

WI-SA CONTROL UNIT USER MENU

Electronic regulation unit







TECHNICAL MANUAL

SAFETY WARNINGS

SAFETY WARNINGS

Carefully read this booklet before starting and/or using the appliance and keep it in an easily accessible place.

Contact the manufacturer's technical office at the numbers indicated at the back of this booklet for consultancy or special technical requests.

. WARNING

Installation and maintenance must be carried out only by qualified personnel or else the guarantee will be void.

• Use only original spare parts: Failure to comply with this instruction will make the guarantee void

DISPOSAL



According to the provisions of the following European directives 2011/65/EU, 2012/19/EU, and 2003/108/CE, concerning the restriction of the use of certain hazardous substances in electrical and electronic equipment, as well as waste disposal.

The crossed out wheelie bins symbol on the equipment indicates that, at the end of its useful life, the product must be collected separately from general waste.

Therefore, at the end of its useful life, the user must take the equipment to a designated electrical and electronic waste collection point , or return it to the dealer that, against the purchase of an equivalent appliance, it is obliged to collect the product for disposal free of charge.

Appropriate differentiated waste collection for subsequent recycling, treatment and environment-friendly disposal of the discarded equipment helps preventing possible negative environmental and health effects and encourages recycling of the component materials of the equipment.

Illegal disposal of the product by the user entails the application of sanctions provided by the regulations in force.

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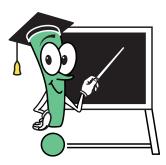
PRESENTATION

WI control unit is customisable and can be used to manage up to 8 mixing systems, 64 climate zones with 64 independent dehumidifiers and control up to 8 air handling units (AHU) with the dehumidification, ventilation, air renewal and integration functions.

Moreover, it can be used in the following operating modes:

- **AUTONOMOUS MODE:** to be installed on systems with independent power production.
- **SLAVE MODE:** to be installed on systems with centralised power production. This configuration provides for the use of WI.MASTER.NET control unit.

The illustrated user manual describes all the possible operating modes.



GENERAL DESCRIPTION



The control unit is structured in two "access levels":

- "basic": the user can enter the desired temperature values, daily and weekly operating time slots, etc. The data entered are essential for the control unit to meet the user's requirements.
- "advanced": password-protected, where all the machine settings are configured. These can be accessed only
 by specialised technicians, since incorrect value entries generate malfunctions. The settings configured by
 the specialised technician (using the dedicated menu) will allow displaying only the necessary screenshot in
 the user menu, hiding the other ones for clarity and ease of use.

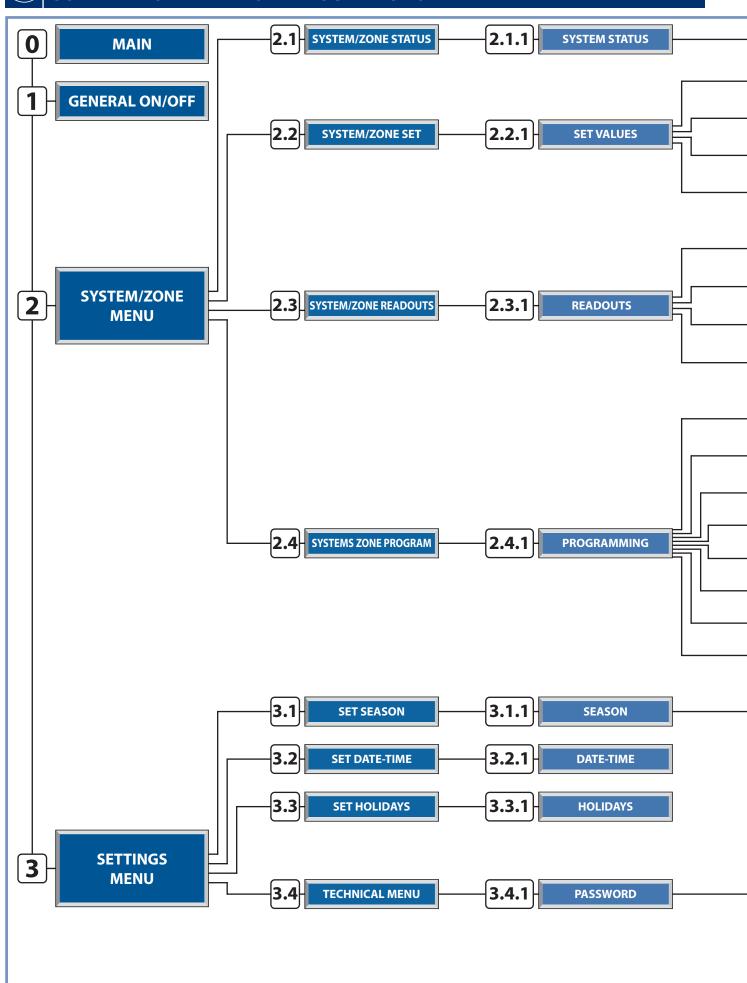
The control unit is quick and easy to use, since the user is guided through the reading and data entering processes by clear flashing symbols that help selecting which buttons to use (refer to **Table A** - Flashing symbols).

