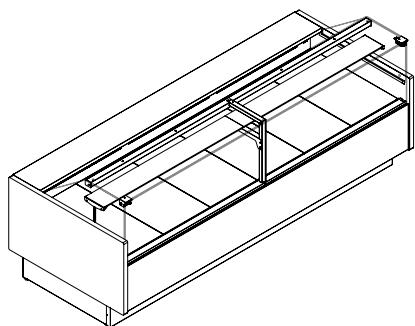


REFRIGERATED DISPLAYS

NEUTRAL DISPLAYS

TRANSLATION OF THE ORIGINAL INSTRUCTIONS



TDMR 9.5

Revision 00 – 07/2023



EN USE AND MAINTENANCE MANUAL

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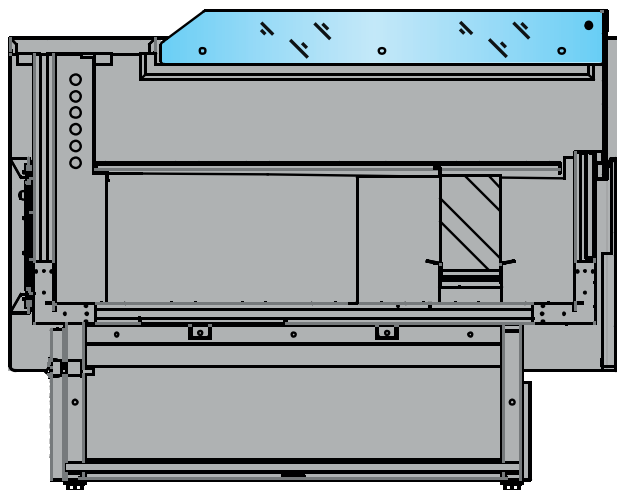
TECHNICAL DATA SHEETS



MR
9.5

MR 9.5

Refrigerated / neutral displays



MR 9.5 VSELF

SUITABLE FOR DISPLAY



GASTRONOMY



MEAT



CURED MEATS



DAIRY PRODUCTS



PACKAGED MEAT



SNACK

TECHNICAL FEATURES	
Cooling type	Ventilated
Available versions	<ul style="list-style-type: none"> With curved tempered glass (VC) With curved tempered glass panes that can be lifted with pistons (VCP) With straight tempered windows (VD) With straight tempered glass panes that can be lifted with pistons (VDP) Free service (VSELF) Neutral (N) Bread grid (P) Hot plate (PC) Bain-marie (BM) With incorporated unit (CG) Without unit (SG) 290
Depth	1000 mm
Height	<ul style="list-style-type: none"> VC 1232 mm VCP 1243 mm VD 1197 mm VDP 1200 mm VSELF 923 mm
Standard supplies	<ul style="list-style-type: none"> Thermoformed and insulated shoulders Tempered glass side panels set up for intermediate shelf Electronic control panel Ceiling lamp with LED lighting Stainless steel worktop Stainless steel display surface with liquid recovery system Automatic evaporation-condensate tray with float (CG) Defrost with stop (CG) or electric (SG) Deflector glass.

GENERAL TECHNICAL CHARACTERISTICS								
	100	125	150	187	200	250	300	375
Length including shoulders (thickness 40 mm each)	1040 mm	1330 mm	1520 mm	1955 mm	2000 mm	2480 mm	2960 mm	3830 mm
Start-up absorption (standard equipment) CG with built-in unit	470 W / 2.87 A	470 W / 2.87 A	470 W / 2.87 A	715 W / 4 A	750 W / 4.12 A	1000 W / 5.42 A	1180 W / 6.47 A	1485 W / 8 A
Absorption during operation (standard equipment) CG with built-in unit	370 W / 2.52 A	370 W / 2.52 A	370 W / 2.52 A	600 W / 3.40 A	630 W / 3.60 A	780 W / 4.56 A	1050 W / 5.07 A	1200 W / 6.81 A
Power consumption (standard equipment) SG without unit	50 W	50 W	75 W	88 W	88 W	103 W	123 W	176 W
Defrosting absorption (optional) CG with built-in unit and (standard) SG without unit	1026 W / 4.62 A	1026 W / 4.62 A	1540 W / 6.91 A	1600 W / 7.20 A	1660 W / 7.50 A	2510 W / 11.54 A	2510 W / 11.54 A	3180 W / 13.82 A

GENERAL TECHNICAL CHARACTERISTICS

Lighting power consumption (standard equipment)	10 W 10W x 1PC	13 W 13W x 1PC	13 W 13W x 1PC	16 W 16W x 1PC	16 W 16W x 1PC	23 W 10W x 1PC 13W x 1PC	26 W 13W x 2PCS	32 W 16W x 2PCS
Lighting power consumption (Intermediate shelf)	10 W 10W x 1PC	13 W 13W x 1PC	13 W 13W x 1PC	16 W 16W x 1PC	16 W 16W x 1PC	23 W 10W x 1PC 13W x 1PC	26 W 13W x 2PCS	32 W 16W x 2PCS
Exposure surface	0.84 m ²	1.10 m ²	1.36 m ²	1.64 m ²	1.68 m ²	2.10 m ²	2.52 m ²	3.28 m ²
Volume in litres reserve	50 Lt	50 Lt	100 Lt	100 Lt	100 Lt	150 Lt	200 Lt	250 Lt
Number of doors (door opening 440 x 235 H mm)	1	1	2	2	2	3	4	4
Cooling capacity for version without T.Evap. unit -10°C	530 W	650 W	795 W	990 W	1060 W	1310 W	1590 W	1985 W
Operating temperature	2°C / +5°C							
Refrigerant gas	R452A - R455A - R290 (On request)							
Climate class - Test data	3 - Temperature + 25°C / Relative humidity 60%							
Supply	220 / 240 V - 1P - 50 Hz (60 Hz on request)							

NEUTRAL GENERAL TECHNICAL CHARACTERISTICS

	100	125	150	187	200	250	300	375
Length including shoulders (thickness 40 mm each)	1040 mm	1330 mm	1520 mm	1955 mm	2000 mm	2480 mm	2960 mm	3830 mm
Lighting power consumption (standard equipment)	10 W 10W x 1PC	13 W 13W x 1PC	13 W 13W x 1PC	16 W 16W x 1PC	16 W 16W x 1PC	23 W 10W x 1PC 13W x 1PC	26 W 13W x 2PCS	32 W 16W x 2PCS
Exposure surface	1.02 m ²	1.33 m ²	1.53 m ²	1.99 m ²	2.04 m ²	2.55 m ²	3.06 m ²	3.98 m ²

