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93	N VA	RV VA	RV LS
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Sistema di Qualità ISO 9001 Cert. CISQ/CSQ 9130.TAIF

Sistema di Qualità ISO 14001 Cert. CIS ECO ISO 9191.ISA3

CE

HCFC FREE

CO_2 100% Green generation

N°	ATTACHMENTS		
1	Wiring diagram	412100394000	**29**
2	Wiring diagram	412100395000	**30**
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The manual contains symbols to attract the reader's attention and highlight particularly important aspects. The table below illustrates the meaning of the various symbols used.

	Read the instructions manual		Use of protective clothing
	Danger: Live electrical parts		Requests for maintenance or operations must be carried out by qualified staff or technical after-sales centres.
	Attention / Danger		Important information
	Information		Operations that must be performed by two persons.
	Visual observation		Notes / Important notes
	Condensing unit on board		Remote condensing unit

1. NOTES / IMPORTANT NOTES

The content of this manual is of technical nature and is owned by **ISA**. It is forbidden to reproduce, circulate or modify all or part of its content without written consent. Any infringement will be legally pursued.

The manual and the conformity certificate are an integral part of the equipment and should always accompany the product in the event of transferral to a new location or to a new owner. The user is responsible for the integrity of these documents, for their consultation during the whole life cycle of the equipment itself. Keep this manual in a safe place. It should be made available near the equipment for consultation at any time. If lost or destroyed, you can request a copy of the manual to **ISA** by specifying the exact model, identification number and year of manufacturing. The manual reflects the manufacturing technology at the time of supply. The manufacturer reserves the right to modify its products in any way it deems necessary, with no obligation to update manuals and machines relating to previous manufacturing batches.

This equipment is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or by persons lacking the necessary experience and knowledge, unless they are supervised by a person responsible for their safety who has instructed them on how to use the cabinet. Children should be supervised to ensure that they do not play with the equipment. Always refer to this manual before going ahead with any operation. Before doing any type of work, disconnect the equipment from the power supply. Any work on electric and electronic parts or cooling system components should only be carried out by trained personnel in compliance with current laws.

The Manufacturer cannot be held liable for any injury to persons or animals, or damage to the product itself in the event of:

- Improper use of the equipment or use of the appliance by unqualified or unauthorised personnel.
- Failure to comply with current legislation.
- Incorrect installation and/or power supply faults.
- Failure to observe the instructions contained in this Manual.
- Failure to follow the maintenance programme.
- Unauthorised modifications.
- Installation of non-original spare parts in the equipment.
- Installation and use of the equipment for purposes other than those for which the appliance was designed and sold.
- Tampering with or damage to the power supply cable.

Liability for applying the safety instructions contained in this manual is held by the technical personnel responsible for the intended use of the equipment, who should ensure that authorised personnel:

- Are qualified to carry out the requested activity.
- Are aware of, and carefully comply with, the instructions contained in this document.
- Are aware of, and apply, the general safety standards applicable to the equipment.

Failure to comply with safety standards may result in injury to personnel and damage to the equipment components and control unit. The user can contact the dealer to request additional information not contained in this document, or suggest improvements, at any time.

Before the product is delivered to the customer, it is essential that a trained technical member of staff checks that the equipment is operating correctly in order to achieve maximum performance.

1.1 Introduction

ISA employs materials of the best quality and as they enter the company, we constantly monitor their storage and the use as part of the manufacturing process to prevent damage, deterioration and failure. All manufacturing elements are designed and manufactured in order to guarantee reliability and high safety standards. All equipment is subjected to a strict testing procedure before delivery. However, please bear in mind that product performance over time depends on correct use and adequate maintenance. This manual contains the necessary instructions to maintain the equipment's initial appearance and functions over time.

Note
So as not to compromise equipment operation and safety, particularly complex installation and maintenance operations are not described in this manual and are carried out by the manufacturer's specialised technical personnel.

The Use and Maintenance Manual contains the necessary information for understanding how the equipment works and how to use it properly, namely: the technical description of the various operational units, equipment and safety systems, operations, how to use the instruments and the interpretation of any diagnostics reports, main procedures and information relating to routine maintenance. For correct use of the equipment, the working environment should comply with current health and safety standards.

The safety requirements, indications, standards and notes illustrated in the various chapters of this manual are aimed at establishing a code of conduct and a series of obligations to be observed when performing the various activities, in order to create safe conditions for personnel, the equipment and the surrounding environment. The safety standards reported in this document are intended for trained, authorised personnel responsible for:

- Transport
- Installation
- Operation
- Management
- Maintenance
- Cleaning, decommissioning and disposal which are the only intended uses of this equipment

Attention
Reading this manual, albeit in full, is no substitute for adequate user experience. therefore it should only be considered a useful reminder of the technical features and the main operations to perform.

Warning
Installers and users are obliged to read and understand all the instructions contained in this document before using the equipment.

1.2 Manufacturer's contact details

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2. SAFETY

The buyer is responsible for training personnel using the appliance on the risks, safety devices and general health and safety rules required by the laws of the country where the equipment is installed.
Users/operators should be aware of the position of all the controls and how they work, as well as of the features of the equipment.
They should also read this manual in its entirely.
Maintenance work should be conducted by qualified personnel after the equipment has been prepared adequately.

Danger
Tampering with or unauthorised replacement of one or more parts of the equipment, applying accessories that modify its use and fitting spare parts other than recommended ones may result in accident risks.

Danger
Before doing any type of work, the equipment must always be disconnected from the power supply.

Any work on electric parts or cooling system components should only be carried out by trained personnel in compliance with current laws.

2.1 Personnel training

The buyer is responsible for ensuring personnel who will use the equipment and maintenance technical staff are instructed and trained adequately.
The manufacturer is available for advice, clarifications, etc. so that the operator and technical staff can use the equipment correctly.

Attention
The equipment is intended for professional use.

2.2 Safety devices applied

The Equipment is equipped with the following safety devices:

2.2.1 SAFETY DEVICES PRESENT

2.2.2 FIXED PROTECTIVE DEVICES

2.2.3 SECTIONING THE ELECTRICITY SUPPLY

2.2.1 Safety devices present

Devices which operation prevents risk situations in operation conditions verifying (e.g. fuses, pressure switches, protective devices, circuit breakers, etc.).

2.2.2 Fixed protective devices

Fixed protective devices consist of fixed perimeter shields, which are used to prevent external parts from entering the equipment.

Danger
It is strictly forbidden to start up the equipment after maintenance work without refitting the panelling properly.

Attention
You should check the integrity of fixed panels and corresponding fixings to the frame, focusing in particular on the protective panels.

2.2.3 Sectioning the electricity supply

Before conducting any maintenance work on the equipment or part of it, it is necessary to section the power supply that powers it.

Danger
Please remember to fully disconnect the equipment from the power supply in the event of maintenance work during which the operator cannot prevent any accidental closure of the circuit by other people.

2.3 Residual risks

During design the manufacturer examined all the areas or parts at risk. Therefore, all necessary precautions have been taken to prevent risks to persons and damage to the equipment as mentioned earlier.

Attention
Periodically check that all safety devices are operating correctly.
Do not remove the fixed protective devices.
Do not introduce foreign objects or tools into the operational and working area.

Although the equipment is fitted with the aforementioned safety devices, there are still some risks that cannot be eliminated, but reduced via corrective actions by the final integrator and correct operational procedures.

Below is a summary of the remaining risks associated with the equipment during:

- Normal operation
- Adjustments and tweaking
- Maintenance
- Cleaning

2.3.1 Risk of contact with live parts

Risk of breaking or damaging the electrical components of the equipment, with a possible reduction in safety levels, following a short circuit.
Before connecting the electricity supply, make sure there is no ongoing maintenance work.

Attention
Before making the connection, check that the d/c electricity at the point of installation is no higher than the value indicated on the protective switches on the fuse box. if it is, the user is responsible for fitting the relevant limiting devices.
It is strictly forbidden to conduct any electrical modification, in order to prevent additional unforeseen hazards and risks.

2.3.2 Fire

Danger
In the event of a fire, immediately disconnect the master switch from the main power supply line.

2.3.3 Explosive atmosphere

The equipment must not be located in an area classified as an explosion risk according to 1999/92/EC such as:

Zone 0
An area in which there is a permanent, long-lasting or frequently explosive atmosphere made up of a mixture of air and flammable substances in the form of gases, fumes or steam.

Zone 1
An area in which the formation of an explosive atmosphere, made up of a mixture of air and flammable substances in the form of gases, fumes or steam is occasionally probable during normal activities.

Zone 20
An area in which there is a permanent, long-lasting or frequently explosive atmosphere in the form of clouds of combustible dust in the air.

Zone 21
An area in which the formation of an explosive atmosphere in the form of clouds of combustible dust is occasionally probable during normal activities.

2.3.4 Slipping

Any leaks in the areas surrounding the equipment may cause personnel to slip.
Check that there are no leaks and keep these areas clean at all times.

2.3.5 Tripping

Generally untidy deposits of material may constitute a tripping hazard and a total or partial obstruction of emergency exit routes.
You should ensure that operating and transit areas and emergency exit routes are free from obstacles in compliance with current legislation.

2.3.6 Circuit faults

Owing to potential faults, safety circuits may become less effective, which results in lower safety levels.
You should check the operational condition of the present safety devices regularly.

2.4 Warning signs (if any)

Owing to the presence of various residual risks identified, the equipment is fitted with hazard, warning and obligation signs devised in compliance with regulations relating to graphical symbols for use on systems.
The signs are located in clearly visible positions.

Attention
It is strictly forbidden to remove the warning signs on the equipment.
The user is responsible for replacing warning signs that, owing to wear, become unreadable.

3. WASTE DISPOSAL

During normal operation, the equipment does not generate any environmental contamination. At the end of its life cycle, or if it is necessary to proceed to permanent decommissioning, we recommend following the procedures below:

DISPOSAL (User)

The symbol, applied to either the product or its packaging, indicates that the product should not be considered as normal domestic waste, but should be taken to a waste collection point for the recycling of electrical and electronic appliances. The correct disposal of this product helps to prevent potential negative consequences that might derive from inadequate product disposal. For detailed information about recycling this product, contact your council, your local waste collection service or the store where you purchased the product.

END-OF-LIFE DISPOSAL AND RECYCLING PROCEDURES FOR THE EQUIPMENT (Authorised Bodies)

1. Switch off the equipment and unplug the power supply cable.
2. Remove the lamps (if installed). These should be disposed of separately.
3. Remove the control boards and the electronic cards. These should be disposed of separately.
4. Remove all the independent parts (grids, casings, profiles, etc.) and group them according to shared features in order to access the heat exchangers, pipes, cables, etc. and be careful not to damage the cooling circuit.
5. Remove all mobile parts (doors, sliding doors, glass parts, etc.) and group the various materials according to their features.
6. Check the type of coolant on the label located inside the counter. Remove the coolant and dispose of it through authorised services.
7. Disconnect the evaporator, condenser, compressor, pipes and fans. These are made of copper, aluminium, steel and plastic and should therefore disposed of separately.
8. Once all the guardings and the various parts of the frame have been removed, separate the various types of material they are made from (plastic, metal sheets, polyurethane, copper, etc.) into groups according to their features.

All recyclable materials and waste should be processed and recycled by professionals, in compliance with the laws of the country in question.
The company responsible for recycling the materials should be registered and certified as a waste disposal service in accordance with the specific directives of the country in question.

Attention
Illegal disposal of the product by the owner will result in administrative sanctions as required by current laws.
Disposal of the product should comply with current laws on the disposal of coolant liquids and mineral oils.

Important
If there is no symbol representing a barred dustbin on the equipment, this means that the manufacturer is not responsible for taking care of the disposal of the product. In this case, again, current waste disposal laws should be complied with.

Additional information
Further information on the disposal of liquid coolant, oils and other substances is available on the safety data sheet corresponding to the substance itself.

