTROL
dEF	PARAMETERS RELATING TO DEFROSTING CONTROL
FAn	PARAMETERS RELATING TO EVAPORATOR FAN CONTROL
PrC	PARAMETERS RELATING TO COMPRESSOR PROTECTION AND POWER ON DELAY
AL	PARAMETERS RELATING TO ALARM CONTROL
din	PARAMETERS RELATING TO DIGITAL INPUT
AuS	PARAMETERS RELATING TO AUXILIARY OUTPUT
Out	PARAMETERS RELATING TO CONFIGURATION OF OUTPUTS
PAn	PARAMETERS RELATING TO CONFIGURATION OF THE KEY BOARD

PARAMETER	DESCRIPTION	ICE CUBE	MINI TWIN GLYCOL	MEDIUM TWIN GLYCOL	TWIN GLYCOL	SUPREME GLYCOL	COLDER	FLAT COLDER
SP 1	Set Point 1	ON DEMAND	-6°C 21.20°F	-6°C 21.20°F	-6°C 21.20°F	-5°C 23°F	-5.5°C 22.1°F	-5°C 23°F
SEnS	Probes Type	NTC	NTC	NTC	NTC	NTC	NTC	NTC
Pr2 (1)	Pr2 Probe presence evaporator	OFF	OFF	OFF	OFF	OFF	OFF	OFF
HSet	Differential	0.1	1	1.5	1.5	1.5	2.5	2.5
dEFE	Max. lenght of defrost cycle	0	10 mins	10 mins	10 mins	10 mins	0	0
dLo	Defrost display lock	OFF	OFF	OFF	OFF	OFF	OFF	OFF
PSC	Type of compressor	1	1	1	1	1	1	1
PtC	Compressor protection time	OFF	OFF	OFF	OFF	OFF	OFF	OFF

## 7. MAINTENANCE

### 7.1 Ordinary maintenance

Keep liquid level constant in glycol reservoir.

A. Check liquid monthly. If level is low, fill with water.

B. If ice builds up, remove one gallon of water and replace with glycol. Clean the equipment monthly as it may have sucked in dust and filaments that may overheat motor or cause faulty operation.

### 7.2 Extraordinary maintenance

A. Glycol should be changed every year except in very hot areas where it should be changed every six (6) months.

B. Keep condensing unit free of foreign matter and clean every six (6) months.

7.3 Storing, dismantling and disposal If the equipment remains unused for long periods, disconnect the power plug, hydraulic and electric systems; empty and clean it; sanitize and wash the coils. Allow cleaned parts to dry, plug and then store the equipment in its original packaging if available.