BREAD GRID GENERAL TECHNICAL CHARACTERISTICS

	100	125	150	187	200	250	300	375
Exposure surface	0.85 m ²	1.12 m ²	1.30 m ²	1.72 m ²	1.76 m ²	2.21 m ²	2.66 m ²	3.44 m ²

HOT PLATE GENERAL TECHNICAL CHARACTERISTICS

	100	125	150	187	200	250	300	375
Total power consumption with lighting (standard equipment)	940 W	1260 W	1410 W	1890 W	1880 W	2350 W	2820 W	3780 W
Number of plates (479x910 mm)	2	-	3	-	4	5	6	-
Number of plates (624x910 mm)	-	2	-	3	-	-	-	6
Operating temperature	+60°C							
Supply	220 / 240 V - 1P - 50 Hz (60 Hz on request)							

BAIN-MARIE GENERAL TECHNICAL CHARACTERISTICS

	100	125	150	187	200	250	300	375
Total power consumption with lighting (standard equipment)	2250 W	4250 W	4250 W	6500 W	6500 W	8500 W	8500 W	13000 W
Number of GN containers	2 x GN 1/1	3 x GN 1/1	4 x GN 1/1	5 x GN 1/1	5 x GN 1/1	6 x GN 1/1	8 x GN 1/1	10 x GN 1/1
Operating temperature	+60°C							
Supply	220 / 240 V - 1P - 50 Hz (60 Hz on request)							

USE AND MAINTENANCE MANUAL

1. GENERAL PRELIMINARY INFORMATION

Thank you for purchasing our equipment.

Carefully read this manual before carrying out installation, maintenance and/or before using the equipment.

This manual accompanies all equipment versions **DISPLAY MR and M**.

The Manufacturer is not liable for breakages, accidents or various problems due to non-compliance with and in any case the non-application of the provisions contained in this manual.

1.1. PURPOSE OF THE DOCUMENT

The **User and Maintenance Manual** represents the reference document, drawn up by the Manufacturer of the equipment, aimed at operators and specialised personnel who will come into contact with it during its entire life cycle.

The purpose of the document is to provide information for the correct use of the equipment, from installation to disposal, bringing attention to the dangers that may arise from incorrect use and taking into account the reasonably foreseeable incorrect behaviour of the operator.





1.2. SUPPLY AND PRESERVATION

The manual is in **electronic format**.

This manual is an integral part of the equipment.

Keep this manual in a place that is accessible to all users for future consultation. In case of transfer or sale of the equipment, be sure to provide the new user with this manual, so that they may be properly informed about the installation procedure, the use and safety requirements.

1.3. CONSULTATION NOTES

SYMBOL	TYPE	DESCRIPTION
-	BOLD TEXT	Highlights some significant sentences and references in the text.
	GENERIC OR DEDICATED WARNING SIGN	It highlights risks to the health and safety of authorised personnel and/or risks of damage to or malfunction of the machine.
	GENERIC OR DEDICATED PROHIBITION SIGN	Emphasises the prohibition to perform an action.
	GENERIC OR DEDICATED OBLIGATION SIGNAL	Indicates a prescription (obligation to perform an action).
	INFORMATION	Reports relevant information.

1.4. REGULATORY FRAMEWORK

The equipment is designed according to the regulatory framework described in the accompanying declaration of conformity and the identification plate placed on the same, as well as the requirements, which can be downloaded directly from the manufacturer's website.

1.5. WARRANTY

The warranty terms established by law apply. Should the equipment be faulty, contact the nearest Authorised Service Centre, or the reference Dealer.

The following documentation must be forwarded in order to repair the equipment:

- Serial number
- Copy of the invoice with the date of purchase of the equipment
- Description of the fault.

2. SAFETY WARNINGS



The Manufacturer cannot be held liable for any damage, suffered by people or things, caused by non-compliance with the aforementioned requirements or deriving from tampering with even a single part of the equipment and from the use of non-original spare parts.



This professional equipment must only be used and serviced by adults (> 18 years in Europe or other limits defined by the local regulatory framework) with normal physical and mental health and adequately trained and informed on the subject of health and safety in the workplace.



WARNING

Electrical hazard. Disconnect the power supply before carrying out maintenance work.



WARNING

This equipment contains flammable and explosive hydrocarbon refrigerants.



WARNING

Fire or explosion hazard. The machine contains a flammable coolant. Do not use mechanical devices or equipment that can ignite fires and explosions. Use only non-sparking equipment for Ex zones. Do not puncture coolant pipes.



WARNING

Fire or explosion hazard. The machine contains a flammable coolant. Consult the safety data sheets of the coolant before working on the equipment.



WARNING

Fire or explosion hazard. The machine contains a flammable coolant. Follow the handling instructions given.



WARNING

Cutting hazard. The profile of doors and drawers has sharp edges. Use the handle to close the equipment.



Only qualified technical personnel should carry out maintenance work.



Qualified technical personnel must remove the electrical current and earth the entire equipment before carrying out maintenance work. He/she must use ESD clothing, shoes and equipment capable of slowly dissipating electrostatic charges and not producing them.



When charging the flammable coolant, the requirements in the safety data sheet of the substance must be strictly adhered to.



Only use original spare parts.



It is strictly forbidden to make changes to the equipment.



Do not start the equipment with wet hands or when there is contact with water.

2.1. OBLIGATIONS AND PROHIBITIONS

2.1.1. OBLIGATIONS

- Only qualified technical personnel should perform the installation work (see chapter '**INSTALLATION**')
- Keep the entire area around the equipment free and clean
- Keep the entire perimeter of the equipment free so that there is air circulation
- Use only food grade containers
- Wait until the set temperature is reached before loading the product into the equipment.
- Place a flammable warning sign in the workplace.

2.1.2. PROHIBITIONS

- Do not install the equipment if it appears damaged upon receipt
- Do not allow children to play with the equipment
- Do not use the equipment as a work surface or as a support surface
- Do not modify or tamper with the equipment in any way
- Do not place or store flammable liquids or materials, or easily ignitable objects inside the equipment or in the immediate vicinity
- Do not place any kind of material (boxes or other) on the equipment
- Do not handle the equipment by the handle. Grasp it at the sides
- Do not place the equipment under direct exposure to sunlight and all other forms of thermal radiation
- Do not place the equipment inside a room with high relative humidity (potential formation of condensate)
- Do not place the equipment inside a closed niche or against the wall
- Do not obstruct the air vents
- Do not set temperatures lower than permitted
- Do not damage and bend the evaporator flaps and the coolant pipes
- Do not store medicines, blood and blood products in the equipment
- Do not store explosive substances, such as pressurised containers with flammable propellants, in the equipment
- Do not store chemical and flammable products
- Do not place hot pans, hot products and objects on or near the equipment
- Do not place electrical appliances inside the equipment.

