



OPERATION AND MAINTENANCE BOOK

FLAT - SUPERFLAT

DOCUMENT CODE: 0150MANFLEN.000



1. PREAMBLE

This manual must be considered as an integral part of the machine, and it must always be available for the people interacting with the machine itself; the manual must always accompany the machine, even if it is transferred to another user.





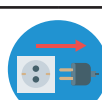









The operators must read this manual and carefully follow the instructions given therein, as **VINSERVICE MICRO MATIC** shall not be held responsible for damage caused to people and/or property, or suffered by the machine itself, if the following conditions are not complied with.

The Customer is required to keep trade secrets, therefore these documents and attachments must not be tampered with or modified, reproduced or transferred to third parties without the permission of **VINSERVICE MICRO MATIC**.

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2. SYMBOLS AND SIGNS

The manual, and/or in some cases the machine, feature: plates, symbols or icons that indicate an obligation, a danger or a prohibition.

OBLIGATION SIGNS		
<ul style="list-style-type: none">Obligation to consult the document, which must be available for future use and must not be deteriorated in any way.		
<ul style="list-style-type: none">Operations that require the use of specialised and authorized personnel.		
<ul style="list-style-type: none">Obligation to wear personal protective equipment (PPE) made available to the employer (e.g. leather gloves) when performing certain tasks.		
<ul style="list-style-type: none">Obligation to turn off the machine before carrying out any installation, cleaning, topping up, maintenance operation, etc.; remove the plug.		
<ul style="list-style-type: none">Obligation to dispose of electrical and electronic waste.		
DANGER SIGNS		
<ul style="list-style-type: none">Operations or situations in which the staff must pay close attention: general danger or dangerous voltage.		
<ul style="list-style-type: none">Low or high temperature zones;Condensation or product leakage which may cause the operator to slip or may injure him/her.		
<ul style="list-style-type: none">Danger due to electromagnetic interference or emission of fumes with a high level of inflammability.Possible danger of explosion.		
PROHIBITION SIGNS		
<ul style="list-style-type: none">Prohibition to access the area examined or prohibition to carry out this operation.		
CAUTION		
<ul style="list-style-type: none">Risk of fire		

3. SUMMARY

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4. SUPPLY CONDITIONS

VINSERVICE MICRO MATIC will not be held liable for any failure to comply with the standards governing correct installation.

VINSERVICE MICRO MATIC will not be held liable for any loss in production, unless expressly shown in the purchase order.

VINSERVICE MICRO MATIC 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 of or improper maintenance, manhandling or improper service; operation by unqualified personnel and the use of product accessories not belonging to the equipment.

VINSERVICE MICRO MATIC 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;
- Water and CO2 feeding and pushing systems;
- The capabilities of the personnel entrusted with the installation and/or use of the machine.

The customer must only use original spare parts installed in accordance with their prescribed use.

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

VINSERVICE MICRO MATIC will not be held liable for the disposal of equipment parts or materials needed to operate the machine.

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.

List of enclosures

In addition to this operation and maintenance manual the following documents are supplied along with the equipment:

- Declaration of conformity

4.1 REFERENCE STANDARDS

This Machine is manufactured in compliance with:

D.lgs. n° 81(3april2008) 3 august 2009 N° 103.

D.lgs. n° 89/391, 89/654, 655/CEE, 89/656, 90/269, 90/270, 90/394, 90/679, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE 99/38/CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE e 2004/40/CE

D.lgs. n° 791, 18 October1977 and D.lsg. (25 November1996) n°626 (2006/95/CE) (September 19th, 1994)

D.Lgs. n° 194, 6 November 2007 European Community (CEI EN 2004/108/CE) (EMC)

CEI EN 2006/42/CE Machines

CEI EN 60335-2-89: Refrigerating equipment

CEI EN 60335-2-89/A1/A11 February 2006

CEI EN 60335-2-89/A2 November 2007

UNI EN ISO 12100-1 - UNI EN ISO 12100-2 (EMC) Electromagnetic compatibility - CEI E55014-1: CEI E55014-2: (EMC) Electromagnetic compatibility

ANSI/UL 471, Issue: 2010/11/24, Ed:10, Rev: 2013/06/28, Standard for Safety Commercial Refrigerators and Freezers

CSA Standard for Refrigeration equipment, CSA C22.2 No. 120 - Issued: 2013/03/01, Ed: 4

NSF 18:2016 Manual Food And Beverage Dispensing Equipment

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.



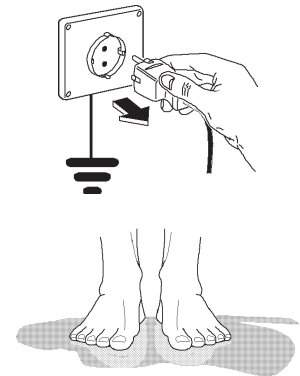
- Operators must be given correct information. They must therefore read and follow the technical information set out in the manual and in the attached documentation. Carefully keep the technical documentation accompanying the equipment.
- **VINSERVICE MICRO MATIC** will not be held liable if installation instructions are not followed.
- Do not use the equipment if any operating fault occurs.
- The equipment has been designed under strictest energy saving regulations enforced in the manufacturing country therefore customer should avoid unnecessary energy waste.
- The equipment must not be installed outdoors or in adverse environmental conditions (sun, rain, snow, wind, high humidity, etc.) Also make sure that there is no electromagnetic interference.
- Equipment has not been designed to operate in environments in which there is a danger of fire or explosions.
- It is absolutely forbidden to tamper and/or inhibit or modify the safety devices.



- In case of fire, make use of carbon dioxide extinguishers and automatic suction systems to fight against fire in closed environments. Pay attention to flammable beverages.



- Cleaning and maintenance operations must be carried out when the machine is off after 5 minutes of unplugging the power cord.
- Personnel must NOT go anywhere near the equipment on bare feet or with wet hands.
- Personnel must also make use of suitable personal protection device used accordingly. Beverage leaks may cause slippage.



- Maintenance personnel must report any fault or deterioration due to wear or aging so that safety conditions can be promptly restored.
- Do not carry out makeshift repairs. Only manufacturer-approved spare parts must be used for the repairs and installed accordingly. Components must then be reassembled in the original position and condition.
- If the power supply cable is broken or damaged it needs to be replaced by the constructor or by specialized personnel
- Cleaning of the equipment should be done with suitable devices and detergents that will not cause it any damage. The use of water jets for equipment cleaning or washing is strictly prohibited. Food circuits must be washed or cleaned with suitable non toxic products.



- The installation, removal and/or re-installation in other place and extraordinary maintenance operations must be done only by specialized personnel in compliance with the instructions outlined within this manual.
- Proper illumination of equipment installation location is advised in order to guarantee that all necessary operations are carried out in safe conditions.
- Although **VINSERVICE MICRO MATIC** has removed sharp edges where possible, however the use of personal protective device e.g. leather gloves is recommended when handling:

sheet metal, self-threading screws, etc...

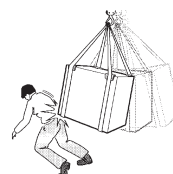
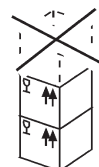
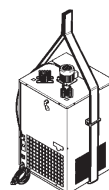
- The single equipment's output sound level (Noise) when operating at full capacity and correct maintenance is inferior to 70dBA thus absolutely harmless to the operator. Whenever the noise threshold is exceeded due to different and unpredictable installation cases, ask for the intervention of a specialized technician.
- Handling and/or lifting of heavy objects (more than 30Kg) must be carried out by means of suitable lifting devices.

6. LIFTING AND TRANSPORT

- 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.
- 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 device (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.
- During handling, check that the weight of the loads is correctly distributed on the ropes and do not make sudden movements that could create dangerous oscillations.
- Remember that packing elements (wood, nails, paper, cellophane, metal points, adhesive tape, straps, cords, etc...) may cut and/or cause injury unless they are handled with care. They must be removed with appropriate instruments and must be kept out of the reach of irresponsible persons (e.g. children). These rules also apply to the instruments used in removing the packing (scissors, hammers, pliers, knives, etc...). The packing must also be eliminated and disposed of in accordance with the regulations in force in the country of installation.



- When opening the packing, check the machine for damage and check that no machine parts or accessories are missing.
- If you detect faults or deterioration, suspend operations immediately and contact the carrier or shipper and also notify.



7. AIM OF THE DOCUMENT

This document (OPERATION AND MAINTENANCE MANUAL) is a useful guide that enables safe working and the performance of all operations necessary to keep the equipment in a safe working order.



- 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.
- Personnel dealing with the equipment must read this manual carefully; operators must also be made aware of residual risks arising from its use.