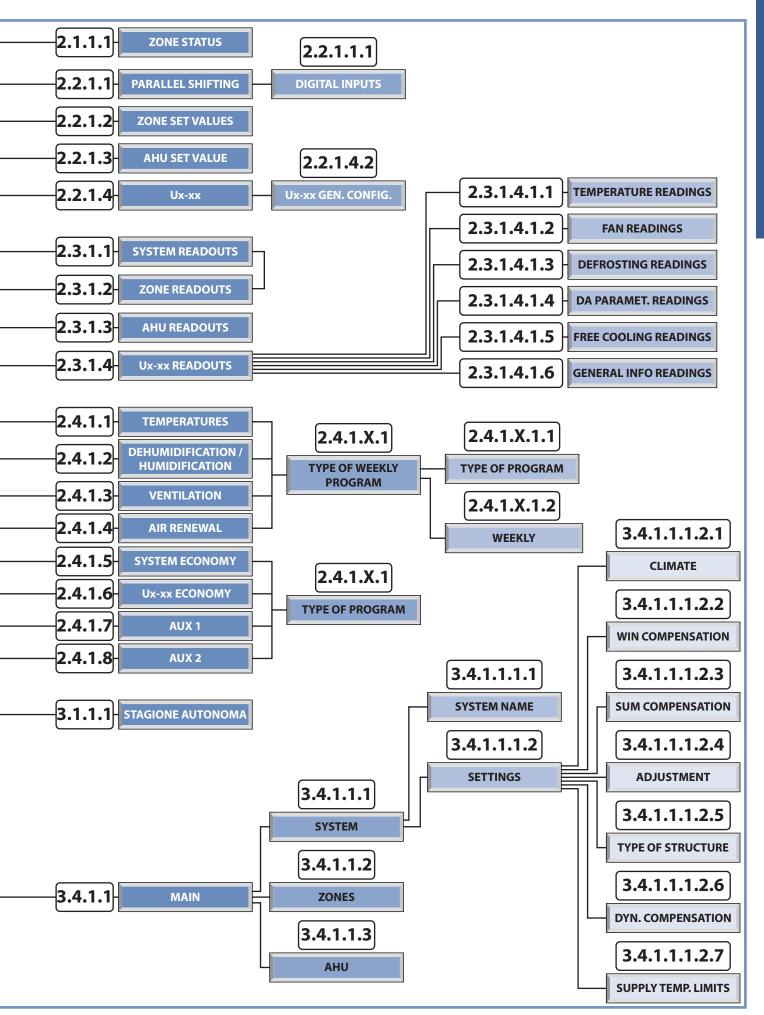
The procedure to enter data is the same for every screenshot, except for some display screenshot that only allow accessing system operation information that cannot be changed.