3. IDENTIFICATION AND DESCRIPTION

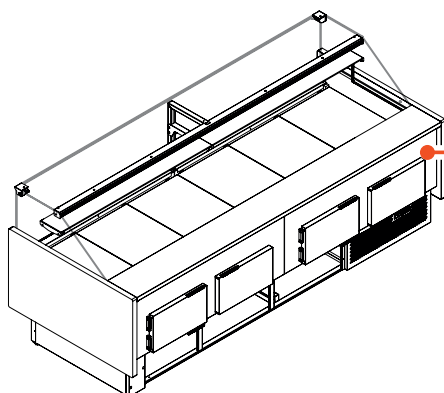
3.1. EQUIPMENT IDENTIFICATION

The nameplate is on the rear of the equipment. Contains:

- Serial number
- The type/functional features
- The details of the certification and marking.



**Do not remove the identification plate and/or replace it with other plates.
Contact the manufacturer if required.**



Data produzione Production date	Matricola	Serial Number	Modello	Model
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
			Cod: <input type="text"/>	
Norma sicurezza Safety norm			Classe Climatica Climatic class	
Gas espansione Expansion gas	Tipo Gas type	Carica Gas Load	Carica 2 Gas 2 Load	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Illuminazione Lighting	Resist. condensa Condensation heater	Corrente Rated current		
<input type="text"/>	<input type="text"/>	<input type="text"/>		
Tensione Alimentazione Power Supply	Fase Phase	Frequenza Frequency		
<input type="text"/>	<input type="text"/>	<input type="text"/>		
Volume netto Net volume	Potenza elettrica Electric power	ABB Sbrinatorio elettrico Electric defrost		
<input type="text"/>	<input type="text"/>	<input type="text"/>		



The nameplate may change depending on the country of destination of the equipment.

3.2. INTENDED USE

The equipment is a **DISPLAY MR and M** for professional use. Allows to display and/or store packed and/or unpacked food. The Manufacturer cannot be held liable for uses other than those indicated.



Do not use this equipment to store and/or display products other than those intended.



Do not use pressurised containers with flammable propellant in the equipment.

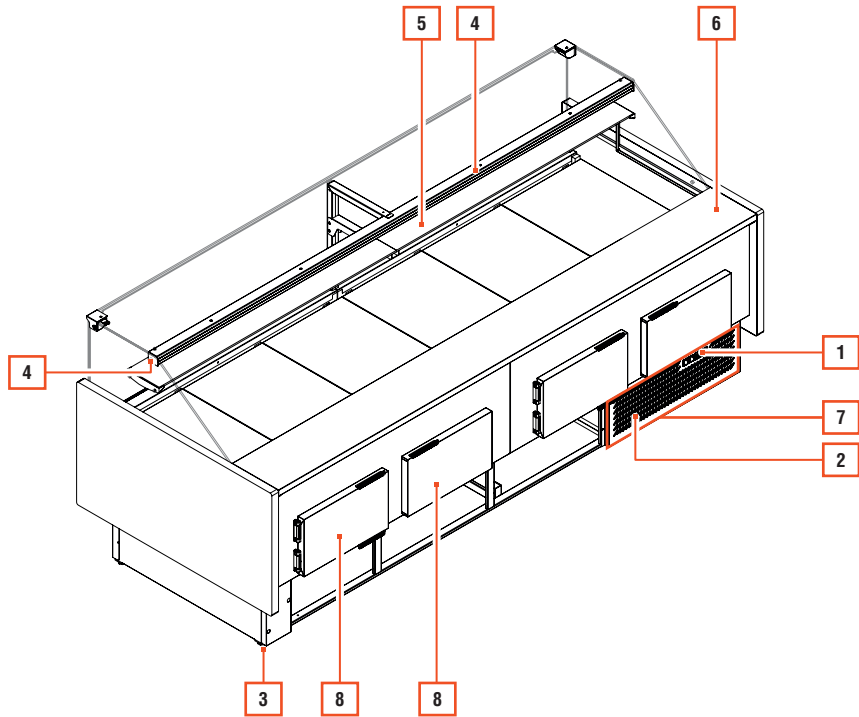
3.3. DESCRIPTION

The equipment has a stainless steel worktop and exposure surface. It has an insulation density of 40 kg/m³ made of polyurethane resins.

It is equipped with a power supply cable.

The insulation is made without the use of environmentally hazardous CFCs.

3.4. MAIN COMPONENTS



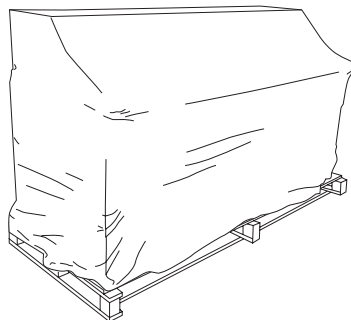
POS.	ELEMENT	NOTES
1	CONTROL PANEL	
2	SUCTION GRID	
3	ADJUSTABLE FEET	
4	LED LAMP	
5	TEMPERED GLASS SHELF	
6	WORK SURFACE	
7	COOLING UNIT	Including: <ul style="list-style-type: none">▪ Compressor▪ Condenser▪ Fan.
8	RESERVE	

4. RECEIPT AND HANDLING

4.1. EQUIPMENT RECEIPT

The equipment is delivered on a pallet packed with shrink-wrapped nylon.

Upon delivery, check that the packaging is intact and that it has not been damaged during transport.



4.1.1. HANDLING WITH PACKAGING



Only qualified technical personnel should perform handling operations on the equipment.

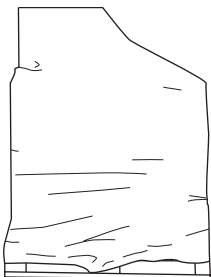


The manufacturer accepts no liability in the event of non-compliance with current safety regulations.

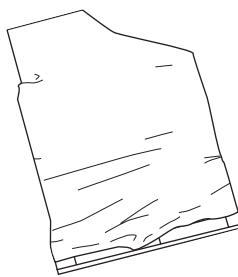
Always handle the packaging in an upright position (see the instructions on the packaging).