4. INSTALLATION

This manual provides information on how to unpack, position and connect to the power supply.

4.1 Storage and unpacking

The equipment, with or without the packaging, should be carefully stored inside warehouses or in areas away from the elements and direct sunlight, at a temperature between **0** and **+40**°C.

The equipment should only be moved by qualified personnel operating forklift trucks, the power of which should be suited to handling the weight of the product: during this operation the equipment MUST be placed on the special pallet supplied.

Unpack the equipment by removing the screws fixing it to the pallet.
All packaging materials are recyclable and should be disposed of in accordance with local regulations. Please destroy "plastic" bags to prevent them from becoming hazardous to children (suffocation).

4.2 Installation, positioning and ambient conditions

Attention
There should be a good air flow around the compressor and condensing unit. Therefore the area around the unit should not be obstructed by boxes or other objects.
Position the equipment away from sources of heat (radiators, all types of ovens, etc.), and away from draughts (generated for example by fans, air conditioning ducts, etc.).
Also avoid direct exposure to sunlight, or anything that causes the temperature inside the cabinet to rise with detrimental results to unit operation and energy consumption. Do not use the equipment outdoors and do not leave it exposed to rain.

4.3 Electrical connection

Attention
Check that the voltage indicated on the appliance is the same as the value on the appliance identification label and in the table provided in paragraph 2 of this manual, and check that the required voltage is suitable.
Check on the socket that the power supply voltage provides rated voltage (±10%) when the compressor is started.
The plug should be directly connected to the electrical socket. It is forbidden to connect the plug to the socket by means of multiple socket extensions or adaptors.
The electrical system socket must be fitted with a disconnecting device from the mains (rated for the load and conform to current standards) to guarantee full disconnection in overloads category III (3) and ensure protection of the circuits from earth faults, overloads and short circuits.
Do not route the electricity cable in passageways.

Attention
Earthing is necessary and mandatory by law.

5. TECHNICAL SPECIFICATIONS

This equipment is exclusively intended to **display and sell pastry (fresh or dry) and/or pre-packaged fresh products**.
The manufacturer is not liable for injury to persons or damage to property or the equipment itself caused by the displaying of products other than those described above.

Attention
- Food preservation.
- Displaying and/or preserving non-food products (chemicals, pharmaceuticals, etc).

N VA			93	129
External dimensions (lxpxh)	LX	mm	950 x 852 x 1338	1305 x 852 x 1338
	ST	mm	950 x 840 x 1327	1305 x 840 x 1327
Power supply		V / ph / Hz	230 / 1 / 50	230 / 1 / 50
Electric absorption		W / A	100 / 1	150 / 1.5
Weight (net)		Kg	200	250

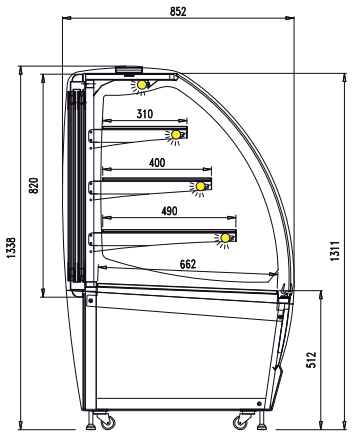
RV VA			93	129
External dimensions (lxpxh)	LX	mm	950 x 852 x 1338	1305 x 852 x 1338
	ST	mm	950 x 840 x 1327	1305 x 840 x 1327
Refrigeration			Ventilated	Ventilated
Defrosting			Off Cycle	Off Cycle
Climate class		N°	3	3
Environmental conditions		°C / % RH	25 / 60	25 / 60
Product class			M1	M1
Safety class (CEI EN 60335-2-89)		N° / °C (ambient)	5 / 43	5 / 43
Refrigerant (GWP)			R404A (3784)	R404A (3784)
Power supply		V / ph / Hz	230 / 1 / 50	230 / 1 / 50
Electric absorption (standard)		W / A	880 / 4.8	980 / 5.2
Electric absorption (defrosting)		W / A	150 / 0.7	170 / 0.9
Weight (net)		Kg	330	430

RV LS			93	129
External dimensions (lxpxh)	LX	mm	950 x 852 x 1338	1305 x 852 x 1338
	ST	mm	950 x 840 x 1327	1305 x 840 x 1327
Refrigeration			Ventilated	Ventilated
Defrosting			Off Cycle	Off Cycle
Climate class		N°	3	3
Environmental conditions		°C / % RH	25 / 60	25 / 60
Product class			M2	M2
Safety class (CEI EN 60335-2-89)		N° / °C (ambient)	5 / 43	5 / 43
Refrigerant (GWP)			R404A (3784)	R404A (3784)
Power supply		V / ph / Hz	230 / 1 / 50	230 / 1 / 50
Electric absorption (standard)		W / A	1270 / 6.5	1500 / 6.7
Electric absorption (defrosting)		W / A	400 / 1.8	350 / 1.5
Weight (net)		Kg	310	400

5. TECHNICAL SPECIFICATIONS

N VA

LX



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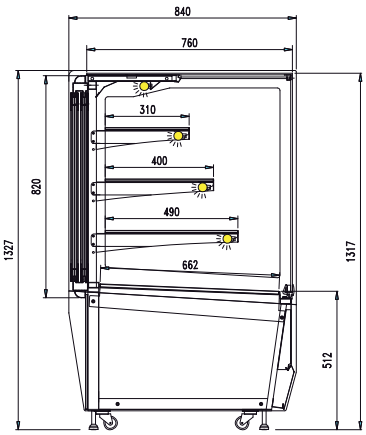

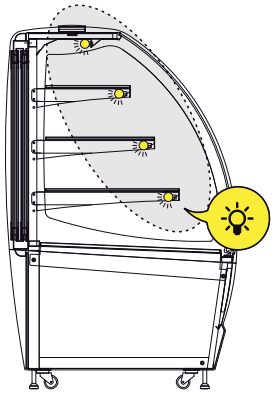

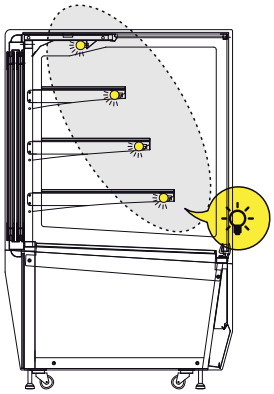

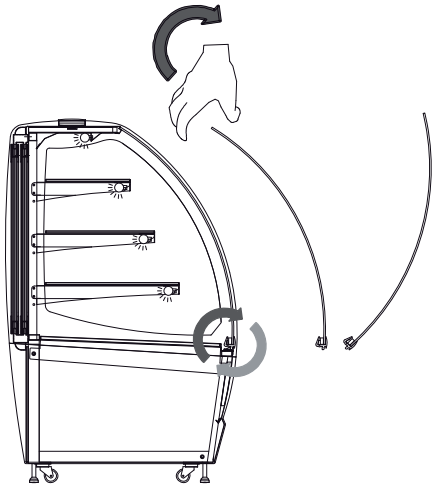

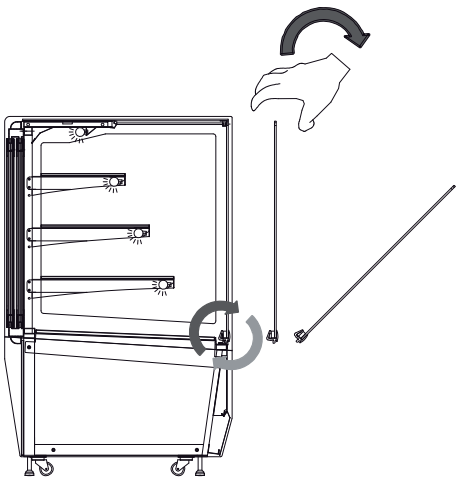

5. TECHNICAL SPECIFICATIONS

RV VA

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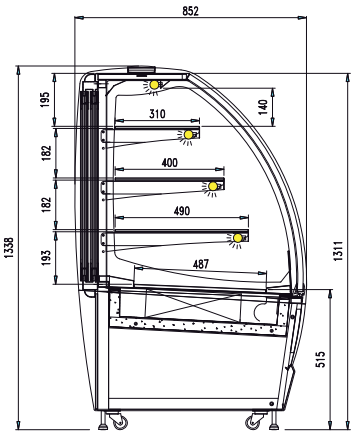

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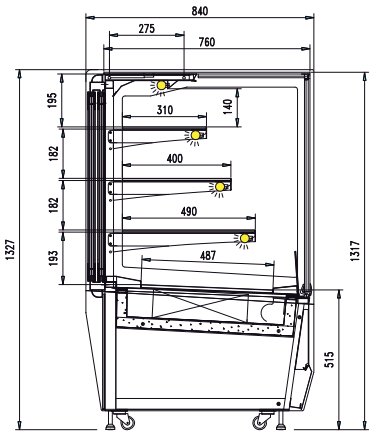

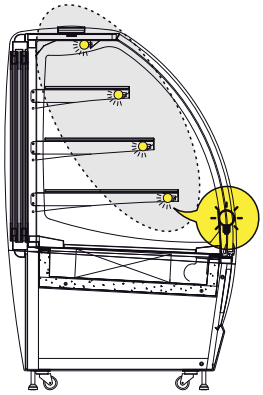

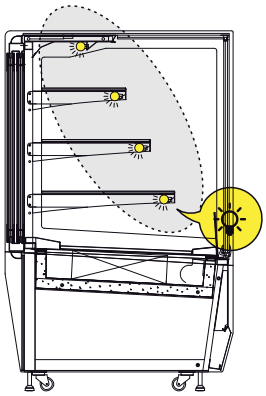

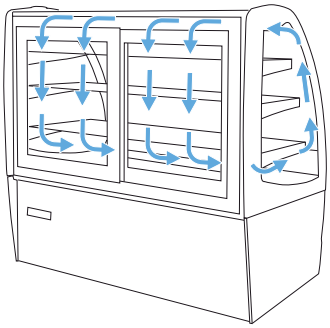

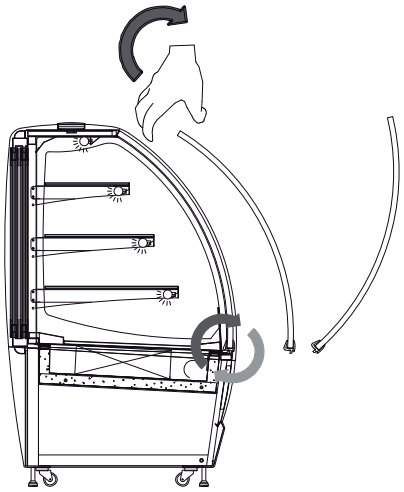

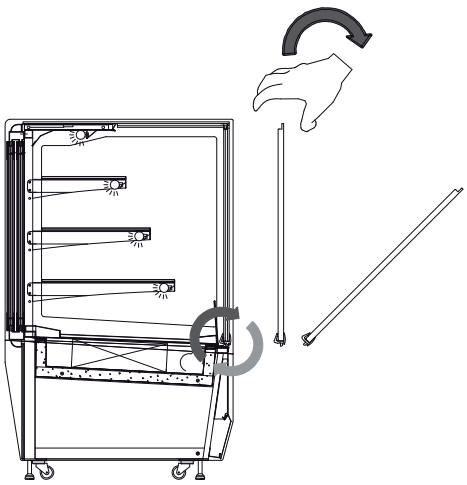

5. TECHNICAL SPECIFICATIONS

RV LS

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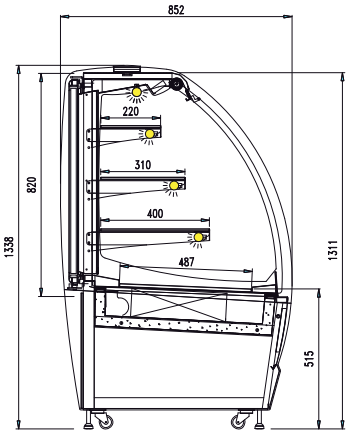