## 8. TROUBLESHOOTING

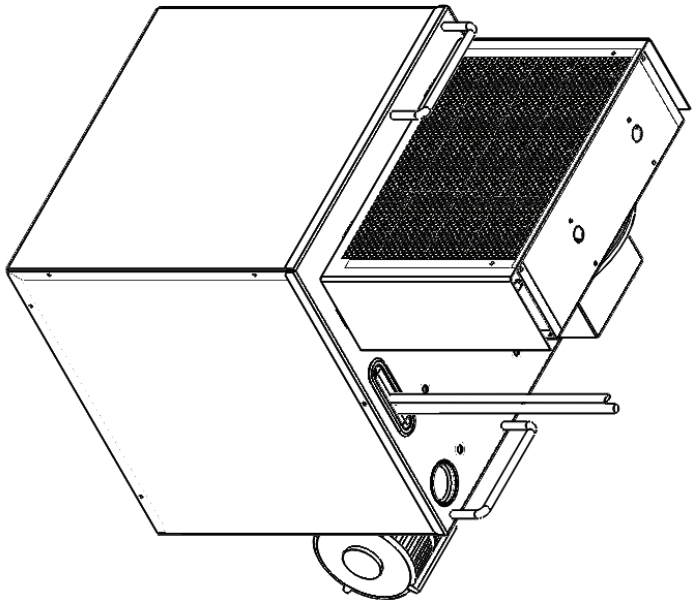
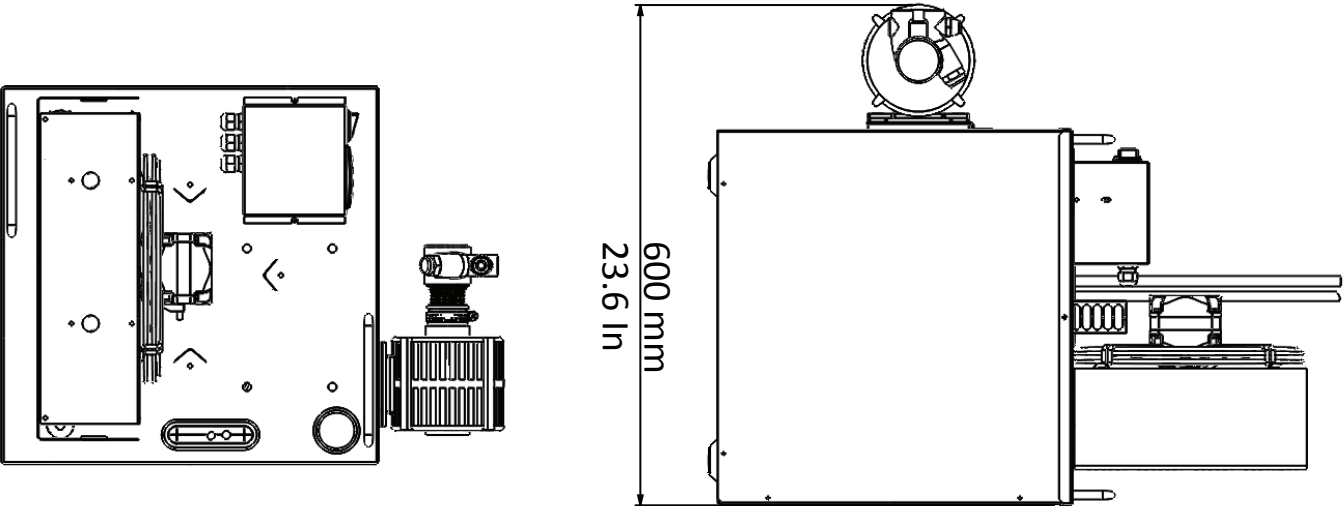
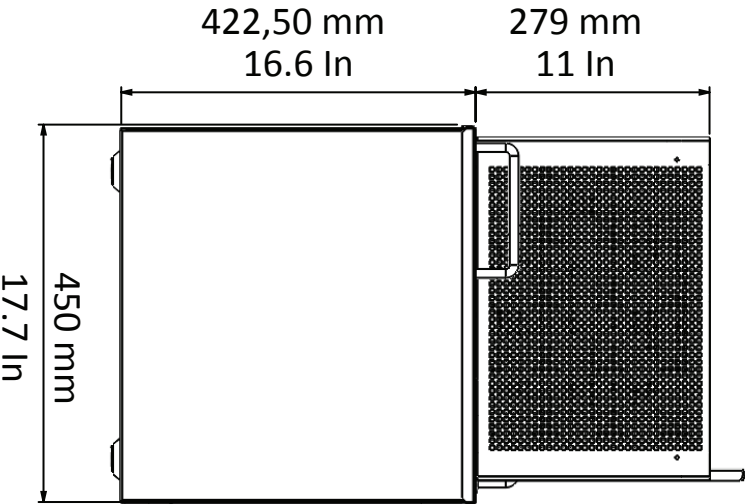
If the control system does not function properly, verify that the unit is wired, configured and set properly.

If the problem persists, use the following procedures to determine the cause of the problem:

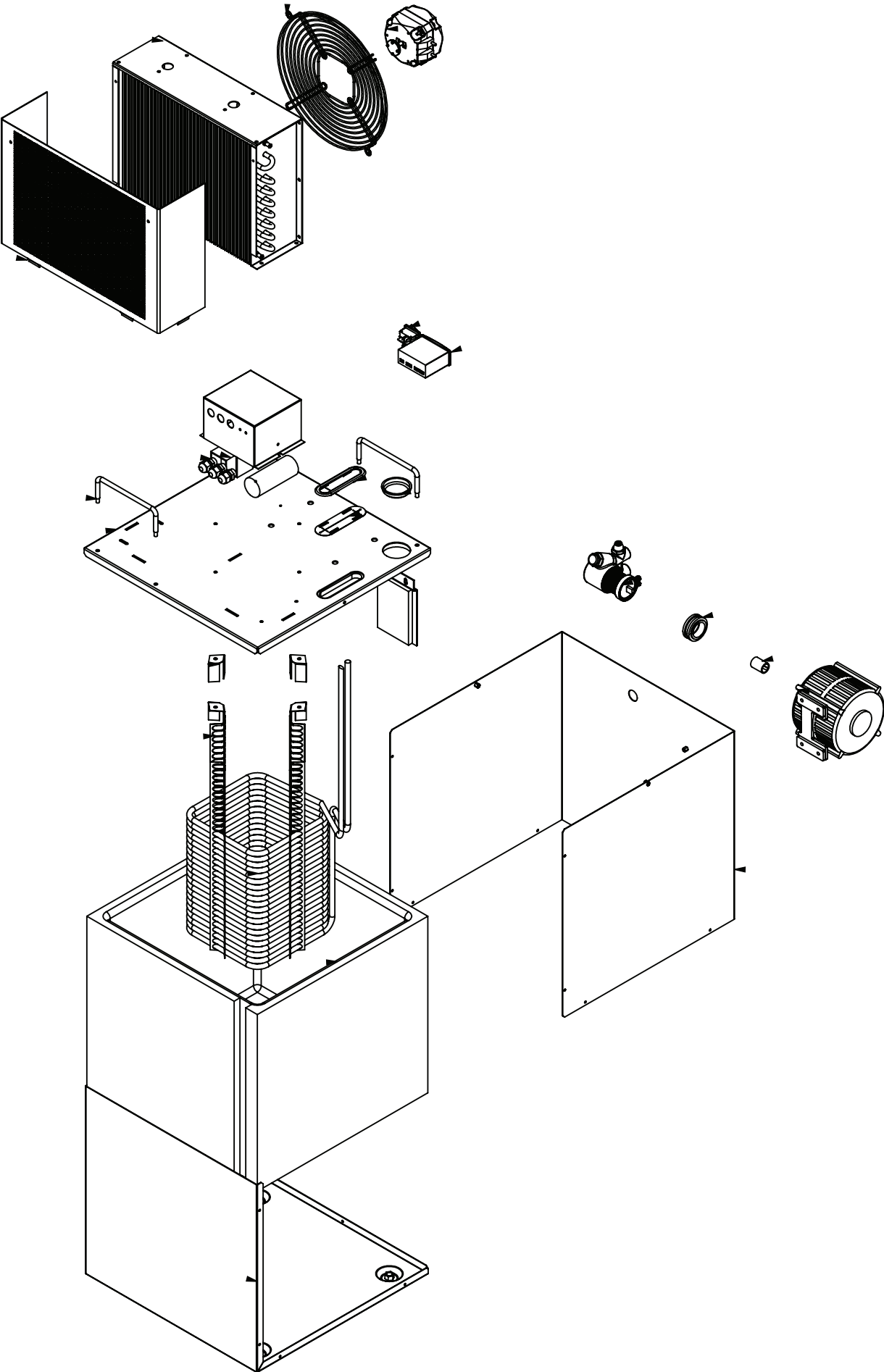
PROBLEM	CAUSE	SOLUTION (S)
1- Compressor does not start (no hum), but the fan motor runs.	A - Compressor relay or capacitor malfunction B - Inadequate voltage C - Compressor failure	A - Replace compressor relay, overload or capacitor B - Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage. C - Replace compressor
2 - Compressor starts and continues to run until freeze up and will not cut off.	A - Thermostat control failure B - Freon Leak	A - Replace thermostat B - Repair leak and recharge
3 - Compressor does not run but hums.	A - Inadequate voltage B - Starting relay malfunction C - Compressor malfunction	A - Measure voltage across common and run terminal on compressor. Voltage must not drop below 90% of rated voltage. B - Replace starting relay. (Be sure to use correct relay. Failure to do so will cause compressor failure.) C - Replace compressor



TECHNICAL DRAWING



Exploded view



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# DECLARATION OF CONFORMITY " C E "

ACCORDING TO MACHINE DIRECTIVES :

"Machines" 2006/42/CE  
"Low tension" 2006/95 CE  
"EMC" 2004/108 CE

VIN SERVICE S.R.L.-VIA G. FALCONE 26/34, 24050 ZANICA (BG)

Declares under its own responsibility that:

***Glycol Deck  
125***

Have been designed and built in compliance with the safety requirements  
requested by the "CE" marking regulations

Zanica, date: 02/05/2011

THE SOLICITOR

RICCARDO GUADALUPI GRADUATE OENOLOGIST