If the packaging is tilted, wait at least 8 hours before starting. In this way, the oil in the condenser flows to all parts for lubrication.

YES




NO



4.1.2. PACKAGING REMOVAL AND INSPECTION

For the removal of the packaging:

STEP	ACTION	PICTURE
1	Remove the shrink-wrapped nylon. Lift the equipment to remove it from the pallet.	
2	Place the equipment in its designated place. Note: Handle the equipment with a pallet truck or forklift truck suitable for the weight to be handled.	
3	Remove the protective films used to protect the steel (both external and internal).	



Keep the packaging pallet.

After removing all packaging materials, check for faults.

If any anomalies are found, do not install the equipment. Contact your Dealer or Authorised Service Centre within 8 days from the date of purchase.

4.1.3. PACKAGING DISPOSAL

The materials used for packaging are recyclable and must be collected.



Separate the various packaging materials and dispose of them in accordance with the regulations in force in the country of installation.

4.2. HANDLING

4.2.1. DIVISION OF VERSIONS AND PACKAGING DIMENSION FOR HANDLING

VERSION	LENGTH	DEPTH	HEIGHT
MR 9.5	<ul style="list-style-type: none">1000 mm (100)1250 mm (125)1500 mm (150)1870 mm (187)2000 mm (200)	<ul style="list-style-type: none">1000 mm	<ul style="list-style-type: none">1232 mm (VC)1242 mm (VCP)
MR 9.5 N	<ul style="list-style-type: none">2500 mm (250)3000 mm (300)3750 mm (375)		<ul style="list-style-type: none">1197 mm (VD)1200 mm (VDP)923 mm (VSELF)

4.2.2. HANDLING OPERATIONS

Carefully read the instructions before moving the equipment.



Only qualified technical personnel should perform handling operations on the equipment.



The manufacturer accepts no liability in the event of non-compliance with current safety regulations.



Move the equipment while keeping it upright at all times. Do not tilt the equipment.

Handle the equipment with a pallet truck or forklift truck suitable for the weight to be handled.

If the equipment is tilted, wait at least 8 hours before starting up. In this way, the oil in the condenser flows to all parts for lubrication.



CAUTION
When handling, take care not to damage the equipment itself, persons, animals and/or things in the immediate vicinity.

5. INSTALLATION



Only qualified technical personnel should perform installation operations on the equipment.



The manufacturer accepts no liability in the event of non-compliance with current safety regulations.



Do not install and use the equipment in ATEX classified environments, locations or areas.

5.1. INSTALLATION SITE

5.1.1. FEATURES OF THE INSTALLATION SITE



Do not install the equipment outdoors, directly exposed to the weather.

The installation room must be a room with adequate and controlled temperature and humidity in order to avoid malfunctions and condensation.

Follow the reported permissible environmental conditions:

PERMITTED ENVIRONMENTAL CONDITIONS

Ambient temperature	max 25°C
Air humidity	max 60%

Do not use the equipment outside the permitted conditions of use and operation.



Do not obstruct the supply and return air ventilation openings in the equipment.



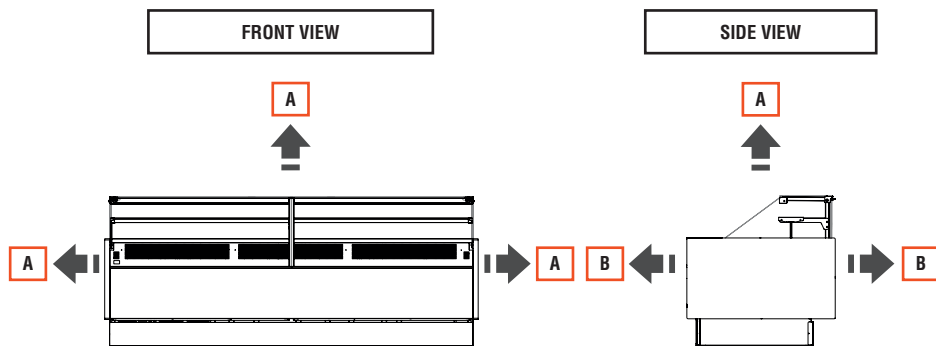
Place the equipment away from heat sources and open flames.

5.1.2. MINIMUM SAFETY DISTANCES

In order to ensure proper functioning of the equipment and thus proper air circulation, observe the minimum safety distances from side walls, other equipment and/or heat sources.

MINIMUM SAFETY DISTANCES

A	Lateral / Upper	0.1 m
B	Front / Rear	0.6 m



5.2. FEET PLACEMENT AND ADJUSTMENT

Position the equipment perfectly level, so that it can work properly, the condensation water from the defrosting process can drain off correctly and there are no noisy vibrations of the motor.

For **positioning and adjusting the equipment feet**:

STEP	ACTION	PICTURE
1	Place the equipment on a horizontal plane.	
2	Adjust (if necessary) the height of the screw feet.	
3	Check flatness with a spirit level.	

5.3. CONDENSATE WATER DRAIN - DRAIN CONNECTION

The equipment:

- With built-in refrigeration system, it is equipped with a condensate drip tray with float complete with heater
- The remote unit is equipped with a drain hose and siphon for connection to the water drainage system.



Do not install the equipment without a siphon. Each drain must have its own siphon.



The connection to the water drainage system is the responsibility of the end user.

5.4. CHANNELLING



All operations must be carried out with the equipment switched off.



Only qualified technical personnel should carry out channelling.

For channelling:

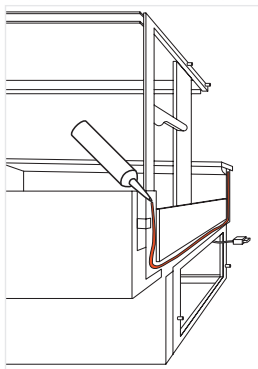
STEP	ACTION
1	Remove the packaging of the equipment according to the instructions in “ 4.1.2. Removal of packaging and inspection ”.
2	Place the equipment on a horizontal surface according to the instructions in “ 5.2. Positioning and adjustment of feet ”.
3	Apply silicone to all side sections of the bench to be channelled.
4	Bring the equipment sections closer together.
5	Fasten the 3 screws (A) and the hook (B) .
6	Join the ceiling lights (C) with rivets.