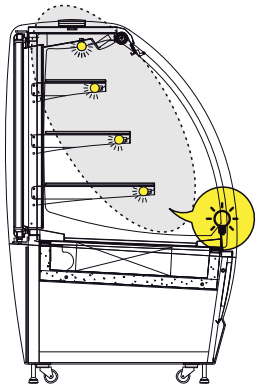

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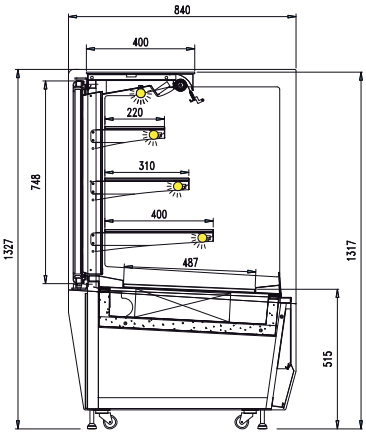
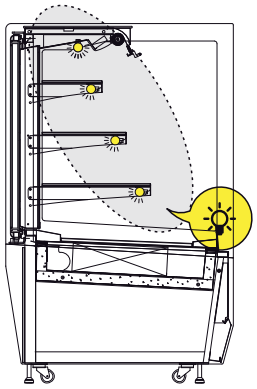
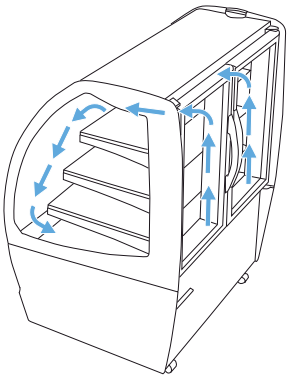


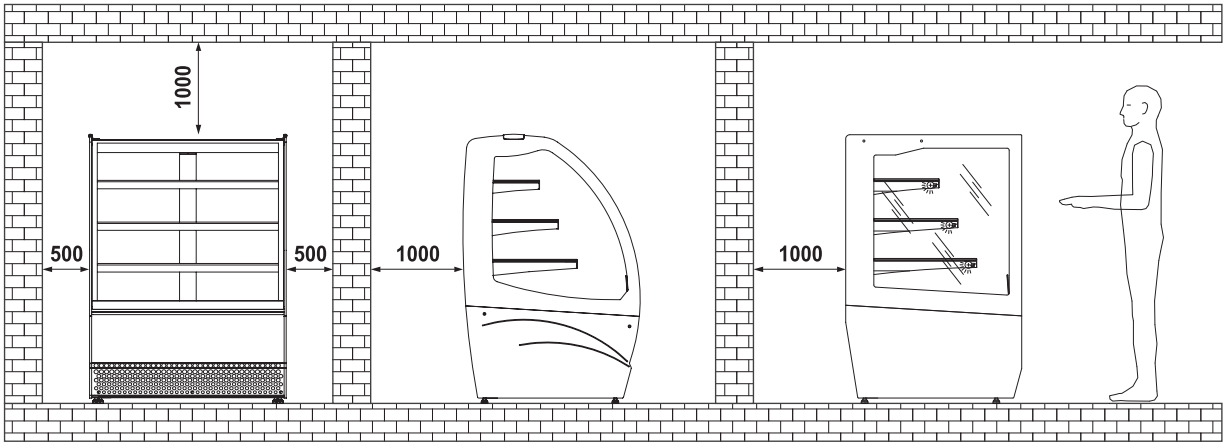




5.1 Installation

Attention

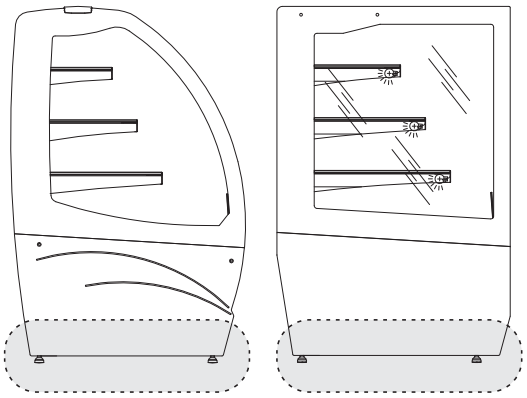
The distances (mm) indicated for correct equipment installation must be respected.

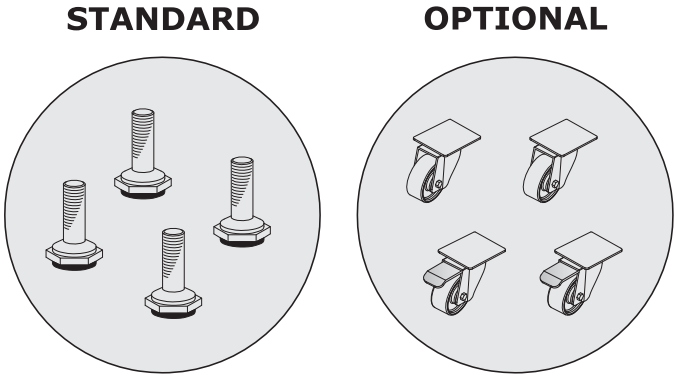


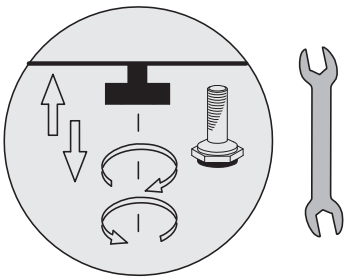
5.2 Positioning

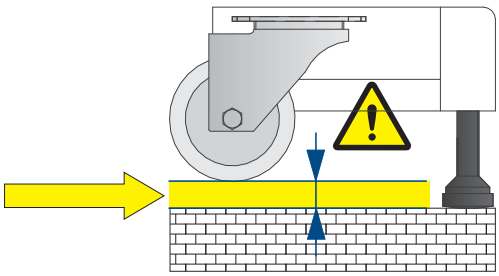
Warning

The equipment is fitted with height adjustable feet.
It is absolutely necessary after placement, to stabilise the equipment to the floor.





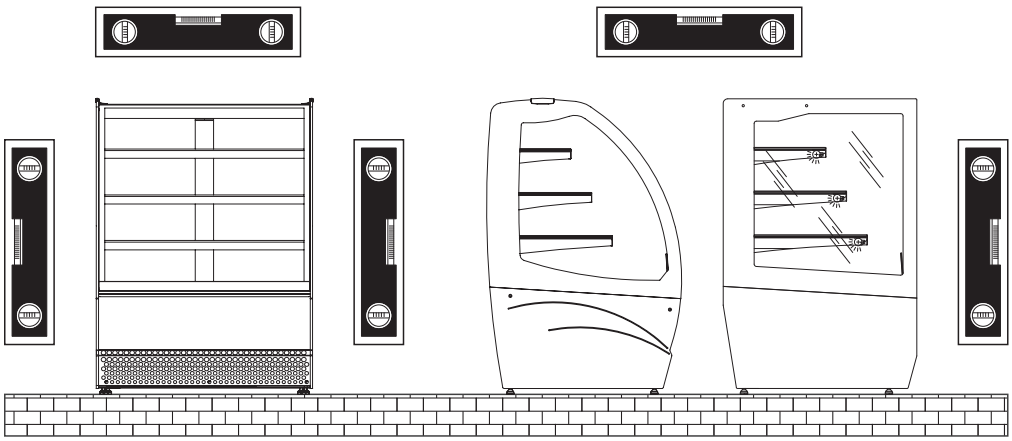




5.3 Levelling

Warning

It is absolutely necessary after placement, to level the equipment to the floor.



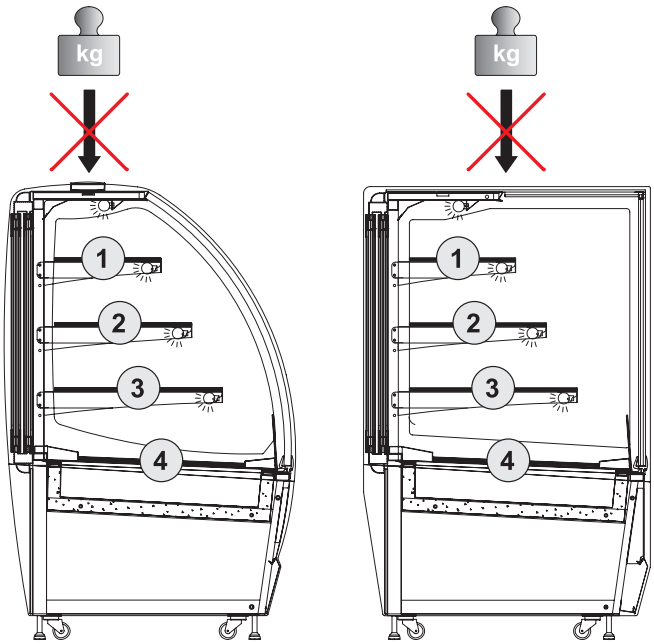
5.4 Load limits

Attention
It is essential not to exceed the indicated load limits in order to prevent altering the correct air flow and thus avoid higher product temperatures.

5.5 Shelves Load limits

Attention

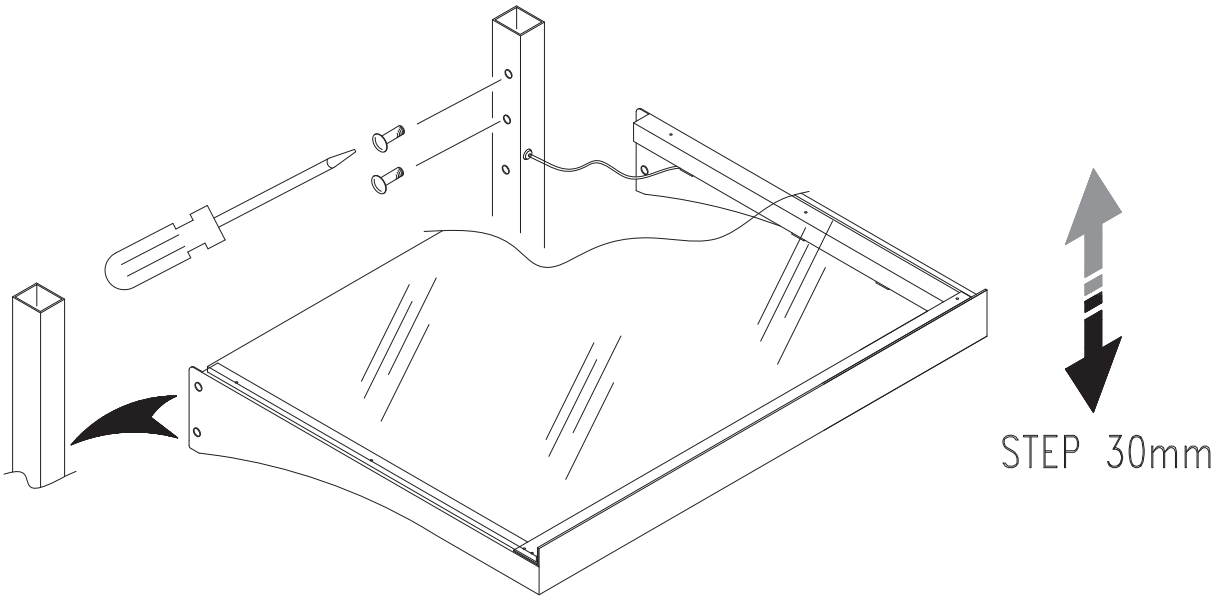
The weight limits indicated for each shelf must be respected to avoid their deformation or breaking.



SHELF N°		93	129
1	Kg max	30	45
2	Kg max	30	45
3	Kg max	30	45
4	Kg max	30	45

5.6 Adjusting shelves

The display shelves are adjustable in height as indicated below.



