NATURAL COOL

HPro

# Instructions for use and routine maintenance

www.naturalcool.eu

## Index

## Warning

Read this instruction manual before operating the machine.

**Original instructions**

## General information

This manual provides you with all the information for proper use and maintenance of the machine. Please, carefully follow the instructions given. The manufacturer is not liable for any damage to people or goods, or to the machine itself, if the machine is used differently from what described in this manual. This manual shall be available to the user/technician for correct use of the machine. Information provided in this manual does not replace regulations on safety at work in force. Therefore, the user should comply with the regulations in force in the country where the machine is installed, besides following common sense rules. Do not use the product if you notice and defect or wear that may compromise the original safety standards. The user or the maintenance technician must report any fault to the supplier. The machine is meant for specific applications. Do not modify it and/or use it for applications other than the specified ones. Instructions, drawings, tables and all the contents of this document are confidential technical documentation and exclusive property of the manufacturer: no information may be released to third parties without written permission by the manufacturer. Descriptions and images in this document are only meant as indications and practical examples. They may be modified at any time and without prior notice. If further technical and functional details are needed, please contact the supplier.

## Warning

Please, read the information contained in this booklet since they will provide you with useful instructions for safe installation, use and maintenance. Carefully read the sections “General information”, “Foreseen Operation Conditions”, “Incorrect Use”, “Forbidden Use”. This booklet is an integral part of the product. As specified by Directive 98/37EC, it shall be given to the users of the misting unit, in order to meet the obligations on training/information of the personnel using the machine. The manufacturer is not liable for any damage to people or goods, or to the machine itself, if the latter is used differently from what described in this manual. Keep this booklet in a safe place and make it available for future reference. Make sure it corresponds to the unit you have purchased, by checking the data on the machine identification plate. At delivery, check for any possible damages due to transportation. Complaints can be accepted only if reported by registered letter with return receipt within 8 days from product delivery date.

## General information: Natural Cool

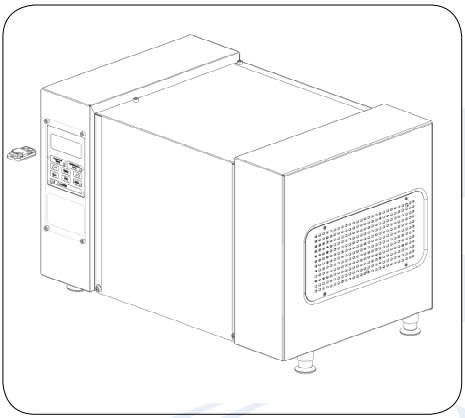
The misting unit cools the temperature through a physics process called “Adiabatic process” or “Thermal Dynamics”.
Water needs energy to evaporate, that is to pass from liquid to gaseous state. 1 g/0,03 oz of water needs 600 calories to evaporate. This energy is taken from the same room temperature where the water is nebulized, thanks to the high-pressure generated by the unit.
Because of their diameter of only 5 micron / 0,1969 mil, water particles evaporate almost immediately if the air condition is suitable. A suitable condition requires high temperatures and relative humidity not exceeding 90%. General efficiency of the system depends on temperature and relative humidity: between 30°C and 45°C – 86 °F and 115 °F with relative humidity below 40%, the naturalcool systems finds its best operating condition and achieves excellent results in heat reduction. Between 40% and 80% of relative humidity the results are still good, but above 80% of relative humidity they are marginal. The advantages offered by these products are best exploited in shaded or covered areas (verandas, gazebos, large umbrellas, marquees and the like). The misting unit, properly installed and set, allows reducing the heat by 4°C to 13°C – 39,2 °F to 55,4 °F. By combining the misting unit with special diffusers, such as wall or floor fans and special nozzles, it is possible to cool many different places and environments, both indoor and outdoor. Industrial buildings and areas, warehouses, vegetable and chilled food cabinets, farm businesses: these are only a few fields of application where you can have cool at low costs. Proper installation and adjustment of the system guarantee the best results in terms of performance and costs.

## Machine description

The misting unit consists of an electric pump assembly, equipped with electrical and hydraulic safety systems. The on/off and pressure controls are located on the same unit. The machine mechanics is based on a ceramic-coated piston system, operated by an axial cam controlling the water flow at a pressure between 70 and 105 bar (100-1522 psi), allowing a water flow between 0.3 and 16.0 l/min (0,07 to 4,22 gal./min). Moreover, a patented by-pass system allows containing water flow backs without causing the water to overheat and thus avoiding incorrect evaporation. This system allows containing any pressure rise due to negligence that may compromise machine operation, thus considerably increasing its standard service life.

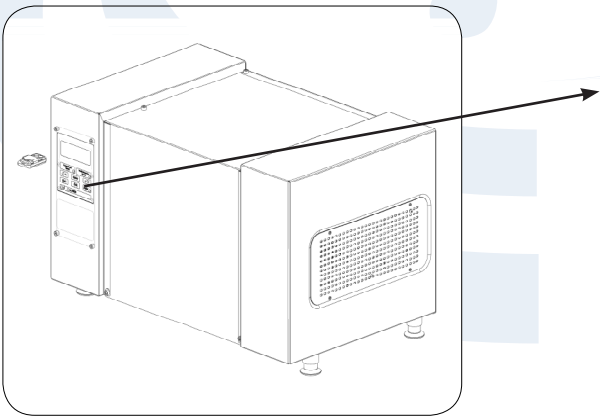
A pressure level out of the range mentioned above may seriously compromise the correct operation of the machine. The depressurization solenoid valve allows discharging excessive pressure, thus assuring the non-drip functionality and long efficiency of the seals. We suggest using High-Pressure lines, namely hoses and pipes with seal capacity 2 or 3 times higher than normal working pressure. This allows preventing water hammerings that may compromise the system seal. In case of special applications or use with particularly high pressure, please contact the manufacturer who will advise you on project feasibility, to avoid useless expenses or possible damages to components.

## Package content

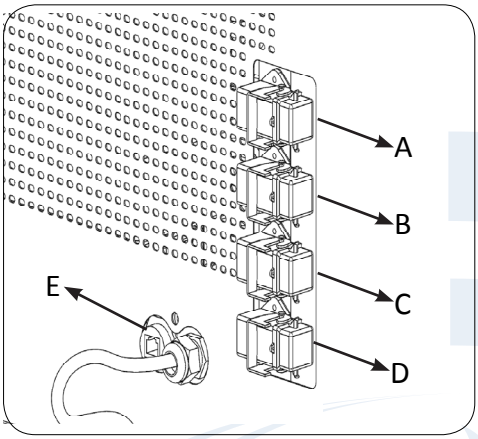


1 Misting Unit
2 User manual

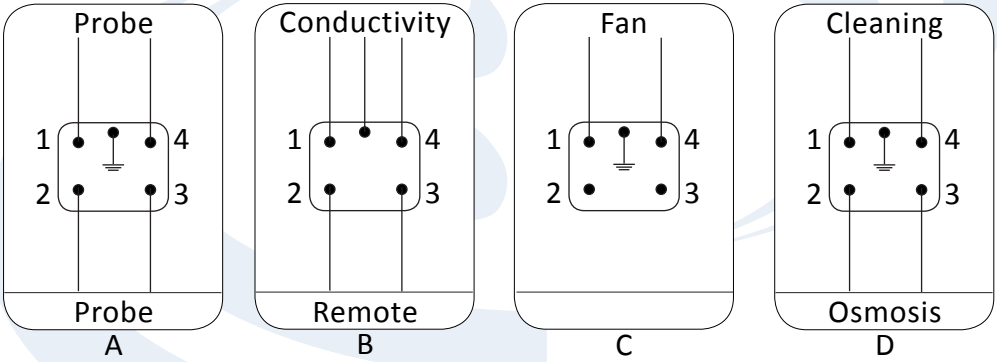
## Machine description - control panel



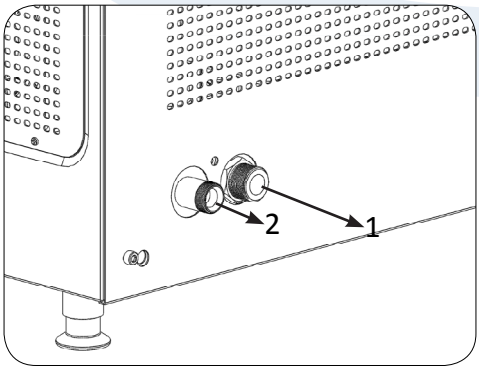
## Machine description – electrical connections