STEP	ACTION
------	--------

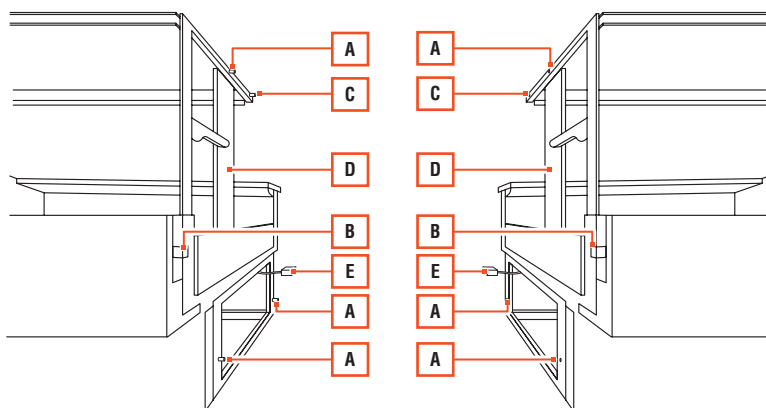
7	Gently remove the wooden support (D) .
---	---

8	Proceed with the electrical connection, connecting the two plugs (E) and following the instructions in "6.1. Electrical connection" .
---	---

3	
---	--



4-8	
-----	--



6. CONNECTIONS

6.1. ELECTRICAL CONNECTION



Only qualified technical personnel should perform connection operations on the equipment.



The electrical connection must be carried out in accordance with the legal compendium and regulations applicable in the country where the equipment is installed.

6.1.1. POWER SUPPLY CONNECTION

Refer to the attached wiring diagram of the equipment.

To make a correct electrical connection:

- Set up a residual current circuit breaker
- Check that the mains voltage and frequency correspond to those on the nameplate. A variation $\pm 10\%$ of the rated voltage is allowed
- Connect the equipment to an efficient earthing system. Verify operation and declaration of conformity in accordance with the regulatory compendium of the country of installation
- Install a bipolar cut-off switch with opening of the contacts at least 3 mm, upstream of the plug. This switch is mandatory when the load exceeds 1000 watts or when the equipment is connected directly without the use of a plug. It must therefore be placed in the immediate vicinity of the equipment so that it can be clearly seen by personnel in the event of maintenance
- Check that the cross-section of the power cable is adequate for the power absorbed by the equipment

It is compulsory by law to connect the equipment to an efficient earthing system, declared and verified by the relevant authorities.

Do not connect the electrical plug of the equipment to an extension cord and/or reducer.

Proceed as follows:

STEP	ACTION
1	Connect the power supply plug to the wall socket.



WARNING

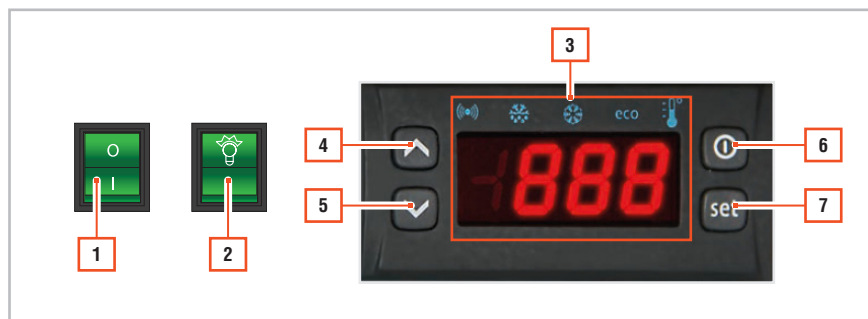
Electrical hazard. If the power cable is damaged, replace it.







The manufacturer disclaims all liability for incorrect connections, not carried out in a workmanlike manner or by unqualified and authorised technical personnel.

7. CONTROL PANEL

7.1. CONTROL PANEL (MOD. EW961-EW974)



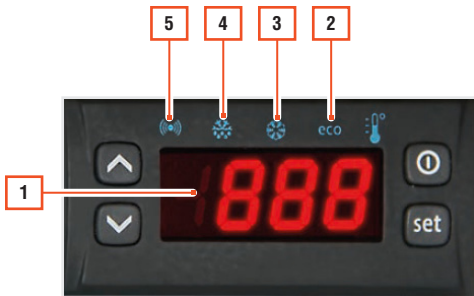
POS.	ICON	ELEMENT	DESCRIPTION
1	-	MAIN SWITCH 0/I	<ul style="list-style-type: none"> Set to "0": machine switched off Set to "I": machine electrically powered.
2	-	LIGHT SWITCH 0/I	<ul style="list-style-type: none"> Set to 0: light off Set to I: light on.
3	-	DISPLAY	Displays the equipment operating parameters.
4		UP KEY	<p>Press and release Scrolls the items within the menu Increases the values</p> <p>Press for at least 5 sec Activates the manual defrosting function</p>
5		DOWN KEY	<p>Press and release Scrolls the items within the menu Decreases the values</p> <p>Press for at least 5 sec User configurable function</p>
6		STAND-BY KEY (ESC)	<p>Press and release Returns to an earlier level than the current menu Confirms parameter Value</p> <p>Press for at least 5 sec Activates the Stand-by function (when not inside the menus)</p>






POS.	ICON	ELEMENT	DESCRIPTION
7		SET KEY (ENTER)	<p>Press and release Displays any alarms (if present) Accesses the base controls menu</p> <p>Press for at least 5 sec Accesses the programming menu Confirms the controls</p>



The EW974 version is fitted for equipment with electric defrosting.

7.1.1. DISPLAY




POS.	ICON	ELEMENT	DESCRIPTION
1	-	DISPLAY	-
2		Reduced SET / SET LED	<ul style="list-style-type: none"> Flashing: reduced set active Quick flash.: access to level 2 parameters Off: LED off in all other cases
3		Compressor LED	<ul style="list-style-type: none"> Fixed on: compressor on Flashing: delay, protection or activation blocked Off: LED off in all other cases
4		Defrost LED	<ul style="list-style-type: none"> Fixed on: defrost on Flashing: manual or digital input activation Off: LED off in all other cases
5		Alarm LED	<ul style="list-style-type: none"> Fixed on: presence of an alarm Flashing: alarm silenced Off: LED off in all other cases
-		Fan LED	<ul style="list-style-type: none"> Fixed on: fans on Off: LED off in all other cases

7.2. ACCESS AND USE OF THE MENU

The resources are organised in two menus:

- **Machine Status Menu**
- **Programming Menu**

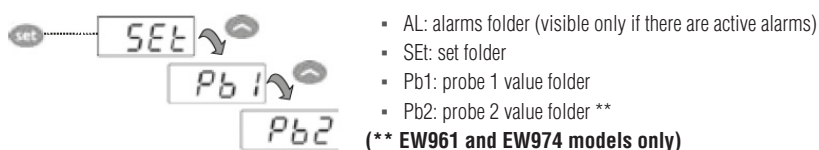
Press the  button once to confirm the last value shown on the display and return to the previous display. Inactivity of the keyboard for more than 15 seconds (time-out) also confirms the last displayed value and a return to the previous display.