6. EQUIPMENT DESCRIPTION

To ensure the operator's safety, equipment devices should be kept in constant working order.
This manual is intended to illustrate the use and maintenance of the equipment.
The operator has a responsibility and duty to carefully observe its instructions.

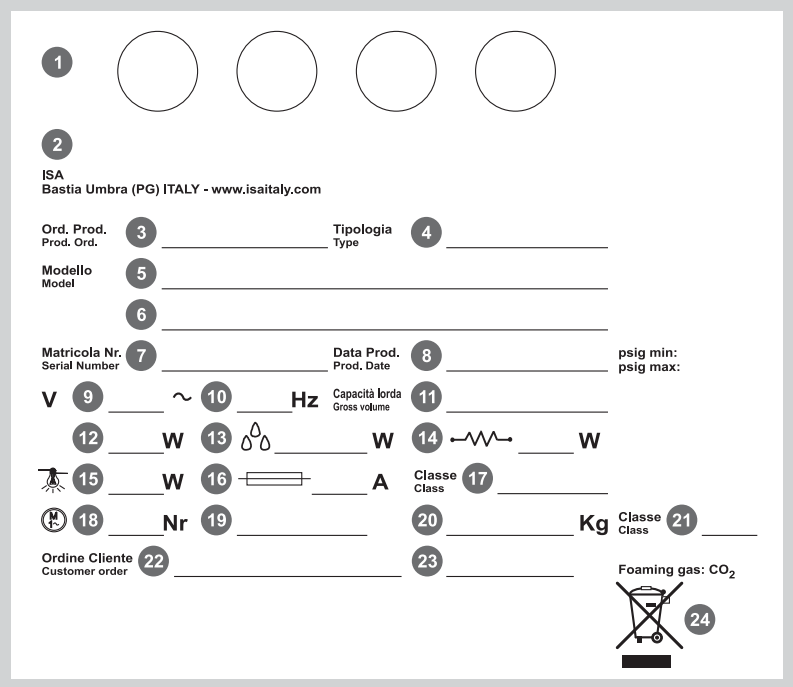
6.1 Structure

The equipment consist of a single piece of furniture which contains all the operational devices necessary to make it a professional and efficient product for its intended use.

The equipment consists of:

- Insulated structure in ecological polyurethane
- Cooling system
- Electronic commands panel
- Electrical system
- On board condensing unit
- Shelf lighting
- Height adjustable feet (wheel kit optional)

6.2 Identification

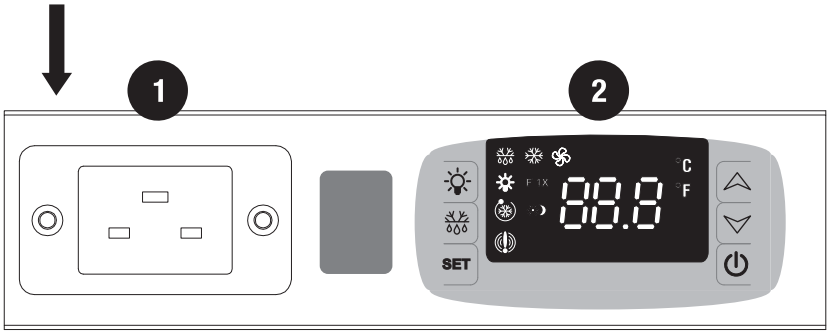


1	Symbols of Compliance
2	Company Identification Product Manager
3	Production Order
4	Type
5	Model Name
6	Article
7	Serial Number
8	Production Date
9 - 10	Power supply Voltage and Frequency
11	Gross Capacity
12	Absorption at Rated Capacity
13	Absorption during Defrosting
14	Absorption of Heating Elements
15	Lamp Power
16	Fuse Value
17	Climate Class
18	Number of Motors
19	Type of Coolant
20	Amount of Coolant
21	Safety Class
22 - 23	Customer order
24	WEEE Mark

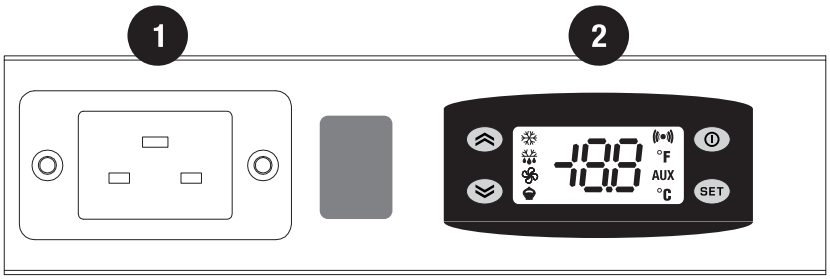
7. CONTROL PANEL

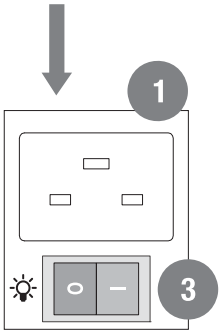
The control panel consists of the following components:

1	Electrical socket
2	Electronic Control Unit
3	Lighting switch



MODELS	
93	RV LS
93	RV VA
129	RV LS
129	RV VA



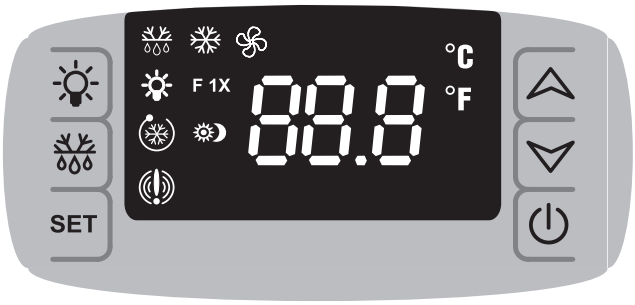


MODELS	
93	N VA
129	N VA

7.1 Start-up

Activate the mains system master switch.
Plug the socket supplied by the customer, ensuring that the plug is fitted with an earth contact and that there are no multiple sockets connected to it; the equipment automatically activates.

7.2 User Interface XR44CX

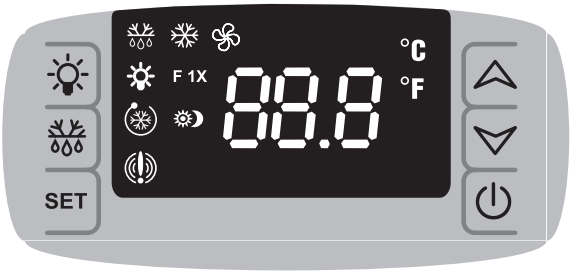


Attention
The electronic control board is installed already programmed. Any changes to the control board settings can be carried out exclusively by qualified technical personnel.

KEYS - Single Pressing	
☼	Switches lighting on or off
❄	**SBR** To start defrosting
SET	To display or modify set-point. Selects a parameter or confirms a value when in programming.
∧	**UP** To view data of a temperature alarm. Scrolls parameters' codes or increases their value when in programming.
∨	**DOWN** To view data of a temperature alarm. Scrolls parameters' codes or decreases their value when in programming.
⏻	Switches instrument on or off

KEYS - Combined Pressing	
∧ + ∨	To lock and release keyboard
SET + ∨	To access programming
SET + ∧	To exit programming

7.2 User Interface XR44CX



LED	Mode	Meaning
❄	On	Compressor(s) active
	Flashing	Delay against close start-ups
❄	On	Defrosting in progress
	Flashing	Dripping in progress
!	On	A temperature alarm has occurred
❄	On	Continuous cycle in progress
☾	On	Energy saving in progress
°C / °F	On	Unit of measure
	Flashing	Programming

7.2.1 Functions XR44CX

Minimum temperature display

Press and release key ⩔

The “**Lo**” message is displayed followed by reached minimum temperature.

Press ⩔ or wait 5 seconds to go back to displaying normal temperature.

Maximum temperature display

Press and release key ⩓

The “**Hi**” message is displayed followed by reached maximum temperature.

Press ⩓ or wait 5 seconds to go back to displaying normal temperature.

Set Point display

Press and release **SET** , set point is immediately displayed.
Wait 5 seconds or press key again, to go back to temperature display **SET**

Set Point modification

Press **SET** for at least 2 seconds.

Set point is displayed and LED **°C** starts flashing.

Modify value by acting on keys ⩓ and ⩔ .

Memorise new set point by pressing **SET** or wait 15 seconds to exit programming.

Manual defrosting

Press for at least 2 seconds to start defrosting cycle.

Keyboard lock

Keep both keys ⩓ ⩔ pressed for a few seconds until “**POF**” appears flashing.
The keyboard is now locked; only display of set point, maximum and minimum temperature is possible.
“**POF**” appears if a key is pressed for more than 3 seconds.

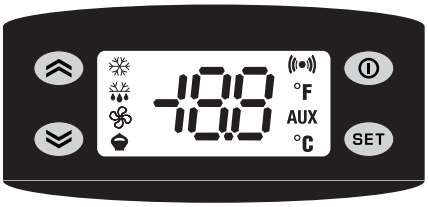
Keyboard release

Keep both keys ⩓ ⩔ pressed for a few seconds until “**POn**” appears flashing.

On / Off

Press for 2 seconds for display to show “**OFF**”.
Loads and all adjustments are disabled in this configuration.
Press key again for 2 seconds to bring instrument at ON again.

7.3 User Interface EW978



Attention

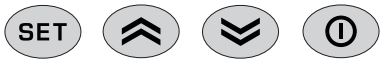
At start-up, the instrument conducts a **LAMP TEST** for a few seconds. The display and LEDS flash to verify their integrity and to ensure they are working correctly.

KEYS	
	UP Scrolls menu options Increases the values Activates manual defrosting Switches lighting on
	DOWN Scrolls menu options Decreases the values
	STAND-BY (ESC) Goes back one level compared to current menu Confirms parameter value Activates the Stand-by function
SET	**SET (ENTER)** Accesses the Setpoint Accesses the programming menu Confirms input commands Displays alarms (if any)

LED	
	COMPRESSOR or RELAY 1 ON for compressor on Flashing for delay, protection or blocked activation
	ADDITIONAL ON for defrosting in progress Flashing for manual activation
	ALARM ON for active alarm Flashing for silenced alarm
	FANS ON for operating fans

7.3 User Interface EW978

SET button



Press the **SET (ENTER)** button and release immediately.
The "**Set**" label appears.
To view the Setpoint value, press the **SET (ENTER)** button again.
The Setpoint value will appear on the display.
To change the Setpoint value, press the **UP** and **DOWN** buttons within 15 seconds.
To confirm the new Setpoint value set, press the **SET (ENTER)** button again.
If 15 seconds passes without any of the buttons being pressed (time-out), or if the **STAND-BY (ESC)** button is pressed just once, the last values viewed on the display will be confirmed and the previous display will be restored.

Check UP

Alarms are reported by the buzzer (if any) and the LED corresponding.
to the alarm icon.
Any alarms deriving from broken probe (probe 1) appear directly on the instrument's display and are indicated by E1.
Any alarms deriving from broken evaporator probe (probe 2) appear directly on the instrument's display and are indicated by E2.

Manual activation of the Defrosting cycle

To manually activate the defrosting cycle, press and hold the **UP** key for 5 seconds.
If defrosting conditions are not present (for instance the temperature of the evaporator probe is higher than the temperature at the end of the defrosting process), the display will flash three (3) times to indicate that the operation will not be performed.

8. CLEANING

8.1 Chiller compartment inside cleaning

a) Remove the product contained in the chiller compartment and place it immediately in a freezer to ensure it is preserved correctly.
b) Switch off the equipment.
Wait at least 4 to 6 hours, until the ice on the evaporator has melted completely, before proceeding with cleaning the equipment. We recommend waiting until the following day to make sure the product has been completely defrosted.
c) Wash the bottom of the tank and the sides with a mild detergent, warm water and a cloth or a non-abrasive sponge.
Rinse well and dry using a cloth.
d) If the equipment is connected with a ground discharge, pour some warm water with a sanitising solution suited for the intended use. In terms of quantity, the the amount of solution used should be enough to remove any product residues and disinfect the whole drainage channel.
If the equipment is not connected to a drain channelled into the ground, follow the procedure described in the previous paragraph. The water used to rinse the solution should be collected in the tray located inside the base of the equipment. Clean and disinfect the tray.