A Temperature / Humidity probe
B Remote contact / Conductivity probe
C Fan
D Cleaning solenoid valve / Osmosis device
E Ethernet connector / LAN

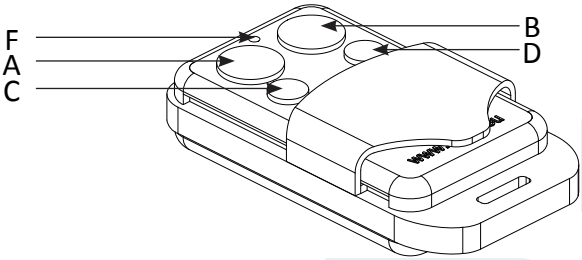



## Machine description – water connections



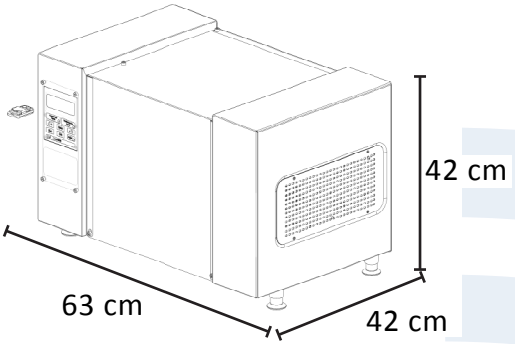

1 Water Inlet (2-4 bar / 30 – 60 psi) Sect. 3/4”
2 High-Pressure Water Outlet (70 – 105 bar / 1000 – 1500 psi)

## Machine description – radio remote control




It is supplied a little and a practical radio control which allows a short-distance activation of the unit. Its function is limited to start-up and a temporary stand-by. For proper use the unit must be switched off through the central switch during longer breaks. On the radio control there are four buttons (buttons “A”, “B”, “C” and “D” as shown in figure) and a confirming light ( “F” as shown in figure). In order to switch on or put the unit into sleep mode press button “A”. Button “B” can be used only for the functioning of fan units, if connected. Button “C” allows activating and deactivating the “auto” program, whereas if you press button “D” you can modify pause-work time leading the unit to a rolling work. If the unit has been already set to a rolling work the touch of that button won’t bring about any change.
At the touch of the buttons, confirmation is signaled by a flashing light. In the absence of flashing please replace the butteries of the radio control.

## Weight and dimensions



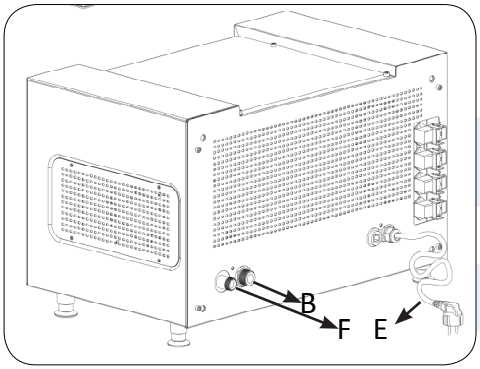


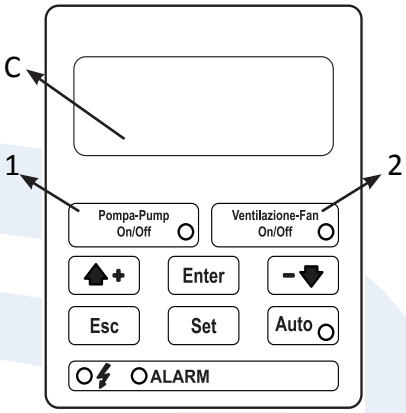
20/30 Kg.

## Transfer, packing and transportation

In case of first installation or misting unit's transfer please wear always working gloves and any other protective wearing to avoid any incidents or injuries. During transportation or transfer operations, the unit is placed on a pallet. Thus packed, the machine can be lifted by a lift truck with at least 100 Kg load capacity. If you need to transfer the machine but you do not have the original package, the unit should be correctly re-packaged and fastened to the means of transportation, in order to avoid impacts that may damage its external casing and compromise its functionality. In order to correctly restore machine operation after it has been transferred, changed of place or stored, the unit must be placed horizontally to avoid incorrect distribution of the lubricant, as this may cause faulty operation. Following this operation, disconnect the electrical supply and disassemble the machine. When putting the machine in its package, take care that its external parts and the external connections do not get damaged.

## Installation position and start-up




1. Place the misting unit away from the wall (50 cm/20 in) in a safe, accessible and dry place, out of the reach of unauthorized people. The place should be ventilated and protected against weather conditions and the control unit must not be placed under the sun. Room temperature must not be above 40°C / 104 °F. Also remember that dust compromises seal efficiency and increases clogging frequency of the micrometric nozzles.
2. Fix the filter to the wall (if not built-in) and connect outlet (B) to the misting unit. To carry out the connection, use fabric or braided rubber hoses with ¾" diameter (typical of watering hoses), possibly NOT transparent.
3. Connect the supply hose to the water line and to the left-hand water inlet on the filter, then fill the latter by opening the water network tap. To release air bubbles from the filter, push the white button on the cover. Warning: Only use water from the water line. If necessary, install a water softener or a reverse osmosis system. If water hardness is above 15 French degrees, replace the particulate filter every three months, or wash it once a month.
4. Connect the high-pressure water outlet (F) to the high-pressure hose previously installed by a qualified technician.
5. Electrical supply (E): connect the unit to the electric panel equipped

with a dedicated residual current device. Never operate the misting unit if the cables are damaged, incorrectly connected or if their section is unsuitable. If using power extension cables, keep to the following instructions: if the length of the power extension cable is between 1 and 25 m (3 ft and 80 ft), cable section should be 2.5 mm2. (0,0039 sq in); if length is between 25 and 50 m (80 ft and 160 ft), cable section should be 4 mm2 (0,0062 sq in). Never use power extension cables longer than 50 m (160 ft). Warning: section is 4 mm2 (0,0062 sq in) and 6 mm2 (0,0093 sq in) respectively for three-phase machines.