7.2.1. MACHINE STATUS MENU

To access the **Machine Status menu**, press and release the  button.




If no alarms are in progress, the "SEt" label is displayed.

Press keys  and  to scroll the folders of the Machine Status menu.



Setpoint setting:

to view the Setpoint value, press the  key when the "SEt" label is displayed.

The Setpoint value appears on the display. To change the Setpoint value, use keys  and  within 15 seconds. Press  to confirm the change.





Probe display:

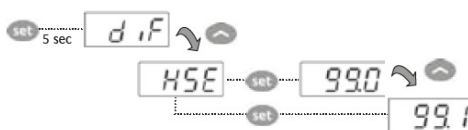
when the Pb1 or Pb2* labels are present, press the key to display the value measured by the associated probe (* Pb2 is only present in **models EW961 and EW974**).

7.2.2. PROGRAMMING MENU

Press the  key for more than 5 seconds to access the **Programming menu**. If applicable, an access PASSWORD "PA1" is required.

When accessed, the display will show the first parameter ("diF").

Use keys  and  to scroll through all the parameters of the Programming menu:



Select the desired parameter using the  and  keys. Press the  key to display the current parameter value. Use the  and  keys to change their value and press the  key to store the value.

Note: it is recommended to switch the equipment off and on again each time the parameter configuration is changed to prevent malfunctions on the configuration and/or timings in progress.

7.2.3. SETPOINT MODIFICATION BLOCK

The equipment provides the option to disable keyboard operation.

The keyboard can be locked by programming the "LOC" parameter.

If the keyboard is locked, it is always possible to access the Machine Status menu by pressing the **set** key and display the Setpoint, however its value cannot be changed.

To unlock the keyboard repeat the procedure used to lock it.

7.2.4. PASSWORD

- Password "PA1": allows access to level 1 parameters (User)
- Password "PA2": allows access to level 2 parameters (Installer).

Level 2 parameters also contain all level 1 parameters.

In the standard configuration the password "PA1" is not enabled (value = 0) while password "PA2" is (value = 15).

To enable the password "PA1" (value $\neq 0$) and assign it the desired value, enter the Programming menu, select the "PS1" parameter with the **▲** and **▼** keys, press the **set** key, set the desired value and confirm it by pressing the key again.

If the password "PA1" is enabled, when entering the Programming menu, you will be asked to enter the password "PA1" or "PA2" based on the parameters you wish to change. To enter the password "PA1" (or "PA2"):



If the password entered is wrong, the instrument will display the "PA1" (or "PA2") label and the entry procedure must be repeated. Level 2 parameters can also be accessed from level 1 parameters, by selecting the "PA2" parameter (present at level 1) with the keys **▲** and **▼** and then pressing the key **set**.

8. USE

Before using the equipment, check that it is in perfect condition. In the presence of faults, the equipment must be decommissioned and the Technical Assistance Service must be contacted.



CAUTION

Keep all the supply and return air ventilation openings inside the equipment free of obstructions.

8.1. CHECKS BEFORE USE



Only specialised technical personnel should carry out the initial start-up of the equipment.

Before switching on, check that:

- The equipment and surrounding surfaces are dry
- The equipment is in a perfectly flat and level position
- The operating parameters have been adjusted (see chapter “CONTROL PANEL”)
- The main switch is in the “0-OFF” position
- There is no direct or indirect contact with live electrical parts



Do not perform operations with wet or damp hands.

Clean the equipment and its components thoroughly before loading the product (see chapter “CLEANING”).

8.2. ACTIVATION







Do not start the equipment with wet hands or when there is contact with water.

For switching on the equipment:

STEP	ACTION	PICTURE
1	Press the O/I main switch. Note: when switched on, the button lights up green.	

8.3. SETTING THE TEMPERATURE

To **set the temperature**:

STEP	ACTION
1	Press and hold the key  on the control panel. Note: if no alarms are in progress, the "SET" label will be displayed.
2	Set the required temperature by using keys  and  .
3	Press  to confirm.

8.4. PRODUCT LOADING



Do not overload products on the cap.



**Load each exposure tray with a maximum of 35 kg per running metre.
The load must be evenly distributed on the exposure tray.**



For proper storage, do not introduce hot products. Wait for the product to cool down before placing it inside the equipment.

Before loading product, wait until the desired temperature inside the equipment has been reached.



Make sure that the cold chain has been respected during transport and/or storage of the product.

Arrange the product so as not to obstruct the circulation of refrigerated air.

There is a red adhesive line on the equipment that delimits the load limit of the product that can be deposited inside the equipment.

Do not cross the line.



8.5. DEFROST

8.5.1. AUTOMATIC DEFROST

The equipment is equipped with an **automatic system for daily defrosting** set by the Manufacturer.
Act on the control panel to change the automatic defrosting (number, duration, interval).

8.5.2. MANUAL DEFROST

A manual defrost can be performed **if required**.


To perform **manual defrosting**:

STEP	ACTION
1	Press and hold the  button for 5 seconds. Note: the equipment must be switched off/in stand-by.

If the conditions for defrosting are not met, the display will flash 3 times, indicating that the operation will not be carried out.

8.6. SWITCHING OFF

To **shut down the equipment**:

STEP	ACTION	PICTURE
1	Press the O/I main switch. Note: the button is no longer illuminated in green.	

9. CLEANING

9.1. SAFETY WARNINGS FOR CLEANING

**WARNING**

Electrical hazard. Disconnect the power supply before cleaning.

**WARNING**

Electrical hazard. Do not use water jets and/or high-pressure lances to wash the internal and external parts of the equipment.



Do not damage the refrigerant fluid circuit.

The first cleaning of the equipment must be carried out by specialised personnel.

Observe the following indications:

- Clean the surfaces of the equipment regularly, to avoid deterioration of the equipment materials
- Use only lukewarm water with non-aggressive detergents, then dry damp parts with a soft cloth
- Carry out at least daily periodic cleaning of the loading area to prevent the development and accumulation of bacteria
- Carry out at least one internal cleaning per month if the equipment is used to blast chill frozen products
- Carry out at least one weekly periodic cleaning of the bottom of doors and drawers
- Do not use water jets to wash the internal parts of the equipment
- Do not direct water jets at electrical parts
- Do not use hard metal tools to remove any ice that may have formed



Use work gloves when carrying out cleaning operations.