8. PERSONNEL QUALITIES



- Only expert operation or maintenance personnel familiar with the described task and knowledgeable enough to execute them must use this equipment. They must be able to sufficiently carry out the instructions contained in this manual, thoroughly carry out checks and ensure safety.



- The use of unqualified personnel especially for installation and maintenance operations is strictly prohibited.



- Since it is not possible to describe all operational information for the equipment, it is therefore mandatory that persons in operational contact with the equipment possess basic knowledge of its operations in order to perform their duties.



- Personnel in operational contact with the equipment must use the personal protective device required by law: leather gloves for sharpened or pointed objects or components at high temperatures.

9. FIELD OF EMPLOYMENT

VINSERVICE MICRO MATIC will not be held liable for damages of any type arising from non compliant or unwise usage. The equipment **MUST** neither be operated by unqualified personnel nor qualified personnel doing so in non compliance with what is described in the present user's manual and attached documentation.



- The use of this equipment for other purposes rather than those of which it were designed is strictly prohibited. This equipment has been designed to carbonate water, with the possibilities and features described herein.

Limits of use:

Allowed room temperature: (+ 5 / + 42 °C) 41°F / 107°F;

Max. allowable operating pressure: 7 bar

Do not use liquids or beverages with high volatility or flammability degree or that can cause fire;

Protection Class IP20 Insulation Class 5-T.

Prohibited uses:



- It is strictly prohibited to use the equipment or parts of it in flammable environments. The equipment cannot be operated or installed in environments where gases or explosive volatile substances are present. N.B **VINSERVICE MICRO MATIC** will not be held liable for unsuitable and/or unhygienic conditions in the workplace.



- **VINSERVICE MICRO MATIC** will not be held liable for damages of any type arising from non compliant or unwise usage.

- Dispensing water without prior cleaning and sanitizing of equipment is strictly prohibited.

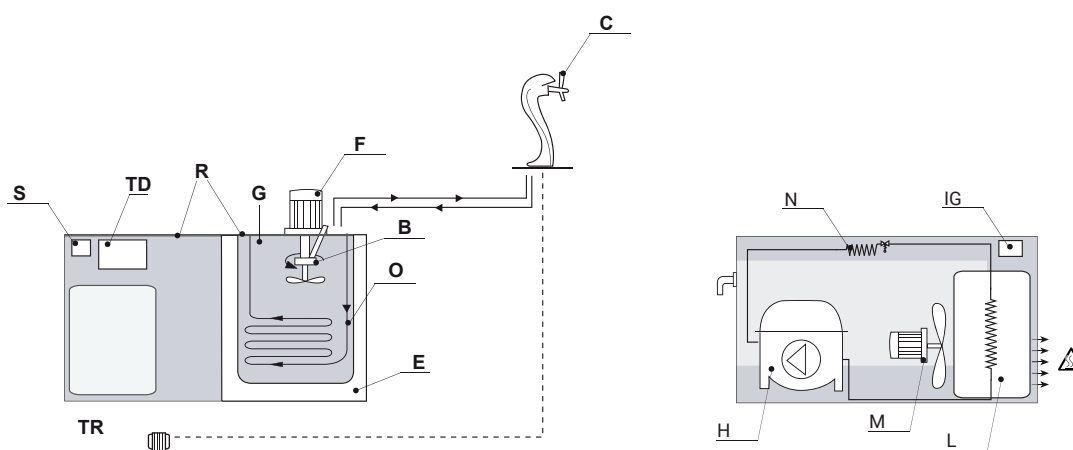
- The use of this equipment or part of it for other purposes other than those for which it is designed or not compliant with its proper usage is strictly prohibited.
- Only expert operation or maintenance personnel familiar with the described task and knowledgeable enough to execute them must use this equipment. They must be able to sufficiently carry out the instructions contained in this manual, thoroughly carry out checks and ensure safety.
- The use of unqualified personnel especially for installation and maintenance operations is strictly prohibited.
- Since it is not possible to describe all operational information for the equipment, it is therefore mandatory that persons in operational contact with the equipment possess basic knowledge of its operations in order to perform their duties.
- Personnel in operational contact with the equipment must use the personal protective device required by law: leather gloves for sharpened or pointed objects or components at high temperatures.



- This machine, can be used by children over 8 years old and people with poor mental or sensory skills, or people without enough experience or knowledge, only under surveillance or after they have been taught about the machine working and the risk connected to it.
- Children must not play with the machine.
- Children and people with poor mental or sensory skills, or people without enough experience or knowledge, can't perform cleaning procedures without surveillance.

10. EQUIPMENT DESCRIPTION

- The cooler **VINSERVICE MICRO MATIC** belonging to glycol line allows the temperature of the liquid recirculating in the system to lower. As a result the temperature of the dispensing body (C) will also lower and will cause either a condensation or ice effect on the body surface.
- The temperature of the recirculation liquid (monopropylenic glycol) is controlled by a digital thermostat (TD) that constantly keeps the temperature of the liquid inside the tank under 0°C (-5,5° C / - 7°C - 22.1/ 19.4 °F)
- The glycol is stirred by the agitator (F) and is recirculated by means of the recirculation pump (B).
- The chiller is composed of a compressor (H) that is the motor (engine) of the cooling system. When running, it is compressing a refrigerant (R134A) that is in a low-pressure gaseous state to a high pressure gas, the temperature rise to 90°C while the pressure reach approx. 20 bar.
- The high pressure refrigerant gas, coming from the compressor, flows through the condenser (L) and becomes a liquid thanks to the fan (M) that draws air over the fins of condenser to dissipate the heat from the tubes and fins. As this occurs, the refrigerant gives off heat causing the temperature to drop to some 40°C
- Once the liquid refrigerant has travelled the length of the condenser, it is forced through the capillary tube (N) a tiny copper tube where it expands (from some 20 bar to ½ bar). The capillary tube is attached from the end of the condenser to the beginning of evaporator. When the liquid refrigerant comes out of the small capillary tube, it is injected into the larger tubes of the evaporator (O) causing a pressure drop. This pressure drop allows the refrigerant to expand back into a gaseous state. This change of state from liquid to gas absorbs heat, as a result the gas will be very cold.
- Because the evaporator is absorbing heat it is very cold to touch. The coldness causes any humidity in the air to freeze on the evaporator as ice. The gaseous refrigerant travels through the evaporator tubes down to the compressor to begin the circulation process again
- The transformer OPTIONAL (TR) is used to for led illumination of the dispensing unit (C).
- The machine external body is made of sheet metal and it is equipped with:
 - Agitator (F) motor housing the recirculation pump (B) on the stem;
 - Removable panel (R) for water loading and topping up;
 - Master switch (IG), digital thermostat (TD), and plug (S)



11. QUICK OPERATION GUIDE

11.1 FIELD OF EMPLOYMENT

- **VINSERVICE MICRO MATIC** declines any responsibility for damages of any type that arose from non compliant or unwise usage. The machine **MUST NOT** be operated by inexperienced personnel who operate the unit not in compliance with what is described in the present user's manual and attached documentation.



- The use of this equipment for other purposes not complying with its proper usage is absolutely forbidden.
- This equipment has been designed to cool beverages and food liquids, with the possibilities and features described herein.



- Do not use liquids or beverages with high volatility or flammability degree or that can cause fire.

Prohibited uses:

- It is strictly forbidden to use the machine or parts of it in flammable environments. The machine can **NOT** be operated or installed in environments with presence of gases or explosive volatile substances.
- N.B. **VINSERVICE MICRO MATIC** declines any responsibility for unsuitable and/or hygiene conditions in the workplace.
- **VINSERVICE MICRO MATIC** declines any responsibility for damages of any type that arose from non compliant or unwise usage.
- The use of this equipment or parts of it for other purposes not complying with its proper usage is absolutely forbidden.

11.2 INSTALLATION

ATTENTION:

- **VINSERVICE MICRO MATIC** advises the cleaning of the equipment prior to use with a suitable cleaning agent.
- It is recommended to protect the unit with a ground-fault circuit interrupter.
- It is recommended to install a residual-current device (RCD) a nominal operating residual current below 30mA.
- Water pipes connections and fixtures directly connected to a potable water supply shall be sized, installed and maintained in accordance with federal, state and local codes.
- After removing the machine from its packaging, check that:
 - The area where the machine is to be installed is solid and perfectly level;
 - The chiller is positioned far from heat or humidity sources.
 - The grills are free. It is recommended to leave a 30/40 cm space from the wall to allow for proper air circulation around the unit.

Start up:

The unit operation is completely automatic and does not require any particular operation by the operator. First of all make sure that there are no leaks present in the system and carry out a periodic control, as the unit can be left always running.