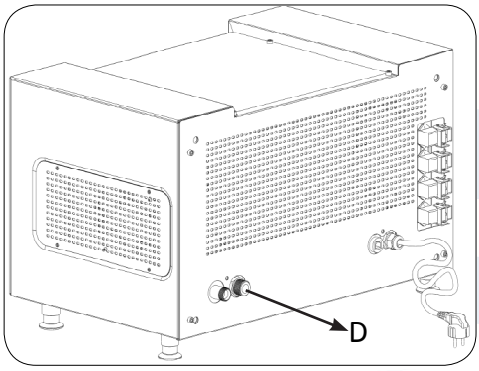
6. Check that the water pressure from the water network is between 2 and 5 bar (30 – 70 psi), then open the tap for machine supply.
7. If installed, leave the end of drain vent valve open, then power on the unit through switch (1) and let the water flow, thus expelling the air bubbles trapped in the misting line and in the pump. This operation requires 6-8 minutes. For further information about the best configuration of the misting line via electronic panel, please read the relevant instructions for use later on this guide.
8. After release the air, close the vent valve and check if the pressure gauge (C) is showing a pressure of 70 bar (1000 psi), taking into consideration that pressure is stable after 15-20 minutes. If the indicator is visibly unstable, some air is still present in the system. Open again the end of line vent valve for a few seconds to expel the air, then close it again.
9. Within 5 minutes, the high-pressure line will start nebulizing water through the nozzles. If this does not happen, switch the system off following the instructions given and contact your supplier or the manufacturer.
10. Check proper seal/engagement of the nozzles. If pressure is considerably lower than 70 bar (1000 psi), this may be due either to poor water supply, leaking at the nozzles or end of line, or to the use of a number of nozzles greater than what foreseen in the original design. In such cases, contact your supplier.

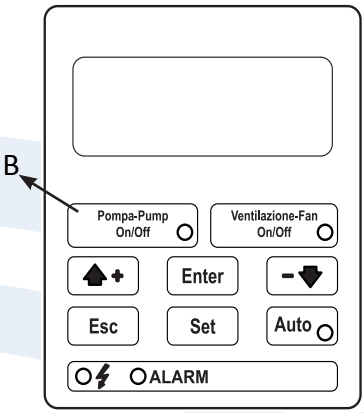
11. In case of leaks from one or more nozzles, power off the system before disassembling them. After powering off, open the faulty nozzles and check for any foreign bodies, taking care not to lose the non-drip pin installed inside.
12. It is possible to activate only the fans by pressing the button (2) on the control panel.
13. The management control panel includes a number of safety settings for the misting line. We therefore recommend reading the relevant instructions for use later on this guide.

## Warning

In case of lack of water supply, the machine is powered off automatically to avoid damages to the misting unit. In case of a current hogging due to a sudden voltage drop, use of an extension cable with a too small section (min. 2.5mm2 / 0.0038 sq in) or work under the sun, the unit could automatically stops to protect the coil windings. In case, please contact the maintenance service or the supplier to replace the fuse inside of the electronic box. For this reason, we suggest checking that the electrical network is not affected by frequent and considerable voltage variations. If that were under the rated voltage of the electrical network for a long time, the control unit could be damaged.

## Switching off and storing



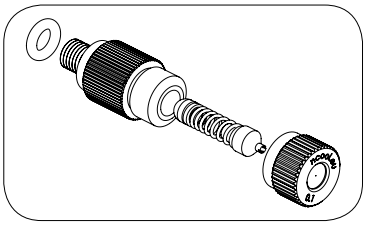

1. Close the water network tap to stop water supply. Warning: if you are using softener or an inverse osmosis system, switch off those devices too. Follow the instructions provided in the relevant manuals. Let the unit drain the water left in the system.
2. The unit switches off automatically when the water is completely drained. After that, use the machine main switch (B) to power off the misting unit.
3. If you are powering off the misting unit to clean the filter (A) or store the machine, disconnect the filter from the inlet coupling (D) connecting hose and clean it after unscrewing the transparent unit from the blue plastic cover. Once the fabric cartridge is clean, let it dry and store it (storage) or reinstall it in the filter (normal use).
4. To store the machine, put it in a safe and dry place, out of the reach of unauthorized people. The storage place should be protected against weather conditions. If necessary, cover the unit for more protection.
5. When starting up the unit for the first time after a storage period, contact your supplier or a qualified technician. The scheduled routine maintenance allows including the annual storing and start-up operations as optional extra services.
6. During storage, the high-pressure lines and the filters must be completely drained in order to avoid incrustations or bacteria deposits.

It is also advisable to disassemble, wash and store the micrometric nozzles. At next start-up, the lines should be washed by letting some water flow before bringing the system to high-pressure.

## Repairing the unit

No final user is allowed to carry out repairing operations on the Unit, otherwise the warranty shall immediately become null and void. In case a repair is needed, contact your supplier only, or ask for the intervention of a qualified technician authorized by the producer.

## Routine maintenance - micrometric ceramic nozzles



The only operation allowed on the misting line is cleaning the misting nozzles. If water nebulization is not uniform, the nozzle needs cleaning. Disassemble it, taking care not to lose the non-drip pin, then remove any foreign bodies by using compressed air. In case of scale deposits, immerse the nozzle in a container filled with a descaling solution for at least 5 hours, then rinse it with water, dry it and store it for future use. Use cotton buds to remove any dust from the inside. In case of prolonged downtime of more than 30 days, remove the nozzles and drain the line. If room temperature is below 5°C, remove the misting nozzles from the line. If the internal non-drip pin is lost or damaged, this could result in small dripping when switching off the system, or bad nebulization. The fineness of nebulization is given by the pressure (70 bar min) and the condition of the nozzle. Replace the nozzle if the nebulization is excessive or dampens, even if room temperature is above 28°C.

## Routine naintenance - oil change

Every 500 Hours please call a maintenance service in order to change the oil.

### Warning

Always disconnect the electrical supply before servicing or checking the machine.

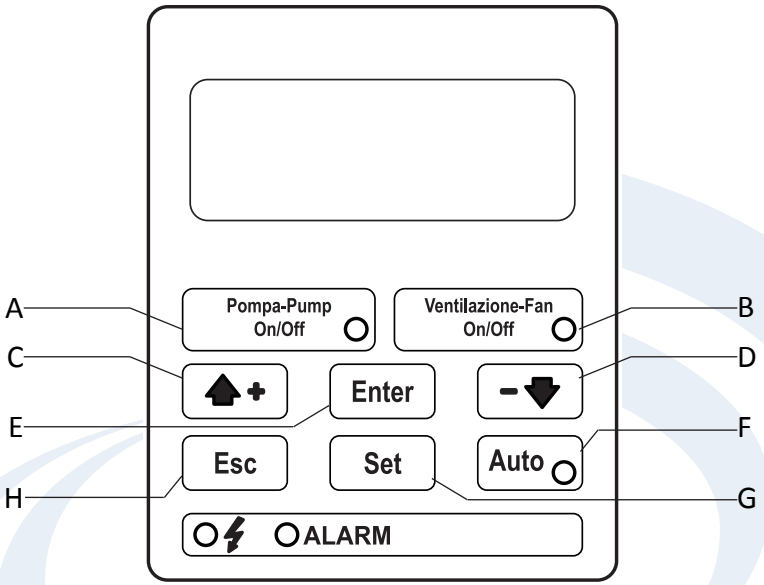
## Troubleshooting – causes and solutions

| Symptom | Cause | Solution |
|---|---|---|
| The lines under pressure visibly vibrate: | 1. Dirty water filters<br>2. One or more nozzles clogged<br>3. Air in the pipes | 1. Clean or replace the filters<br>2. Disassemble and clean the nozzles<br>3. Open the end of line valve to expel the air from the pipe |
| The misting unit is pumping but no water comes out of the high-pressure line. | 1. Air in the water circuit<br>2. End of line open or leakage in the circuit<br>3. Tampering with the flow adjustment knob or the by-pass in the machine head<br>4. Several nozzles clogged | 1. Expel the air from the line<br>2. Find and repair the leakage<br>3. Ask for the intervention of the supplier or authorized technician<br>4. Switch off the misting unit, clean or replace clogged nozzles |
| The misting unit does not activate when the start button is pressed | 1. No electrical supply<br>2. The residual current device has triggered<br>3. Incorrect electrical connections or cables of unsuitable size<br>4. No water (green indicator light on) | 1. Check the electrical connection<br>2. Lift the switch and start the unit<br>3. Check cable diameter, extension cable length and electrical connections<br>4. Open the water network tap. Check if the filter is clean and if water flows freely through it. Make sure the water flow is correct |

