

DEHUMIDIFIER

Installation & Operation Manual



CONTENT

1. Preface	1
2. Installation Precautions	2
2.1 Marks	2
2.2 Icons	2
2.3 Warnings	2
2.4 Attention	3
3. Specifications	5
3.1 Parameters	5
3.2 Performance Curve	6
3.3 Dimensions	7
3.4 Working Principle	7
3.5 Product Features	8
3.6 Hygrostat Control	8
4. Installation	9
4.1 Installation Precautions	9
4.2 Positioning	9
4.3 Minimum Installation Distances	9
4.4 Drainage	10
5. Usage	11
5.1 The wire controller operation interface	11
5.2 Function of wire controller	12
5.3 Wind speed setting	14
5.4 Electric heating setting	14
5.5 Keyboard lock function	15
5.6 Fault interface	15
6. Maintenance	16
6.1 Maintenance	16
6.2 Troubleshootings	17
7. Appendix	23
7.1 Interface diagram	23
7.2 Cable specification	25
7.3 Comparison table of refrigerant saturation temperature	26

1. Preface

Thank you for choosing Swimming Pool Dehumidifier for controlling the climate in you pool area. This product strictly complies with design and production standards to provide perfect performance, high reliability and good adaptability for you.

Read the entire manual before the initial start-up of the unit. It is important to know the correct operating procedures for the unit and all safety precautions to prevent the possibility of property damage and/or personal injury. Do not modify or intervene on the unit by yourself only as this could create dangerous situations and the manufacturer will not be responsible for any damage caused.

This instruction must be kept carefully and must always accompany the appliance. If it is lost or damaged, please contact the local technical service center.

1.1 Fail to comply with these recommendations will invalidate the warranty.

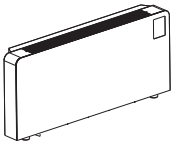
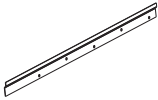
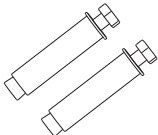
- This unit must be installed by an authorized installer.
- All repair or maintenance interventions must be performed by the technical service department or by professionally qualified personnel.
- All repair or maintenance interventions must be performed in the specified period and times.
- Use the spare parts ONLY provided by the manufacturer.

1.2 In case of system leakage, disconnect the power to the unit and call the technical service department or other professionally qualified personnel as soon as possible, and do not intervene personally on the appliance.

If the unit is not used for a long time, you should disconnect the power to the unit.

1.3 Packing List (Fig.1)

Fig.1

Main unit	Wall suspension bar	Manual	Expansion bolts
			

2. Installation Precautions

2.1 Marks

Mark	Meaning
 WARNING	A wrong operation may lead to death or heavy injury on people.
 ATTENTION	A wrong operation may lead to harm to people or loss of property.

2.2 Icons

Icon	Meaning
	Prohibition. What is prohibited will be nearby this icon.
	Compulsory implement. The listed actions need to be taken.
	Attention(include warnings) Please pay attention to what is indicated.

2.3 Warnings

INSTALLATION	 PROFESSIONAL INSTALLER IS REQUIRED	Entrust a specialized personnel for installation. Wrong installation may cause leakage, personnel electric shock or fires.
	 EARTHING IS REQUIRED	Confirm whether wether the unit is with correct earthing. Wrong connection may cause personnel shock.

OPERATION	 PROHIBITION	Do not put fingers or others into the fan or evaporator of the unit, otherwise harm may be occurred.
	 SHUT OFF THE POWER	When there is something wrong or strange smell from the unit, please cut off the power to the unit immediately.

MOVE AND REPAIR	 ENTRUST	When the unit needs to be moved or installed again, please entrust dealer or qualified person to carry it out. Improper installation may lead to water leakage, electrical shock, injury or fire.
	 PROHIBIT	It is prohibited to repair the unit by the user himself, otherwise electrical shock or fire may occur.
	 ENTRUST	When the unit needs to be repaired, please entrust dealer or qualified person to carry it out. Improper movement or repair on the unit may lead to water leakage, electrical shock, injury or fire.

2. Installation Precautions

2.4 Attention

INSTALLATION	Meaning
 Fix the unit	Make sure that the basement of the unit is strong enough to avoid any decline or fall down.
 Need circuit breaker	Make sure that there is circuit breaker for the unit. Lack of circuit breaker can lead to electrical shock or fire.

OPERATION	Meaning
 Check the installation basement	Please check the installation basement regularly to avoid any decline or damage which may hurt people or damage the unit.
 Disconnect the power	Please disconnect the power to the unit for clean or maintenance.
 Prohibit	Please use the suitable fuse. If copper or iron is used to replace the fuse, it will cause failure, even fire.



Warning:

Remember that some fundamental safety rules should be followed when using this product:

1. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
2. It is forbidden to touch the appliance with wet hands or body when barefoot.
3. It is forbidden to carry out any cleaning before having disconnected the appliances from the electricity mains supply by turning the system master switch to OFF.
4. It is forbidden to modify the safety or adjustment devices or adjust without authorization and indication of the manufacturer.
5. It is forbidden to pull, cut or knot the electrical cables coming out of the appliance, even if it is disconnected from the mains supply.
6. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
7. It is forbidden to poke objects or anything else through the inlet or outlet grills.
8. It is forbidden to dispose of or leave in the reach of children the packaging materials which could become a source of danger.
9. It is forbidden to climb onto the appliance or rest any object on it.
10. It is forbidden to touch the unit with hands directly as the external parts of the appliance can reach temperatures of more than 70°C.
11. The appliance shall be installed in accordance with national wiring regulations.



2. Installation Precautions

12. The unit can only be repaired by qualified installer centre personnel or an authorised dealer. (for Europe market)
13. This appliance is not intended for use by persons (including children) with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. (for Europe market) Children should be supervised to ensure that they do not play with the appliance.
14. Please make sure that the unit and power connection have good earthing, otherwise may cause electrical shock.
15. If the supply cord is damaged, it must be replaced by the manufacturer or our service agent or similarly qualified person in order to avoid a hazard.
16. Directive 2002/96/EC (WEEE):
The symbol depicting a crossed-out waste bin that is underneath the appliance indicates that this product, at the end of its useful life, must be handled separately from domestic waste, must be taken to a recycling centre for electric and electronic devices or handed back to the dealer when purchasing an equivalent appliance.
17. Directive 2002/95/EC (RoHs): This product is compliant with directive 2002/95/EC (RoHs) concerning restrictions for the use of harmful substances in electric and electronic devices.
18. The unit CANNOT be installed near the flammable gas. Once there is any leakage of the gas, fire can occur.
19. Make sure that there is circuit breaker for the unit, lack of circuit breaker can lead to electrical shock or fire.
20. The heat pump located inside the unit is equipped with an over-load protection system. It does not allow for the unit to start for at least 3 minutes from a previous stoppage.
21. The unit can only be repaired by the qualified personnel of an installer center or an authorized dealer. (for North America market)
22. Installation must be performed in accordance with the NEC/CEC by authorized person only. (for North America market)
23. USE SUPPLY WIRES SUITABLE FOR 75°C.
24. Caution: Single wall heat exchanger, not suitable for potable water connection.

3. Specifications

3.1 Parameters

● Swimming Pool Dehumidifier

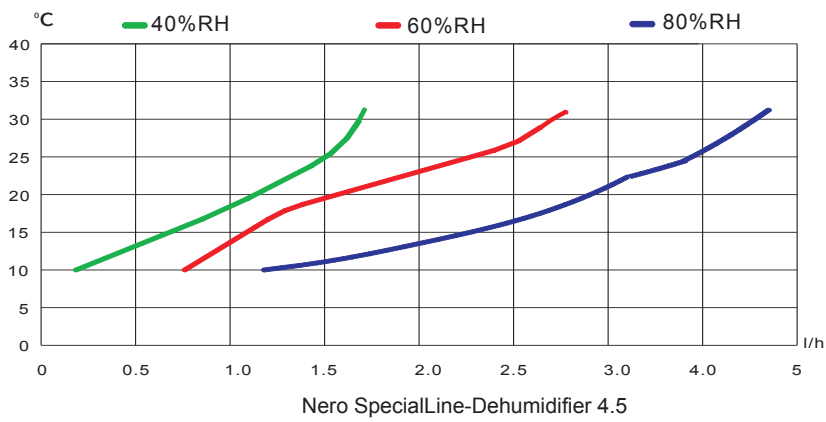
Model	Unit	Nero SpecialLine-Dehumidifier 4.5
Rated Capacity	L/h	4.5
Dehumidification capacity per day	L	108
Max pool area	m ²	20
Noise Level	dB(A)	46
Rated Voltage/Freq	/	220-240V~/50Hz
Rated Power Input	kW	1.95
Rated Running Current	A	8.8
Max.Power Input	kW	2.3
Max.Running Current	A	10
Relative Humidity	%RH	40 ~ 90
Temperature	℃	10~32
Dimensions(L/W/H)	mm	See 3.3
Net Weight	kg	See nameplate/ package label
Refrigerant	/	R32
Condensation Pipe Diameter	mm	16

Test condition: Ambient temperature: 30℃, Relative humidity: 80%.

Operating limits: temperature 10℃~32℃
relative humidity 40%~90%

3. Specifications

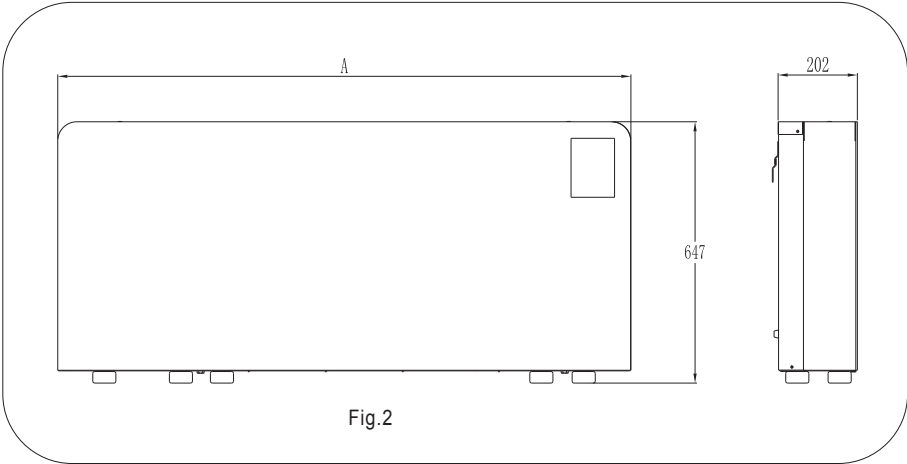
3.2 Performance Curve



3. Specifications

3.3 Dimensions

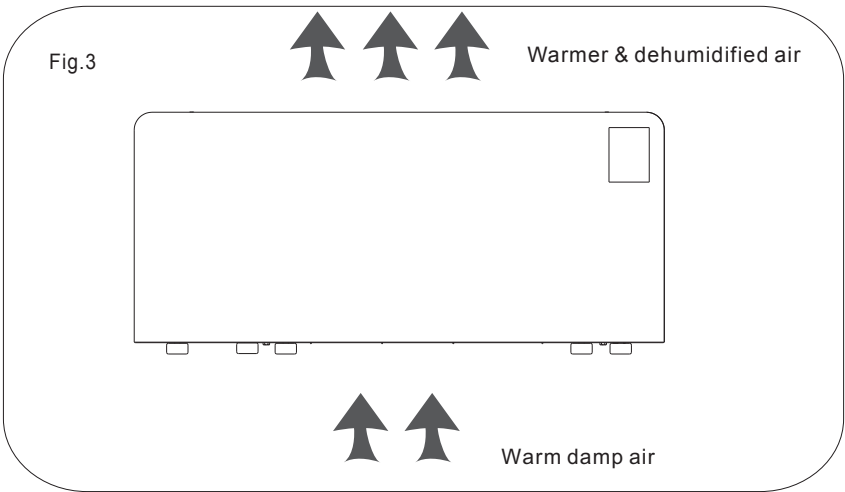
3.3.1 Applicable product model: Nero SpecialLine-Dehumidifier 4.5



Model	Nero SpecialLine-Dehumidifier 4.5
Length: A	1695

3.4 Working Principle:

The unit works by drawing moist air over a refrigerated coil with a small fan. The cold coil of the refrigeration device condenses the water, which is removed, then the air is reheated by the hot coil. This process works most effectively with higher ambient temperatures with a high dew point temperature(Fig.3).



3. Specifications

3.5 Product Features

3.5.1 Ultra-low noise

With the advanced air ducting technology and the super quiet cross-flow fan, the unit can operate with ultra-low noise.

3.5.2 Ultra-thin casing

With the ultra-thin casing of 200mm, which is the result of compact design, the unit can save more space for you when it is compared with the common dehumidifiers with the thickness of 400mm.

3.5.3 Fashionable appearance

With noble & fashion arc frame and elegant & graceful snow white color, the unit will be perfectly combined with your pool house.

3.5.4 Newly design controller.

With simple operating display, the newly developed controller makes the unit operation easier and more user-friendly.

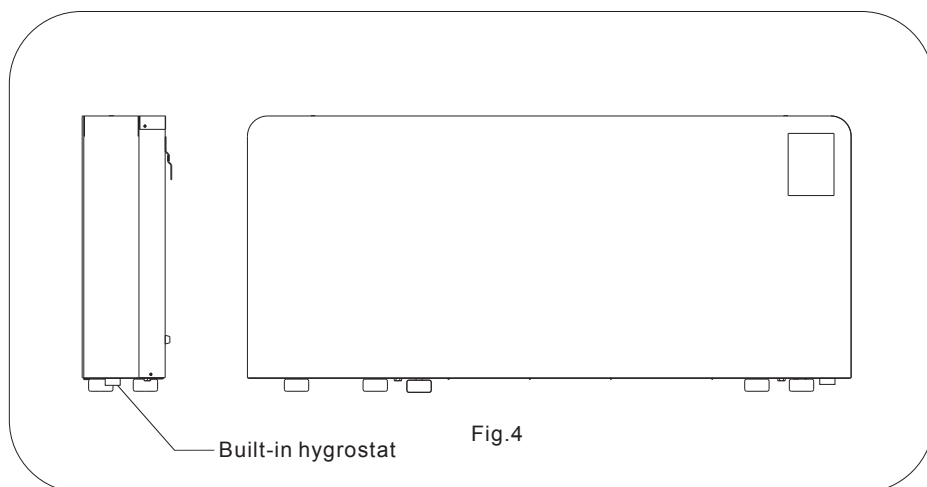
3.6 Hygrostat Control

3.6.1 The dehumidifier is controlled by a built-in hygrostat set on one side of the unit and the target RH value can be set ranges from 30% to 90%.

3.6.2 The unit will not start to dehumidify until the actual RH is beyond the setting value.

3.6.3 We recommend that an external hygrostat should be installed to ensure a constant measure of the humidity in the pool area.

3.6.4 The location of hygrostat is as the following (Fig.4):



4. Installation

4.1 Installation Precautions

4.1.1 To ensure that the installation is performed correctly and that the appliance will perform perfectly, please carefully follow the instructions indicated in this manual. Fail to respect the rules indicated not only can cause malfunctions of the appliance but also invalidate the warranty, hence our company shall not respond for any damage to persons, animals or property.

4.1.2 It is important that the electrical installation is made according to the laws in force, respects the data indicated in the technical sheet and the unit is correctly earthed.