- Fill the tank until the max level sticker.
- After making sure that all previously described conditions are present (water and electrical connections, cooling water lines, etc...), power on the machine.
- During power on the fan (M), the agitator (F) and the compressor (H) start up; after about 2-3 hours (according to the model and the machine capacity), the compressor and the fan stop, as will reach the set temperature, whereas the

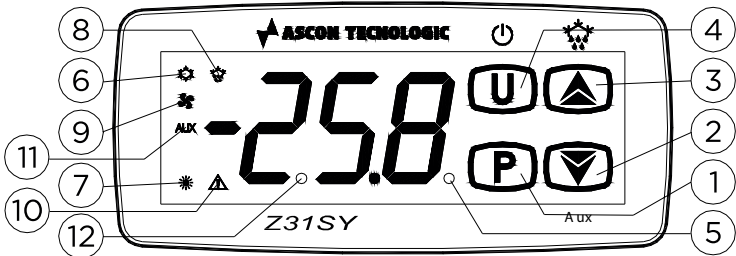


agitator keeps on running to stir water and ease the heat exchange.

- The probe (G), positioned in the water, reads the temperature and controls the cooling system switching on and off.
- During operation, the recirculation pump (B) allows the cooling of the distributor (C).
- The cooling capacity is automatically adjusted by means of the digital thermostat (TD) that controls the temperature inside the tank and activates the compressor.
- On request an transformer OPTIONAL (TR) can be installed.
- Hydraulic connection:
- The equipment is supplied hydraulic connection ready. It contains steel tubes ready to be connected to the water, CO2 and recirculation tubes going in and out of it.

11.3 DIGITAL THERMOSTAT: INSTRUCTIONS

Front panel description:



Led indicators:

5	Led SET: In normal mode it serves to indicate when a key is pressed. In programming mode indicates the programming level of the parameters.
6	Led OUT - COOL: Indicates the output status (compressor or temperature control device) when the istrument is programmed for cooling operation; on (Led on), off (Led off) or inhibited (Led flashing).
7	Led OUT - HEAT: Indicates the output status (compressor or temperature control device) when the istrument is programmed for heating operation; on (Led on), off (Led off) or inhibited (Led flashing).
8	Led DEFROST: Indicates defrosting in progress (Led on) or drainage time in progress (Led flashing).
9	Led FAN: Indicates fan output status on (Led on), off (Led off) or inhibited (Led flashing).
10	Led ALARM: Indicates the alarm status (Led on), off (Led off) and silenced or memorized (Led flashing).
11	Led AUX: Indicates AUX output status on (on), off (off) or inhibited (flashing).
12	Led Stand-By: Indicates the Stand-by status.

Keys description:

P	Used for setting the Set point (press and release) and for programming the function parameters (hold pressed for 5 sec.). When the keyboard is locked it can be used together with the UP (hold pressed for 5 sec.) key to unlock the keyboard.
▼ / Aux	In programming mode is used for decreasing the values to be set and for selecting the parameters. In normal mode it can also be programmed via the parameter "t.Fb" to carry out other functions (hold pressed for 1 sec.) such as activating the Aux output, starting up the continuous cycle, etc.

▲ / ❄	Used for selecting the parameters and for increasing the value to be set. Also used for activating manual defrost (hold pressed for 5 sec.).
U	Used (press and release) for visualising the instrument variables (measured temperatures etc.). In programming mode can be used to come back in normal mode (hold for 2 sec.). In normal mode it can also be programmed via the parameter "t.UF" to carry out other functions (hold pressed for 1 sec.) such as turning on and off (stand-by) the device, activating the Aux output, starting up the continuous cycle, etc.

Setting the set point:

- Press **P** and release it and SP 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 10 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 display will visualised the code that identifies the first parameter.
- 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 and its setting can be changed with ▲ and ▼.

To quit the procedure:

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

Thermostat programmable parameters:

Parameter Groups	Description
S.	Parameters relating to set point
i.	Parameters relating to measuring inputs
r.	Parameters relating to temperature control
d.	Parameters relating to defrosting control
F.	Parameters relating to evaporator fan control
P.	Parameters relating to compressor protection and power on delay
A.	Parameters relating to alarm control
o.	Parameters relating to configuration of outputs and buzzer
t.	Parameters relating to configuration of the keyboard

Switch power supply off & on after parameter modifications

11.4 MAINTENANCE

Routine maintenance:

Routine maintenance can be carried out by common personnel in compliance with the rules started below.



- Daily: check for leaks.
- Every month or as needed, sanitize or wash the coils through which liquids passes. Wash and rinse them with plenty of water. Use detergents suitable for food industry according to the supplier's instructions.
- Every month clean the machine vacuum dust, filaments, paper, that may overheat motors or cause faulty operation.
- Every six months clean the condenser (L) fins with brushes and/or jets of compressed air. Pay attention not to bend the fins. They are sharp, always use leather gauntlets.

11.5 CLEANING AND SANITIZATION

The unit can be cleaned using the detergent TM DESANA or any other industry certified detergent. This procedure must be carried out by a trained technician using the appropriate personal protective equipment. If using any other industry certified detergent, it is important to follow the mixing ratio and other instructions as indicated in its literature.

The below procedure is for cleaning using the detergent TM DESANA.



This procedure must be performed with plug disconnected and body panels removed.

- a) Close the water mains tap and discharge all the water in the circuit
- b) Prepare the detergent solution in the cleaning container (barrel or filter, available in different make and size with service/installation technicians) by mixing 4,5 litres (1 gallon) of warm water to 1 packet (45g/1,6 oz) of TM DESANACID.
- c) Mix and shake well. Colour of the fresh solution is pink
- d) Connect the cleaning container to the unit. Aim is to have it dispense the liquid contained therein.
- e) Open tap and leave running until the cleaning solution flows through. Vent the safety valve on top of carbonation tank to fill it completely
- f) Allow cleaning liquid to remain in circuit for 10 minutes. DESANA discolours when cleaning.
- g) Repeat procedures E + F other two times whilst paying attention to the leave time indicated in the detergent's literature. The circuit is completely clean when the cleaning solution remains pink for 10 minutes.
- h) Rinse with tap water by running water through the system for 1 minute, stop, push water out with CO2, run water for 1 minute
- i) Reset the machine to its original condition by reconnecting it to the water mains.

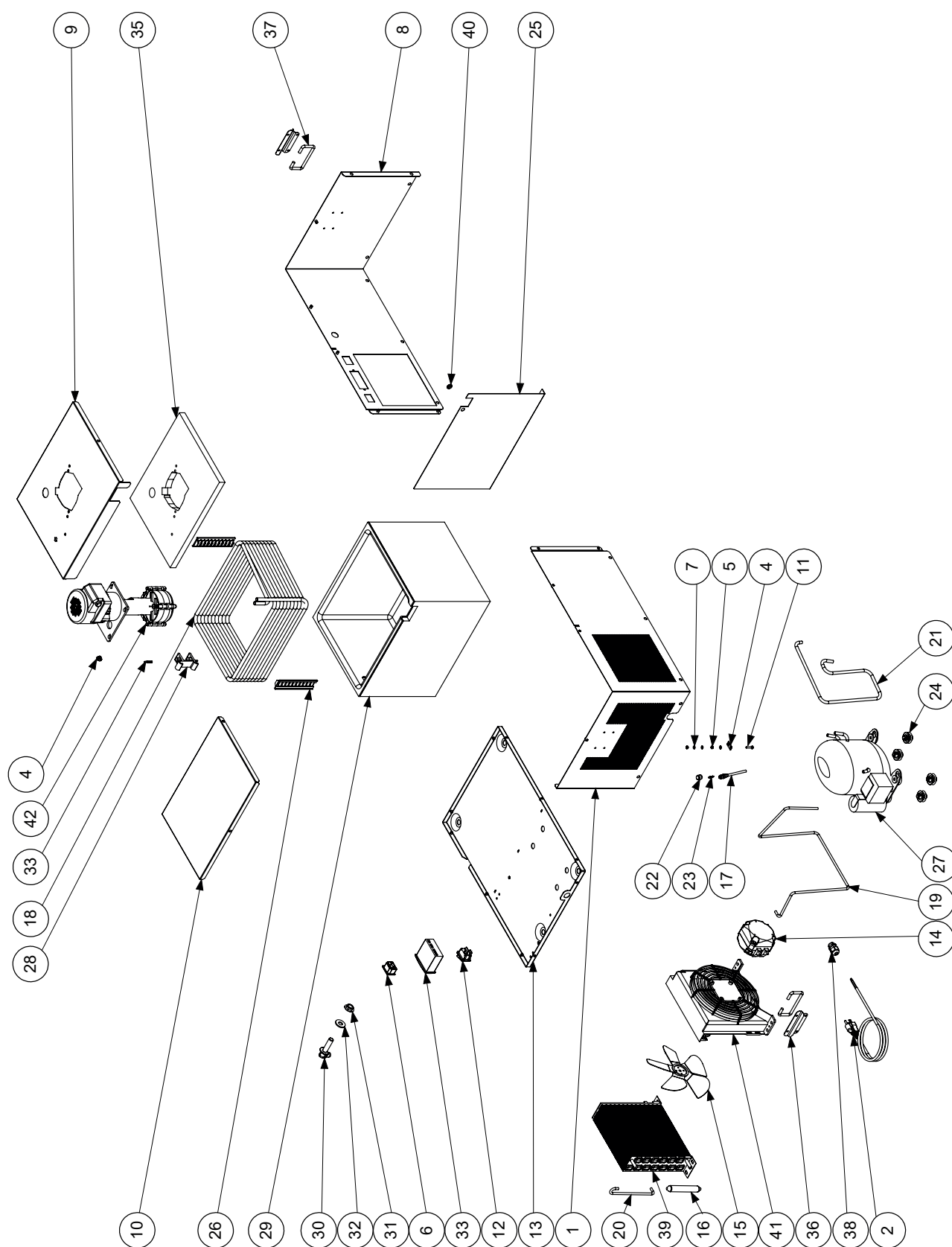
WARNING:

Disconnect power to the unit before servicing. Verify all power is off to the unit before performing any work. Failure to comply could result in serious injury, death or damage to the equipment.