Table A - FLASHING SYMBOLS					
MOVING ICONS	MOVING ICONS				
When the mouse cursor is blinking	Pressing the button	What happens is			
_	◆ or ↑	You can access the following or previous screenshot			
•	•	You can access modifiable fields within the current screenshot			
E	Esc	You can go back to the previous menu			
*	◆ or ↑	You can access the following field (where present)			
	(4)	You can access the sub menus			
VALUE FIELDS					
example:	◆ or ◆	You can decrease / increase the value (e.g.: from "24°C" to "25°C")			
24°C	(4)	You can confirm the value and proceed to the next field			
TEXT FIELDS					
example: Off/	◆ or ◆	You can change the current setting (e.g.: from "ON" to "OFF")			
On	(4)	You can confirm the value expressed by the text and proceed to the next field			

(1)

SUMMARY OVERVIEW OF THE SCREENSHOT





® FUNCTIONAL OVERVIEW OF THE SCREENSHOT

то	THIS IS THI	E SCREENSHOT TO REFER
INFORMATION ON: Type of Hardware, board address, type of program, program version.	i	Info: Address:1 Ident:001 Board:UC2 Device:WI-SA Rel: X.X.X Design Release: <mm-yyyy></mm-yyyy>
DISPLAY THE MAIN SCREENSHOT Program version, Season, General Activation, Date.	0	### [Wi-RDZ] _{2.2}
SWITCH OFF ALL SYSTEMS Off: Control unit general switch-off On: Control unit general start-up N.B. Screenshot present only in configurations with more than one mixing system	1	Description of the description o
MANAGE SYSTEMS AND ZONES System-Zone function selection menu: Status / Set / Readouts / Programming	2	<syst-zone menu="">> Systems/Zones Menu</syst-zone>
MODIFY THE SYSTEM (ON/OFF) AND ZONE (ON/OFF/PGM/PGM-MAN) STATUS	2.1	\$ [SYST-ZONE STATUS] Set System and zone start-up mode
MODIFY THE SYSTEM STATUS Off: System and associated zones switch-off (the system is automatically activated when the control unit detects a temperature lower than 5°C – anti-freeze function) On: System activation.	2.1.1	\$\frac{\pi}{\text{SYSTEM STATUS 01}}\$ SYS[1] On No:08 Zones * Activation Status Systems and Zones
MODIFY A ZONE STATUS AND ITS REMOTE TERMINAL BLOCK Off: Zone switch-off. Man: Zone start-up according to the settings. Pgm: Zone in programming mode (Zone start-up according to the timeslots and set point set in the programming menu). Pgm/Man: Zone in manual programming mode (Zone start-up according to the timeslots set in the programming menu and temperatures set manually). Unlocked: Allows modifying the settings from the remote terminals. Locked: Inhibits the option to modify the settings from the remote terminals.	2.1.1.1	#ZONE 2 ZONE STATUS Unlocked Done status and block setting

MODIFY SYSTEM, ZONE AND AHU PARAMETERS	2.2 2.2.1	\$\frac{1}{2} \text{SYST-ZONE}\$ Output Set system and zone values \$\frac{1}{2} \text{SET VALUES}\$ SYS[1] * N^*:02 Zones * AHU * UxBUS_xx Output Modify system & Zone Set values
MODIFIED PARALLEL SHIFTING This parameter manages the shift that can be introduced in the system delivery temperature calculation obtained through the compensation line.	2.2.1.1	\$SYS[1] Set-Sum Parall shift: 0.0°C ID-Remote:*
MODIFY DIGITAL INPUTS Digital input modification by changing their intended use and identification of the contact status with idle component.	2.2.1.1.1	Type of signal Wi-M1 digital inp. N/N 0/0 ID1:Season →NO ID2:General On-Off →NO ID3:NO ID4:NO
MODIFY ZONE PARAMETERS Temperature and humidity parameter setting (if dehumidifier is present) of the zones in MANUAL or PROGRAMMING MANUAL operation.	2.2.1.2	\$ZONE 1 Set Sum Val 22.0 55 25.0 55% Setting 24h manual setpoints
CHANGE AHU PARAMETERS Activate or deactivate the integration function and set the relevant functioning temperatures; if there is an air quality sensor, set the reference value of CO2 to activate the renewal function.	2.2.1.3	\$\frac{\pmath*AHU[1]}{Act.Sum:No Act.Win:No Integr. diff:03.0°C Neutral air:22.0°C CO2:30%
Ux READINGS/SETTINGS: Unit type selected (Ux) and identification address. CO2: Displays the value of Co2 (with probe A present)	2.2.1.4	<pre># UxBUS_02</pre>
TEMPERATURE READINGS for UxBUS_xy (xy = unit index) Supply Temp: Delivery air temperature. Water Temp: Inflow water temperature. Conden Temp: Gas condensation temperature. Evapor Temp: Gas evaporation temperature. External temp: Reading of the outside temperature Operation status □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	2.2.1.4.1.1	UxBUS_01 UC11 Temperature Readings Supply temp.:000.0% Water temp.:000.0% Conden.temp.:000.0% Evapor.temp.:000.0% Extern.temp.:000.0%