## Eddy5 - General information

The programmable electronic device provided with Eddy5 technology is a component used for several configurations and products by the manufacturing company.
In this section of the manual we illustrate the use of the electronic device Eddy5 and explain how to fully exploit its technology through a number of operating modes: we recommend you follow the explanations and, where applicable, to carry out the tests you may find useful in the order in which they are proposed in this manual.
Remember that all the functions of the plant which depend on a probe or on external devices can be operative only if the misting line is equipped with the relevant components (provided upon request by the manufacturing company), otherwise the available functions relate to timing and a number of operating parameters which are not associated with additional functions.
Any setting of the control unit through the electronic device Eddy5 becomes effective in real time during the machine operation, unless otherwise specified.
Never leave the misting unit or the multifunction display Eddy5 under direct sunlight.

## Eddy5 – Meaning of buttons




| | |
|---|---|
| A | Pump on/off /Alarms Reset |
| B | Fan on/off |
| C | Change Menu/shift between options and value change (+1) |
| D | Change Menu/ shift between options and value change (-1) |
| E | Confirm set value |
| F | Auto program |
| G | Change mode setting |
| H | Cancel set value |

## Warning

Function buttons C-D-E-G provide different functions and modes. Their functions change according to what is displayed on the screen.

## Eddy5 – Available programs

The electronic device Eddy5 is set out in a number of levels starting from the main screen to the following submenu. The menu structure and the functions contained are at the root. From the main screen you move on selecting the lower levels and respective sub-levels through their representative numbers. We show you the scheme menu below:

| N.ro | Name | Programs description |
|---|---|---|
| | Dashboard | Eddy4 main program allows switching on fans misting unit set temperature/humidity and pause-work time |
| 1 | Info | it shows the summary of all information related to the misting line; it only has advisory character |
| 2 | Setup | it is used for the entire setting of the misting line |
| 3 | Alarm records | it shows the last 10 alarms that have occurred to the misting line; it only has advisory character |
| 4 | Notifications settings | it allows setting sending notifications |
| 5 | Notification records | it shows the last notifications that have occurred to the misting line; it only has advisory characte |
| 6 | Weekly | it allows setting every single day of the week when the misting line has to atomize |
| 7 | WEB | it allows setting all the functionalities which are linked to the network port LAN which you find on the misting line |
| 9 | Auto program | program which allows setting the automatic features of the misting line |

For each program you can find later in this manual a dedicated page in

order to explain the different options and operating methods. For each misting pump not all programs are available. In order to know what active options your misting pump has please contact the authorized distributor. The sequence of buttons you need to have access to single programs and to modify the relevant settings is the following one and it won't be repeated later.

## Eddy5 – Shift and program selection

In order to shift on the different programs use button C (forward) and button D (backward). Once you have found the desired program press the E button to select the program.

## Eddy5 – Shift and options page selection

Each program can contain several configuration options pages. The program, the current page and the total number of pages are indicated in every subpage in the pattern

"Program.Current Page/Total pages"

In order to shift on the different pages use button C (forward) and button D (backward). Once you have found the page which contains the desired option press the E button to have access to the change of the single setting.

## Eddy5 – Shift and change setting

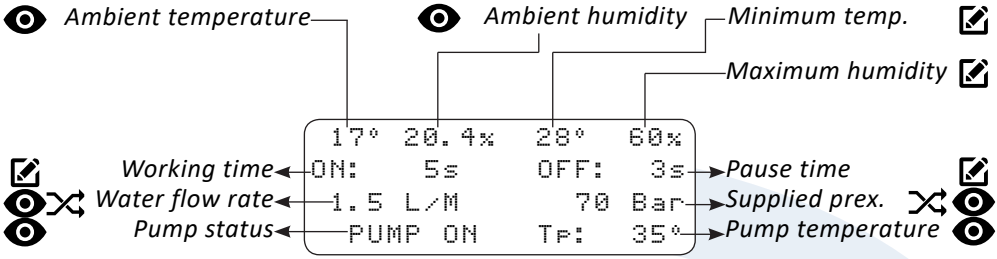
Every page can contain several changeable options. In order to move through the changeable options use button C (forward) and D (backward). Once you have found the setting you want to change press the G button. The box containing the value will start flashing and it indicates that you can modify the value pressing C (+) and D (-) buttons. In order to confirm the value you have chosen press the E button or press the H button to cancel the operation. In both cases the box will stop flashing by showing the set value and the active value at that moment.

## Warning

The indications mentioned above provide a detailed description about how to select the program, the options page and the single setting for every of them. It is assumed that this information is clear and acquired, so it will be only indicated to which program and to which page you have to go without explaining what operations to perform. We will use the following icons in order to identify the item which can only be consulted, the changeable item and which item is only available on some models

*Content only to be consulted*
*Changeable content*
*Content available only on some models*

## Eddy5 - Dashboard program




### *Access*

The Dashboard program is Eddy5 main interface. Unlike all the other programs there is no access page since when starting with the misting unit you will find directly in this program.
In order to turn back to it press several times the “Esc” button from any other program. The program consists of only one options page.

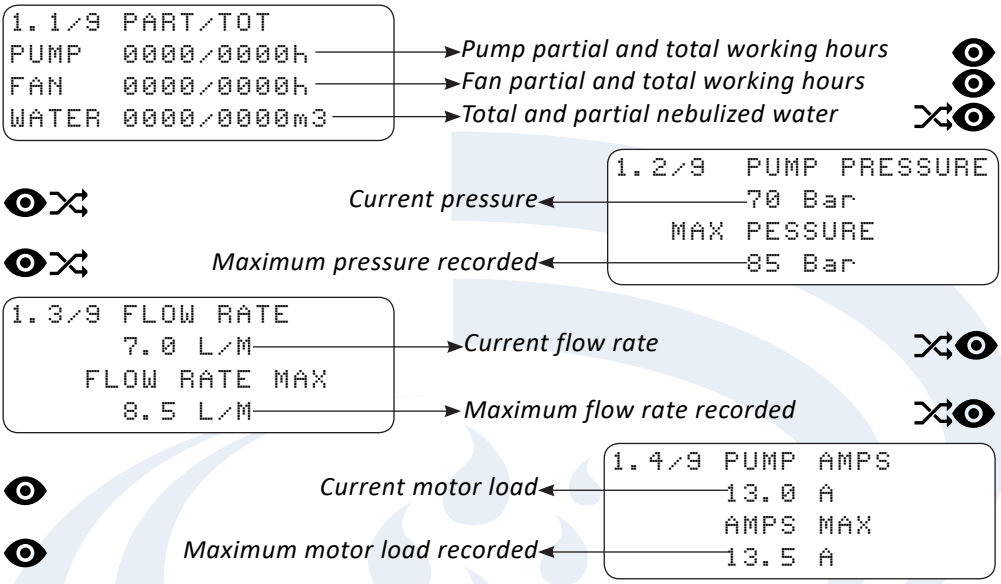
### *Detailed description*

By this interface it is possible to modify and to set:
1.Pause-work time
2.Humidity and minimum working temperature
3.It is possible to consult temperature and ambient humidity
Moreover many operational parameters of the misting unit are displayed in real time. In order to modify pause-work values, temperature and humidity read the section explained above in this manual.