1. Shut off CO2 and water supplies to the unit.
2. Remove the units top cover by unscrewing the screws holding it in place
3. Disconnect the water line from the double check valve then remove the check valve.
4. Disassemble the check valve. Clean and inspect each part, especially check the ball for damage. Replace damaged or suspicious parts.
5. Reassemble and install the check valves.
6. Turn on the CO2, syrup, and water supplies, and reconnect the electrical power.

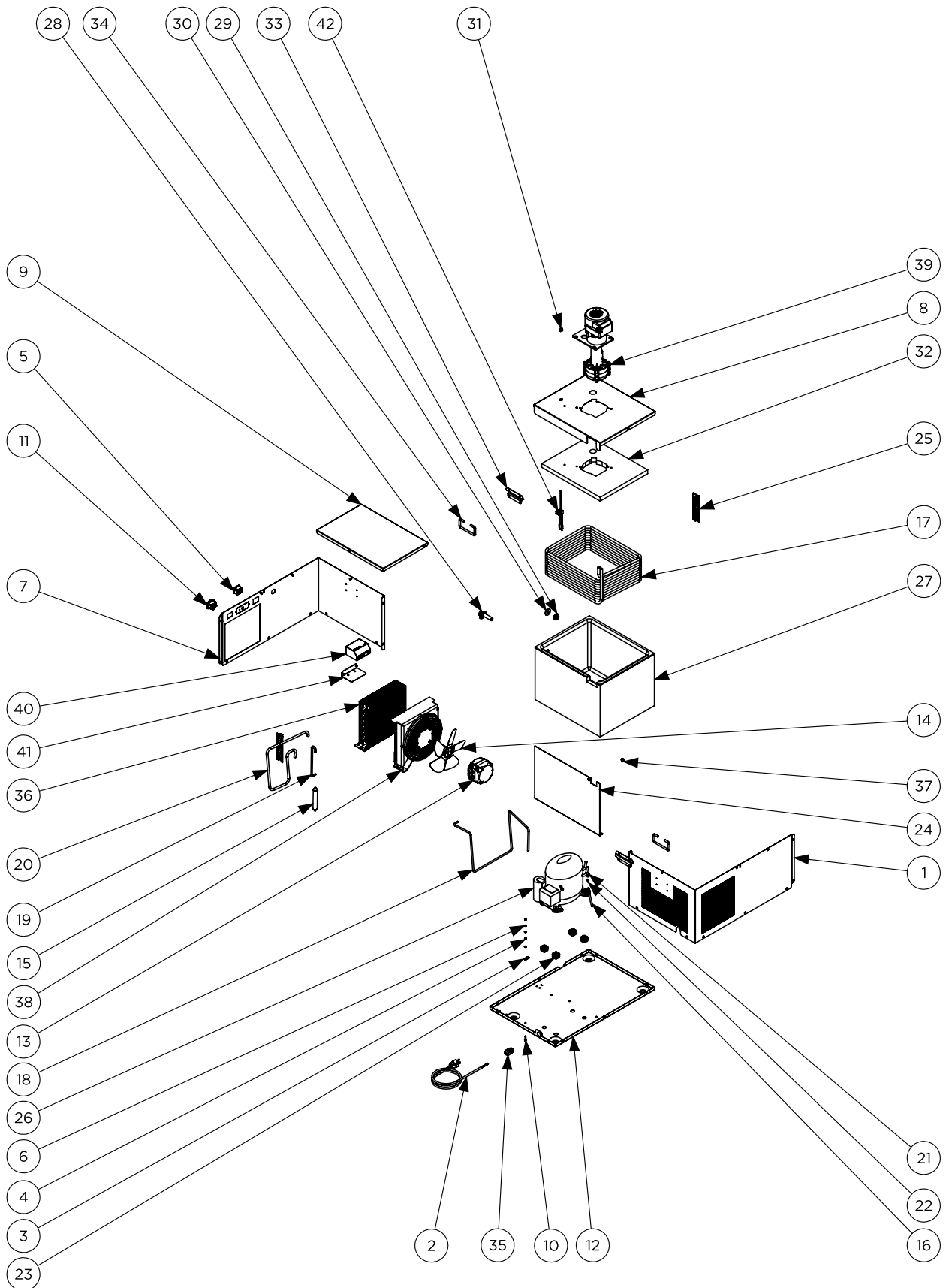
12. SUPER_FLAT MAIN COMPONENTS

12.1 DIGITAL THERMOSTAT



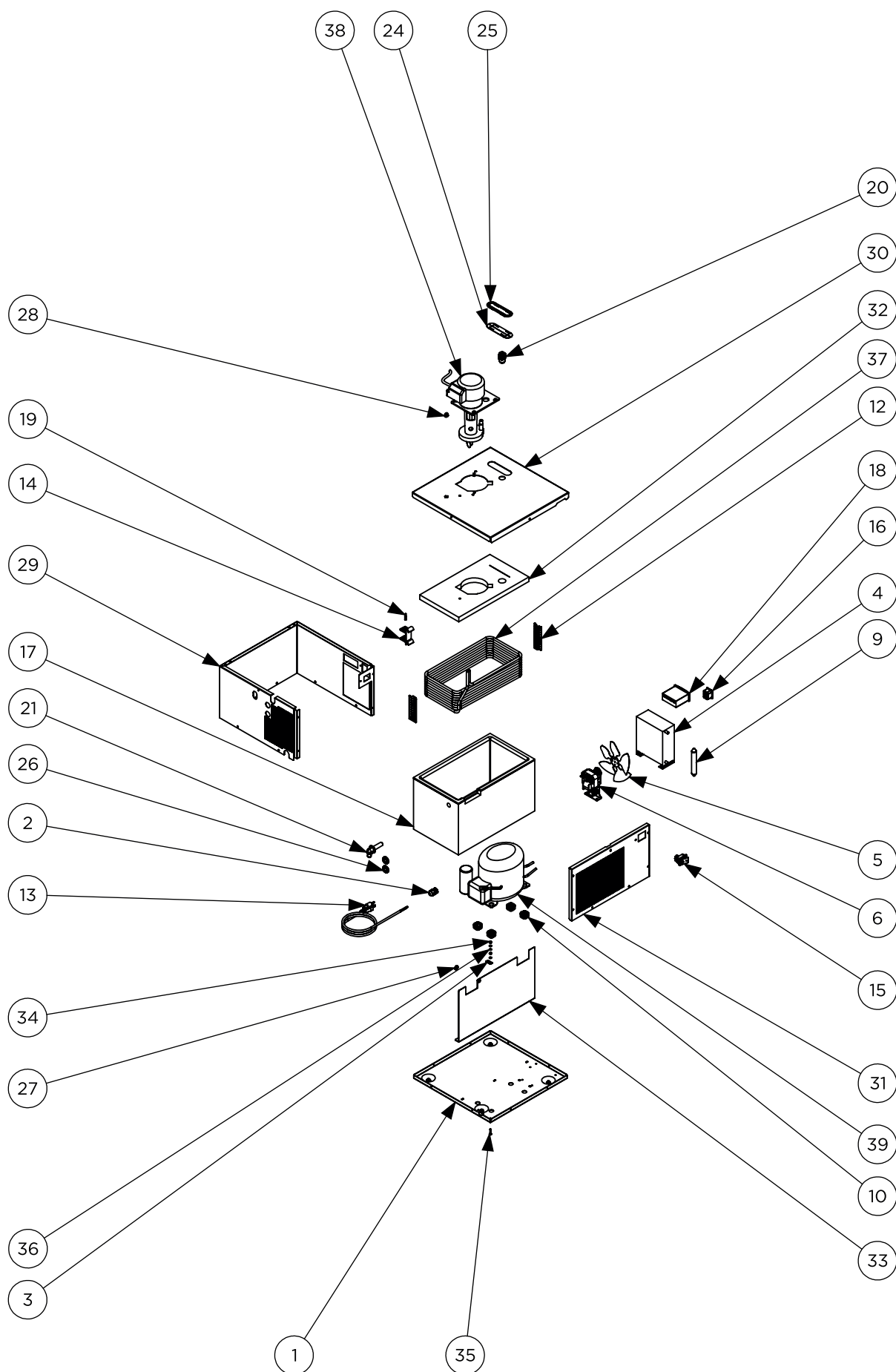
N°	DESCRIPTION	QTY	N°	DESCRIPTION	QTY
1	SUPER FLAT BACK PANEL ST.PLAST	1	23	VALVE MECH. 14-990 HFC	1
2	ELECTRIC CABLE	1	24	COMPRESSOR FIXING SHAFT	4
3	DIGITAL THERMOSTAT PROBE	1	25	SUPER FLAT PARTITION PANEL	1
4	PLATES GROUNDED	1	26	SPACER DIAM 10 mm PLASTIC	2
5	ISO - 4032 - M4	2	27	COMPRESS. 3/8 R134A 220V GLY-12RA	1
6	POWER CONNECTOR FEMALE	1		1/2HP R404 115V60 COMPRESSOR	1
7	WASHER ISO 7089 - 4,3 x 9	3	28	PROBES SUPPORT FOR MEC. TERM.	1
8	SUPER FLAT FRONT PANEL ST.PLAS	1	29	TANK SUPER FLAT 25 LT RBD710-D	1
9	SUPER FLAT COVER TANK SIDE	1	30	TANK DRAIN 2010	1
10	Suoerflat compr. side lid	1	31	NUT TANK DRAIN 2010	1
11	ISO 4017 - M4 X 20-C	1	32	DRAIN GASKET HE SIL 30X13X3	1
12	LIGHTED BIPOL. ELECTR. SWITCH	1	33	TERMOSTATO DIGITALE Z31Y 110-2	1
13	SUPER FLAT BASE	1	34	CLIP D.6 L.10 PL CABLE PUMP	1
14	VENTIL. MOTOR 5W 220/230V 50/60Hz	1	35	S.FLAT TANK INSULATION H=20MM	1
	VENTIL. MOTOR 5W 115V 60Hz	1	36	STEEL HANDLE FIXING PLATE	2
15	MOTOR FAN 200mm 1/3 ASP	1	37	STEEL HANDLE	2
16	FILTER DRYER 15gr 2V	1	38	Gland D.11 BM4911	1
17	LOAD VALVE + TUBE D6 100mm	1	39	SUPER FLAT COND. CE.UL STFT14T	1