Do not use cleaning agents containing chlorine, dilute solutions, caustic soda, abrasive detergents, muriatic acid, bleach or other products that can scratch or sand.



Do not use a steam cleaner to clean the equipment.

9.2. TABLE OF CLEANING OPERATIONS

The table lists a number of cleaning operations to be performed according to the recommended schedule.

OPERATION	FREQUENCY				
	DAILY	WEEKLY	MONTHLY	EVERY 6 MONTHS	YEARLY
Cleaning the loading area	■				
External cleaning	■				
Cleaning the inside of the door near the gaskets	■				
Cleaning the bottom of tanks and drawers		■			
Cleaning the condensate tray	■				
Cleaning inside			■		

9.3. GENERAL CLEANING

Carry out general cleaning of the equipment using a soft cloth and non-aggressive cleaning products.

Remove the grids inside the equipment for better cleaning. Clean the grills with a soft cloth.

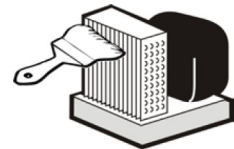
9.4. CLEANING THE CONDENSER

Clean the condenser periodically to ensure its proper functioning.

Use an air jet blowing from the inside to the outside of the unit. If this is not possible, use a long-bristled brush on the outside of the condenser.



Do not use water jets.



10. MAINTENANCE



WARNING
Electrical hazard.
Disconnect the power supply before carrying out maintenance work.




Only authorised technical personnel should service the equipment.

10.1. ROUTINE MAINTENANCE

Ensure smooth operation over time of the equipment by performing periodic/preventive checks and maintenance.

10.1.1. INSPECTING AFTER DELIVERY

The following table lists a series of checks and interventions that need to be carried out according to the recommended frequency.

OPERATION	FREQUENCY			
	WEEKLY	MONTHLY	EVERY 6 MONTHS	YEARLY
Check that the door seals of the reserve and the door itself close properly.		■		
Check the correct functioning of the condensate water drainage system		■		
Check that there are no coolant leaks and that the coolant system is working properly				
 Checking for refrigerant gas leaks must be carried out by qualified and authorised personnel in accordance with local regulations.				■
Check that the maintenance status of the electrical system is in complete safety.				■
Check the correct electronic control setting.				■

10.2. EXTRAORDINARY MAINTENANCE

Special maintenance includes service, repair, and restoration of nominal operating conditions or replacement of a faulty, defective or worn component.

10.2.1. LED LAMP REPLACEMENT



Check the function of the LED lamp before replacing it.

Press the main switch O/I and check the ignition, if the lamp does not ignite, proceed to replacement.

To **replace the LED lamp**:

STEP	ACTION
1	Disconnect the power plug or open the isolating switch located upstream of the equipment.
2	Remove the connection plug.
3	Unhook and replace the LED lamp.
4	Reconnect the plug.

10.2.2. REPLACEMENT OF FRONT GLASS, SIDE GLASS, SHELVES



For replacement, contact the Authorised Dealer or Service Centre.

10.2.3. REPLACEMENT OF MOTOR FAN



For replacement, contact the Authorised Dealer or Service Centre.

10.2.4. COOLING UNIT REPLACEMENT



For replacement, contact the Authorised Dealer or Service Centre.

10.2.5. REPLACING ELECTRICAL RESISTOR



For replacement, contact the Authorised Dealer or Service Centre.


11. DIAGNOSTICS

11.1. ALARMS

LABEL	FAULT	CAUSE	EFFECTS	TROUBLESHOOTING
E1	Probe1 faulty (cold room)	<ul style="list-style-type: none"> ▪ Reading of values outside the operating range ▪ Faulty / shorted / open probe 	<ul style="list-style-type: none"> ▪ Display of the E1 label ▪ Fixed Alarm Icon ▪ Disabling of the maximum and minimum alarm regulator ▪ Compressor operation based on the "Ont" and "OFt" parameters 	<ul style="list-style-type: none"> ▪ Check the probe type (NTC) ▪ Check the probe wiring ▪ Replace the probe
E2	Probe 2 faulty (defrost)	<ul style="list-style-type: none"> ▪ Reading of values outside the operating range ▪ faulty / shorted / open probe 	<ul style="list-style-type: none"> ▪ Display of the E2 label ▪ Fixed Alarm Icon ▪ The Defrost cycle will end due to Time out (Parameter "dEt") 	<ul style="list-style-type: none"> ▪ Check the probe type (NTC) ▪ Check the probe wiring ▪ Replace the probe
AH1	HIGH Alarm Probe 1 temperature	<ul style="list-style-type: none"> ▪ Value read by Pb1 > HAL after time of "tAO" (see "MIN/MAX TEMP. ALARMS") 	<ul style="list-style-type: none"> ▪ Recording of label AH1 in folder AL ▪ No effect on the adjustment 	<ul style="list-style-type: none"> ▪ Wait for the temperature value read by probe 1 to return below HAL.
AL1	LOW Alarm Probe 1 temperature	<ul style="list-style-type: none"> ▪ Value read by Pb1 < LAL after time of "tAO" (see "MIN/MAX TEMP. ALARMS") 	<ul style="list-style-type: none"> ▪ Recording of label AL1 in folder AL ▪ No effect on the adjustment 	<ul style="list-style-type: none"> ▪ Wait for the temperature value read by probe 1 to return above LAL.
EA	External Alarm	<ul style="list-style-type: none"> ▪ Activation of the digital input (H11 set as an external alarm) 	<ul style="list-style-type: none"> ▪ Recording of label EA in folder AL ▪ Fixed Alarm icon ▪ Adjustment blocked if EAL = y 	<ul style="list-style-type: none"> ▪ Check and remove the external cause that caused the alarm on D.I.
OPd	Door Open Alarm	<ul style="list-style-type: none"> ▪ Activation of the digital input (H11 set as door switch) (for a time greater than tdO) 	<ul style="list-style-type: none"> ▪ Recording of label Opd in folder AL ▪ Fixed Alarm icon ▪ Regulator block 	<ul style="list-style-type: none"> ▪ Close the door ▪ Delay function defined by OAO

LABEL	FAULT	CAUSE	EFFECTS	TROUBLESHOOTING
Ad2	Defrost for time-out	<ul style="list-style-type: none"> ▪ End defrost by time instead of reaching the end defrost temperature detected by probe Pb2. 	<ul style="list-style-type: none"> ▪ Recording of label dAt in folder AL ▪ Fixed Alarm icon 	<ul style="list-style-type: none"> ▪ Wait for the next defrost for automatic return

11.2. DIAGNOSTICS

The alarm condition is always signalled by the buzzer (if present) and by the alarm icon .