4.1.3 The appliance must be installed in a position that allows the routine maintenance, such as filter cleaning.

4.2 Positioning

4.2.1 Avoid installing the unit in proximity to:

- positions subject to exposure to direct sunlight;
- sources of heat;
- in places with oil fumes
- places subject to high frequencies.

4.2.2 Make sure that:

- the wall on which the unit is to be installed is strong enough to support the weight;
- the part of the installation wall does not have pipes or electric wires passing through;
- the installation wall is perfectly flat;
- there is an area free of obstacles which could interfere with the inlet and outlet air flow;
- it is preferably that there is an outside perimeter-wall to allow the discharge of condensation outside;

4.3 Minimum Installation Distances

4.3.1 Removing the four rubber feet of the unit are suggested if hanging it on the wall.

4.3.2 Fig. 5 indicates the minimum mounting distances between the wall-mounted swimming pool dehumidifier and furniture in the room.

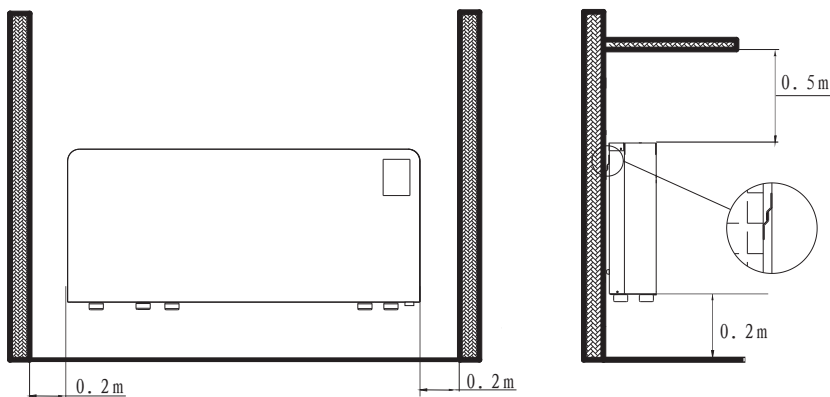
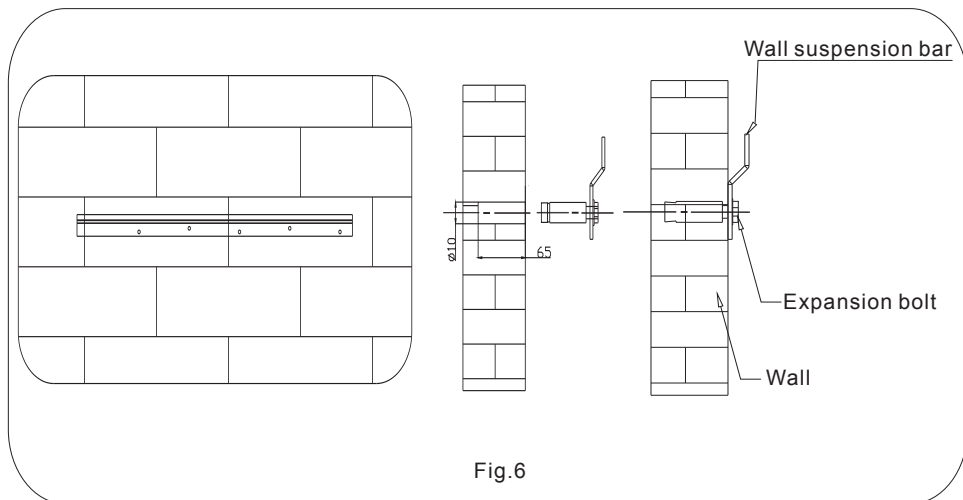


Fig.5

4. Installation

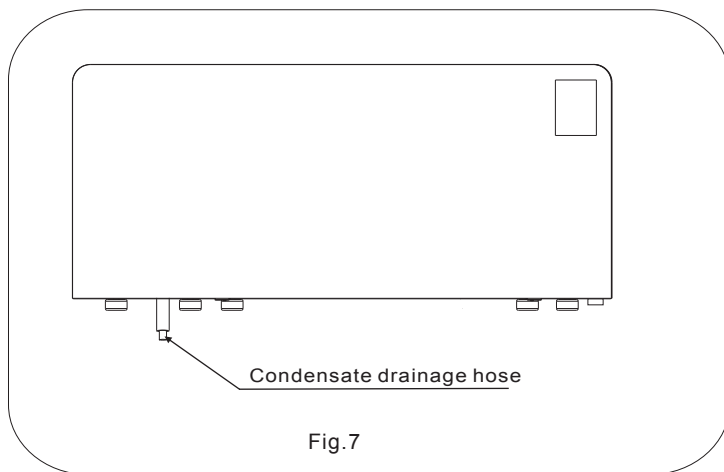
4.3.3 Wall mounted installation

Insert 5 expansion bolts into holes which are bored by $\phi 10$ drill and fix the wall suspension bar horizontally(Fig.6).



4.4 Drainage

Select a suitable size hose to connect to the built-in hose if it is needed(Fig.7).



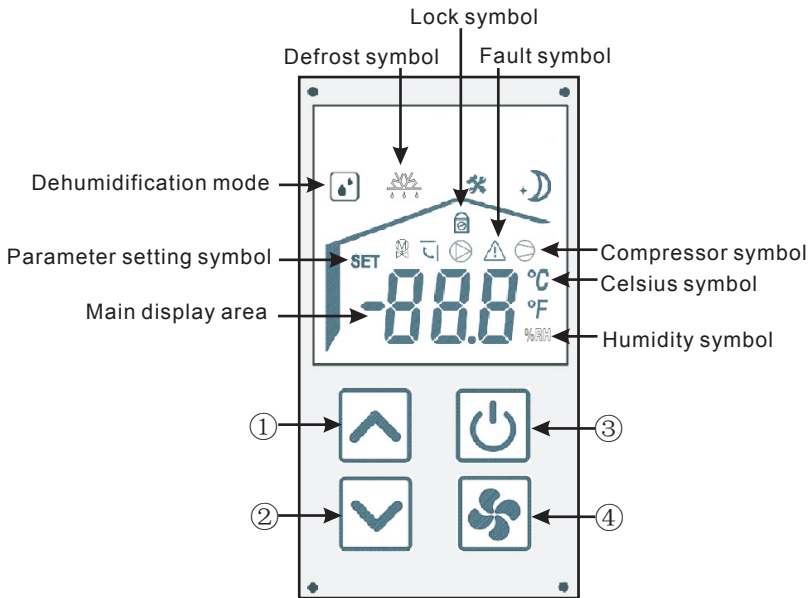
Attention:

- If the condensation water discharges directly into a container, the condensate outlet should be above the container to avoid immersing in the container.

5.Usage

1.1.The wire controller operation interface

1.1.1 Full display interface



1.1.2 Key description

Key number	Key name	Key function
①	Up	Press this key to select the upward option or increase the parameter value
②	Down	Press this key to select the downward option or decrease the parameter value
③	ON/OFF	Press this button to turn on/off and cancel the current operation and return to the previous menu
④	Wind speed button/Confirm	Press to set the wind speed and confirm/save parameters

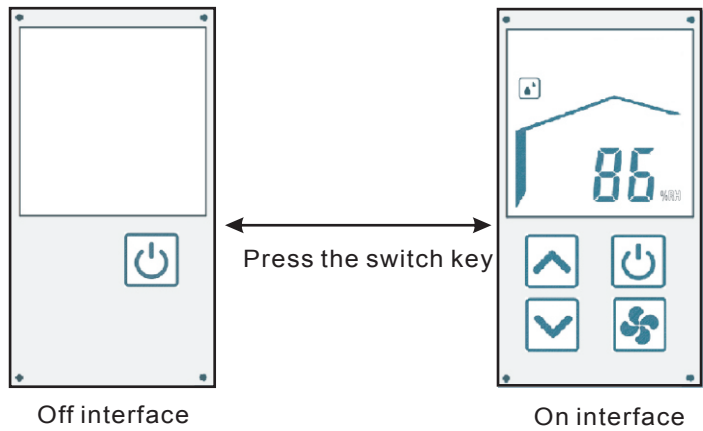
5.Usage

2.1. Function of wire controller

2.1.1 ON and OFF

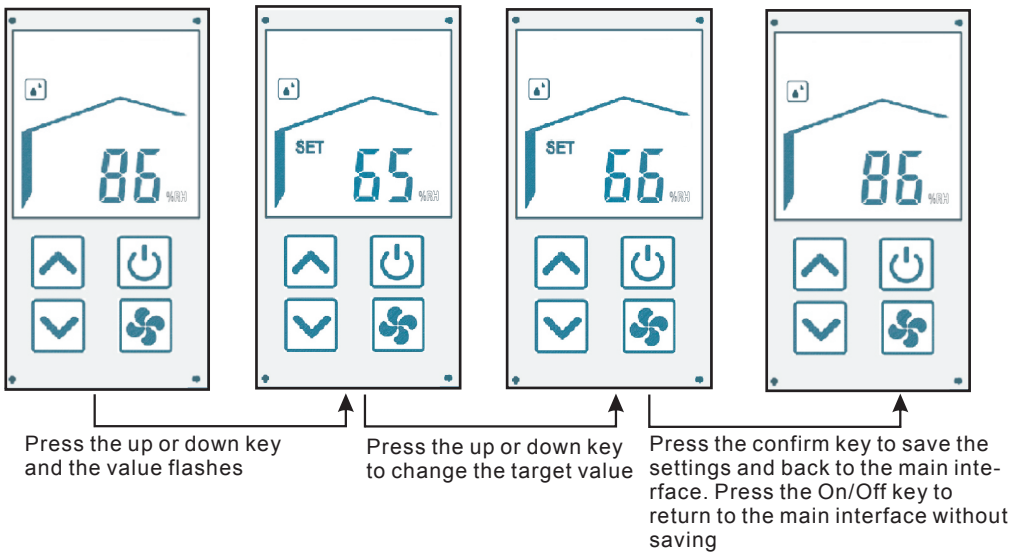
Off state: press the On/Off key, the unit enters the On state; key lights and display lights are up.

On state: press the On/Off key, the unit enters the Off state; key lights and display lights are off .



2.2.2 Target humidity setting

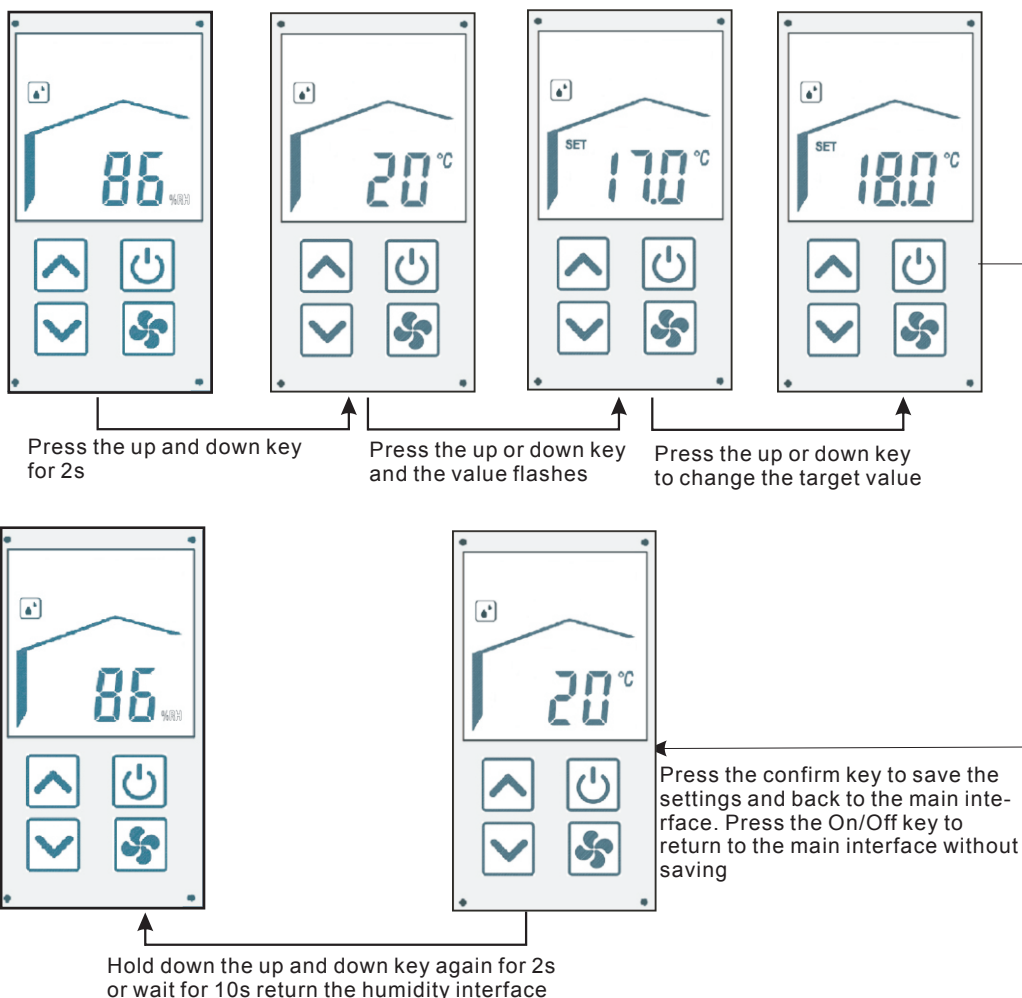
In the main interface, short press the up or down key after the target humidity flashing, press the up or down key to change the target humidity value. In the target humidity setting interface, if no operation in 5s, settings will be saved automatically and return to the main interface.



5.Usage

2.2.3 Return air temp setting

In the main interface, press the up and down key for 2s to switch to the return air temperature display, and then short press the up or down key after the return air temp. flashing, press the up or down key to change the value. In the target setting interface, if no operation in 5s, settings will be saved automatically and return to the main interface.



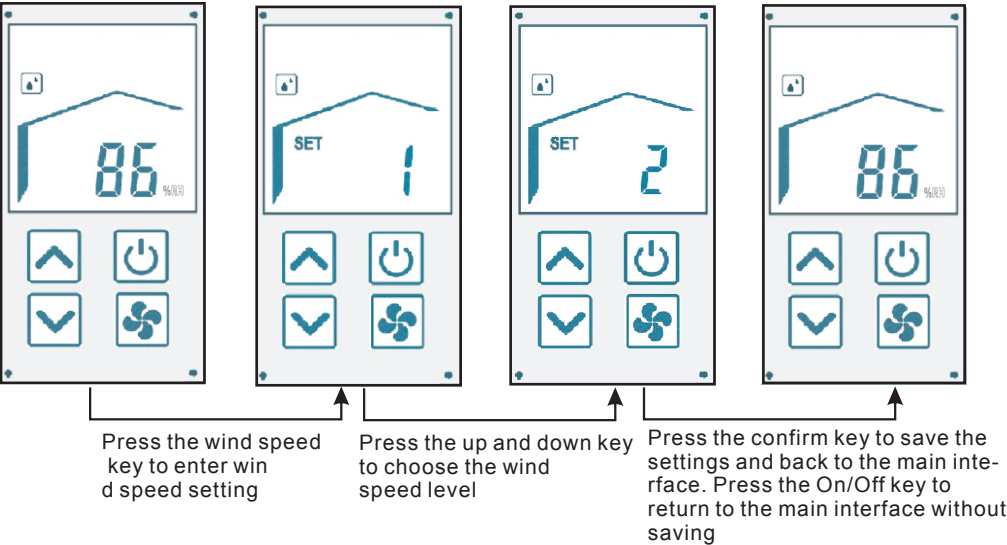
Note:

1. In the return air temperature interface, the humidity interface automatically returns after 10s.
2. In the return air temperature interface, hold down the up and down key again for 2s to return to the humidity display.
3. By default, the humidity interface is displayed during power-on, and there is no power failure memory.