18	SUPER FLAT COPPER EVAPORATOR	1	40	GASKET CABLE D16 HOLE 5 H 5mm	1
19	SUPER FLAT SEND. COPPER TUBE	1	41	COND.SUP. CARTER LUVE 14221STF	1
20	SUPER FLAT FILTER TUBE	1	42	PUMP 18/20 SAM.STC AR.220-5	1
21	SUPER FLAT RETURN TUBE	1		XYLEM FLOJET PUMP SPC43 115/60	1
22	COVER VALVE 8392/A	1			

12.2 ELECTRONIC THERMOSTAT



N°	DESCRIPTION	QTY	N°	DESCRIPTION	QTY
1	SUPER FLAT BACK PANEL ST.PLAST	1	23	COMPRESSOR FIXING SHAFT	4
2	ELECTRIC CABLE USA PLUG	1	24	SUPER FLAT PARTITION PANEL	1
3	PLATES GROUNDED	1	25	SPACER DIAM 10 mm PLASTIC	2
4	ISO - 4032 - M4	2	26	COMPRESS. 3/8 R134A 220V GLY-12RA	1
5	POWER CONNECTOR FEMALE	1		1/2HP R404 115V60 COMPRESSOR	1
6	WASHER ISO 7089 - 4,3 x 9	3	27	TANK SUPER FLAT 25 LT RBD710-D	1
7	SUPER FLAT FRONT PANEL ST.PLAS	1	28	TANK DRAIN 2010	1
8	SUPER FLAT COVER TANK SIDE	1	29	NUT TANK DRAIN 2010	1
9	Suoerflat compr. side lid	1	30	DRAIN GASKET HE SIL 30X13X3	1
10	ISO 4017 - M4 X 20-C	1	31	CLIP D.6 L.10 PL CABLE PUMP	1
11	LIGHTED BIPOL. ELECTR. SWITCH	1	32	S.FLAT TANK INSULATION H=20MM	1
12	SUPER FLAT BASE	1	33	STEEL HANDLE FIXING PLATE	2
13	VENTIL. MOTOR 5W 220/230V 50/60Hz	1	34	STEEL HANDLE	2
	VENTIL. MOTOR 5W 115V 60Hz	1	35	Gland D.11 BM4911	1
14	MOTOR FAN 200mm 1/3 ASP	1	36	SUPER FLAT COND. CE.UL STFT14T	1
15	FILTER DRYER 15gr 2V	1	37	GASKET CABLE D16 HOLE 5 H 5mm	1
16	LOAD VALVE + TUBE D6 100mm	1	38	COND.SUP. CARTER LUVE 14221STF	1
17	SUPER FLAT COPPER EVAPORATOR	1	39	PUMP 18/20 SAM.STC AR.220-5	1
18	SUPER FLAT SEND. COPPER TUBE	1		XYLEM FLOJET PUMP SPC43 115/60	1
19	SUPER FLAT FILTER TUBE	1	40	ICE BANK CONTROL UNIT 220V	1
20	SUPER FLAT RETURN TUBE	1		ICE BANK CONTROL UNIT 115V	1
21	COVER VALVE 8392/A	1	41	MINI LADY EL. CONTR.UNIT BRACK	1
22	VALVE MECH. 14-990 HFC	1	42	DINFER PROBE CLIP 3/8	1