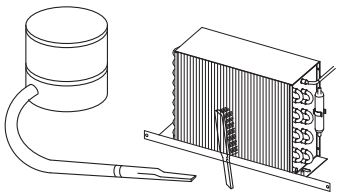
8.2 Accessing and cleaning the Condensing Unit

Remove the rear protective grid by loosening the specific fixing screws.

Attention

Clean the condensing unit using a suction brush.

Clean the **CONDENSER** with a soft bristle brush; make sure you do not bend the condensing unit springs whilst cleaning it.



8.3 External cleaning operations

The external surfaces should be cleaned as follows:

STAINLESS STEEL
Wash with lukewarm water and mild detergents, rinse and dry using a soft cloth.
ACRYLIC OR POLYCARBONATE SURFACES
Wash with lukewarm water, using a soft cloth or a chamois cloth.
Do not use detergents, alcohol, acetone and solvents.
Do not use abrasive cloths or sponges.
GLASS SURFACES
Only use products specifically designed for cleaning glass.
We do not recommend using tap water, which may leave calcium deposits on the surface of the glass.

9. MAINTENANCE

Any work conducted on the on the equipment **must** involve disconnection from the power socket and in any case, none of the protective elements (grid, casing) should be removed by non-qualified staff; the equipment should not be operated when these protective elements have been removed.

The **Equipment manager** must check and respect the maintenance schedule in the table below by calling the authorised **Technical Assistance** service when indicated.

ROUTINE		
OPERATION	**FREQUENCY**	**AUTHORISED PERSONNEL**
Cleaning the external surfaces	Depending upon Use and Necessity	User
Cleaning the accessible internal parts (without the use of tools)	Depending upon Use and Necessity	User
Power supply cable, electric sockets and/or plugs check	Monthly/Six monthly	User
Check the seal gaskets integrity	Monthly	User
Condenser cleaning	Monthly/Six monthly	**Technical Assistance**
Check the compressor oil level (if present)	Six-monthly	**Technical Assistance**
Air tank draining (if present)	Six-monthly	**Technical Assistance**
Check pneumatic connections (if present)	Six-monthly	**Technical Assistance**
Check the integrity of chiller system piping	Six-monthly	**Technical Assistance**
Inspect cables and internal power connections	Six-monthly	**Technical Assistance**
Cleaning of condensation absorbing sponges (if present)	Six-monthly	**Technical Assistance**

EXTRAORDINARY	
OPERATION	**AUTHORISED PERSONNEL**
Replacing lamps/LED (if present)	**Technical Assistance**
Replacing control panel (electronic control board - thermostat - etc.)	**Technical Assistance**
Replacing power supply cable, electric sockets and/or plugs check	**Technical Assistance**

10. TECHNICAL ASSISTANCE

10.1 Faults

If the appliance is not working properly or stops working, **before contacting the Technical Assistance service intervention** check the following:

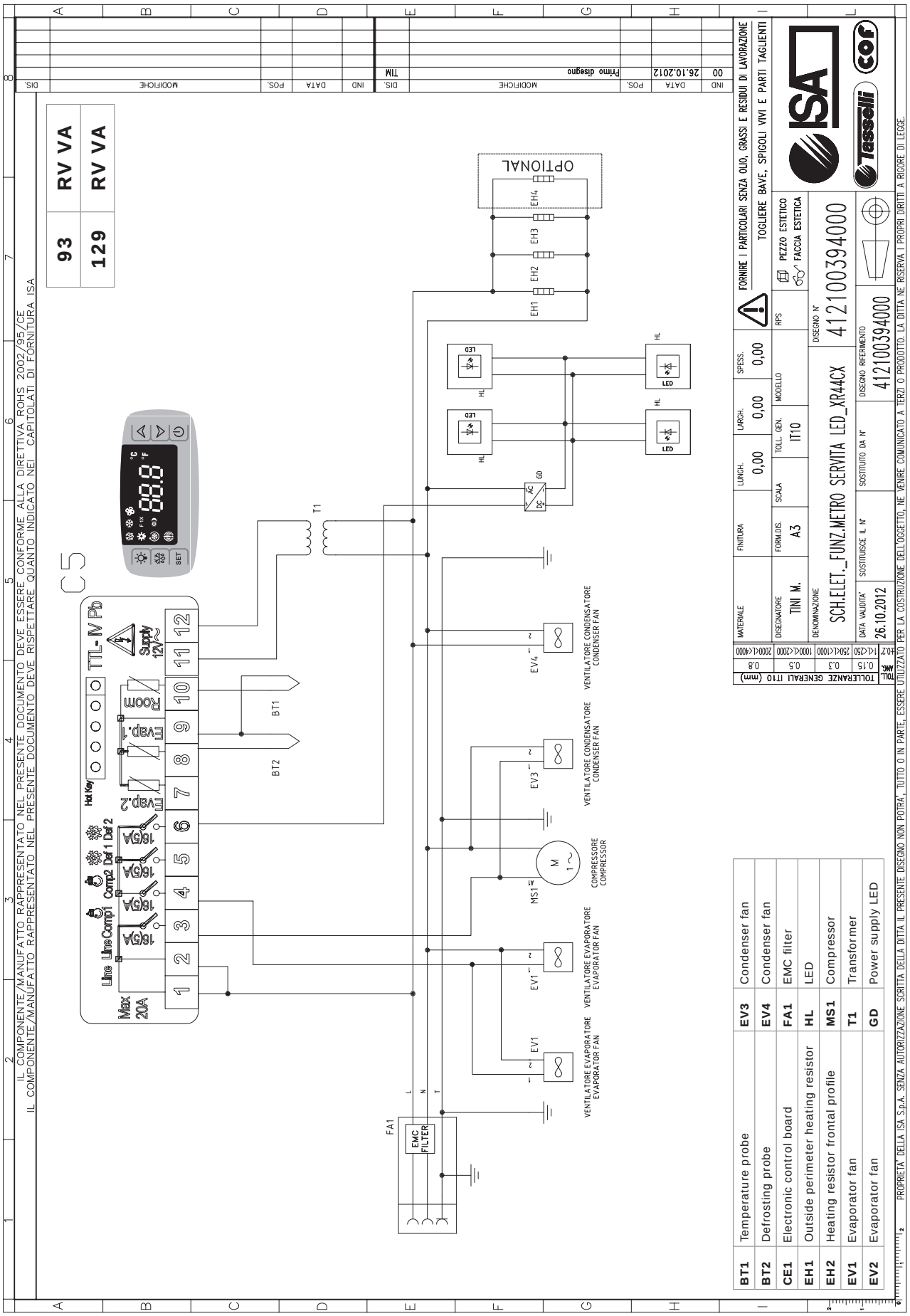
FAILURE	CAUSE	SOLUTION
The appliance is not working	Blown protective fuse	Find what triggered the switch and subsequently replace the fuse.
	The master switch is open	Close the master switch.
	Plug is not inserted	Insert the plug.
	Power cut	If the power cut persists, transfer the product to a freezer.
The internal temperature is not low enough	Evaporator(s) completely blocked by ice	Carry out an additional defrosting cycle.
	The wrong temperature has been set on the electronic control board	Set the right temperature.
	The equipment is affected by draughts or is exposed to direct or reflected sunlight	Eliminate any excessive draughts and prevent any direct or reflected sunlight.
	Insufficient cooling air flow in the air condensing unit	Remove anything that may affect air flow inside the condensing unit (paper sheets, cardboard, grids with an insufficient number of holes, etc.).
	The internal fans have stopped or their blades are damaged	Contact the **Technical Assistance** service.
	Internal ventilation is too high	Contact the **Technical Assistance** service.
	Low electronic control board efficiency	Contact the **Technical Assistance** service. Replace electronic control unit. Replace the temperature probes only after checking which of the two is not operating efficiently.
	Air condensing unit blocked by dust or debris	Contact the **Technical Assistance service.** Clean the condensing unit thoroughly.
	Insufficient coolant in the cooling system	Contact the **Technical Assistance** service. Find the cause behind the lower amounts of coolant and eliminate it. Top up the coolant. If necessary, empty the system before topping up.
The compressor does not work or works only for a few moments	No power supply	Check if there is a power cut. Close the various switches on the power supply line.
	The power supply voltage is too low	Check that the mains voltage at the ends of the power supply cable is 220V +/- 10%.
	The temperature set on the thermostat is too high	If the set temperature is higher than that of the air in the display area, the compressor does not activate itself. Set a more suitable temperature if the current value is not low enough.
	The pressure switch (if any) was activated at maximum pressure	Contact the **Technical Assistance service.** Check the reasons why the pressure switch is operating at maximum pressure levels, such as: air condensing unit blocked, condensing unit fan stopped, ambient temperature too high, pressure switch broken.

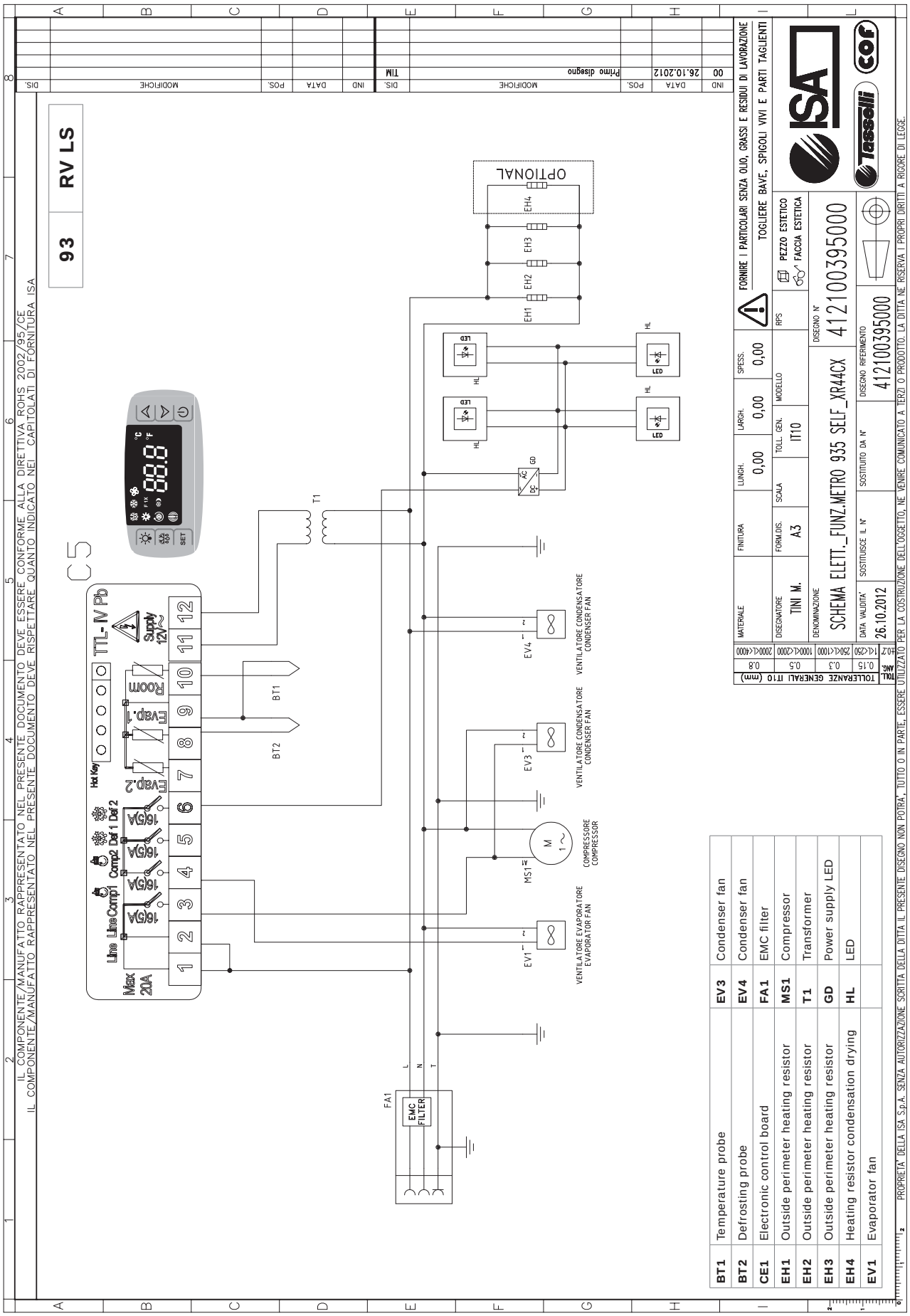
10.2 List of alarms on the electronic controller (if any)