5.Usage

3.1 Wind speed setting

In the on/off interface, short press the wind speed key to enter the wind speed setting, wind speed level value flashing, short press the up or down key, wind speed cycles among 1-3, if no operation in 5s, settings will be saved automatically and return to the main interface.



Note: If setting the wind speed in the off interface, it will back to the off interface.

3.2 Fan Mode

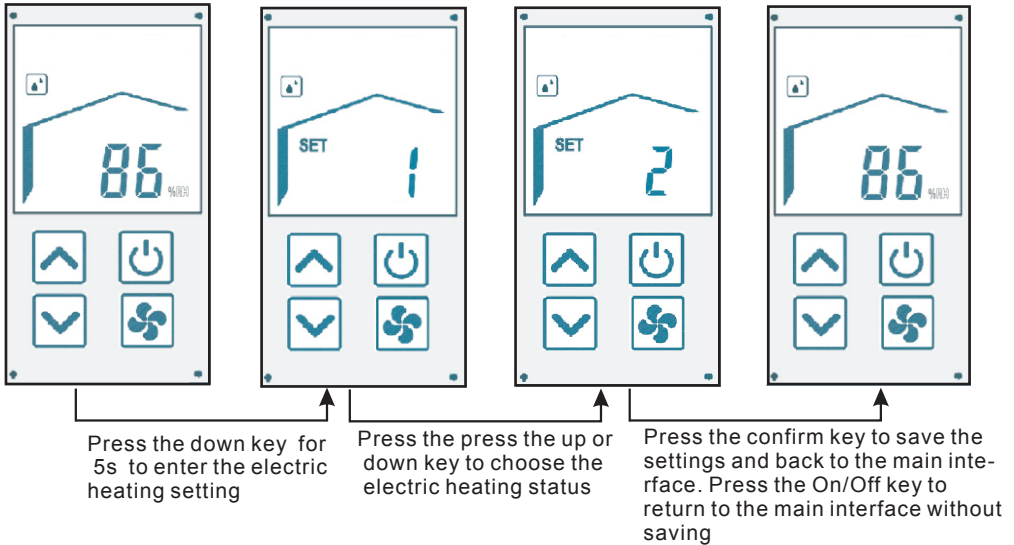
In the on/off interface, press the wind speed key for 2s to enter the fan mode setting, the current fan mode flashing. Press the up or down key, the fan mode switches between ON and OFF. The other operation is the same as the wind speed setting.

- ON: The fan keeps running when the target humidity is reached;
- OFF: The fan stops when the target humidity is reached.

4.1. Electric heating setting

In the on interface press the down key for 5s to enter the electric heating setting, electric heating status value flashing. Short press the up or down key, electric heating status value among 0-1-2, if no operation in 5s, settings will be saved automatically and return to the main interface.

5.Usage

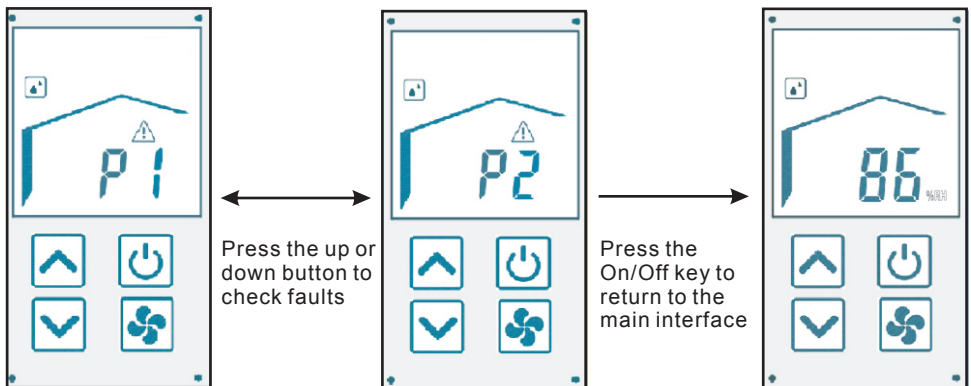


5.1. Keyboard lock function

To avoid any faulty operations by others, please lock the keyboard after finishing settings. In the main interface, long press On/Off button for 5 seconds, you can lock the keyboard; In the keyboard lock state, long press On/Off button for 5 seconds or occur the faults, you can unlock the keyboard. In the lock keyboard interface you can only unlock, other operations are invalid.

6.1. Fault interface

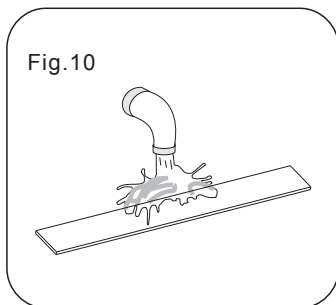
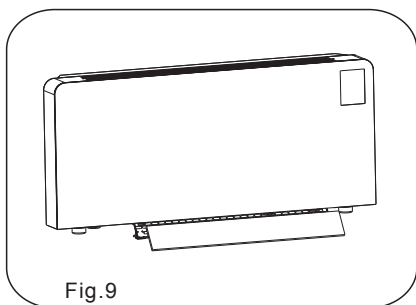
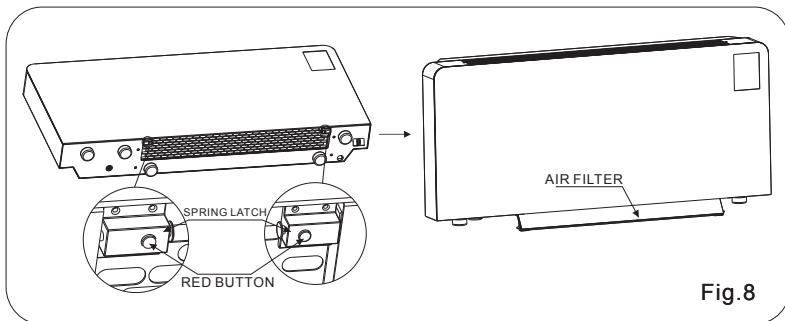
When the unit fails, the fault code displays in the main display area, press the up or down button, faults will display in cycle. Press the On/Off button to return to the main interface.



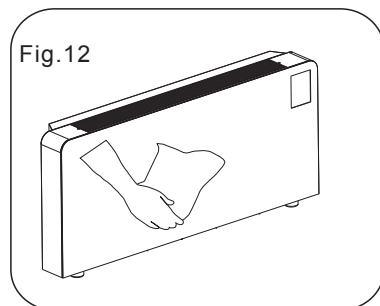
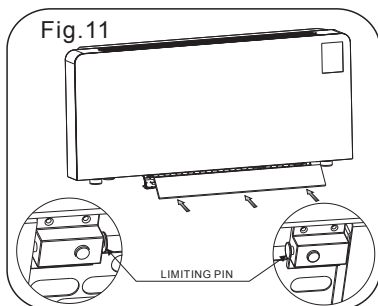
6. Maintenance

6.1 Maintenance

- To guarantee the unit reliable and security operation for a long time, it is suggested to maintain and clean up the unit every six months.
- Please take the following steps to clean up the strainer regularly:
 - 1) Press the two red buttons and drag it down slowly (Fig.8) ;
 - 2) Seperate the return air filter screen from the units as the image shown below (Fig.9) ;
 - 3) Take away the return air filter screen and flush it with water (Fig.10) .



- 4) Set the filter net and the air return grille to the original place and press the limiting pin. (Fig.11).
- 5) Clean up the unit outer with soft and damp rag (Fig.12) . To protect the paint-coat of the unit, please don' t use rough sponge or corrosive detergent to do these.



Warning: Cut off power supply before cleaning or maintaining the unit.

6. Maintenance

6.2 Trouble shootings

Press the key of "UP" or "Down" to check that if there are more failure codes.

You can find solutions to the problems according to the codes.

Malfunction	Code	Reason	Solution
High pressure protection has appeared 3 times in 30mins.	P1	High pressure protection is too frequently.	Check the below solutions to failure P1/P2/P3
High pressure protection	P2	Discharge pressure is too high	
Condenser outlet temp. overhigh	P3	Condenser coil temp. is too high	
Evaporator outlet temp. sensor failure	P5	This temp. sensor is broken or in open/short circuit	Check or replace this temp. sensor
Evaporator inlet temp. sensor failure	P6	This temp. sensor is broken or in open/short circuit	Check or replace this temp. sensor
Condenser outlet temp. sensor failure	P7	This temp. Sensor is broken or in open/short circuit	Check or replace this temp. sensor
Humidity sensor failure	P8	Humidity sensor is broken or in open/short circuit	Check or replace this humidity sensor
Motor feedback signal failure	E0	The feedback wiring is in bad connection. Or fan motor is damaged.	Check the feedback wiring of fan motor or replace the fan motor
Return air temp. sensor failure	P9	This temp. sensor is broken or in open/short circuit	Check or replace this temp. Sensor

Solution to failure P1/P2/P3:

1. f P1/P2/P3 appears together with other failures, please solve the others first.
2. f there is no other failures of P3~E0, and P1 & P2 still exist, please disconnect the power to the unit and connect again after 1 hour.
3. f only P3 exists, please keep the fan running for 30min. If P3 still exist after the running, please disconnect the power to the unit and connect again after 1 hour.

Note: Please contact with Technical Service Assistance when failures can not be solved.

6. Maintenance

- Check the water supply device and the release often. You should avoid the condition of no water or air entering into system, as this will influence unit's performance and reliability. You should clear the pool/spa filter regularly to avoid damage to the unit as a result of the dirty of clogged filter.
- The area around the unit should be dry, clean and well ventilated. Clean the side heating exchanger regularly to maintain good heat exchange as conserve energy .
- The operation pressure of the refrigerant system should only be serviced by a certified technician .
- Check the power supply and cable connection often, .Should the unit begin to operate abnormally, switch it off and contact the qualified technician.
- Discharge all water in the water pump and water system ,so that freezing of the water in the pump or water system does not occur. You should discharge the water at the bottom of water pump if the unit will not be used for an extended period of time. You should check the unit thoroughly and fill the system with water fully before using it for the first time after a
- Checks to the area
Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system. prolonged period of no usage.
- Work procedure
Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.
- Work procedure
Work shall be undertaken under a controlled procedure so as to minimise the risk of a flammable gas or vapour being present while the work is being performed.
- General work area
All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.
- General work area
All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.
- Checking for presence of refrigerant
The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.
- Presence of fire extinguisher
If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging **area**.

6. Maintenance

● No ignition sources

No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. “No Smoking” signs shall be displayed.

● Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere. prolonged period of no usage.

● Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system. prolonged period of no usage.

● Checks to the refrigeration equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance.

The following checks shall be applied to installations using flammable refrigerants:

The charge size is in accordance with the room size within which the refrigerant containing parts are installed;

The ventilation machinery and outlets are operating adequately and are not obstructed;

If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;

Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;

Refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

● Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised.

Initial safety checks shall include:

- . That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- . That there no live electrical components and wiring are exposed while charging, recovering or purging the system;
- . That there is continuity of earth bonding.

6. Maintenance

● Repairs to sealed components

- 1) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.
- 2) Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc. Ensure that apparatus is mounted securely.

● Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE: The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

● Repair to intrinsically safe components

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use.

Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

● Cabling

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

● Detection of flammable refrigerants

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

Leak detection methods

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants.

● Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.) Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.

Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

If a leak is suspected, all naked flames shall be removed/ extinguished.

If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

6. Maintenance

● Removal and evacuation

When breaking into the refrigerant circuit to make repairs or for any other purpose conventional procedures shall be used. However, it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:

- . Remove refrigerant;
- . Purge the circuit with inert gas;
- . Evacuate;
- . Purge again with inert gas;
- . Open the circuit by cutting or brazing.

● The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be "flushed" with OFN to render the unit safe. This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.

Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum. This process shall be repeated until no refrigerant is within the system. When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. This operation is absolutely vital if brazing operations on the pipe-work are to take place.

Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available. working on them.

● Labelling

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

● Recovery

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.

When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.

The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

6. Maintenance

● Decommissioning

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

- a) Become familiar with the equipment and its operation.
- b) Isolate system electrically.
- c) Before attempting the procedure ensure that:
 - . Mechanical handling equipment is available, if required, for handling refrigerant cylinders;
 - . All personal protective equipment is available and being used correctly;
 - . The recovery process is supervised at all times by a competent person;
 - . Recovery equipment and cylinders conform to the appropriate standards.
- d) Pump down refrigerant system, if possible.
- e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f) Make sure that cylinder is situated on the scales before recovery takes place.
- g) Start the recovery machine and operate in accordance with manufacturer's instructions.
- h) Do not overfill cylinders. (No more than 80 % volume liquid charge).
- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

● Charging procedures

In addition to conventional charging procedures, the following requirements shall be followed.

- Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.
- Cylinders shall be kept upright.
- Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
- Label the system when charging is complete (if not already).
- Extreme care shall be taken not to overfill the refrigeration system.

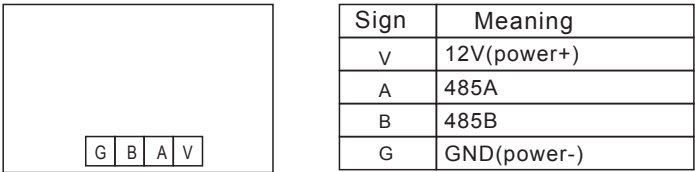
Prior to recharging the system it shall be pressure tested with OFN. The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

● The safety wire model is 5*20_5A/250VAC, And must meet the explosion-proof requirements

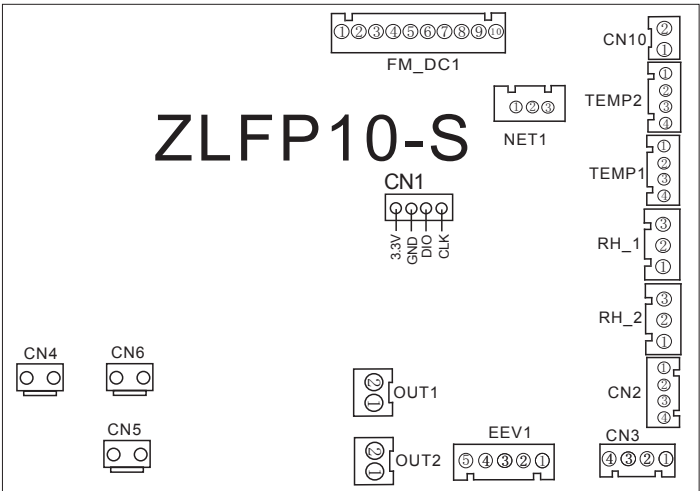
7. Appendix

7.1 Interface diagram

7.1.1 Wire control interface diagram and definition



7.1.2 Controller interface diagram and definition



Appendix

Connections explanation:

Number	Signal	Meaning
1	CN1	Program port
2	CN2	The centralized controller port
3	CN3	The wire controller/Wifi
4	CN4	220V input
5	CN5	Electric heating
6	CN6	Compressor
7	EEV1	Electronic expansion valve
8	RH_1	Humidity sensor(internal)
9	RH_2	Humidity sensor(external)
10	CN10	High pressure switch
11	TEMP1-①+②	Evaporation outlet temperature
12	TEMP1-③+④	Evaporation inlet temperature
13	TEMP2-①+②	Condensing outlet temperature
14	TEMP2-③+④	Return air temperature
15	OUT1	Reserved
16	OUT2	Reserved
17	FM DC1	DC motor
18	NET1	Wire controller(3 core)