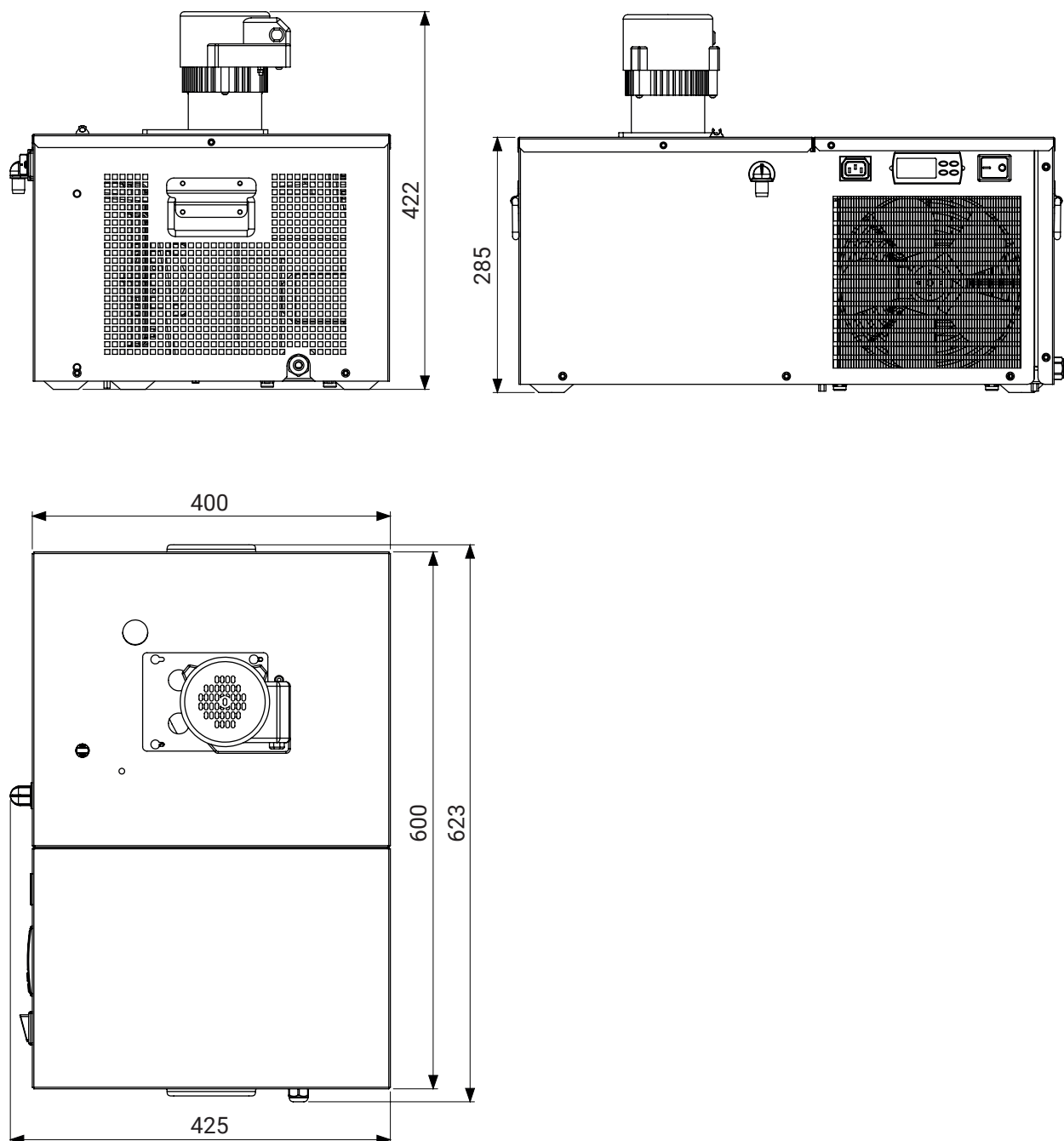
13. FLAT_GLYCOLE MAIN COMPONENTS



N°	DESCRIPTION	QTY	N°	DESCRIPTION	QTY
1	FLAT BASE	1	22	NUT TANK DRAIN 2010	1
2	CABLE GLAND GEWISS PG9	1	23	DRAIN GASKET HE SIL 30X13X3	1
3	PLATES GROUNDED	1	24	RUBBER MEMBRANE 116X36	1
4	FLAT/MINI LADY CONDESATOR	1	25	FRAME 116X36 OUT TUBE	1
5	MINI LADY D.154 HELICOIDAL FAN	1	26	GROMMET EPDM Ø27 H6,5mm	2
6	MINI LADY VENTIL. MOTOR	1	27	GASKET CABLE D16 HOLE 5 H 5mm	1
7	COVER VALVE 8392/A	1	28	CLIP D.6 L.10 PL CABLE PUMP	1
8	HFC VALVE 14-990 MEC.	1	29	FLAT U BODY PANEL	1
9	FILTER DRYER 15gr 2V	1	30	FLAT TOP	1
10	COMPRESSOR FIXING SHAFT	4	31	FLAT FRONT PANEL	1
11	LOAD VALVE + TUBE D6 100mm	1	32	FLAT TANK INSULATION H=20MM	1
12	PLASTIC SPACER FOR TUBES COILS	2	33	FLAT TANK/COMPRESSOR DIVIDER	1
13	ELECTRIC CABLE	1	34	ISO - 4032 - M4	2
14	PROBES SUPPORT FOR MEC. TERM.	1	35	ISO 4017 - M4 X 20-C	1
15	LIGHTED BIPOL. ELECTR. SWITCH	1	36	WASHER ISO 7089 - 4,3 x 9	3
16	POWER CONNECTOR FEMALE	1	37	FLAT & MINI LADY COPPER EVAPOR	1
17	TANK FLAT 13 LT RBD710-D	1	38	12/14 220/50 PUMP	1
18	DIGITAL THERMOSTAT Z31Y 110-240V	1		12/14 115/60 PUMP	1
19	DIGITAL THERMOSTAT PROBE	1	39	COMPR.1/6HP 220V R134 EMT45H-DR	1
20	FITTING HMM3/8-3/8G	1		COMPR.1/6HP 115V R134 THB-4415YA	1
21	TANK DRAIN 2010	1			

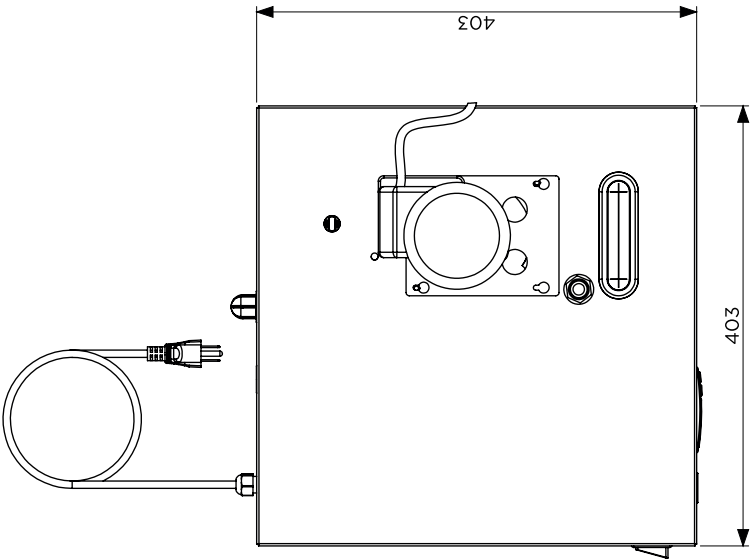
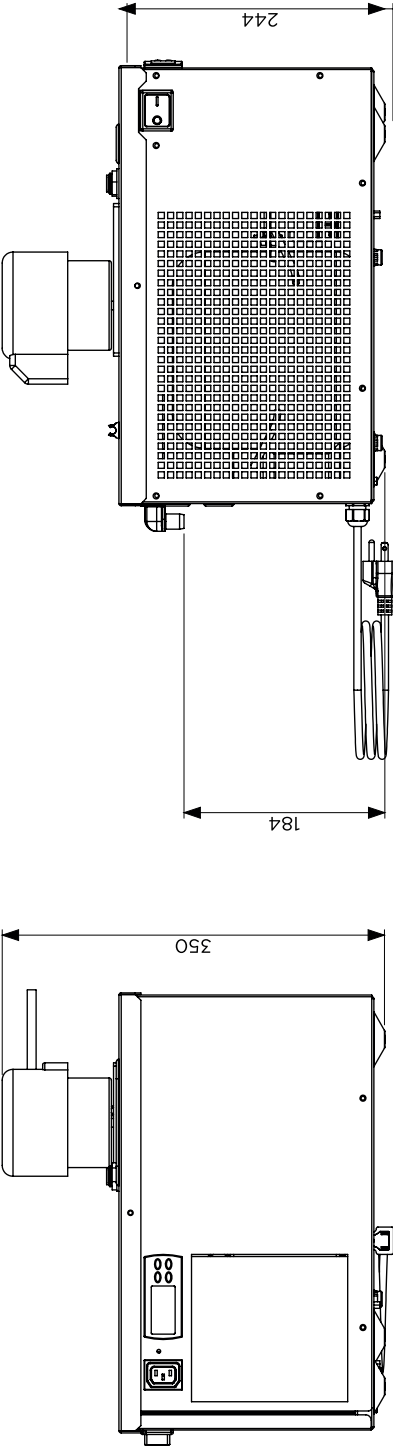
14. TECHNICAL DRAWING SUPERF_FLAT

measures in mm



15. TECHNICAL DRAWING FLAT_GLYCOLE

measures in mm



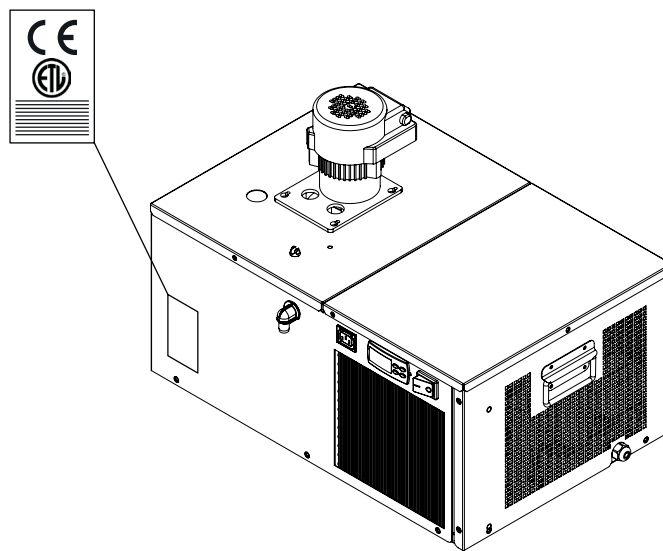
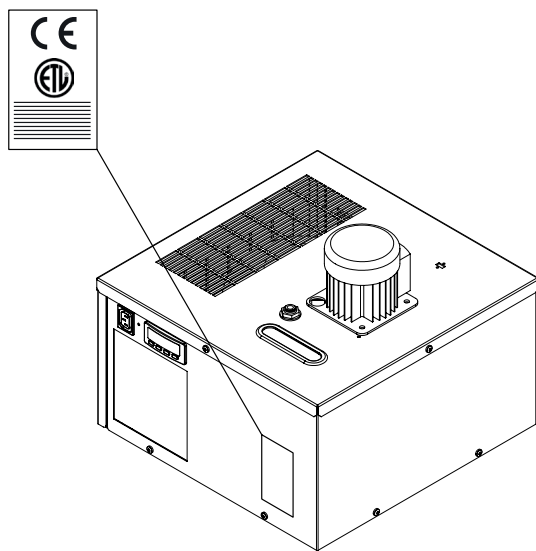
16. TECHNICAL SPECIFICATIONS

Identifying machinery and manufacturer:

Equipment and manufacturer identification. The CE tag is placed in the position as shown in the picture below. The manufacturer name plates mounted on the side of the equipment which must be cleaned regularly must neither be removed, damaged, soiled, nor hidden, etc.