### Warning

Data shown could be different from what is displayed on the screen you have since it could show other language descriptions or values with a different standard of measurement

## Eddy5 - Info program




### *Access*

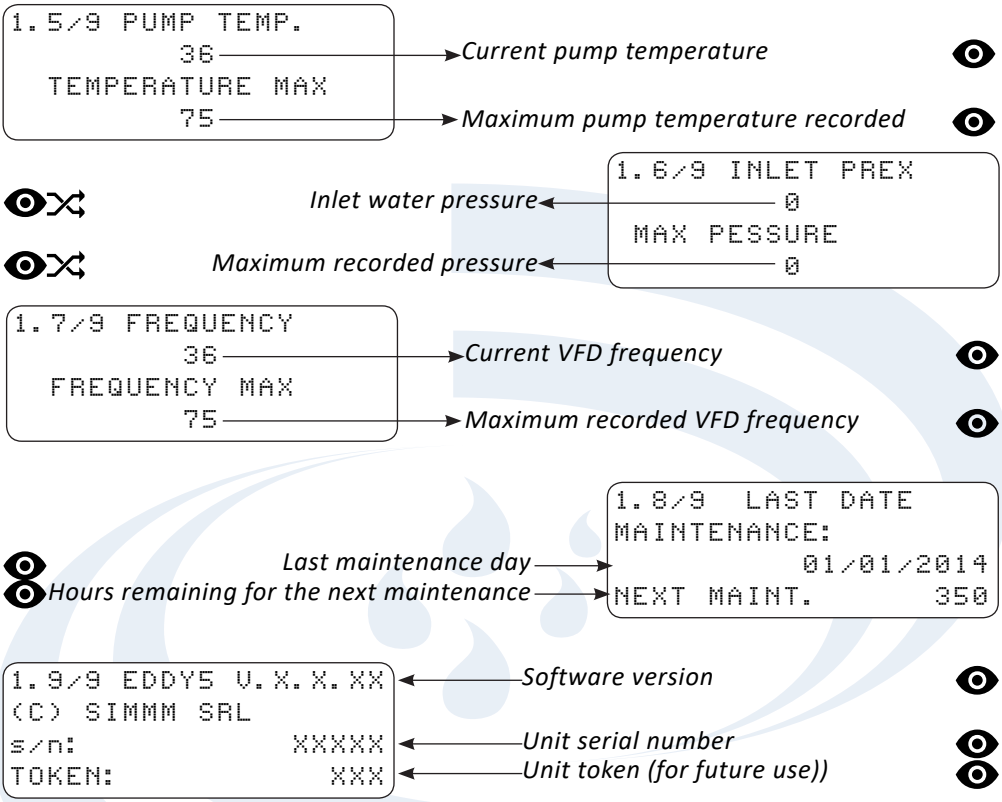
The Info Program is at position 1. It totally has 9 options pages for a total of 9 summary screens in this page and in the following one.

### *Detailed description*

Here you can view all real-time and historical data relating to the misting pump. No data can be changed since the program only has an advisory goal.
With partial we mean the value recorded from the last maintenance performed by an authorized dealer.

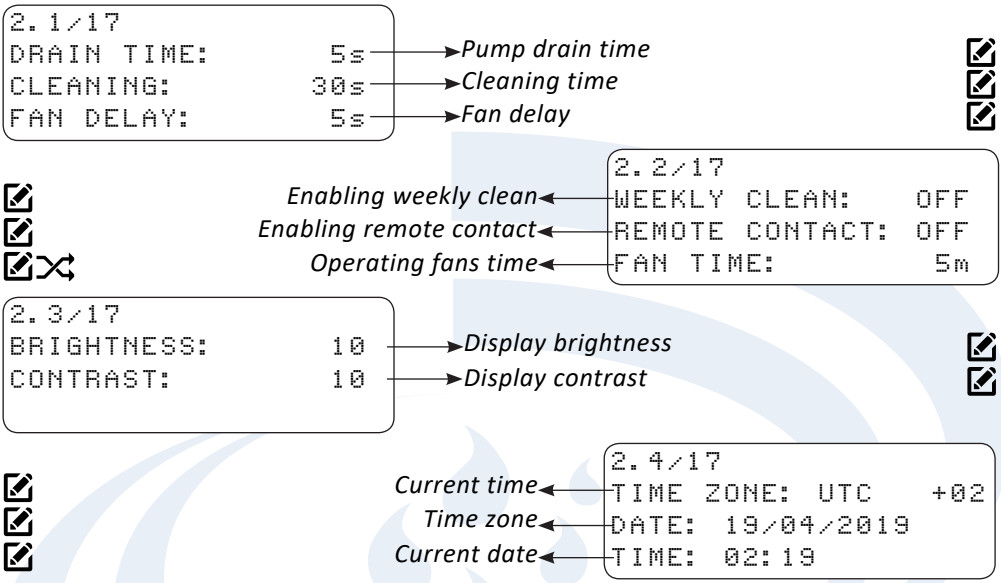
### Warning

Data shown could be different from what is displayed in your screen since it could show other language descriptions or values with a different standard of measurement


1.5/9 PUMP TEMP.
36
TEMPERATURE MAX
75
Current pump temperature
Maximum pump temperature recorded
1.6/9 INLET PREX
0
MAX PESSURE
0
Inlet water pressure
Maximum recorded pressure
1.7/9 FREQUENCY
36
FREQUENCY MAX
75
Current VFD frequency
Maximum recorded VFD frequency
1.8/9 LAST DATE
MAINTENANCE:
01/01/2014
NEXT MAINT. 350
Last maintenance day
Hours remaining for the next maintenance
1.9/9 EDDY5 V.X.X.XX
(C) SIMMM SRL
s/n: XXXXX
TOKEN: XXX
Software version
Unit serial number
Unit token (for future use))

# Eddy5 - Setup program

2




## *Access*

The Setup Program is at position 2. It is divided into 17 screens as specified below. Not all screens are accessible without purchasing additional programs.