7. Appendix

7.2 Cable specification

(1) Single phase unit

Nameplate maximum current	Phase line	Earth line	MCB	Creepage protector	Signal line
No more than 10A	$2 \times 1.5\text{mm}^2$	1.5mm^2	20A	30mA less than 0.1 sec	$n \times 0.5\text{mm}^2$
10~16A	$2 \times 2.5\text{mm}^2$	2.5mm^2	32A	30mA less than 0.1 sec	
16~25A	$2 \times 4\text{mm}^2$	4mm^2	40A	30mA less than 0.1 sec	
25~32A	$2 \times 6\text{mm}^2$	6mm^2	40A	30mA less than 0.1 sec	
32~40A	$2 \times 10\text{mm}^2$	10mm^2	63A	30mA less than 0.1 sec	
40~63A	$2 \times 16\text{mm}^2$	16mm^2	80A	30mA less than 0.1 sec	
63~75A	$2 \times 25\text{mm}^2$	25mm^2	100A	30mA less than 0.1 sec	
75~101A	$2 \times 25\text{mm}^2$	25mm^2	125A	30mA less than 0.1 sec	
101~123A	$2 \times 35\text{mm}^2$	35mm^2	160A	30mA less than 0.1 sec	
123~148A	$2 \times 50\text{mm}^2$	50mm^2	225A	30mA less than 0.1 sec	
148~186A	$2 \times 70\text{mm}^2$	70mm^2	250A	30mA less than 0.1 sec	
186~224A	$2 \times 95\text{mm}^2$	95mm^2	280A	30mA less than 0.1 sec	

(2) Three phase unit

Nameplate maximum current	Phase line	Earth line	MCB	Creepage protector	Signal line
No more than 10A	$3 \times 1.5\text{mm}^2$	1.5mm^2	20A	30mA less than 0.1 sec	$n \times 0.5\text{mm}^2$
10~16A	$3 \times 2.5\text{mm}^2$	2.5mm^2	32A	30mA less than 0.1 sec	
16~25A	$3 \times 4\text{mm}^2$	4mm^2	40A	30mA less than 0.1 sec	
25~32A	$3 \times 6\text{mm}^2$	6mm^2	40A	30mA less than 0.1 sec	
32~40A	$3 \times 10\text{mm}^2$	10mm^2	63A	30mA less than 0.1 sec	
40~63A	$3 \times 16\text{mm}^2$	16mm^2	80A	30mA less than 0.1 sec	
63~75A	$3 \times 25\text{mm}^2$	25mm^2	100A	30mA less than 0.1 sec	
75~101A	$3 \times 25\text{mm}^2$	25mm^2	125A	30mA less than 0.1 sec	
101~123A	$3 \times 35\text{mm}^2$	35mm^2	160A	30mA less than 0.1 sec	
123~148A	$3 \times 50\text{mm}^2$	50mm^2	225A	30mA less than 0.1 sec	
148~186A	$3 \times 70\text{mm}^2$	70mm^2	250A	30mA less than 0.1 sec	
186~224A	$3 \times 95\text{mm}^2$	95mm^2	280A	30mA less than 0.1 sec	

When the unit will be installed at outdoor, please use the cable which can against UV.

7. Appendix

7.3 Comparison table of refrigerant saturation temperature

Pressure (MPa)	0	0.3	0.5	0.8	1	1.3	1.5	1.8	2	2.3
Temperature (R410A)(°C)	-51.3	-20	-9	4	11	19	24	31	35	39
Temperature (R32)(°C)	-52.5	-20	-9	3.5	10	18	23	29.5	33.3	38.7
Pressure (MPa)	2.5	2.8	3	3.3	3.5	3.8	4	4.5	5	5.5
Temperature (R410A)(°C)	43	47	51	55	57	61	64	70	74	80
Temperature (R32)(°C)	42	46.5	49.5	53.5	56	60	62	67.5	72.5	77.4

NOTE_____

[illegible]



DEHUMIDIFIKATOR

Uputstvo za instalaciju i rad



1. Predgovor

Hvala što ste izabrali Dehumidifikator za bazen za kontrolu klime u vašem prostoru bazena. Ovaj proizvod strogo se pridržava dizajnerskih i proizvodnih standarda kako bi vam pružio savršene performanse, visoku pouzdanost i dobru prilagodljivost.

Pročitajte ceo priručnik pre prvog pokretanja uređaja. Važno je poznavati ispravne procedure rada za uređaj i sve sigurnosne mere kako bi se sprečila mogućnost oštećenja imovine i/ili lične povrede. Ne modifikujte ili intervenišite na uređaju sami, jer to može stvoriti opasne situacije, a proizvođač neće biti odgovoran za bilo kakvu štetu koja nastane.

Ova uputstva moraju se pažljivo čuvati i uvek pratiti uređaj. Ako se izgube ili oštete, molimo kontaktirajte lokalni tehnički servis.

1.1 Nepostupanje prema ovim preporukama će poništiti garanciju.

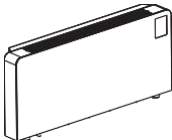
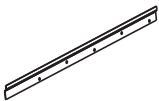
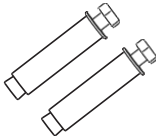
- Ovaj uređaj mora instalirati ovlašćeni instalater.
- Sve popravke ili intervencije održavanja moraju izvesti tehnička služba ili profesionalno kvalifikovano osoblje.
- Sve popravke ili intervencije održavanja moraju se izvesti u propisanom periodu i vremenu.
- Koristite rezervne delove SAMO koje obezbeđuje proizvođač.

1.2 U slučaju curenja sistema, isključite napajanje uređaja i što pre pozovite tehničku službu ili drugo profesionalno kvalifikovano osoblje, i ne intervenišite lično na uređaju.

Ako se uređaj ne koristi duži vremenski period, trebate isključiti napajanje uređaja.

1.3 Lista pakovanja (Sl.1)

Sl.1

Glavna jedinica	Bar za montažu na zid	Priručnik	Ekspanzione šrafove
			

2. Mjere predostrožnosti prilikom instalacije

2.1 Oznake

Oznaka	Značenje
 UPUTSTVO	Pogrešna operacija može dovesti do smrti ili teških povreda ljudi.
 PAŽNJA	Pogrešna operacija može dovesti do povreda ljudi ili gubitka imovine.

2.2 Ikone

Ikona	Značenje
	Zabrana. Ono što je zabranjeno biće u blizini ove ikone.
	Obavezno izvršenje. Navedene radnje je potrebno preduzeti.
	Pažnja (uključujući upozorenja) Molimo vas da obratite pažnju na ono što je naznačeno.

2.3 UPOZORENJA

INSTALACIJA	 POTREBNA JE PROFESIONALNA INSTALACIJA	Poverite instalaciju specijalizovanom osoblju. Pogrešna instalacija može izazvati curenje, električni udar ili požar.
	 UZEMLJENJ E JE POTREBNO	Potvrdite da li je uređaj pravilno uzemljen. Pogrešna povezanost može izazvati električni udar.

RAD	 ZABRANA	Ne stavljajte prste ili druge predmete u ventilator ili isparivač uređaja, inače može doći do povrede.
	 ISKLUČIT E SNAGU	Kada primetite nešto neobično ili čudan miris iz uređaja, odmah isključite napajanje uređaja.

PREMEŠTAJ I POPRAVKA	 POVERITE	Kada je potrebno pomeriti ili ponovo instalirati uređaj, molimo vas da to poverite prodavcu ili kvalifikovanoj osobi. Nepravilna instalacija može dovesti do curenja vode, električnog udara, povreda ili požara.
	 ZABRANJE NO	Zabranjeno je da korisnik sam popravlja uređaj, inače može doći do električnog udara ili požara.
	 POVERITE	Kada je potrebno popraviti uređaj, molimo vas da to poverite prodavcu ili kvalifikovanoj osobi. Nepravilno pomeranje ili popravka uređaja može dovesti do curenja vode, električnog udara, povreda ili požara.

2. Mjere predostrožnosti prilikom instalacije

2.4 Pažnja

INSTALACIJA	Značenje
 Popravite uređaj	Uverite se da je osnova uređaja dovoljno čvrsta da izbegnete bilo kakvo opadanje ili pad.
 Potreban osigurač	Uverite se da postoji osigurač za uređaj. Nedostatak osigurača može dovesti do električnog udara ili požara.

RAD	Značenje
 Proverite instalacionu osnovu	Molimo vas da redovno proveravate instalacionu osnovu kako biste izbegli bilo kakvo opadanje ili oštećenje koje može povrediti ljude ili oštetiti uređaj.
 Isključite napajanje	Molimo vas da isključite napajanje uređaja za čišćenje ili održavanje.
 Zabranjeno	Molimo vas da koristite odgovarajući osigurač. Ako se koristi bakar ili ikona za zamenu osigurača, to će izazvati kvar, čak i požar.



Upozorenje:

Zapamtite da se neka osnovna pravila bezbednosti moraju poštovati prilikom korišćenja ovog proizvoda:

1. Ovaj uređaj nije namenjen za korišćenje od strane osoba (uključujući decu) sa smanjenim fizičkim, čulnim ili mentalnim sposobnostima, ili nedostatkom iskustva i znanja, osim ako im nije pruženo nadgledanje ili uputstvo o korišćenju uređaja od strane osobe odgovorne za njihovu bezbednost. Deca treba da budu pod nadzorom kako bi se osiguralo da se ne igraju sa uređajem.
2. Zabranjeno je dodirivati uređaj mokrim rukama ili telom kada ste bosi.
3. Zabranjeno je vršiti bilo kakvo čišćenje pre nego što se uređaj isključi iz napajanja isključivanjem glavnog prekidača sistema na OFF.
4. Zabranjeno je menjati bezbednosne ili podešavajuće uređaje ili ih podešavati bez odobrenja i uputstva proizvođača.
5. Zabranjeno je povlačiti, seći ili čvoriti električne kablove koji izlaze iz uređaja, čak i ako je isključen iz napajanja.
6. Ako je napojni kabl oštećen, mora ga zameniti proizvođač, njegov servisni agent ili slične kvalifikovane osobe kako bi se izbegla opasnost.
7. Zabranjeno je provlačenje predmeta ili bilo čega drugog kroz ulazne ili izlazne rešetke.
8. Zabranjeno je odlaganje ili ostavljanje pakovanja u doseg deca koja bi mogla postati izvor opasnosti.
9. Zabranjeno je penjanje na uređaj ili postavljanje bilo kog predmeta na njega.
10. Zabranjeno je dodirivati uređaj rukama direktno jer spoljašnji delovi uređaja mogu dostići temperature veće od 70°C.
11. Uređaj treba instalirati u skladu sa nacionalnim propisima o električnim instalacijama.



2. Mjere predostrožnosti prilikom instalacije

12. Uređaj može popraviti samo kvalifikovano osoblje servisnog centra ili ovlašćeni trgovac.
(za evropsko tržište)
13. Ovaj uređaj nije namenjen za upotrebu od strane osoba (uključujući decu) sa smanjenim fizičkim, čulnim ili mentalnim sposobnostima, ili nedostatkom iskustva i znanja, osim ako im nije pruženo nadgledanje ili uputstvo o korišćenju uređaja od strane osobe odgovorne za njihovu sigurnost.
(za evropsko tržište) Deca treba da budu pod nadzorom kako bi se osiguralo da se ne igraju sa uređajem.
14. Molimo vas da se uverite da su jedinica i napajanje dobro uzemljeni, inače može doći do električnog udara.
15. Ako je napojni kabl oštećen, mora ga zameniti proizvođač ili naš servisni agent ili slična kvalifikovana osoba kako bi se izbegla opasnost.
16. Direktiva 2002/96/EC (WEEE):
Simbol koji prikazuje precrtanu kantu za otpatke ispod uređaja označava da se ovaj proizvod, na kraju svog korisnog veka, mora odvojeno obraditi od domaćeg otpada, mora se odneti u reciklažni centar za električne i elektronske uređaje ili vratiti trgovcu prilikom kupovine ekvivalentnog uređaja.
17. Direktiva 2002/95/EC (RoHs): Ovaj proizvod je u skladu sa direktivom 2002/95/EC (RoHs) koja se odnosi na ograničenja u korišćenju štetnih supstanci u električnim i elektronskim uređajima.
18. Jedinica NE SME biti instalirana u blizini zapaljivog gasa. Kada dođe do bilo kakvog curenja gasa, može doći do požara.
19. Uverite se da postoji osigurač za uređaj, nedostatak osigurača može dovesti do električnog udara ili požara.
20. Toplotna pumpa smeštena unutar uređaja opremljena je sistemom zaštite od preopterećenja. Ne dozvoljava da uređaj počne da radi najmanje 3 minuta nakon prethodnog zaustavljanja.
21. Uređaj može popraviti samo kvalifikovano osoblje instalaterskog centra ili ovlašćeni distributer. (za tržište Severne Amerike)
22. Instalaciju mora izvršiti ovlašćeno lice u skladu sa NEC/CEC.
(za tržište Severne Amerike)
23. KORISTITE KABLOVE ZA NAPAJANJE PRIKLADNE ZA 75°C.
24. Pažnja: Jednoslojni toplotni izmenjivač, nije pogodan za povezivanje sa pitkom vodom.

3. Tehničke specifikacije

3.1 Parametri

● Dehumidifikator za bazen

Model	Jedinca	Nero SpecialLine-Dehumidifier 4.5
Nazivna kapacitet	L/h	4.5
Kapacitet dehumidifikacije po danu	L	108
Maksimalna površina bazena	m ²	20
Nivo buke	dB(A)	46
Nazivni napon/frekvencija	/	220-240V~/50Hz
Nazivna snaga	kW	1.95
Nazivna radna struja	A	8.8
Maksimalna snaga	kW	2.3
Maksimalna radna struja	A	10
Relativna vlažnost	%RH	40~ 90
Temperatura	°C	10~32
Dimenzije(D/Š/V)	mm	Vidi3.3
Neto težina	kg	Pogledajte oznaku etiketu pakovanja
Rashladna tečnost	/	R32
Prečnik kondenzacione cevi	mm	16

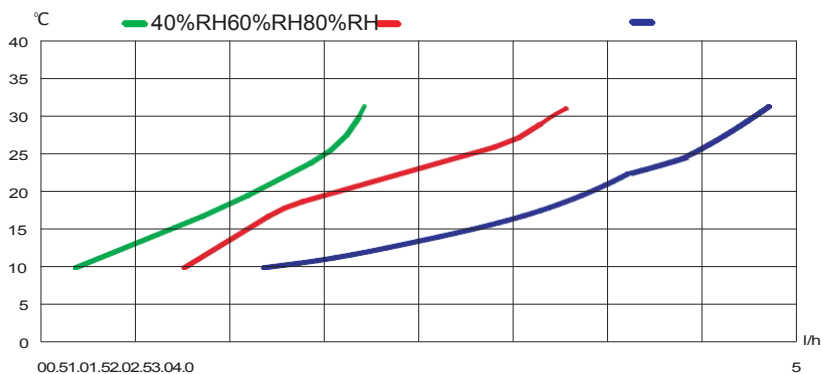
Testni uslovi: Temperatura okoline: 30°C, Relativna vlažnost: 80%.