ALARM	DESCRIPTION	SOLUTIONS
P1 E0	Broken thermostat probe. Compressor trip with “CON” and “COF" parameters	Contact the **Technical Assistance service.** The alarm starts a few seconds after the probe breaks down; it stops a few seconds after the probe starts working again properly. We recommend checking the probe connections before replacing it.
P2 E1	Broken evaporator probe. Set time for defrosting	Contact the **Technical Assistance service.** The alarm starts a few seconds after the probe breaks down; it stops a few seconds after the probe starts working again properly. We recommend checking the probe connections before replacing it.
HA HI	High temperature alarm	Contact the **Technical Assistance service.** The alarm stops automatically after reaching of set temperature. Check the settings.
LA LO	Low temperature alarm	Contact the **Technical Assistance service.** The alarm stops automatically after reaching of set temperature. Check the settings.
EA IA CB	External alarm	Contact the **Technical Assistance service.** The external alarm stops after the digital infeed is deactivated. It should be automatically restarted. The alarm is activated when the pressure switch and/or the compressor's circuit breaker (if present) is activated.
ETc RTF	Real time clock is broken	Contact the **Technical Assistance service.** Reset the clock. If the alarm does not stop, replace the clock.
EE	Machine parameter error	Contact the **Technical Assistance service.** The instrument is damaged. It should be replaced.
EF	Operating parameters error	Contact the **Technical Assistance service.** The instrument is damaged. It should be replaced.

11. WARRANTY TERMS AND CONDITIONS

The seller's warranty on the equipment is valid for **12** (twelve) **months from the date of delivery**.
The warranty includes repairs or replacements of any faulty parts due to manufacturing processes or installation after written communication has been received, stating the equipment serial number and date of installation.
All defects caused by incorrect use of the equipment, inappropriate electrical connection, normal wear (for instance compressor failure and fluorescent lamp malfunctioning that is not due to manufacturing defects), as well as calls for installation, technical instructions, adjustments and cleaning, are not included in the warranty.
If the seller's technical staff detect any tampering, unauthorised repairs or inappropriate use of equipment the warranty will be invalidated.
Shipment of components covered by the warranty is freight collect only.
Any damage to the equipment detected at the time of delivery due to transport must be reported on the same shipping note to claim compensation from the carrier.
The seller cannot be held liable in the event of damage to the preserved product due to equipment failure.


93 RV VA
129 RV VA
IL COMPONENTE/MANUFATTO RAPPRESENTATO NEL PRESENTE DOCUMENTO DEVE ESSERE CONFORME ALLA DIRETTIVA ROHS 2002/95/CE
IL COMPONENTE/MANUFATTO RAPPRESENTATO NEL PRESENTE DOCUMENTO DEVE RISPETTARE QUANTO INDICATO NEI CAPITOLATI DI FORNITURA ISA
OPTIONAL
EH1
EH2
EH3
EH4
T1
BT1
BT2
EV1
EV2
EV3
EV4
MS1
FA1
GD
HL
LED
EMC FILTER
COMPRESSORE COMPRESSOR
VENTILATORE EVAPORATORE EVAPORATOR FAN
VENTILATORE CONDENSATORE CONDENSER FAN
TTL-IV Pb
Hot Key
Supply 12V
Line
Line Comp1
Comp2 Def 1 Def 2
Max 20A
16.5A
Evap.1
Evap.2
Room
SET
FORNIRE I PARTICOLARI SENZA OLIO, GRASSI E RESIDUI DI LAVORAZIONE
TOGLIERE BAVE, SPIGOLI VIVI E PARTI TAGLIENTI
PEZZO ESTETICO
FACCIA ESTETICA
MATERIALE
FINITURA
LUNGH. 0,00
LARGH. 0,00
SPESS. 0,00
RPS
DISEGNATORE TINI M.
FORM.DIS. A3
SCALA
TOLL. GEN. IT10
MODELLO
DENOMINAZIONE SCH.ELET._FUNZ.METRO SERVITA LED_XR44CX
DISEGNO N° 412100394000
DATA VALIDITA' 26.10.2012
SOSTITUISCE IL N°
SOSTITUITO DA N°
DISEGNO RIFERIMENTO 412100394000
TOLLERANZE GENERALI ITTO (mm)
0,8 | 0,5 | 0,3 | 0,15 | 0,07
2000<4<4000 | 1000<4<2000 | 250<4<1000 | 4<250 | 4=0
PROPRIETA' DELLA ISA S.p.A. SENZA AUTORIZZAZIONE SCRITTA DELLA DITTA IL PRESENTE DISEGNO NON POTRA', TUTTO O IN PARTE, ESSERE UTILIZZATO PER LA COSTRUZIONE DELL'OGGETTO, NE' VENIRE COMUNICATO A TERZI O PRODOTTO. LA DITTA NE' RISERVA I PROPRI DIRITTI A RIGORE DI LEGGE.
BT1 Temperature probe
BT2 Defrosting probe
CE1 Electronic control board
EH1 Outside perimeter heating resistor
EH2 Heating resistor frontal profile
EV1 Evaporator fan
EV2 Evaporator fan
EV3 Condenser fan
EV4 Condenser fan
FA1 EMC filter
HL LED
MS1 Compressor
T1 Transformer
GD Power supply LED


93 RV LS
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IL COMPONENTE/MANUFATTO RAPPRESENTATO NEL PRESENTE DOCUMENTO DEVE RISPETTARE QUANTO INDICATO NEI CAPITOLATI DI FORNITURA ISA
TTL- IV Pb
Hot Key
Line Line Comp1 Comp2 Def 1 Def 2
Max 20A
16,5A
Supply 12V
Room
Evap.1
Evap.2
BT1
BT2
T1
EV1
EV2
EV3
EV4
MS1
FA1
EMC FILTER
VENTILATORE EVAPORATORE EVAPORATOR FAN
VENTILATORE CONDENSATORE CONDENSER FAN
COMPRESSORE COMPRESSOR
OPTIONAL
EH1
EH2
EH3
EH4
LED
HL
GD
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BT2 Defrosting probe
CE1 Electronic control board
EH1 Outside perimeter heating resistor
EH2 Outside perimeter heating resistor
EH3 Outside perimeter heating resistor
EH4 Heating resistor condensation drying
EV1 Evaporator fan
EV3 Condenser fan
EV4 Condenser fan
FA1 EMC filter
MS1 Compressor
T1 Transformer
GD Power supply LED
HL LED
FORNIRE I PARTICOLARI SENZA OLIO, GRASSI E RESIDUI DI LAVORAZIONE
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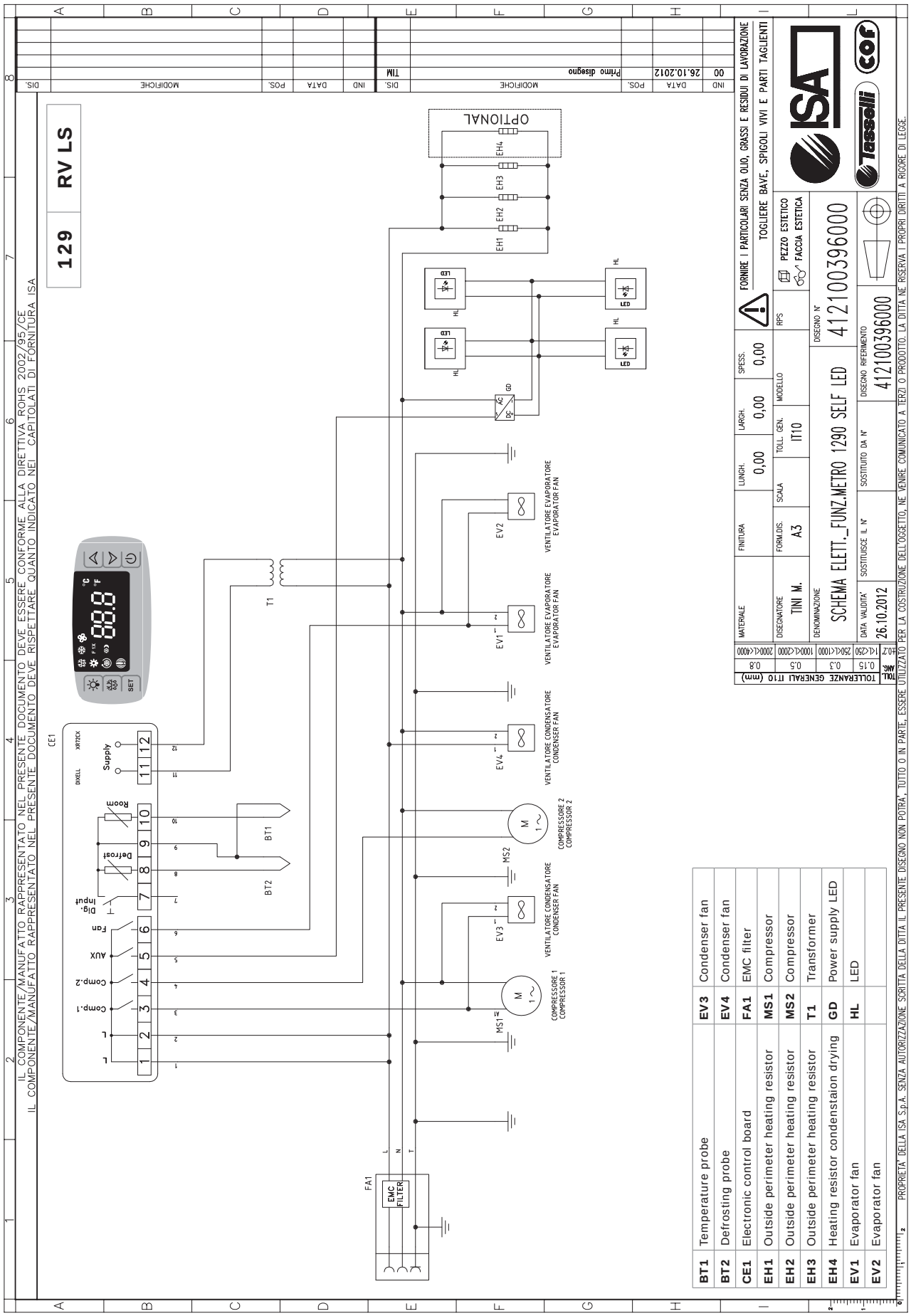
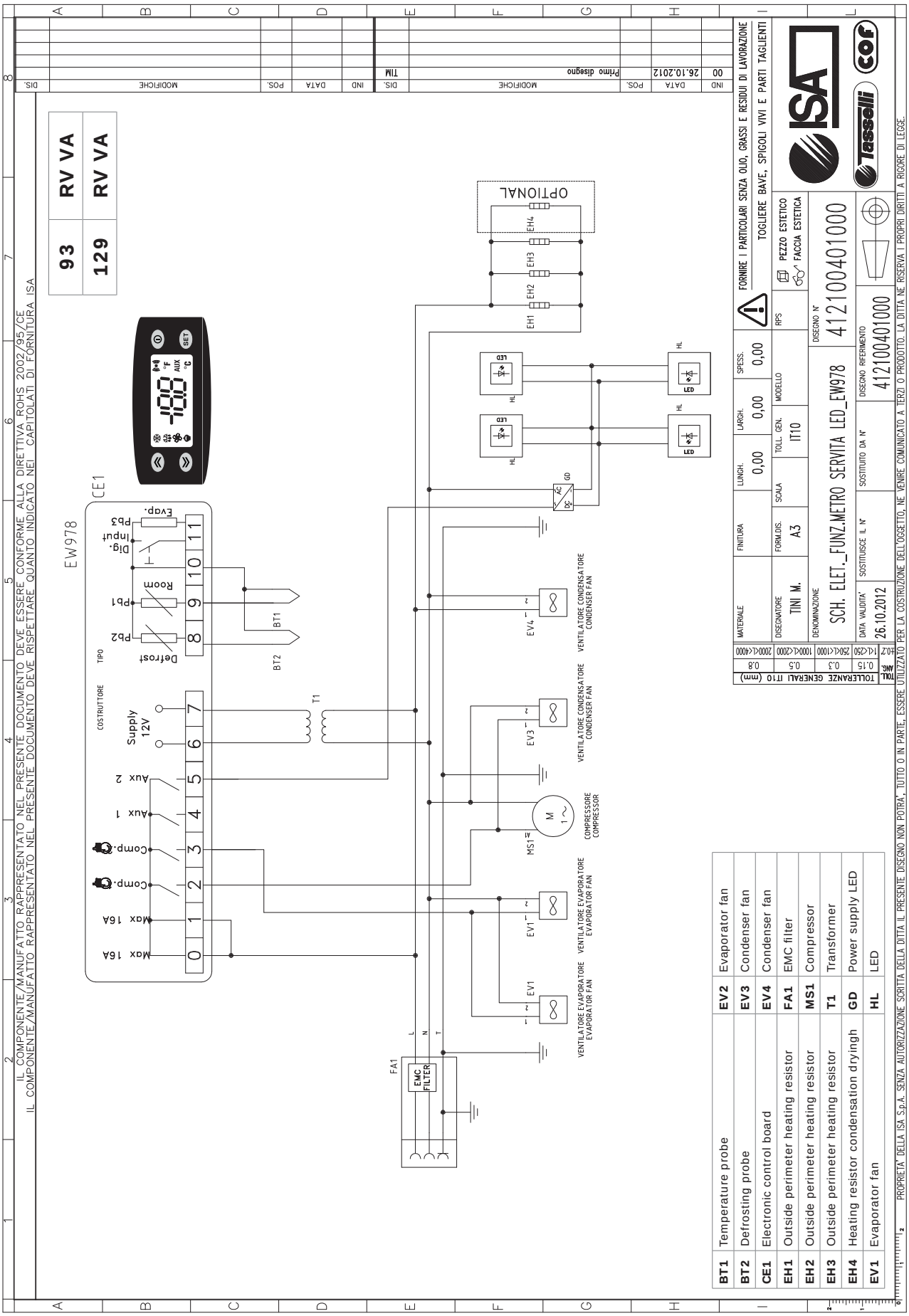
MATERIALE
FINITURA
LUNGH. 0,00
LARGH. 0,00
SPESS. 0,00
SCALA
TOLL. GEN. IT10
MODELLO
RIPS
DISEGNATORE TINI M.
FORM.DIS. A3
DENOMINAZIONE SCHEMA ELETT._FUNZ.METRO 935 SELF_XR44CX
DISEGNO N° 412100395000
DATA VALIDITA' 26.10.2012
SOSTITUISCE IL N°
SOSTITUITO DA N°
DISEGNO RIFERIMENTO 412100395000
TOLLERANZE GENERALI ITO (mm)
0,1<T<0,5 0,15
0,5<T<2,5 0,3
2,5<T<10 0,5
10<T<20 0,8
20<T<40 2
TOLL. ANG. ±0,2°
IND 00 DATA 26.10.2012 POS. DIS. MODIFICHE Primo disegno TIM
PROPRIETA' DELLA ISA S.p.A. SENZA AUTORIZZAZIONE SCRITTA DELLA DITTA IL PRESENTE DISEGNO NON POTRA', TUTTO O IN PARTE, ESSERE UTILIZZATO PER LA COSTRUZIONE DELL'OGGETTO, NE' VENIRE COMUNICATO A TERZI O PRODOTTO. LA DITTA NE RISERVA I PROPRI DIRITTI A RIGORE DI LEGGE.