FAN READINGS for selected Ux: rpm Room: Rotation speed for supply air fan. rpm Exhaust: Rotation speed for exhaust air fan.	2.2.1.4.1.2	Tym Room:00000 rpm Exhaust:00000
DEFROSTING READINGS for selected Ux: Defrost ON/Off: It shows the defrosting status Num. Defrost: It shows the number of defrosting cycles already performed	2.2.1.4.1.3	TuxBUS 01 UC11 ReadIng defrost Defrost ON/Off: 000 Num. Defrost: 000
DA PARAMETERES READINGS for selected Ux: Superheat Temp: Overheating temperature H2O P Pos. Valv.: Position of the water valve for the pre-treatment coil H2O C Pos. Valv.: Position of the water valve of the condensation coil	2.2.1.4.1.4	UxBUS 01 UC11 Parameters Readings Superheat Temp: 00.0% H20 P Pos.Valv.: 100% H20 C Pos.Valv.: 100%
UNIT INFO READINGS: Free Cooling connection type. Pre: Free Cooling air inlet before coils. Post: Free Cooling air inlet after coils.	2.2.1.4.1.5	UxBUS 01 UC11 Unit Info FreeCooling: Pre
GENERAL INFORMATION for SELECTED Ux: ID Ux: Modbus net index. Model: Ux Model. Ver: Software version installed. Rev: Software revision installed.	2.2.1.4.1.6	## UxBUS 01 UC11 Readings ID UxBUS:09 - Modbus Modello:- Rel:xxx Rev:0000
GENERAL SETTINGS for SELECTED Ux: Cool supply temp: Summer supply temperature setting. Heat supply temp: Winter supply temperature setting. Room flow rate: Room flow rate setting. Summer flowrate: It sets the room inlet air flow.(*) Winter flowrate: It sets the room inlet air flow. (*) (*) only for UAP 200	2.2.1.4.2	Cool supply temp:25.0°c Heat supply temp:21.0°c room flowrate:040%
READ THE SYSTEM, ZONE AND AIR HANDLING UNIT PARAMETERS	2.3 2.3.1	# [SYST-ZONE READOUTS] Measured Syst/Zone Value readouts READOUTS Cei SYS[1] * N°:01 Zones * AHU * UxBUS_xx View measured System Zone values