Radni limiti: temperatura 10°C~32°C

relativna vlažnost 40%~90%

3. Tehničke specifikacije

3.2 Kriva performansi

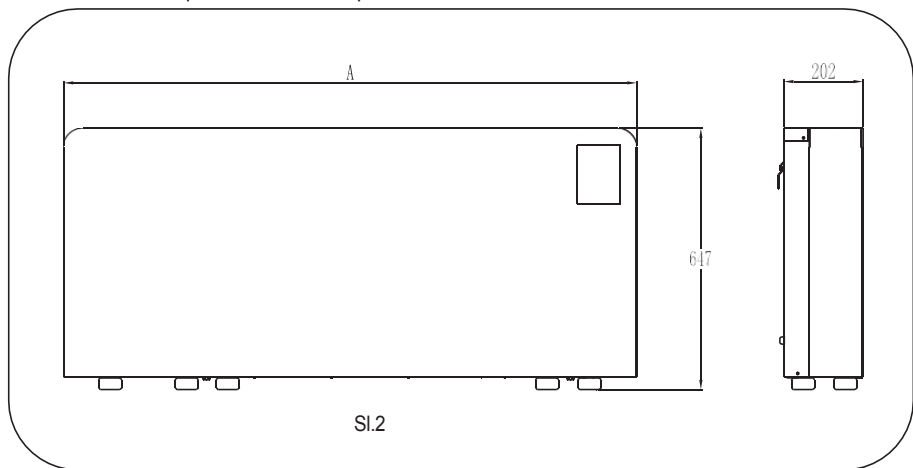


Nero SpecialLine-Dehumidifier 4.5

3. Tehničke specifikacije

3.3 Dimenzije

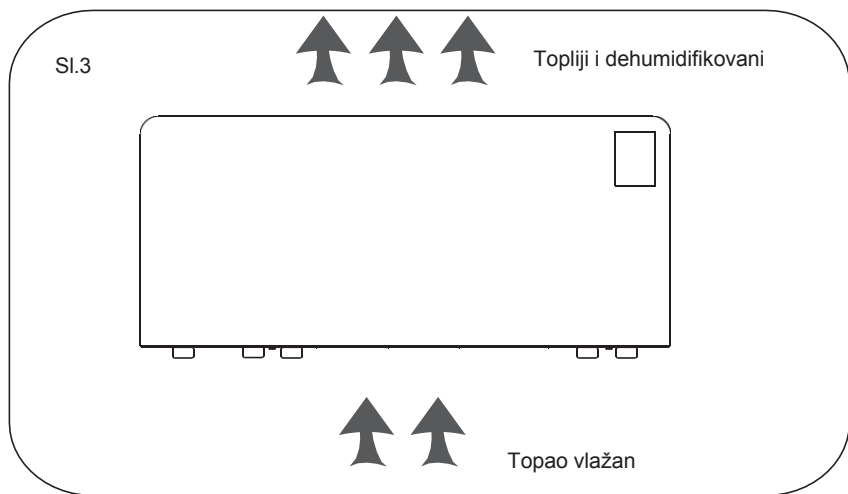
3.3.1 Primerni model proizvoda: Nero SpecialLine-Dehumidifier 4.5



Model	Nero SpecialLine-Dehumidifier 4.5
Dužina: A	1695

3.4 Princip rada:

Uređaj radi tako što usisava vlažan vazduh preko rashladne cevi sa malim ventilatorom. Hladna cev rashladnog uređaja kondenzuje vodu, koja se uklanja, a zatim se vazduh ponovo zagreva toplom cevi. Ovaj proces najefikasnije funkcioniše pri višim ambijentalnim temperaturama sa visokim tačkama rosišta (Sl.3).



3. Specifikacije

3.5 Karakteristike proizvoda

3.5.1 Ultra-nizak nivo buke

Sa naprednom tehnologijom vazdušnih kanala i super tihim ventilatorom sa poprečnim protokom, uređaj može raditi sa ultra-niskim nivoom buke.

3.5.2 Ultra-tanki kućišta

Sa ultra-tankim kućištem od 200mm, što je rezultat kompaktne konstrukcije, uređaj može uštedeti više prostora u poređenju sa uobičajenim dehumidifikatorima debljine 400mm.

3.5.3 Moderna pojava

Sa plemenitim i modrim okvirom i elegantnom i gracioznom snežno belom bojom, uređaj će se savršeno uklopiti u vašu kuću pored bazena.

3.5.4 Novi dizajn kontrolera.

Sa jednostavnim operativnim prikazom, novorazvijeni kontroler čini rad uređaja lakšim i korisnički prijatnijim.

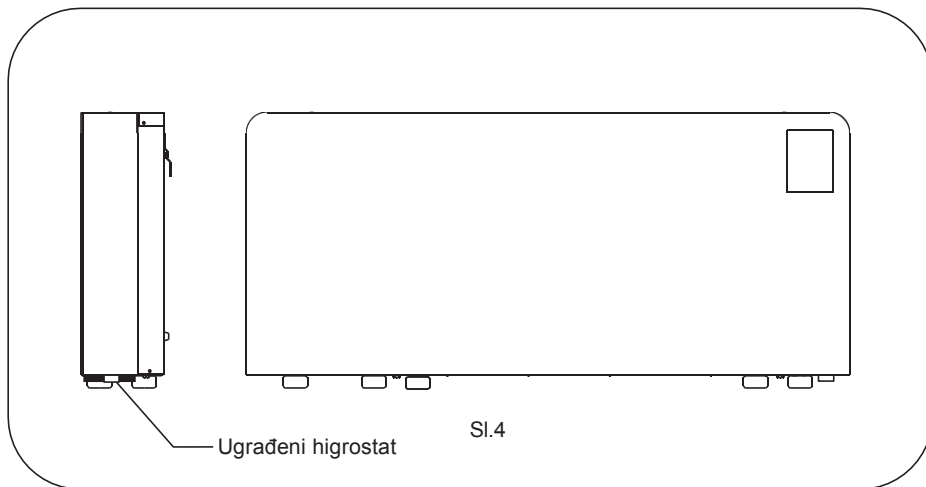
3.6 Kontrola higrostata

3.6.1 Dehumidifikator se kontroliše ugrađenim higrostatom postavljenim sa jedne strane uređaja, a ciljana vrednost RH može se postaviti u rasponu od 30% do 90%.

3.6.2 Uređaj neće početi da dehumidifikuje dok stvarna RH ne pređe postavljenu vrednost.

3.6.3 Preporučujemo da se instalira spoljašnji higrostat kako bi se osiguralo konstantno merenje vlažnosti u prostoru bazena.

3.6.4 Lokacija higrostata je sledeća (Sl.4):



4. Instalacija

4.1 Mere predostrožnosti prilikom instalacije

4.1.1 Da bi se osiguralo da instalacija bude izvršena ispravno i da uređaj funkcioniše savršeno, molimo vas da pažljivo pratite uputstva navedena u ovom priručniku. Nepoštovanje navedenih pravila može izazvati neispravnosti uređaja, ali i poništiti garanciju, stoga naša kompanija ne snosi odgovornost za bilo kakvu štetu na osobama, životinjama ili imovini.

4.1.2 Važno je da električna instalacija bude izvršena u skladu sa važećim zakonima, da poštuje podatke navedene u tehničkom listu i da je uređaj pravilno uzemljen.

4.1.3 Uređaj mora biti instaliran na mestu koje omogućava rutinsko održavanje, kao što je čišćenje filtera.

4.2 Pozicioniranje

4.2.1 Izbegavajte instalaciju uređaja u blizini:

- pozicije izložene direktnoj sunčevoj svetlosti;
- izvori toplote;
- na mestima sa dimom od ulja
- mesta izložena visokim frekvencijama.

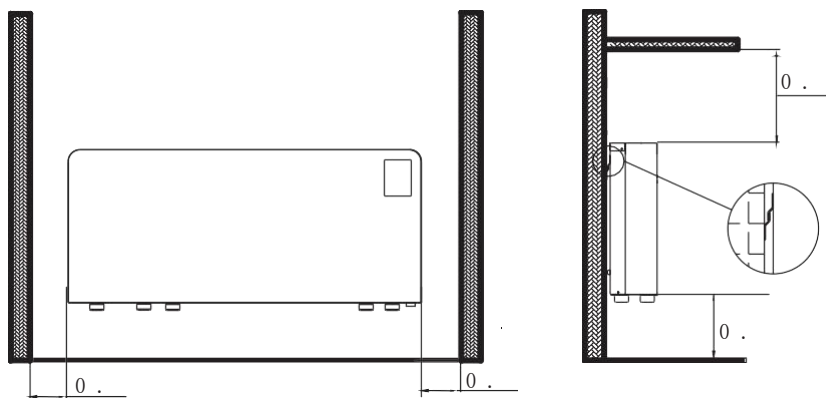
4.2.2 Proverite da:

- zid na kojem će se jedinica instalirati je dovoljno jak da podrži težinu;
- deo zida za instalaciju nema cevi ili električne žice koje prolaze kroz njega;
- zid za instalaciju je savršeno ravan;
- ima prostor slobodan od prepreka koje bi mogle ometati protok vazduha ulaznog i izlaznog;
- poželjno je da postoji spoljašnji zid kako bi se omogućilo ispuštanje kondenzacije napolje;

4.3 Minimalne udaljenosti za instalaciju

4.3.1 Preporučuje se uklanjanje četiri gumena stopala jedinice ako se montira na zid.

4.3.2 Sl. 5 prikazuje minimalne udaljenosti montaže između zidnog dehumidifikatora bazena i nameštaja u prostoriji.

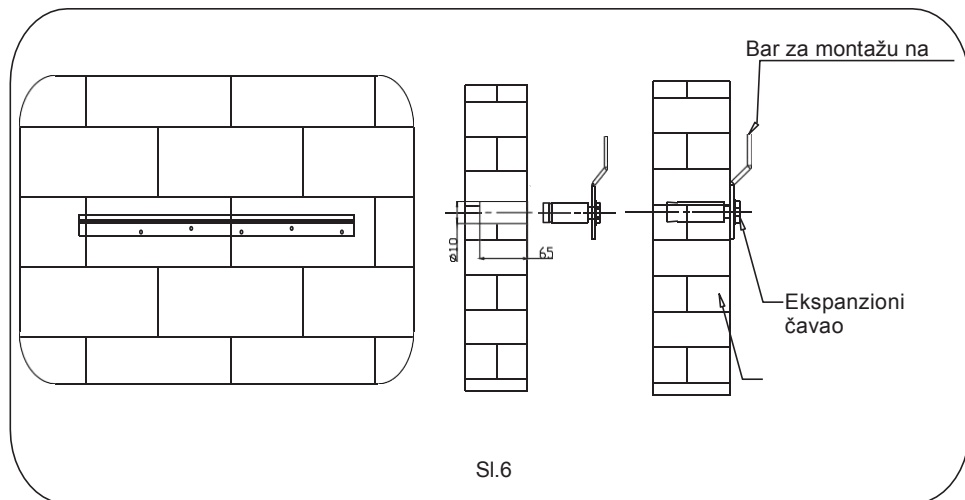


Sl.5

4. Instalacija

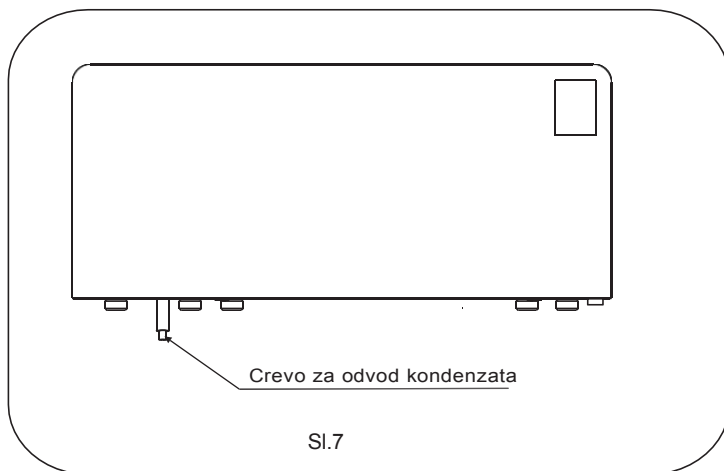
4.3.3 Montaža na zid

Umetnite 5 ekspanzionih vijaka u rupe koje su bušene $\phi 10$ burgijom i fiksirajte horizontalnu šipku za suspenziju zida (Sl.6).



4.4 Odvod

Odaberite odgovarajuću veličinu creva za povezivanje sa ugrađenim crevom ako je potrebno (Sl.7).



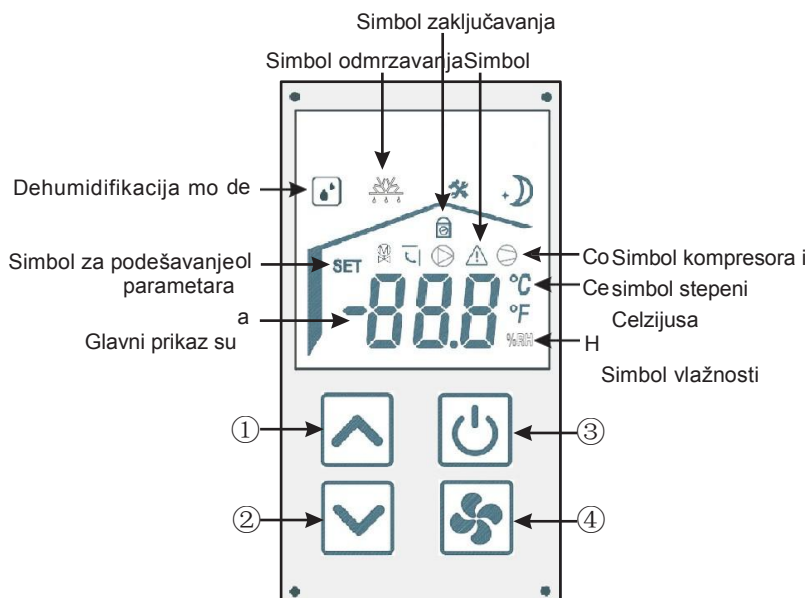
Pažnja:

- Ako se kondenzat direktno ispušta u posudu, izlaz za kondenzat treba da bude iznad posude kako bi se izbeglo potapanje u posudu.