BT1	Temperature probe	**EV3**	Condenser fan
BT2	Defrosting probe	**EV4**	Condenser fan
CE1	Electronic control board	**FA1**	EMC filter
EH1	Outside perimeter heating resistor	**MS1**	Compressor
EH2	Outside perimeter heating resistor	**MS2**	Compressor
EH3	Outside perimeter heating resistor	**T1**	Transformer
EH4	Heating resistor condenstaion drying	**GD**	Power supply LED
EV1	Evaporator fan	**HL**	LED
EV2	Evaporator fan		


93 RV VA
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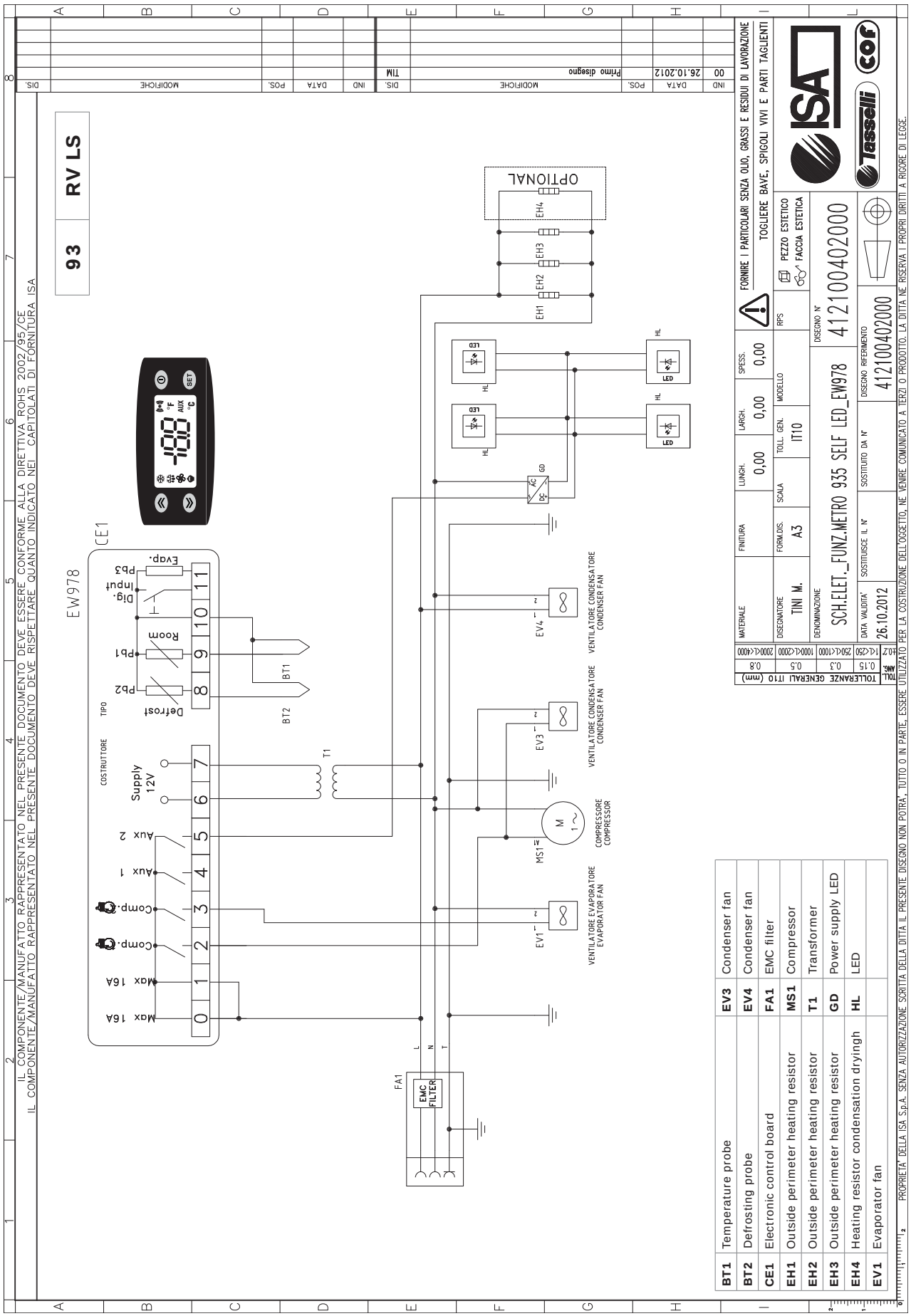
FORNIRE I PARTICOLARI SENZA OLIO, GRASSI E RESIDUI DI LAVORAZIONE
TOGLIERE BAVE, SPIGOLI VIVI E PARTI TAGLIENTI
PEZZO ESTETICO
FACCIA ESTETICA
DENOMINAZIONE SCH. ELET._FUNZ.METRO SERVITA LED_EW978
DISEGNO N° 412100401000
DISEGNATORE TINI M.
DATA VALIDITA' 26.10.2012
DISEGNO RIFERIMENTO 412100401000
PROPRIETA' DELLA ISA S.p.A. SENZA AUTORIZZAZIONE SCRITTA DELLA DITTA IL PRESENTE DISEGNO NON POTRA', TUTTO O IN PARTE, ESSERE UTILIZZATO PER LA COSTRUZIONE DELL'OGGETTO, NE' VENIRE COMUNICATO A TERZI O PRODOTTO. LA DITTA NE RISERVA I PROPRI DIRITTI A RIGORE DI LEGGE.



BT1	Temperature probe	**EV3**	Condenser fan
BT2	Defrosting probe	**EV4**	Condenser fan
CE1	Electronic control board	**FA1**	EMC filter
EH1	Outside perimeter heating resistor	**MS1**	Compressor
EH2	Outside perimeter heating resistor	**T1**	Transformer
EH3	Outside perimeter heating resistor	**GD**	Power supply LED
EH4	Heating resistor condensation dryingh	**HL**	LED
EV1	Evaporator fan		