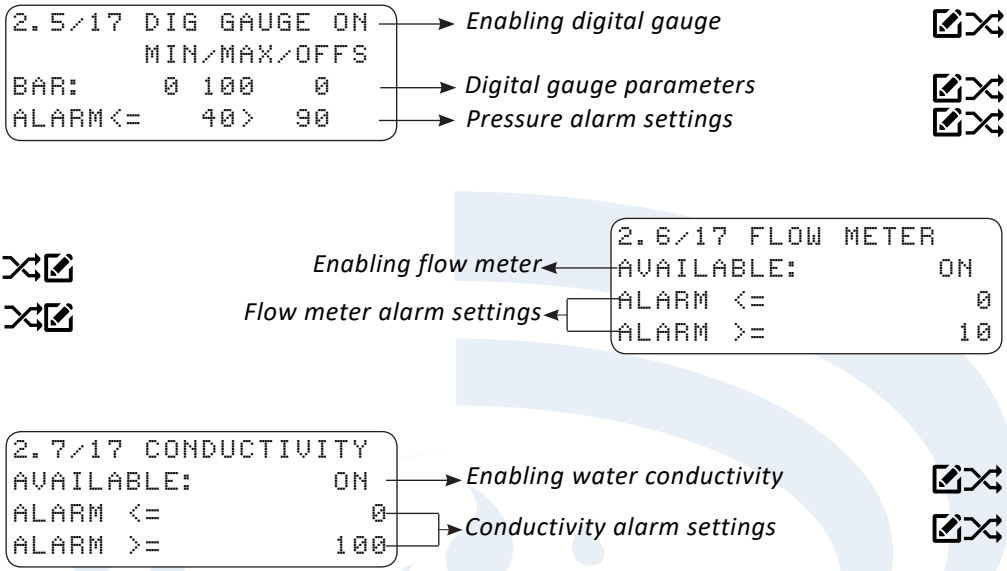
## *Detailed description*

Here you can change the general settings of the misting unit. The drain time is the duration for the activation of the drain pressure of the tube at every break. The “clean” value determines the duration of the water flow that is expelled from the end of the tube for the washing of the tube or its sanitization, if applicable.

Fan delay time is the time (if the fans are connected with Eddy5) between the switch off the unit and the switch off the fans.

Enabling the weekly clean you automatically activate the control unit in order to activate the clean of the high-pressure tube.

Enabling remote contact allows an external device controlling the mist-

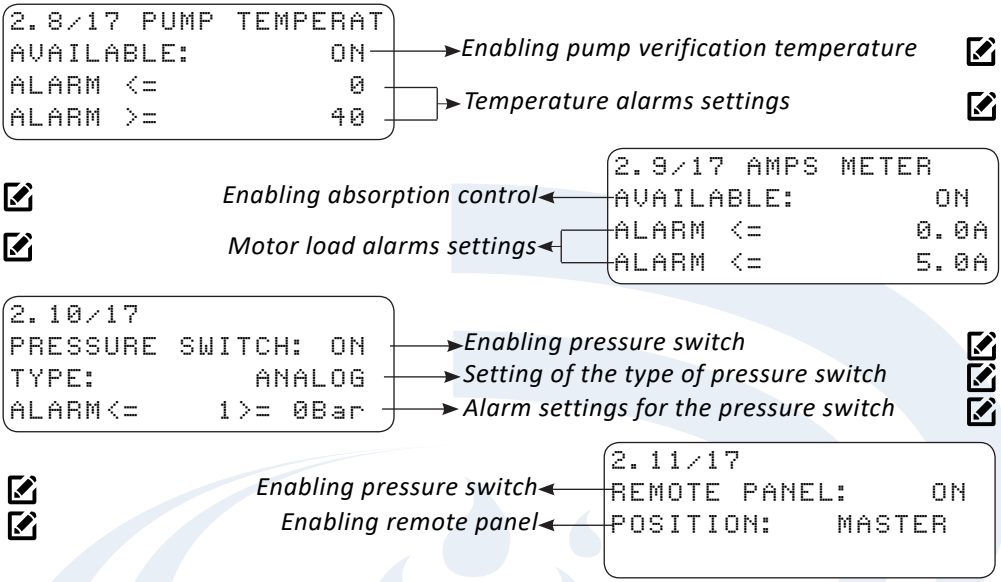



ing unit turning on/off. In order to enable it you need a connection with the external device directly on the Eddy5 card. This procedure has to be done by an authorized dealer. The final user is not authorized to perform that procedure.

The operating fans time is enabled only for the models which provide internal cooling fans of the unit.

Contrast and brightness indicate the respective values of the screen, whereas date and time indicate current date and time.

It is possible to connect up to 4 probes with ModBus technology in parallel, all connected to the connector inserted on the control unit (refer to this guide for the exact location in the section “Description of the machine - Electrical connections”). The end user is not authorised to connect several probes in parallel; in this case, please contact a qualified installer and dealer. The Eddy5 electronic control unit will average the probes connected in parallel and it will use the data acquired as a reference value for all operations related to temperature and humidity. The probes must have different IDs starting from n° 2 and the connection



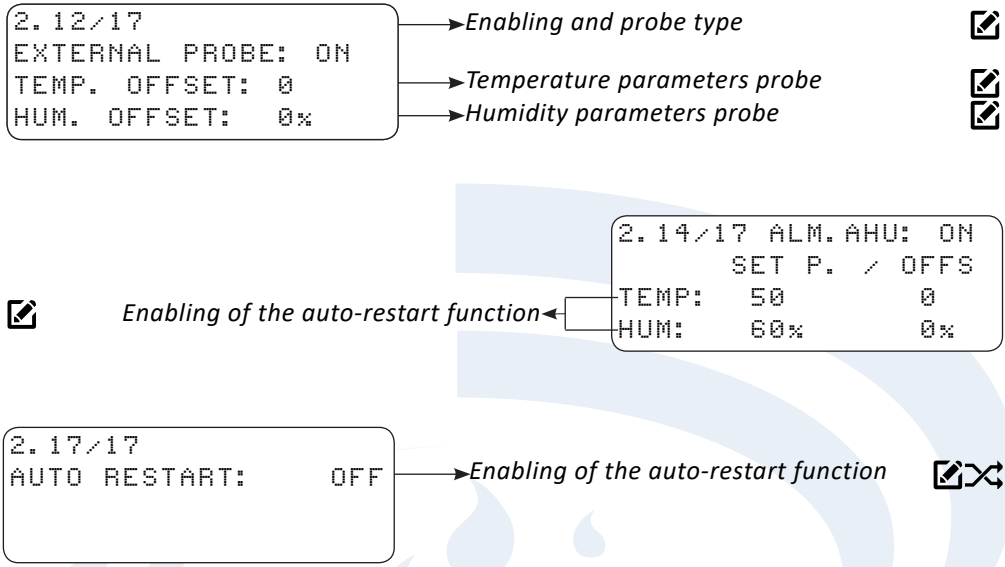

speed must be set to 192 Kbps.

Digital gauge, flow meter or conductivity only exist for certain models. For each indicated element, if present, in these pages it is possible to enable/configure it and set its related alarms.

The electronic Eddy5 allows controlling the internal temperature of the misting unit in two ways: in the first there is a probe connected to the card which verifies the temperature directly on the pomp unit; in the second the temperature probe is incorporated in Eddy5 and it verifies the recorded temperature in proximity. The first type can be activated by setting “Available” to ON, whereas the second by setting to OFF. According to this setting it is possible to choose alarms thresholds. Eddy4 allows the verification of the electrical absorption of the misting unit through the setting of the related alarms.

A pressure switch verifies the correct water supply, if enabled. If there is no supply or an improper supply Eddy5 provides a lack of water alarm.

The electronic Eddy5 card provides up to a maximum 4 other control panels, “slave”, which completely repeat real-time data shown on the master




panel. The “slave” panels and their accessories are available in kit, which can be ordered separately. Then they have to be connected to Eddy4 card in appropriate locations through its LAN network. The arrangement of this structure has to be made by qualified personnel. After this it is possible to set a panel as master and then indicate in the same LAN network how many other panels you want indicating them with “SLAVE” and with a different ID for each one.

This functionality blocks the multizone system (as explained further on this guidebook).

The different slaves won’t have Web interface function activated. The slave panels will duplicate the interface shown on the master panel. This functionality is useful in all locations where you want to regulate or set the unit which is not near the location itself.