5. Korišćenje

1.1. Interfejs za rad bežičnog kontrolera

1.1.1 Interfejs za pun prikaz



1.1.2 Opis tastera

Broj tastera	Ime tastera	Funkcija tastera
①	Gore	Pritisnite ovaj taster da izaberete opciju povećanja ili da povećate vrednost parametra
②	Dole	Pritisnite ovaj taster da izaberete opciju smanjenja ili da smanjite vrednost parametra
③	Uključi/Isključi	Pritisnite ovaj taster da uključite/isključite i otkažete trenutnu operaciju i vratite se na prethodni meni
④	Taster za brzinu vetra/ Potvrđi	Pritisnite da postavite brzinu vetra i potvrdite/sacuvate parametre

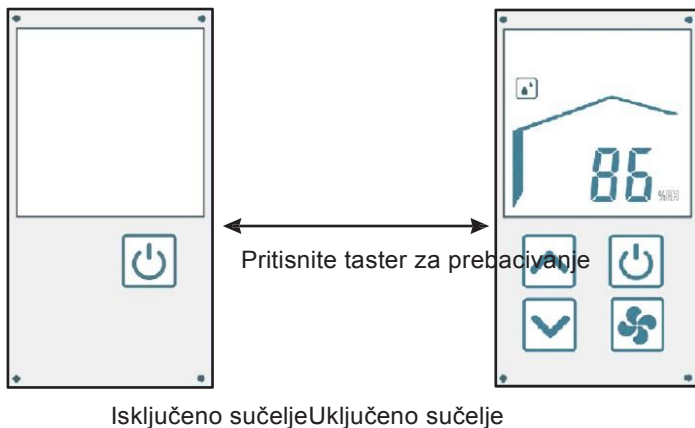
5. Korišćenje

2.1. Funkcija bežičnog kontrolera

2.1.1 Uključeno i isključeno

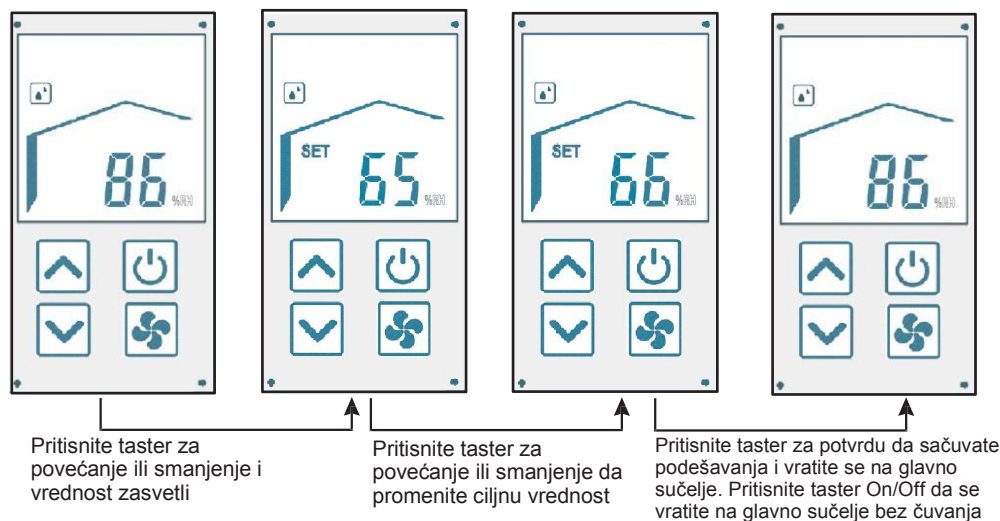
Isključeno stanje: pritisnite taster On/Off, uređaj ulazi u uključeno stanje; taster svetli i ekran svetli.

Uključeno stanje: pritisnite taster On/Off, uređaj ulazi u isključeno stanje; taster svetli i ekran je isključen.



2.2.2 Podešavanje ciljne vlažnosti

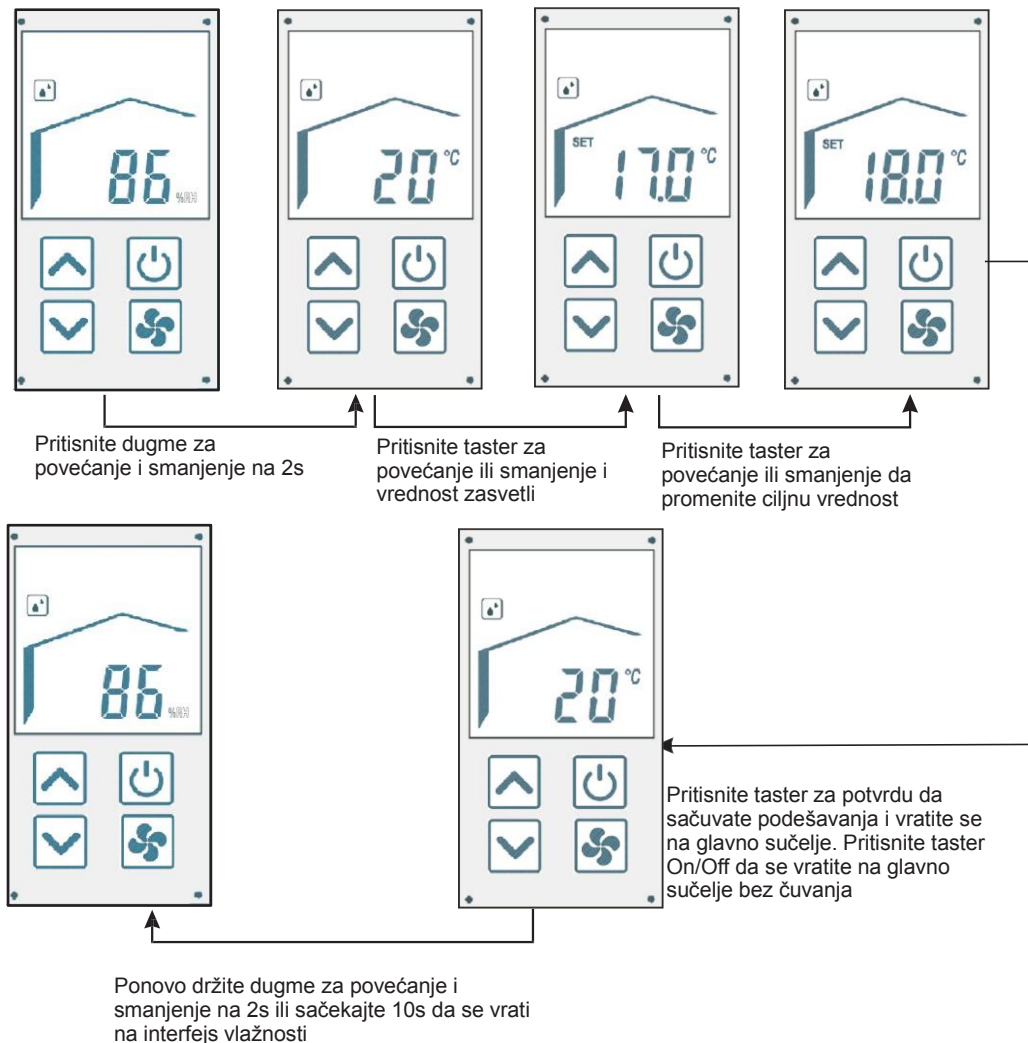
U glavnom sučelju, kratko pritisnite taster za povećanje ili smanjenje nakon što ciljana vlažnost zasvetli, pritisnite taster za povećanje ili smanjenje da promenite vrednost ciljne vlažnosti. U sučelju za podešavanje ciljne vlažnosti, ako nema operacije u roku od 5s, podešavanja će se automatski sačuvati i vratiti na glavno sučelje.



5. Korišćenje

2.2.3 Podešavanje temperature povratnog vazduha

Na glavnom sučelju, pritisnite dugme za povećanje i smanjenje na 2s da prebacite na prikaz temperature povratnog vazduha, a zatim kratko pritisnite dugme za povećanje ili smanjenje nakon što temperatura povratnog vazduha počne da trepće, pritisnite dugme za povećanje ili smanjenje da promenite vrednost. U interfejsu za podešavanje cilja, ako nema operacije u 5s, podešavanja će se automatski sačuvati i vratiti na glavno sučelje.



Napomena:

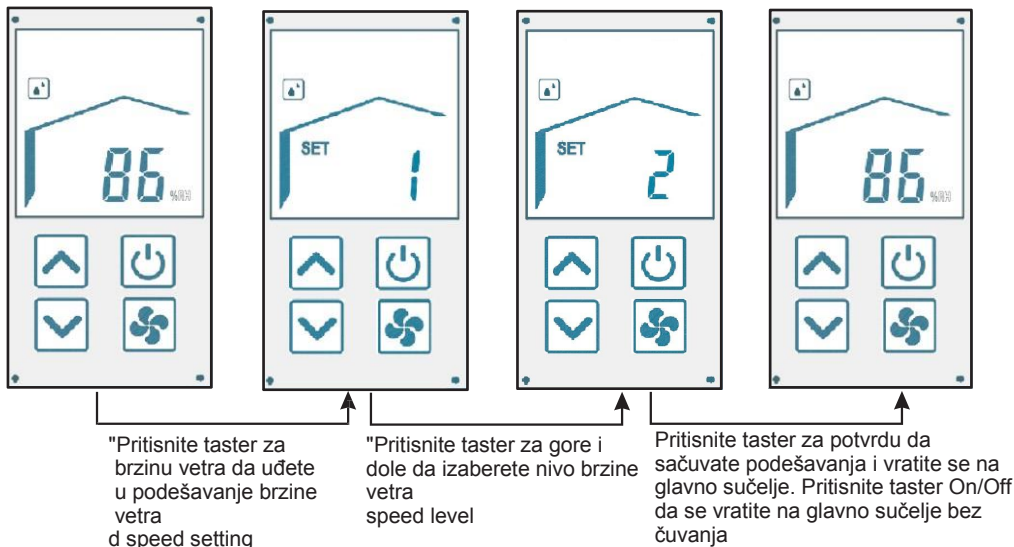
1. U interfejsu za temperaturu povratnog vazduha, interfejs vlažnosti se automatski vraća nakon 10s.
2. U interfejsu za temperaturu povratnog vazduha, držite dugme za povećanje i smanjenje ponovo na 2s da se vratite na prikaz vlažnosti.
3. Podrazumevano, interfejs vlažnosti se prikazuje prilikom uključivanja, i nema memorije o prekidu napajanja.

5. Korišćenje

3.1 Podešavanje brzine vetra

U interfejsu za uključivanje/isključivanje, kratko pritisnite dugme za brzinu vetra da uđete u podešavanje brzine vetra, vrednost nivoa brzine vetra trepće, kratko pritisnite dugme za povećanje ili smanjenje, brzina vetra se ciklično menja između 1-3,

"ako nema operacije u 5s, podešavanja će biti sačuvana automatski i vraćena na glavno sučelje.



"Napomena: Ako podešavate brzinu vetra u isključenom interfejsu, vratite se na isključeni interfejs.

3.2 "Režim ventilatora

"U interfejsu za uključivanje/isključivanje, pritisnite taster za brzinu vetra na 2s da uđete u podešavanje režima ventilatora, trenutni režim ventilatora trepće. "Pritisnite taster za gore ili dole, režim ventilatora se prebacuje između Uključeno i Isključeno. Ostale operacije su iste kao i podešavanje brzine vetra.

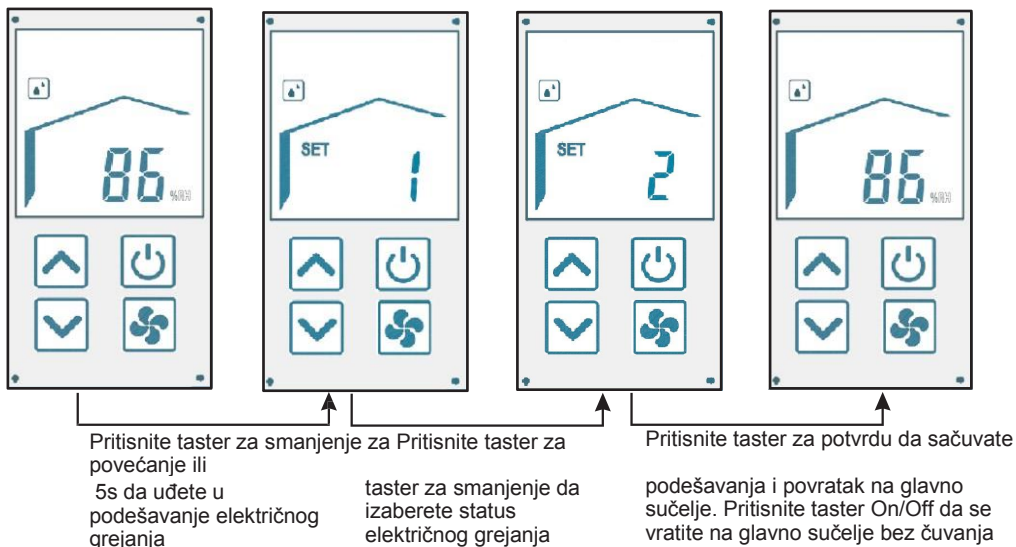
UKLJUČENO: Ventilator nastavlja da radi kada se dostigne ciljana

vlažnost; ISKLJUČENO: Ventilator se zaustavlja kada se dostigne ciljana vlažnost.

4.1. Podešavanje električnog grejanja

Na aktivnom sučelju pritisnite dugme za smanjenje na 5s da uđete u podešavanje električnog grejanja, status električnog grejanja trepće. Kratko pritisnite dugme za povećanje ili smanjenje, status električnog grejanja između 0-1-2, ako nema operacije u 5s, podešavanja će se automatski sačuvati i vratiti na glavno sučelje.

5. Korišćenje



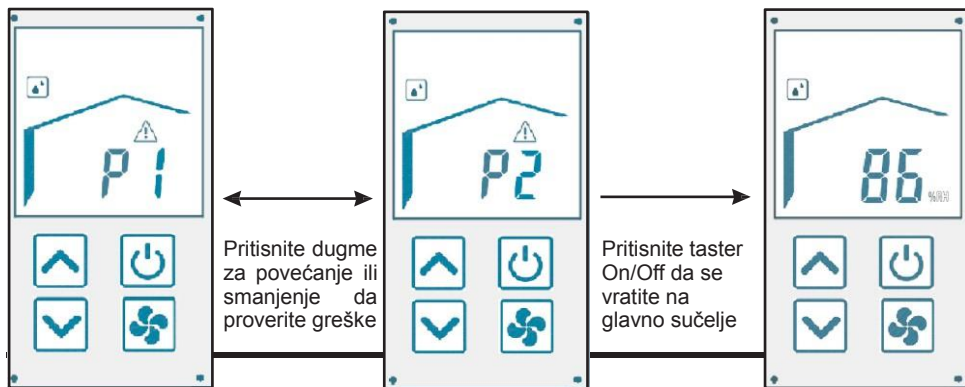
5.1. Funkcija zaključavanja tastature

Da biste izbegli bilo kakve greške u radu od strane drugih, molimo vas da zaključate tastaturu nakon završetka podešavanja. Na glavnom sučelju, dugotrajno pritisnite dugme On/Off 5 sekundi da biste zaključali tastaturu;

Ustanju zaključane tastature, dugotrajno pritisnite dugme On/Off 5 sekundi ili u slučaju greške, možete otključati tastaturu. Na interfejsu zaključane tastature možete samo otključati, druge operacije su nevažeće.

6.1. Interfejs greške

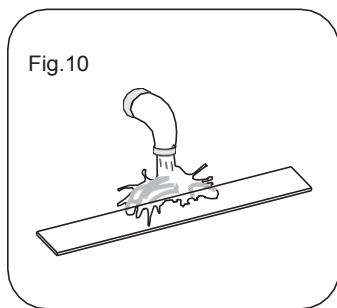
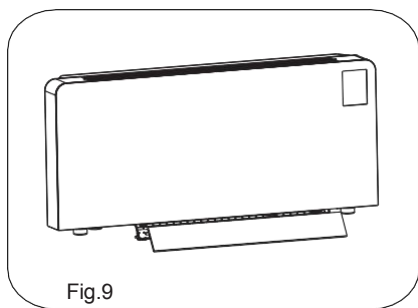
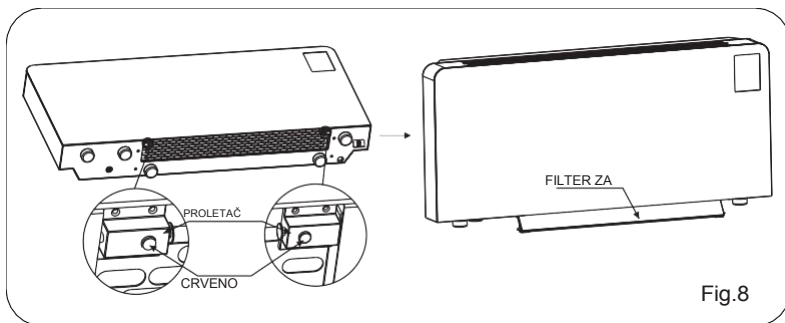
Kada jedinica ne funkcioniše, kod greške se prikazuje u glavnom prikaznom području, pritisnite dugme za povećanje ili smanjenje, greške će se prikazivati u ciklusu. Pritisnite dugme On/Off da se vratite na glavno sučelje.