Intertek
3194408

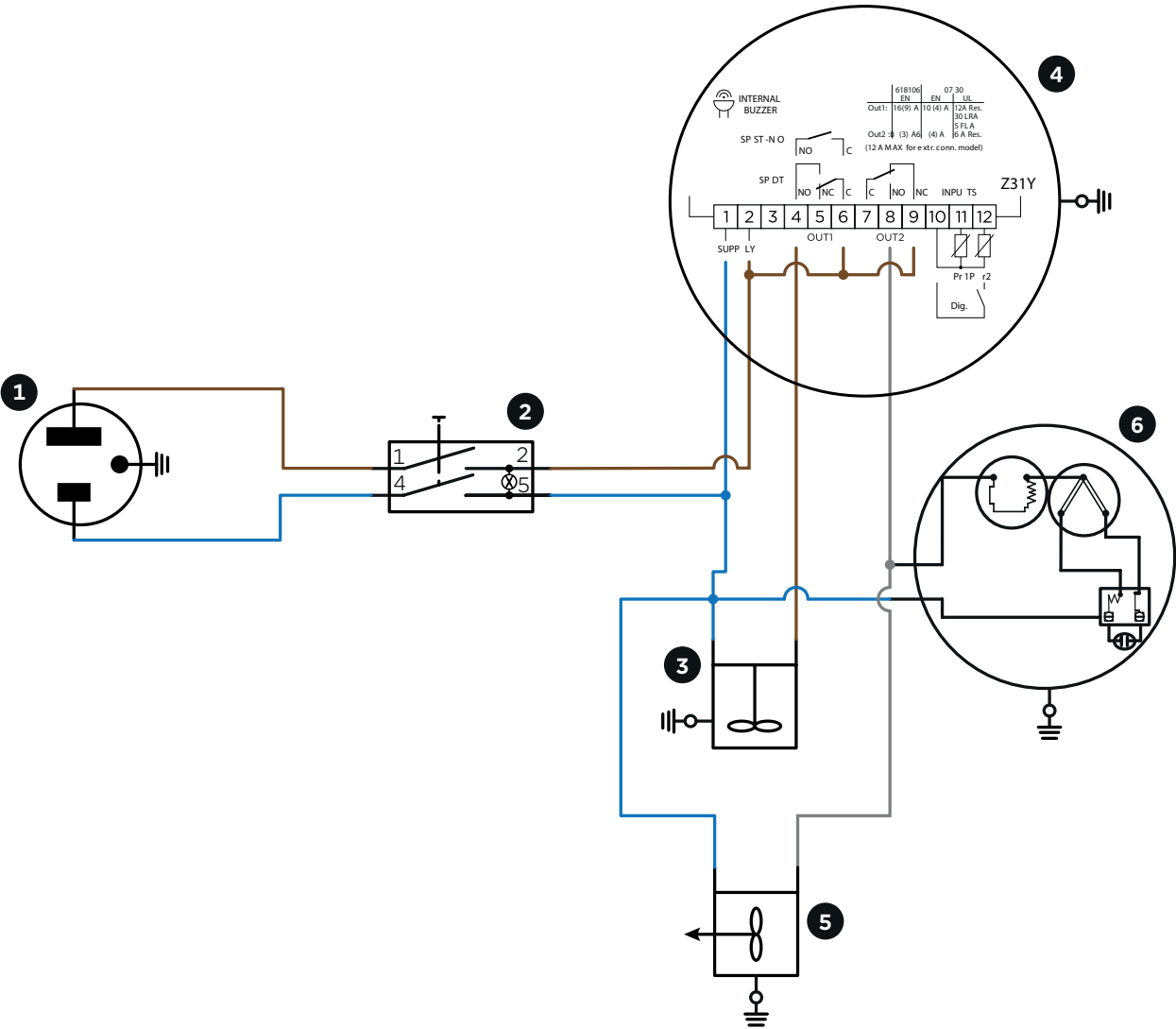


	FLAT	SUPER_FLAT
POWER	1/6 HP	3/8 HP
TYPE OF COOLANT GAS	R134A	R134A
NOMINAL POWER -10°C+45°C	301W	893W
TANK CAPACITY	13LT	17LT
SUPPLY VOLTAGE/FREQUENCY STANDARD OUTFIT	115V 60Hz	115V 60Hz
	200-220V 50-60Hz	200-220V 50-60Hz
ICE BANK	4 Kg	7 Kg
RECIRCULATION PUMP	4/12 Ø50mm	8/10 Ø37,5mm
ALLOWABLE MAX RELATIVE HUMIDITY	80%	80%
WEIGHT (LOADLESS STATIC WEIGHT)	23 Kg	42Kg