An external safety probe can be connected to the Eddy5 electronic board in case of installation of the nebulizer control unit for the humidification of AHUs (Air Handling Units). The probe must be connected directly to the Eddy5 electronic board. The end user is not authorized to carry out

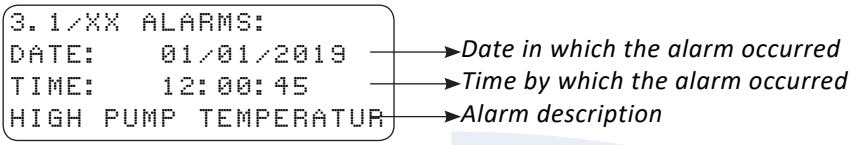
this work, therefore contact an authorized dealer in the event of such a situation. The probe, installed in this way, can read the temperature and humidity values of the AHU and generate an alarm according to what has been set. The auto-restart function allows, if enabled, the auto-rearm of the nebulizing control unit connected to the Eddy5 in case of voltage drop. If this function is enabled, the Eddy5 electronics will reset the nebulizer control unit the next time the power is restored, taking into account all the parameters and programs set at the time of the power failure.

## Warning

Data shown could be different from what is displayed on your screen since it could show other language descriptions or values with a different standard of measurement

## Eddy5 – Alarms records program

3




### *Access*

The Alarms records program is at position 3. The total number of pages varies according to existing alarms, for each identified alarm a page appears.

### *Detailed description*

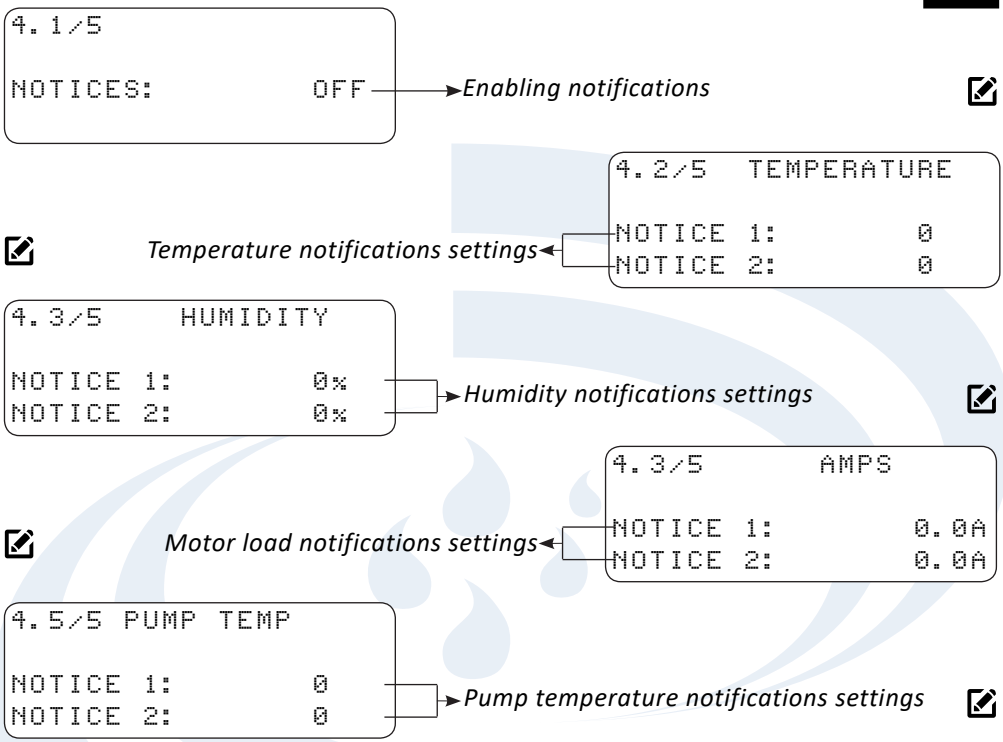
Here you can display the last alarms occurred on the misting pump controlled by Eddy5. The program shows date, time and a short description about the alarm occurred. When data storage in which alarms are stored is full new data overwrite old data. This page can only be of advisory character.

### Warning

Data shown could be different from what is displayed on your screen since it could show other language descriptions or values with a different standard of measurement

# Eddy5 - Notifications setup program

4




## *Access*

The Notifications setup program is at position 4. It is composed by 5 screens mentioned above.

## *Detailed description*

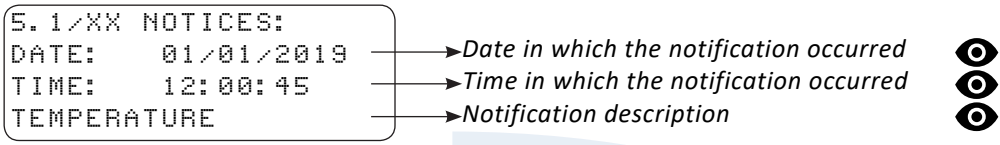
Here it is possible to set notifications and when they occur Eddy5 warns the user. A notification is different from an alarm since it is a simple warning which does not signal a malfunction but simply gives information. For each parameter it is possible to set 2 notifications at 2 separated values.

## Warning

Data shown could be different from what is displayed on your screen since it could show other language descriptions or values with a different standard of measurement

# Eddy5 – Notifications records program

5




## *Access*

Notifications records program is at position 5. The total number of pages varies according to existing alarms. For each identifies alarm a page appears.

## *Detailed description*

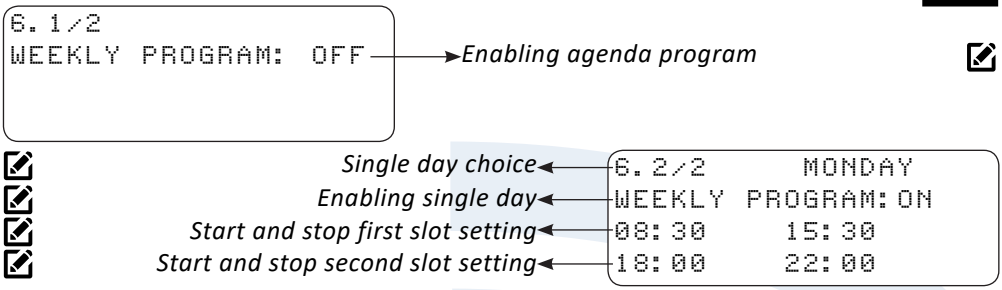
Here it is possible to display the last alarms occurred on the misting line controlled by Eddy5. The program shows date, time and a short description of the occurred alarm. When data storage, in which alarms are stored, is full new data overwrite old data. This page can only be of advisory character.

## Warning

Data shown could be different from what is displayed on your screen since it could show other language descriptions or values with a different standard of measurement

# Eddy5 – Weekly program

6




## *Access*

Agenda program is at position 6. It is composed by 2 screens as mentioned above.

## *Detailed description*

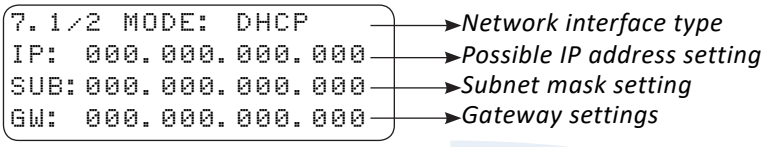
Here it is possible to set the agenda management of the misting line. In addition to a general choice you are allowed to choose daily whether enable or not the nebulization system in a specific day and in a specific slot (up to a maximum of 2 slots).