To turn off the buzzer, press and release any key, the relevant icon will continue to flash.

Note: if alarm exclusion times are in progress, the alarm is not signalled.



The alarm warning from faulty probe 1 (Pb1) appears directly on the instrument display with the indication E1.



Models EW961 and EW974: The alarm warning from faulty probe 2 (Pb2) appears directly on the instrument display with the indication E2.

12. DECOMMISSIONING AND DISPOSAL

12.1. LONG PERIODS OF INACTIVITY

If the equipment is not used for a long period of time (more than 2-3 weeks):

STEP	ACTION
1	Disconnect the power supply.
2	Carry out a thorough cleaning of the equipment (see chapter ' CLEANING ').
3	Cover the equipment with a cloth.

12.2. DISPOSAL



The electrical and electronic equipment that make up the appliance, such as lamps, electronic controls, electrical switches, electric motors and other electrical material in general, must be disposed of and/or recycled separately from urban waste according to the procedures of the regulations in force on the subject in each country.

Do not disperse materials in the environment.

In addition, all materials constituting the product, such as sheet metal, plastic, rubber, glass, etc., must be recycled and/or disposed of in accordance with the procedures of the relevant regulations.

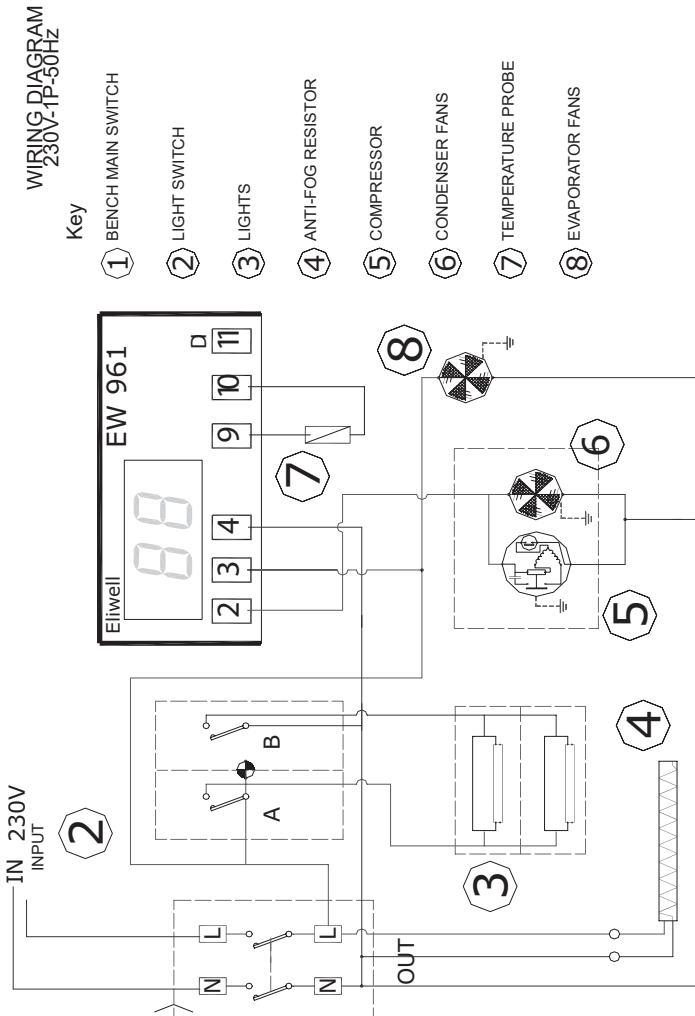
Illegal or incorrect disposal of the equipment entails application of the sanctions required by the legislation in force in the country of installation.

Do not disperse the coolant and oil in the environment.

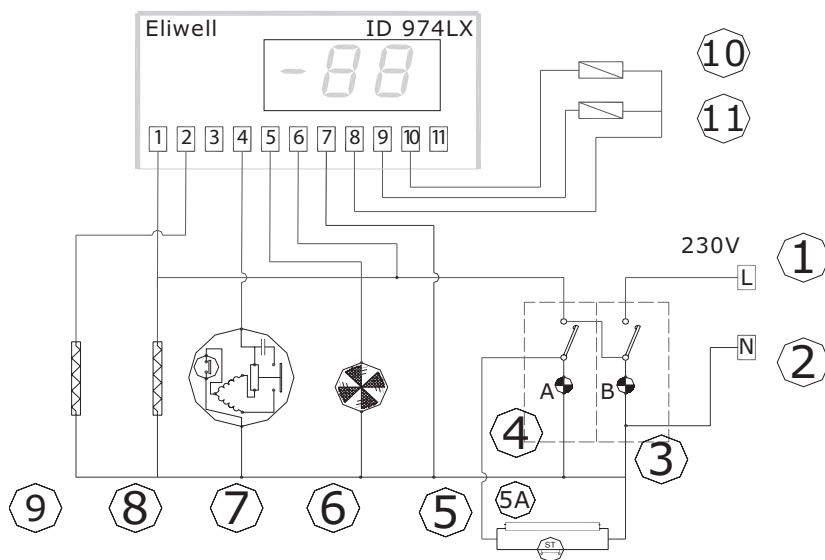
Make the equipment, destined for dismantling, unusable by removing the power supply cables.

13. ATTACHMENTS

13.1. WIRING DIAGRAM EW961



13.2. WIRING DIAGRAM EW974



Key

- | | |
|--|------------------------|
| ① 230V POWER SUPPLY | ⑦ COMPRESSOR |
| ② NEUTRAL | ⑥ BENCH FANS |
| ③ BENCH MAIN SWITCH | ⑧ ANTI-FOG RESISTOR |
| ④ BENCH LIGHT SWITCH | ⑨ DEFROSTING RESISTOR |
| ⑤ BENCH LAMPS WITH REACTORS | ⑩ END-OF-DEFROST PROBE |
| ⑤A OPTIONAL (M-SERIES)
BENCH LAMP REACTORS HOUSED IN
THE MOTOR COMPARTMENT | ⑪ TEMPERATURE PROBE |