17. ELECTRIC SCHEME

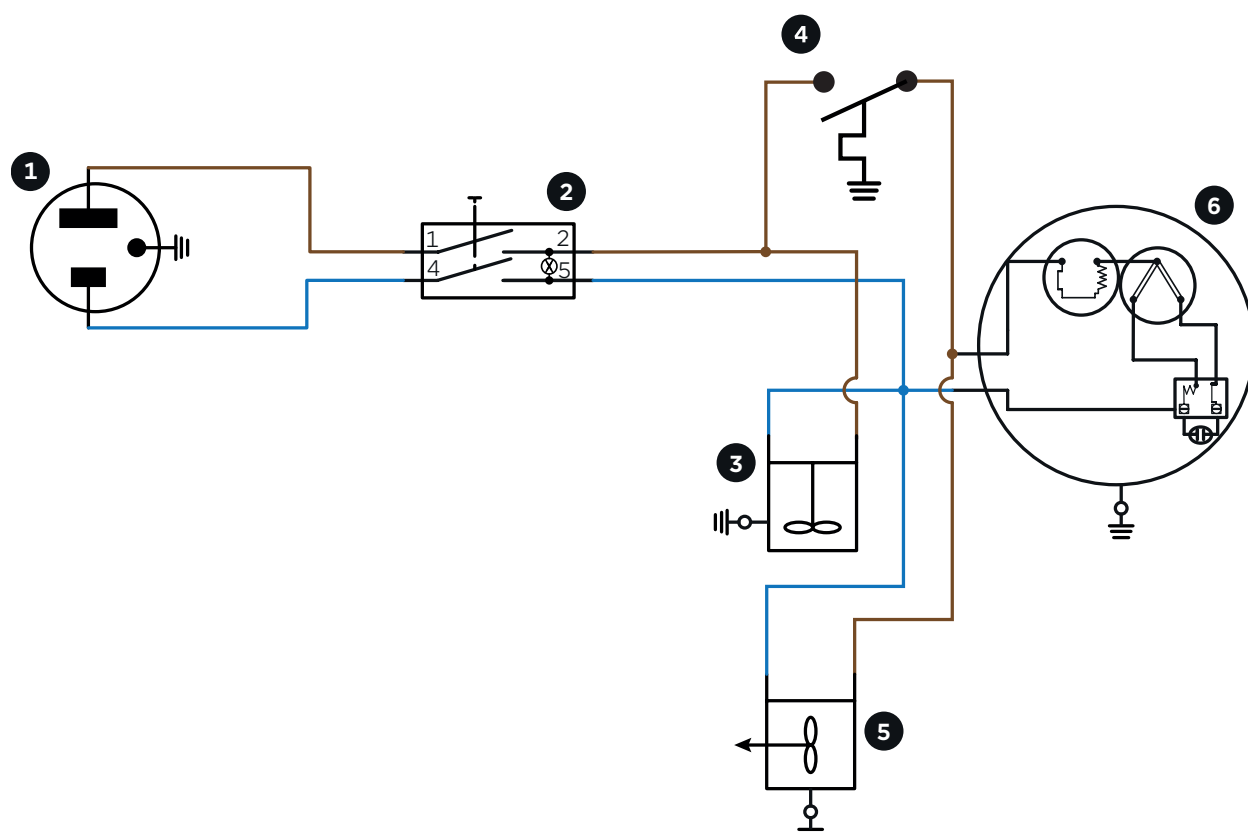
17.1 DIGITAL THERMOSTAT

LEGEND			
1	PLUG	4	DIGITAL THERMOSTAT FOR ICE BANK
2	BIPOLAR SWITCH	5	FAN
3	STIRRER	6	COMPRESSOR



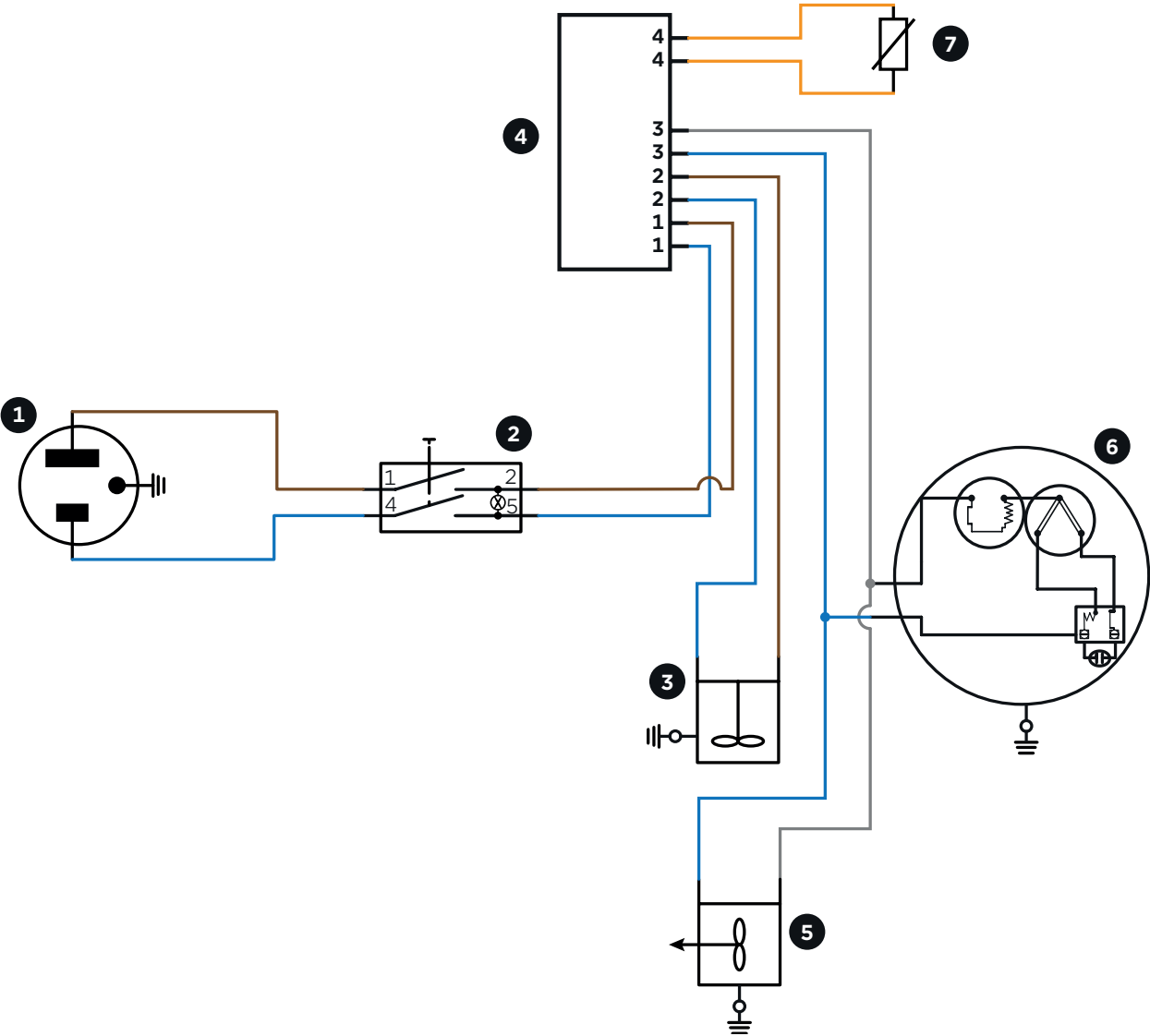
17.2 MECHANICAL THERMOSTAT

LEGEND			
1	PLUG	4	MECHANICAL THERMOSTAT FOR ICE BANK
2	BIPOLAR SWITCH	5	FAN
3	STIRRER	6	COMPRESSOR



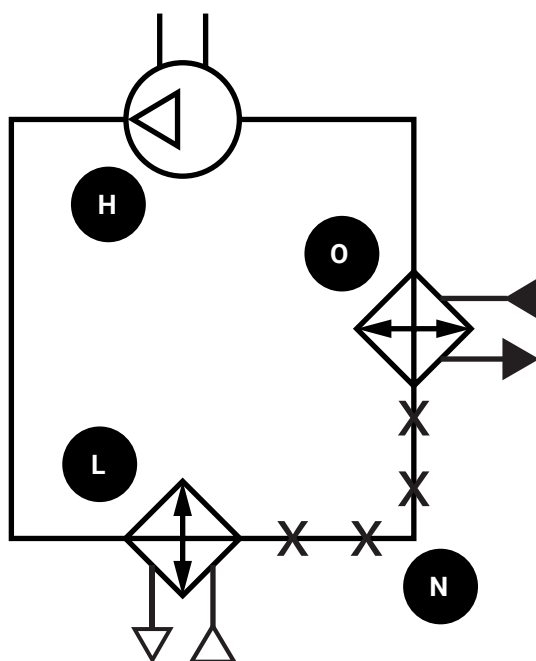
17.3 BARCINOVA THERMOSTAT

LEGEND			
1	PLUG	5	FAN
2	BIPOLAR SWITCH	6	COMPRESSOR
3	STIRRER	7	BARCINOVA PROBE
4	BARCINOVA THERMOSTAT FOR ICE BANK		



18. COOLING SCHEME

O	EVAPORATOR	H	COMPRESSOR
N	CAPILLARY TUBE	L	CONDENSER

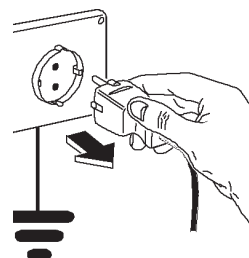


19. TROUBLESHOOTING

ANOMALIES FOUND	POSSIBLE CAUSES	CHECKS AND REMEDIES
The chiller does not work (the master switch (IG) warning light does not turn on)	Lack of voltage	Check the power main Check that the plug is properly inserted in the socket outlet
The machine does not cool (the fan (M), the agitator (F) and the compressor (H) do work)	Low level of refrigerant	Check the refrigerating circuit pressure make sure there is no leak and reload with refrigerant
The refrigerating unit works, but the agitator (F) is at a standstill	Failure of agitator motor or lack of current	Make sure the machine was plugged in properly Check the electric system Replace the agitator
The machine does not cool (the fan (M) and the compressor (H) are at a standstill, but the agitator (F) keeps on running)	Malfunctioning of thermostat	Check the thermostat electrical connections Replace the thermostat and the probe
The machine does not cool (the compressor (H) is at a standstill, but the fan (M) and the agitator (F) keep on running)	Lack of current to the compressor The compressor broke down	Check connections and electric system Check clixon and relays Replace the compressor
The chiller never stops	Failure of thermostat	Replace thermostat Replace probe
The machine does not cool (the fan (M) is at a standstill, but the compressor (H) and the agitator (F) keep on running)	Lack of current to the fan motor The fan motor broke down	Check connections and electric system Replace the fan motor
The agitator pump (F-B) motor is noisy	Broken-down motor bearings Worn-out pump bushings	Replace the agitator motor Replace the pump



N.B. Control and maintenance operations must be carried out when the machine is stationary and with the power supply disconnected, pulling out the plug. Any operation excluded from those stated below must be carried out by specialized and authorized personnel.



DECLARATION OF CONFORMITY



IN ACCORDANCE WITH DIRECTIVES:

"MACHINE" 2006/42/CE

"LOW TENSION" 2006/95/CE

"EMC" 2004/108/CE

ANSI/UL 471

CSA C22.2 No. 120

NSF 18:2016

VINSERVICE MICRO MATIC S.R.L. - VIA G.FALCONE 26/34. 24050 ZANICA (BG)

Declares under their own responsibility that:

FLAT - SUPERFLATHAVE BEEN DESIGNED AND MANUFACTURED IN CONFORMITY WITH THE SAFETY
REQUIREMENTS PROVIDED FOR BY THE "CE" MARK REGULATIONS

(PERSON AUTHORIZED TO CONSTITUTE THE TECHNICAL DOSSIER)

GIULIO GUADALUPI MANAGING DIRECTOR