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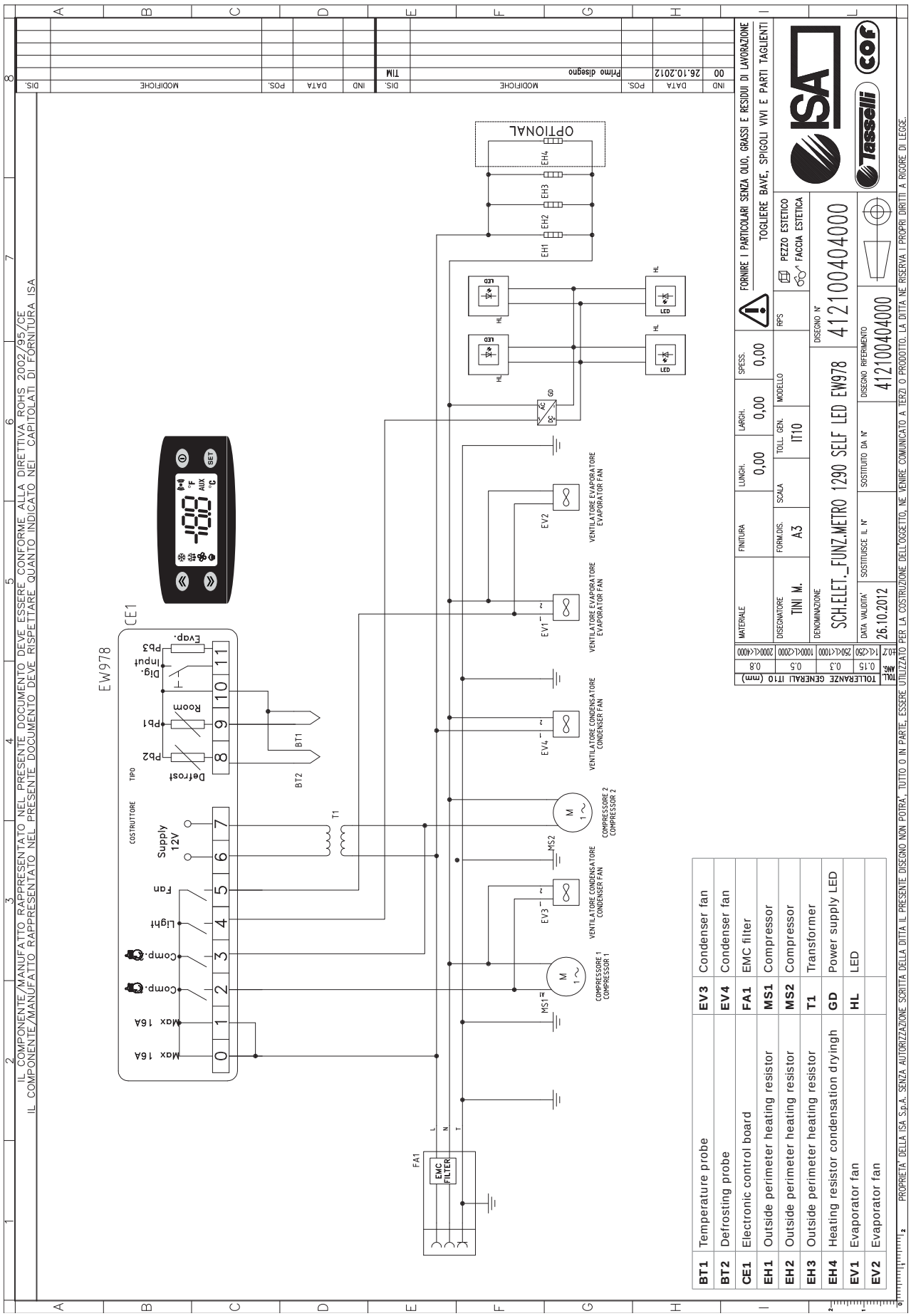

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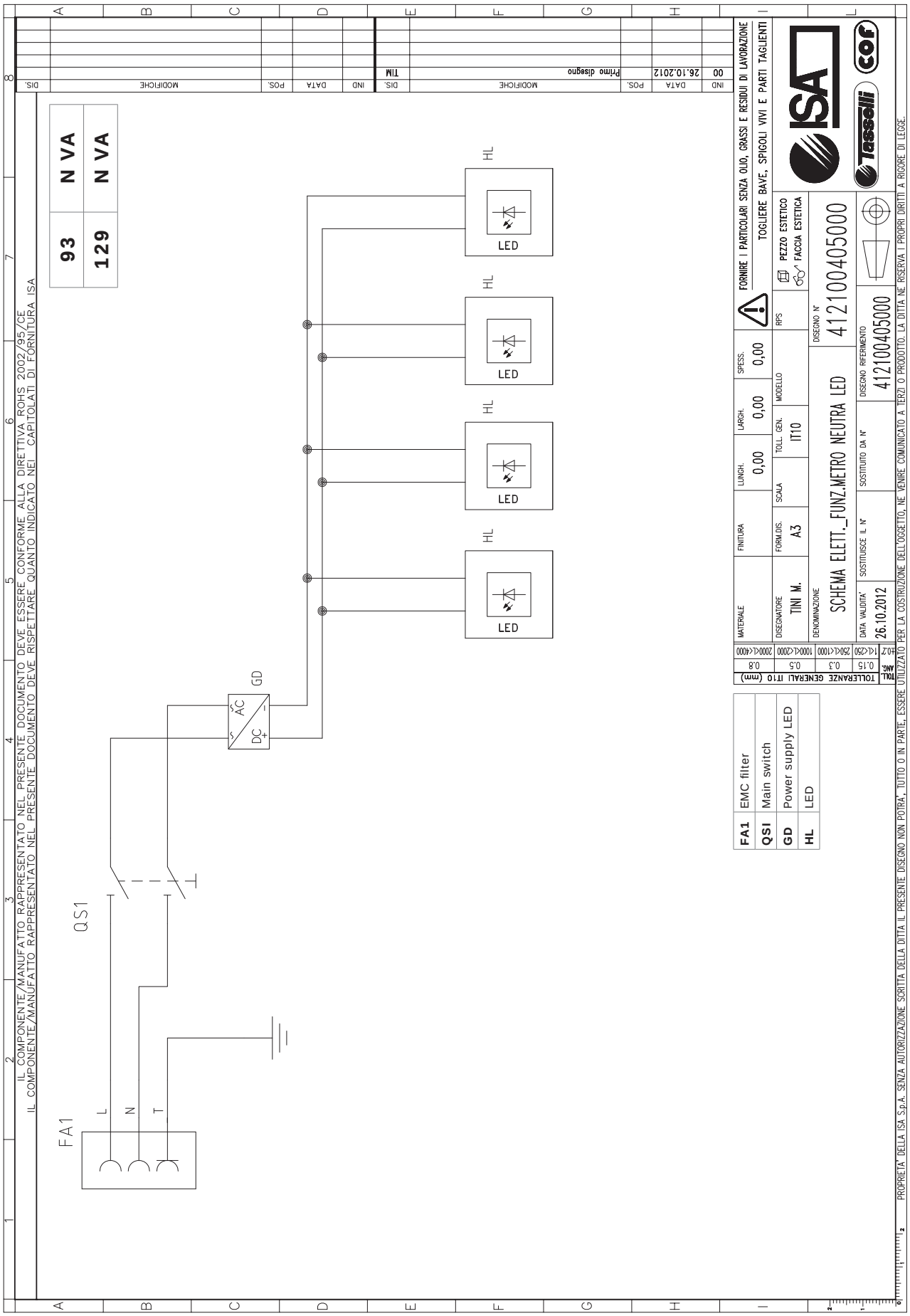
EH4	Heating resistor condensation dryingh	**GD**	Power supply LED
EV1	Evaporator fan	**HL**	LED
EV2	Evaporator fan		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IL COMPONENTE/MANUFATTO RAPPRESENTATO NEL PRESENTE DOCUMENTO DEVE ESSERE CONFORME ALLA DIRETTIVA ROHS 2002/95/CE
IL COMPONENTE/MANUFATTO RAPPRESENTATO NEL PRESENTE DOCUMENTO DEVE RISPETTARE QUANTO INDICATO NEI CAPITOLATI DI FORNITURA ISA
FA1
QS1
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T
GD
AC
DC
HL
LED
FA1 EMC filter
QSI Main switch
GD Power supply LED
HL LED
FORNIRE I PARTICOLARI SENZA OLIO, GRASSI E RESIDUI DI LAVORAZIONE
TOGLIERE BAVE, SPIGOLI VIVI E PARTI TAGLIENTI
PEZZO ESTETICO
FACCIA ESTETICA
SCHEMA ELETT._FUNZ.METRO NEUTRA LED
412100405000
26.10.2012
PROPRIETA' DELLA ISA S.p.A. SENZA AUTORIZZAZIONE SCRITTA DELLA DITTA IL PRESENTE DISEGNO NON POTRA', TUTTO O IN PARTE, ESSERE UTILIZZATO PER LA COSTRUZIONE DELL'OGGETTO, NE VENIRE COMUNICATO A TERZI O PRODOTTO. LA DITTA NE RISERVA I PROPRI DIRITTI A RIGORE DI LEGGE.

Attachment **8**

DECLARATION OF CONFORMITY

We: **ISA S.r.l.**
Via del Lavoro, 5 - 06083 - Bastia Umbra (PG)

declare under our own responsibility, that the product:

Product: **METRO'**

Serial number: .....

To which this declaration refers, is in compliance with e following:

MACHINERY SAFETY

General electric safety Standard EN 60335-1: 2012-01+Modifications A1. Particular requirements for commercial refrigerating appliances EN 60335-2-89/Ed.2010. Standard for Measuring Electromagnetic Fields (EMF) of Electrical Appliances EN 62233:2008, Directive 2006/95/EC of the European Parliament and the Council of 12th December 2006 on the harmonisation of the Laws of Member States relating to electrical equipment for use within certain voltage limits EN 62471/Ed.2009 Photo-biologic safety of lamps and lamp systems

ELECTROMAGNETIC COMPATIBILITY (EMC)

On the basis of the construction evaluations and test results the equipment under test is in compliance with the following standards CEI EN 55014-1 (CEI 110-1) "Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus" . Part 1: Emission "Fifth Edition Technical File 9159 (January 2008) with amendment A1 Technical File 10790 (October 2010) and amendment A2 Technical File 11786 (February 2012) and CEI EN 55014-2 (CEI 210-47) "Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus. Part 2: Immunity - Product family standard" First Edition Technical File 4788 - (October 1998) with amendments A1 Technical File 6577 (August 2002) and amendment A2 Technical File 9942 (August 2009), CEI EN 61000-3-2 (CEI 110-31) "Electromagnetic Compatibility (EMC) - Part 3-2: Limits for harmonic current emissions (equipment input current ≤ 16A per phase)." Technical File 8802 (April 2007) IV Edition with amendment A1/A2 Technical File 11514 (September 2011) and CEI EN 61000-3-3 (CEI 210-96) "Electromagnetic Compatibility (EMC) - Part 3: Limits Section 3: Limitation of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current ≤ 16A." II Edition Technical File 13414 (March 2014).

PRESSURE EQUIPMENT DIRECTIVE (PED) 97/23/EC

As the equipment falls into a class lower than I, it is excluded from the PED's application field (art.1 par.3.6)

FOODSTUFF COMPATIBILITY

Regulation (CE) N.1935/2004 of the European Parliament and of the Council dated 27 October 2004 Regulation (CE) N.2023/2006 of the Council dated 22 December, Directive 2008/39/CE of the Council dated 6 March 2008 Directive 2007/19/CE of the Council dated 30 March 2007 Directive 2005/79/CE of the Council dated 18 November 2005 Directive 2004/19/CE of the Council dated 10 March 2004 Directive 2004/1/CE of the Council dated 6 January 2004 Regulation (UE) 10/2011 of the Council dated 14 January 2011

ROHS and WEEE

Directive 2011/95/EC of the European Parliament and of the Council of 8th June 2011
Directive 2002/96/EC of the European Parliament and of the Council of 27th January 2003

REACH

Regulation (CE) n. 1907/2006 of the European parliament and council dated 18 December 2006 concerning the recording, evaluation, authorisation and restriction of the chemical substances (REACH), which establishes a European Agency regarding chemical substances, which modifies the Directive 1999/45/CE and that repeals the Regulation (CEE) n. 793/93 of the Council and the regulation (CE) n. 1488/94 of the Commission 91/155/CEE, 93/105/CE and 2000/21/CE

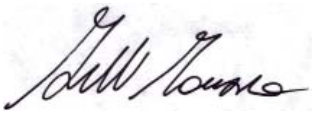
SUBSTANCES THAT REDUCE THE OZONE LAYER

Regulation (CE) N. 1005/2009 dated 16 September 2009 (Official Journal (OJ) of the European Union 31/10/2009 L286)
According to the requirements set by Directives: 2006/95/EC, 2004/108/EC, 2006/42/EC, 97/23/EC

The person authorised to draw-up the Technical Folder is Mr. **Minelli Maurizio** (Technical Department Manager)
Via del Lavoro 5 - 06083 Bastia Umbra (PG)

Bastia Umbra: **24** / **06** / **2015**
(place and date of issue)

Minelli Maurizio



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