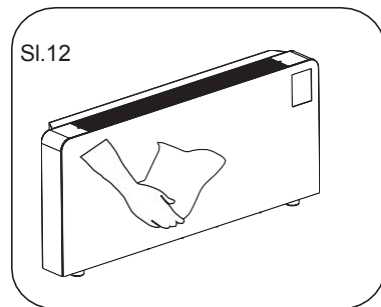
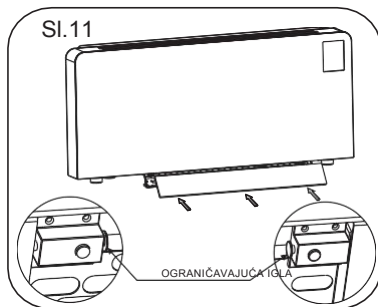
6. Održavanje

6.1 Održavanje

- Da bi se obezbedila pouzdana i sigurna operacija uređaja tokom dugog vremenskog perioda, preporučuje se održavanje i čišćenje uređaja svaka šest meseci.
- Molimo vas da pratite sledeće korake za redovno čišćenje filtera:
 - 1) Pritisnite dva crvena dugmeta i polako ga povucite nadole (Fig.8) ;
 - 2) Odvojite mrežicu povratnog vazduha od uređaja kao što je prikazano na slici ispod (Fig.9) ;
 - 3) Uzmite mrežicu povratnog vazduha i isperite je vodom (Fig.10) .



- 4) Vratite mrežicu filtera i rešetku za povratni vazduh na prvobitno mesto i pritisnite ograničavajuću iglu. (Fig.11).
- 5) Očistite spoljašnjost uređaja mekom i vlažnom krpom (Fig.12) . Da biste zaštitili farbu uređaja, molimo vas da ne koristite grubu sunđerastu krpu ili korozivne deterdžente za ovo.



Upozorenje: Isključite napajanje pre čišćenja ili održavanja uređaja.

6. Održavanje

6.2 Problemi

Pritisnite taster "GORE" ili "DOLJE" da proverite da li postoje dodatni kodovi greške.

Možete pronaći rešenja za probleme prema kodovima.

Kvar	Kod	Razlog	Rešenje
Zaštita od visokog pritiska se pojavila 3 puta u 30 minuta.	P1	Zaštita od visokog pritiska se previše često aktivira.	Proverite sledeća rešenja za greške P1/P2/P3
Zaštita od visokog pritiska	P2	Pritisak na ispuštanju je previše visok	
Temperatura izlaza kondenzatora je previsoka	P3	Temperatura zavojnice kondenzatora je previsoka	
Kvar senzora temperature izlaza isparivača	P5	Ova temperatura. senzor je pokvaren ili u otvorenom/kratkom spoju	Proverite ili zamenite ovaj senzora temperature
Kvar senzora temperature ulaza isparivača	P6	Ova temperatura. senzor je pokvaren ili u otvorenom/kratkom spoju	Proverite ili zamenite ovaj senzora temperature
Kvar senzora temperature izlaza kondenzatora	P7	Ova temperatura. Senzor je pokvaren ili u otvorenom/kratkom spoju	Proverite ili zamenite ovaj senzora temperature
Kvar senzora vlažnosti	P8	Senzor vlažnosti je pokvaren ili u otvorenom/kratkom spoju	Proverite ili zamenite ovaj senzor vlažnosti
Kvar signala povratne informacije motora	E0	Povezivanje povratne žice je loše. Ili je motor ventilatora oštećen.	Proverite povratnu žicu motora ventilatora ili zamenite motor ventilatora.
Kvar senzora temperature povratnog vazduha	P9	Ova temperatura. senzor je pokvaren ili u otvorenom/kratkom spoju	Proverite ili zamenite ovaj senzor temperature.

Rešenje za kvar P1/P2/P3:

1. Ako se P1/P2/P3 pojavljuje zajedno sa drugim kvarovima, prvo rešite ostale.
2. Ako nema drugih kvarova osim P3~E0, i P1 i P2 i dalje postoje, molimo isključite napajanje jedinice i ponovo povežite nakon 1 sata.
3. Ako samo P3 postoji, molimo da pustite ventilator da radi 30 minuta. Ako P3 i dalje postoji nakon rada, molimo isključite napajanje jedinice i ponovo povežite nakon 1 sata.

Napomena: Molimo kontaktirajte Tehničku podršku kada se kvarovi ne mogu rešiti.

6. Održavanje

- Proverite uređaj za snabdevanje vodom i često ga otpuštajte. Trebalo bi da izbegavate uslove bez vode ili vazduha koji ulaze u sistem, jer to utiče na performanse i pouzdanost jedinice. Trebalo bi redovno da čistite filter bazena/spa kako biste izbegli oštećenje uređaja usled prljavog ili zapušenog filtera.
- Površina oko uređaja treba da bude suva, čista i dobro ventilisana. Redovno čistite bočni grejač kako biste održali dobru razmenu toplote i sačuvali energiju.
- Radni pritisak rashladnog sistema treba da servisira samo sertifikovani tehničar.
- Često proveravajte napajanje i priključak kabla. Ako uređaj počne da radi abnormalno, isključite ga i kontaktirajte kvalifikovanog tehničara.
- Ispustite svu vodu iz pumpe i vodoopskrbnog sistema kako ne bi došlo do smrzavanja vode u pumpi ili vodoopskrbnom sistemu. Trebalo bi da ispustite vodu na dnu pumpe ako uređaj neće biti korišćen duži vremenski period. Trebalo bi da temeljno proverite uređaj i potpuno napunite sistem vodom pre nego što ga prvi put upotrebite nakon
- Provere područja
Pre nego što započnete rad na sistemima koji sadrže zapaljive rashladne agense, neophodne su bezbednosne provere kako bi se smanjio rizik od paljenja. Za popravku hladnog sistema, sledeće mere opreza treba poštovati pre nego što se započne rad na sistemu. dug period neupotrebe.
- Procedura rada
Rad će se obavljati prema kontrolisanoj proceduri kako bi se smanjio rizik od prisustva zapaljivog gasa ili pare tokom obavljanja rada.
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- Opšta radna oblast
Svi radnici za održavanje i drugi koji rade u lokalnoj oblasti treba da budu obavešteni o prirodi rada koji se obavlja. Rad u zatvorenim prostorima treba izbegavati. Oblast oko radnog prostora treba da bude odvojena. Osigurajte da su uslovi unutar oblasti bezbedni kontrolom zapaljivog materijala.
- Opšta radna oblast
Svi radnici za održavanje i drugi koji rade u lokalnoj oblasti treba da budu obavešteni o prirodi rada koji se obavlja. Rad u zatvorenim prostorima treba izbegavati. Oblast oko radnog prostora treba da bude odvojena. Osigurajte da su uslovi unutar oblasti bezbedni kontrolom zapaljivog materijala.
- Provera prisustva rashladne tečnosti
Oblast će se proveriti odgovarajućim detektorom rashladne tečnosti pre i tokom rada, kako bi se osiguralo da tehničar bude svestan potencijalno zapaljivih atmosfera. Osigurajte da oprema za detekciju curenja koja se koristi bude pogodna za upotrebu sa zapaljivim rashladnim agensima, tj. da ne iskrči, da bude adekvatno zapečaćena ili intrinzično sigurna.
- Prisutnost aparata za gašenje požara
Ako se bilo kakvi radovi na vrućem izvodu na rashladnoj opremi ili bilo kojim povezanim delovima, odgovarajuća oprema za gašenje požara treba da bude dostupna. Imajte suvi prah ili CO2 aparat za gašenje požara pored područja punjenja.

6. Održavanje

● Nema izvora paljenja

Niko ko obavlja radove u vezi sa sistemom hlađenja koji uključuje izlaganje bilo koje cevi koja sadrži ili je sadržavala zapaljivi rashladni agens ne sme koristiti izvore paljenja na način koji može dovesti do rizika od požara ili eksplozije. Svi mogući izvori paljenja, uključujući pušenje, treba da budu dovoljno daleko od mesta instalacije, popravke, uklanjanja i odlaganja, tokom kojih se zapaljivi rashladni agens može osloboditi u okolni prostor. Pre nego što radovi počnu, područje oko opreme treba pregledati kako bi se osiguralo da nema zapaljivih opasnosti ili rizika od paljenja. "Zabranjeno pušenje" z znakovi treba da budu postavljeni.

● Ventilirano područje

Osigurajte da je područje na otvorenom ili da je adekvatno ventilirano pre nego što se uđe u sistem ili izvrše bilo kakvi radovi na vrućem. Step ventilacije treba da se nastavi tokom perioda kada se radovi obavljaju. Ventilacija treba bezbedno da rasprši svaku oslobođenu rashladnu tečnost i po mogućstvu je izbaci spolja u atmosferu. dug period neupotrebe.

● Provere područja

Pre nego što započnete rad na sistemima koji sadrže zapaljive rashladne agense, neophodne su bezbednosne provere kako bi se smanjio rizik od paljenja. Za popravku hladnog sistema, sledeće mere opreza treba poštovati pre nego što se započne rad na sistemu. dug period neupotrebe.

● Provere na rashladnoj opremi

Kada se menjaju električni komponente, one moraju biti prikladne za tu svrhu i prema ispravnoj specifikaciji. Uvek se moraju poštovati smernice proizvođača za održavanje i servisiranje. Ako ste u nedoumici, obratite se tehničkom odeljenju proizvođača za pomoć.

Sledeće provere treba primeniti na instalacije koje koriste zapaljive rashladne agense:

Veličina punjenja je u skladu sa veličinom prostorije u kojoj su instalirani delovi koji sadrže rashladnu tečnost;

Ventilacione mašine i otvori adekvatno funkcionišu i nisu blokirani; Ako se koristi indirektni rashladni krug, sekundarni krug treba proveriti na prisustvo rashladne tečnosti;

Oznake na opremi moraju ostati vidljive i čitljive. Oznake i znakovi koji su nečitljivi treba ispraviti;

Rashladne cevi ili komponente su instalirane na mestu gde je malo verovatno da će biti izložene bilo kojoj supstanci koja može korodirati komponente koje sadrže rashladnu tečnost, osim ako su komponente napravljene od materijala koji su inherentno otporni na koroziju ili su adekvatno zaštićene od korozije.

● Provere električnih uređaja

Popravka i održavanje električnih komponenti uključuje inicijalne bezbednosne provere i procedure inspekcije komponenti. Ako postoji kvar koji bi mogao ugroziti bezbednost, tada se nijedna električna energija ne sme povezati na krug dok se ne reši na zadovoljavajući način. Ako kvar ne može biti odmah ispravljen, ali je neophodno nastaviti sa radom, mora se koristiti adekvatno privremeno rešenje. Ovo će biti prijavljeno vlasniku opreme kako bi sve strane bile obaveštene.

Inicijalne bezbednosne provere treba da uključuju:

. Da su kondenzatori pražnjeni: ovo treba uraditi na siguran način kako bi se izbegla mogućnost iskrenja;

. Da nijedna živa električna komponenta i ožičenje nisu izloženi dok se sistem puni, oporavlja ili prazni;

. Da postoji kontinuitet uzemljenja.

6. Održavanje

● Popravke zatvorenih komponenti

1) Tokom popravki zatvorenih komponenti, sve električne energije treba isključiti iz opreme na kojoj se radi pre bilo kakvog uklanjanja zatvorenih poklopaca itd. Ako je apsolutno neophodno imati električnu energiju za opremu tokom servisiranja, tada se mora postaviti trajno operativni oblik detekcije curenja na najkritičnijem mestu kako bi se upozorilo na potencijalno opasnu situaciju.

2) Posebnu pažnju treba obratiti na sledeće kako bi se osiguralo da radom na električnim komponentama, kućište ne bude izmenjeno na način koji bi uticao na nivo zaštite. To uključuje oštećenje kablova, prekomeran broj veza, terminale koji nisu napravljeni prema originalnoj specifikaciji, oštećenje brtvila, nepravilno postavljanje brava itd. Osigurajte da je aparat čvrsto montiran.

● Osigurajte da brtvila ili materijali za brtvljenje nisu degradirali tako da više ne ispunjavaju svrhu sprečavanja ulaska zapalnih atmosfera. Delovi za zamenu moraju biti u skladu sa specifikacijama proizvođača.

NAPOMENA: Korišćenje silikonskog brtvila može ometati efikasnost nekih tipova opreme za otkrivanje curenja. Intrinzično sigurni komponente ne moraju biti isključene pre nego što se na njima radi.

● Popravka intrinzično sigurnih komponenti

Ne primenjujte nikakva trajna induktivna ili kapacitivna opterećenja na krug bez osiguranja da to neće premašiti dozvoljeni napon i struju za opremu koja se koristi.

Intrinzično sigurni komponente su jedini tipovi na kojima se može raditi dok su pod naponom u prisustvu zapalne atmosfere. Testna oprema mora biti na odgovarajućem nivou. Zamenite komponente samo delovima koje je odredio proizvođač. Drugi delovi mogu izazvati paljenje rashladne tečnosti u atmosferi usled curenja.

● Kabliranje

Proverite da kabliranje neće biti izloženo habanju, koroziji, prekomernom pritisku, vibracijama, oštrim ivicama ili bilo kojim drugim nepovoljnim uticajima okoline. Provera će takođe uzeti u obzir efekte starenja ili kontinuirane vibracije iz izvora kao što su kompresori ili ventilatori.

● Detekcija zapaljivih rashladnih agenasa

U nijednom slučaju ne smeju se koristiti potencijalni izvori paljenja u potrazi za ili detekciji curenja rashladne tečnosti. Halidna baklja (ili bilo koji drugi detektor koji koristi goli plamen) ne sme se koristiti.

Metode detekcije curenja

Sledeće metode detekcije curenja se smatraju prihvatljivim za sisteme koji sadrže zapaljive rashladne agente.

● Elektronski detektori curenja treba da se koriste za detekciju zapaljivih rashladnih agenasa, ali osetljivost možda neće biti adekvatna ili će možda biti potrebna ponovna kalibracija. (Oprema za detekciju treba da bude kalibrisano u prostoru bez rashladne tečnosti.) Osigurajte da detektor nije potencijalni izvor paljenja i da je prikladan za korišćeni rashladni agens. Oprema za detekciju curenja treba da bude podešena na procenat LFL rashladne tečnosti i treba da bude kalibrisano na korišćenu rashladnu tečnost, a odgovarajući procenat gasa (maksimalno 25 %) treba da bude potvrđen.

Tečnosti za detekciju curenja su pogodne za upotrebu sa većinom rashladnih tečnosti, ali treba izbegavati korišćenje deterdženata koji sadrže hlor, jer hlor može reagovati sa rashladnom tečnošću i korodirati bakarne cevi.