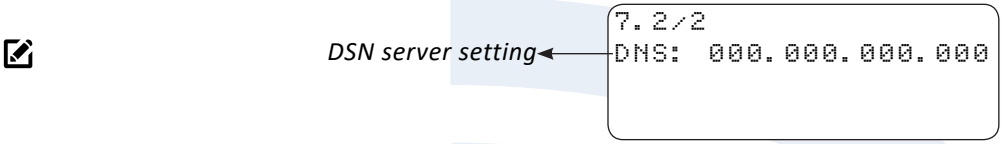
## Warning

Data shown could be different from what is displayed on your screen since it could show other language descriptions or values with a different standard of measurement

# Eddy5 – Web program

7




## *Access*

Web program is at position 7.

## *Detailed description*

The electronic device Eddy5 allows a management through an innovative web interface available via latest-generation pc, tablet or smartphone. The interface covers some functionality of Dashboard program and all the funcionality of info program.

It provides a real-time updating, so when you change a parameter on Eddy4 it automatically reflects on web interface and vice versa. Use only by a single remote device. Referring to remote panel web interface is only available for Eddy5 “master”.

From the web interface is also possible dowload a log file with the last months of work data. This file could be read only by an authorized re-seller.

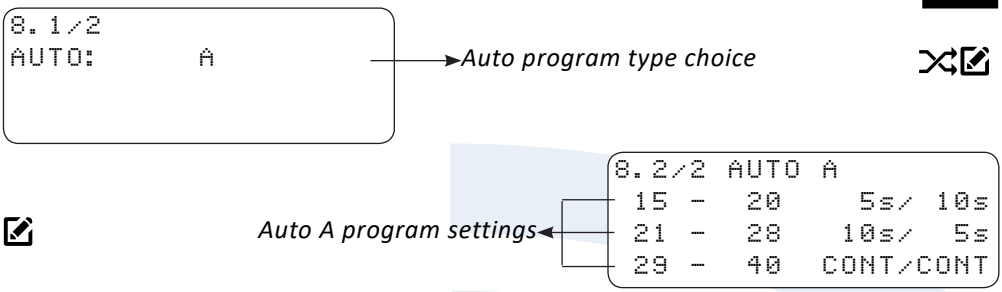
The pages of this program allow the possibility to manage IP address type, subnet mask and DNS server, as well as eventually allowing their entry. For further information please contact your IT manager.

## Warning

Data shown could be different from what is displayed on your screen since it could show other language descriptions or values with a different standard of measurement

## Eddy5 – Auto program

8




### *Access*

Auto program is at the position 8. It has a total of 2 pages as mentioned above.

### *Detailed description*

AutoA Eddy5 allows a complete automated management of pause-work time depending on the temperature detected outside. You can set 3 different detected temperature slots and you can set corresponding pause-work time for each. This mode will allow the unit to self-regulate and it will change dynamically pause-work time to be adopted in order to provide an adequate nebulization.

## Warning

Data shown could be different from what is displayed on your screen since it could show other language descriptions or values with a different standard of measurement

## Foreseen operation conditions

The machine has been designed and manufactured to be used both indoor and outdoor, in parks, industrial buildings, farm businesses and the like. If the machine is installed indoor, check that the area is not dusty and that is properly ventilated in order to allow correct cooling. Therefore, the ideal installation place for the machine is in ventilated areas protected against weather conditions, at a temperature above 27-28°C with relative humidity below 80%. If you use the system both for Summer cooling and Winter humidification, it is advisable to adjust the water flow. For the humidifier function, use the cyclic timer to decrease the nebulization according to a time unit, so that the operation in a minute is limited to 5, 10 or 15 seconds, according to the humidity level to be reached. In summer, you will just need to set the continuous operation again. To perform this operation, contact the manufacturer authorized technician.

## Improper use – forbidden use

1. It is absolutely forbidden to carry out checks or maintenance operations when the machine is running or the power supply is on. ALWAYS DISCONNECT THE POWER SUPPLY!

2. Do not expose the machine to low temperatures: ice formation may cause serious damages to the high-pressure pump.

3. Always wear protection equipment when servicing the machine.

4. When using the misting unit to nebulizer liquids other than water, make sure that they can be completely nebulized and that they do not contain any substance that might harm people in the area. Moreover, make sure NOT to nebulizer substances containing alcohol, oil or particles greater than 5 micron, in order to avoid deteriorating or clogging the micrometric nozzles and the mechanical components of the unit. The manufacturing company is no way liable and does not grant the warranty for any damage to people or goods due to incorrect use of the unit, namely when it is used to nebulizer in the air substances that are not allowed by the law in force or by the manufacturer.

## Warning

DO NOT REMOVE THE LABELS FROM THE MACHINE. IF THEY ARE DETERIORATED, ASK THE SUPPLIER FOR NEW ONES.
THE MANUFACTURER AND THE SUPPLIER ARE NOT LIABLE FOR BREAKAGES OR ACCIDENTS DUE TO NON COMPLIANCE WITH THE WARNINGS ABOVE. WARRANTY WILL BE CONSIDERED NULL AND VOID IF THE ABOVE-MENTIONED WARNINGS ARE NOT FOLLOWED.

# Warranty terms and conditions

## *Validity*

This product is covered by a twenty-four (24) months warranty, starting from the purchase and/or test date. This warranty protects the user against manufacturing or material defects. In case the machine is used for professional applications, this warranty covers a period of twelve (12) months (ex C.L. no°422 art.1 par. B).

## *Warranty Conditions*

1. The in-warranty repair is accepted only if the product is accompanied by the purchase receipt and the test report issued by the supplier.
2. Manufacturing company duty is limited to the repair and, at its own discretion, the replacement of the whole product or of single faulty components.
3. The suppliers and the technicians allowed to carry out in-warranty repairs are only those expressly authorized by the manufacturer
4. This product or its materials are not considered as faulty in case the customer needs to adapt the machine to technical or national safety regulations other than those in force in the country originally foreseen for the product. No refund shall be granted for damages arising from the above-mentioned modifications, or other changes not connected to the original design of the product, carried out by the customer/user or by unauthorized people.
5. The warranty does not apply to:
   a. Periodical checks, maintenance operations, replacement of components subject to wear;
   b. Transport, transfer or installation of the product;
   c. Damages caused by fire, water, natural events, war and riots, incorrect power supply, insufficient ventilation of the installation place, and any other cause not connected the manufacturer;
   d. Incorrect use, operating errors and wrong or unwary installation;
   e. Damages to the product due to non original manufacturer spare parts use;

f. Damages to the product or insufficient performance due to incorrect installation after purchase;
g. Every damage to the product due to negligence.

6. This Warranty is valid for every person formally having the propriety of the product during the above-mentioned period.
7. This Warranty does not affect the rights of the customer as prescribed by the law in force in the country, nor the rights of the customer towards the retailer arising from the contract of sale.

## Declaration of conformity

I, the undersigned, acting legal representative of the company

Declare that the following appliances:

HPRO

Comply with the current laws in force, which implement the following directives and also declare that all the following regulations and/or technical specifications have been applied:

| **2004/108/CE EMC** | **2006/42/CE Machinery** |
|---|---|
| EN 61000-3-2/A2:2009 | EN 60335-1:2010 |
| EN 61000-3-3:2008 | EN 60335-2-79:2009 |
| EN 55014-1/A1:2009 | EN 62233:2008 |
| EN 55014-2/A2:2008 | EN ISO 12100-1/A1:2009 |
| | EN ISO 13857:2008 |

CE

Parts number of that manual: 03.527 rev. 14