Ako se sumnja na curenje, sve otvorene vatre treba ukloniti/ugasiti.

Ako se pronađe curenje rashladne tečnosti koje zahteva zavarivanje, sva rashladna tečnost treba da se povuče iz sistema, ili da se izoluje (putem zatvarača) u delu sistema udaljenom od curenja.

Kisik slobodan azot (OFN) treba zatim da se ispira kroz sistem pre i tokom procesa zavarivanja.

6. Održavanje

● Uklanjanje i evakuacija

Kada se prekida rashladni krug radi popravki ili iz bilo kog drugog razloga, treba koristiti konvencionalne procedure. Međutim, važno je da se poštuju najbolje prakse, jer je zapaljivost faktor koji se mora uzeti u obzir. Sledeća procedura se mora poštovati:

- . Uklonite rashladnu tečnost;
- . Ispraznite krug inertnim gasom;
- . Evakuišite;
- . Ponovo ispraznite inertnim gasom;
- . Otvorite krug sečenjem ili zavarivanjem.

● Rashladna tečnost se mora prikupiti u odgovarajuće cilindre za oporavak. Sistem se mora "ispirati" OFN-om kako bi se jedinica učinila sigurnom. Ovaj proces može biti potrebno ponoviti nekoliko puta. Komprimovani vazduh ili kiseonik se ne smeju koristiti za ovaj zadatak. Ispiranje se postiže prekidom vakuuma u sistemu sa OFN-om i nastavkom punjenja dok se ne postigne radni pritisak, zatim ispuštanjem u atmosferu, i konačno ponovnim usisavanjem do vakuuma. Ovaj proces se mora ponoviti dok u sistemu ne ostane rashladna tečnost. Kada se koristi konačni OFN punjenje, sistem se mora ispuštiti na atmosferski pritisak kako bi se omogućio rad. Ova operacija je apsolutno vitalna ako se planiraju zavarivačke operacije na cevovodu. Osigurajte da izlaz za vakuum pumpu nije blizu izvora paljenja i da je dostupna ventilacija. rad na njima.

● Označavanje

Oprema treba da bude označena sa informacijom da je isključena i prazna od rashladne tečnosti. Oznaka treba da bude datirana i potpisana. Osigurajte da na opremi postoje oznake koje navode da oprema sadrži zapaljivi rashladni agens.

● Oporavak

Kada se rashladna tečnost uklanja iz sistema, bilo za servisiranje ili isključivanje, preporučuje se da se svi rashladni agensi uklone na siguran način.

Kada se rashladna tečnost prenosi u cilindre, osigurajte da se koriste samo odgovarajući cilindri za oporavak rashladne tečnosti. Osigurajte da je dostupan pravilan broj cilindara za držanje ukupnog punjenja sistema. Svi cilindri koji se koriste moraju biti namenjeni za oporavljenu rashladnu tečnost i označeni za tu rashladnu tečnost (tj. posebni cilindri za oporavak rashladne tečnosti). Cilindri moraju biti opremljeni ventilom za oslobađanje pritiska i pripadajućim zatvaračima u dobrom radnom stanju. Prazni cilindri za oporavak se evakuiraju i, ako je moguće, hlade pre nego što dođe do oporavka.

Oprema za oporavak mora biti u dobrom radnom stanju sa setom uputstava koja se odnose na opremu koja je na raspolaganju i mora biti pogodna za oporavak zapaljivih rashladnih agenasa. Pored toga, set kalibrisanih vaga mora biti dostupan i u dobrom radnom stanju. Cevčice moraju biti kompletne sa spojnicama bez curenja i u dobrom stanju. Pre korišćenja mašine za oporavak, proverite da li je u zadovoljavajućem radnom stanju, da li je pravilno održavana i da li su svi povezani električni komponenti zapečaćeni kako bi se sprečilo paljenje u slučaju curenja rashladnog agensa. Konsultujte proizvođača ako imate nedoumice.

Oporavljeni rashladni agens mora biti vraćen dobavljaču rashladnog agensa u ispravnom cilindru za oporavak, a relevantna beleška o prenosu otpada treba biti organizovana. Ne mešajte rashladne agente u jedinicama za oporavak, a posebno ne u cilindrima.

Ako se kompresori ili kompresorska ulja uklanjaju, osigurajte da su ispražnjeni do prihvatljivog nivoa kako bi se osiguralo da zapaljivi rashladni agens ne ostane unutar lubrikanta. Proces ispražnjavanja mora biti izvršen pre vraćanja kompresora dobavljačima. Samo električno grejanje na telu kompresora treba koristiti da bi se ubrzao ovaj proces. Kada se ulje ispušta iz sistema, to treba obaviti na siguran način.

6. Održavanje

● Dezintegracija

Pre nego što se izvrši ova procedura, neophodno je da tehničar bude potpuno upoznat sa opremom i svim njenim detaljima. Preporučuje se dobra praksa da se sve rashladne tečnosti bezbedno prikupe. Pre nego što se zadatak izvrši, uzorak ulja i rashladne tečnosti treba uzeti u slučaju da je analiza potrebna pre ponovne upotrebe prikupljene rashladne tečnosti. Neophodno je da električna energija bude dostupna pre nego što se zadatak započne.

a) Upoznajte se sa opremom i njenim radom.

b) Izolujte sistem električno.

c) Pre nego što pokušate proceduru, osigurajte da:

. Mehanička oprema za rukovanje bude dostupna, ako je potrebno, za rukovanje rashladnim cilindrima;

. Sva lična zaštitna oprema bude dostupna i pravilno korišćena;

. Proces prikupljanja se nadgleda u svakom trenutku od strane kompetentne osobe;

. Oprema za prikupljanje i cilindri odgovaraju odgovarajućim standardima.

d) Pumpe rashladni sistem, ako je moguće.

e) Ako vakuum nije moguć, napravite manifold kako bi se rashladna tečnost mogla ukloniti iz različitih delova sistema.

f) Uverite se da je cilindar postavljen na vage pre nego što oporavak počne.

g) Pokrenite mašinu za oporavak i radite u skladu sa uputstvima proizvođača.

h) Ne prepunjavajte cilindre. (Ne više od 80 % zapremine tečnog punjenja).

i) Ne prekoračujte maksimalni radni pritisak cilindra, čak ni privremeno.

j) Kada su cilindri pravilno napunjeni i proces završen, uverite se da su cilindri i oprema brzo uklonjeni sa lokacije i da su svi izolacioni ventili na opremi zatvoreni.

k) Oporavljena rashladna tečnost ne sme se puniti u drugi sistem hlađenja osim ako nije očišćena i proverena.

● Postupci punjenja

Pored konvencionalnih postupaka punjenja, sledeći zahtevi se moraju poštovati.

- Osigurajte da do kontaminacije različitih rashladnih tečnosti ne dođe prilikom korišćenja opreme za punjenje. Creva ili cevi treba da budu što kraće kako bi se minimizovala količina rashladne tečnosti koja se u njima nalazi.

- Cilindri treba da budu uspravni.

- Osigurajte da je sistem hlađenja uzemljen pre punjenja sistema rashladnom tečnošću.

- Označite sistem kada je punjenje završeno (ako već nije).

- Ekstremna pažnja treba da se posveti kako se ne bi prepunio sistem hlađenja.

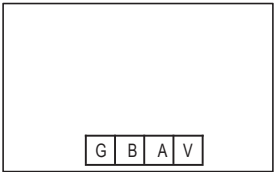
Pre ponovnog punjenja sistema, sistem treba da se testira pod pritiskom sa OFN. Sistem će biti testiran na curenje po završetku punjenja, ali pre puštanja u rad. Testiranje na curenje treba da se izvrši pre napuštanja lokacije.

● Model sigurnosnog kabla je 5*20_5A/250VAC, i mora ispunjavati zahteve za otpornost na eksploziju.

7. Dodatak

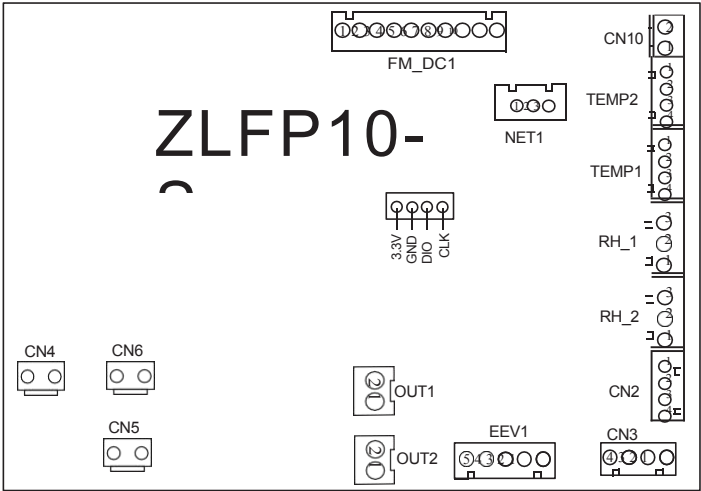
7.1 Dijagram interfejsa

7.1.1 Dijagram i definicija žičanog kontrolnog interfejsa



Znak	Značenje
V	12V(snaga+)
A	485A
B	485B
G	GND(snaga-)

7.1.2 Dijagram i definicija kontrolera



Dodatak

Objašnjenje konekcija:

Broj	Signal	Značenje
1	CN1	Programski port
2	CN2	Port centralizovanog kontrolera
3	CN3	Bežični kontroler/Wifi
4	CN4	220V ulaz
5	CN5	Električno grejanje
6	CN6	Kompresor
7	EEV1	Elektronski ekspanzioni ventil
8	RH_1	Senzor vlažnosti(unutrašnji)
9	RH_2	Senzor vlažnosti(spoljašnji)
10	CN10	Prekidač visokog pritiska
11	TEMP1-①+②	Temperatura izlaza isparavanja
12	TEMP1-③+④	Temperatura ulaza isparavanja
13	TEMP2-①+②	Temperatura kondenzata na izlazu
14	TEMP2-③+④	Temperatura povratnog vazduha
15	OUT1	Rezervisano
16	OUT2	Rezervisano
17	FM_DC1	DC motor
18	NET1	Bežični kontroler (3 žice)

7. Dodatak

7.2 Specifikacija kabla

(1) Jednofazna jedinica

Maksimalna oznaka struja	Fazna žica	Zemljana žica	MCB	Zaštita od proboja	Signalna žica
Ne više od 10A	$2 \times 1.5\text{mm}^2$	1.5mm^2	20A	30mA manje od 0.1 sek	$n \times 0.5\text{mm}^2$
10~16A	$2 \times 2.5\text{mm}^2$	2.5mm^2	32A	30mA manje od 0.1 sek	
16~25A	$2 \times 4\text{mm}^2$	4mm^2	40A	30mA manje od 0.1 sek	
25~32A	$2 \times 6\text{mm}^2$	6mm^2	40A	30mA manje od 0.1 sek	
32~40A	$2 \times 10\text{mm}^2$	10mm^2	63A	30mA manje od 0.1 sek	
40 ~63A	$2 \times 16\text{mm}^2$	16mm^2	80A	30mA manje od 0.1 sek	
63~75A	$2 \times 25\text{mm}^2$	25mm^2	100A	30mA manje od 0.1 sek	
75~101A	$2 \times 25\text{mm}^2$	25mm^2	125A	30mA manje od 0.1 sek	
101~123A	$2 \times 35\text{mm}^2$	35mm^2	160A	30mA manje od 0.1 sek	
123~148A	$2 \times 50\text{mm}^2$	50mm^2	225A	30mA manje od 0.1 sek	
148~186A	$2 \times 70\text{mm}^2$	70mm^2	250A	30mA manje od 0.1 sek	
186~224A	$2 \times 95\text{mm}^2$	95mm^2	280A	30mA manje od 0.1 sek	

(2) Trofazna jedinica

Maksimalna oznaka struja	Fazna žica	Zemljana žica	MCB	Zaštita od proboja	Signalna žica
Ne više od 10A	$3 \times 1.5\text{mm}^2$	1.5mm^2	20A	30mA manje od 0.1 sek	$n \times 0.5\text{mm}^2$
10~16A	$3 \times 2.5\text{mm}^2$	2.5mm^2	32A	30mA manje od 0.1 sek	
16~25A	$3 \times 4\text{mm}^2$	4mm^2	40A	30mA manje od 0.1 sek	
25~32A	$3 \times 6\text{mm}^2$	6mm^2	40A	30mA manje od 0.1 sek	
32~40A	$3 \times 10\text{mm}^2$	10mm^2	63A	30mA manje od 0.1 sek	
40 ~63A	$3 \times 16\text{mm}^2$	16mm^2	80A	30mA manje od 0.1 sek	
63~75A	$3 \times 25\text{mm}^2$	25mm^2	100A	30mA manje od 0.1 sek	
75~101A	$3 \times 25\text{mm}^2$	25mm^2	125A	30mA manje od 0.1 sek	
101~123A	$3 \times 35\text{mm}^2$	35mm^2	160A	30mA manje od 0.1 sek	
123~148A	$3 \times 50\text{mm}^2$	50mm^2	225A	30mA manje od 0.1 sek	
148~186A	$3 \times 70\text{mm}^2$	70mm^2	250A	30mA manje od 0.1 sek	
186~224A	$3 \times 95\text{mm}^2$	95mm^2	280A	30mA manje od 0.1 sek	

Kada će jedinica biti instalirana na otvorenom, molimo vas da koristite kabl koji može da izdrži UV.

7. Dodatak

7.3 Tabela poređenja temperature zasićenja rashladne tečnosti

Pritisak (MPa)	0	0.3	0.5	0.8	1	1.3	1.5	1.8	2	2.3
Temperatura (R410A)(°C)	- 51.3	-20	-9	4	11	19	24	31	35	39
Temperatura (R32)(°C)	- 52.5	-20	-9	3.5	10	18	23	29.5	33.3	38.7
Pritisak (MPa)	2.5	2.8	3	3.3	3.5	3.8	4	4.5	5	5.5
Temperatura (R410A)(°C)	43	47	51	55	57	61	64	70	74	80
Temperatura (R32)(°C)	42	46.5	49.5	53.5	56	60	62	67.5	72.5	77.4

NAPOMENA _____

[illegible]



GARANCIJA ZA PROIZVOD

Kompanija TermoPool d.o.o. garantuje da je proizvod Nero i-ForceLine NEOizrađen od kvalitetnih materijala i u skladu sa svim tehničkim standardima.

Garantni period:

Garancija za ovaj proizvod traje dve godine od datuma kupovine, pod uslovom da se koristi u skladu sa uputstvom za upotrebu i namenjenom svrhom.

Prava iz garancije:

U garantnom periodu, ukoliko se utvrdi da je proizvod neispravan zbog greške u materijalu ili proizvodnji, TermoPool će, po svom izboru, izvršiti popravku, zamenu ili povrat novca.

Izuzeci:

Garancija se ne odnosi na:

- Oštećenja nastala nepravilnom upotrebom, neodržavanjem, ili vanrednim okolnostima (poplave, požari, udar groma itd.).
- Redovno habanje proizvoda.
- Proizvode koji su modifikovani ili servisirani od strane neovlašćenih lica.

Postupak ostvarivanja garancije:

Za ostvarivanje prava iz garancije, kupac je obavezan da priloži originalni račun i garantni list. Proizvod treba dostaviti na procenu u najbližu maloprodaju TermoPool-a ili ovlašćeni servisni centar.

Napomena:

Garancija ne isključuje prava kupca po osnovu zakona o zaštiti potrošača.

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