READ SYSTEM PARAMETERS		\$SYST[1] ⊜ ※Q用
Mix: Mixing valve activation percentage		\$SYST[1] ⊜ ※ QF
Ext: External temperature		Mix: 087%
Del: Delivery Temperature	2.3.1.1	Ext: 27.6
Calc: Calculated Delivery Temperature		□ □ □ Calc:20.0
System pump activation status		09:10 Floor
Energy source (boiler-chiller)		09:10 F100F
READ ZONE PARAMETERS Zone status: Off / On / Pgm / Pgm-Man; Start-up status T: Temperature / D: Dehumidification / H: Humidification / [V:Ventilation / R:Air Renewal]; b: Boost; f: Free Cooling; Com: Comfort Programming Eco: Economy Programming; Measured Temperature;	2.3.1.2	\$ZONE 1 % TO S & 4 \$\times \text{ b f} \text{ b f} \text{ b f} \text{ com 75% } 28. 28. 28. 28. 28. 28. 28. 28. 28. 28.
Measured Humidity (only for TA/H sensors)		
READ AHU PARAMETERS		
Start-up status [D:Dehumidification/ H: Humidification /		
V:Ventilation / R:Air Renewal]		
: System pump activation/deactivation		‡ AHU[1] AHU Readouts
: Integration activation/deactivation		
En.Mix:Mixing calculation enabled		
Del: Value detected by the duct sensor	2.3.1.3	En.Mix:No Del:53.7°C Out:00.0V
Cal: Calculated mixing Temperature		Calc:22.0°C Mix:000 %
Out: Mixing valve output value		En.CO2:No QA-Bad:No
Mix: Mixing valve opening percentage		CO2: % Set:30.0%
En.CO ₂ : Presence of the air quality sensor		
CO ₂ : CO ₂ percentage value detected by the duct sensor		
QA-Bad: Too much CO ₂ in the air Set: Threshold for the quality of clean air		
Set. Threshold for the quality of clean all		
Ux READINGS/SETTINGS:		‡ UxBUS_02 UC12
Unit type selected (Ux) and identification address.		Readings: : *
one type selected (ox, and lacintification address.	2214	Settings: : *
CO2: Displays the value of Co2 (with probe A present)	2.3.1.4	CO2 : 26.8%
COLIDISPINATOR TO COLI (Man prose in present)		- Id-01
		Ver.: 000 Rev. 0000
TEMPERATURE DEADINGS for UVRUS VV		
TEMPERATURE READINGS for UxBUS_xy		
(xy = unit index)		
Supply Temp: Delivery air temperature.		
<u>Water Temp</u> : Inflow water temperature.		
<u>Conden Temp</u> : Gas condensation temperature.		☐ UxBUS 01 UC11
Evapor Temp: Gas evaporation temperature.		Temperature Readings Supply temp.:000.0%
External temp: Reading of the outside temperature		Water temp. :000.0%
Operation status	2.3.1.4.1.1	Conden.temp.:000.0°c
■IPPIEE: The darkening of the square background		Evapor.temp.:000.0% Extern.temp.:000.0%
indicates that the function is ON		DIEFRE
Dehumidification:		الما کا بندار در اندار اندار کا اندار ک
Integration: = ON Boost: = ON		
3		
Renewal:		
Ventilation: ■ = ON		
FAN READINGS for selected Ux:		☐ UxBUS 01 UC11
		Fans Readings
rpm Room: Rotation speed for supply air fan.		rpm Room:00000
rpm Exhaust: Rotation speed for exhaust air fan.	2.3.1.4.1.2	rpm Exhaust:00000
DEFROSTING READINGS for selected Ux:		₩ UxBUS 01 UC11
		Reading defrost
Defrost ON/Off: It shows the defrosting status		
Num. Defrost: It shows the number of defrosting cycles already	2.3.1.4.1.3	Defrost ON/Off: 000 Num. Defrost: 000
performed		Tum. Derrost. 000
	<u> </u>	I.

DA PARAMETERES READINGS for selected Ux: Superheat Temp: Overheating temperature H2O P Pos.Valv.: Position of the water valve for the pre-treatment coil H2O C Pos.Valv.: Position of the water valve of the condensation coil UNIT INFO READINGS: Free Cooling connection type. Pre: Free Cooling air inlet before coils.	2.3.1.4.1.4	UxBUS 01 UC11 Parameters Readings Superheat Temp: 00.0% H20 P Pos.Valv.: 100% H20 C Pos.Valv.: 100% UxBUS 01 UC11 Unit Info
Post: Free Cooling air inlet after coils. GENERAL INFORMATION for SELECTED Ux:	2.3.11.4.11.3	FreeCooling: Pre UxBUS_01 UC11 Readings
ID Ux: Modbus net index. Model: Ux Model. Ver: Software version installed. Rev: Software revision installed.	2.3.1.4.1.6	ID UxBUS:09 - Modbus Modello:- Rel:xxx Rev:0000
WEEKLY PROGRAM	2.4	♣ [SYST-ZONE PROGRAM] ♣ Programming the Timeslots
SELECT THE SYSTEM TO BE PROGRAMMED	2.4.1	PROGRAMMING SYSTEM SYS[1] N°:08 Zones
SELECT PROGRAMMING T: Temperature D: Dehumidification (summer) / H: Humidification (winter) V: Ventilation R: Air renewal E: System economy ECO UCxx: UCxx economy AUX1: Auxiliary chrono 1 AUX2: Auxiliary chrono 2	2.4.1.1 2.4.1.2 2.4.1.3 2.4.1.4 2.4.1.5 2.4.1.6 2.4.1.7 2.4.1.8	TEMPERATURE Modifying system and zone set values CONF/ECO Modifying system and zone set values
MODIFY A PROGRAM OR SET A WEEK	2.4.1.1.1 2.4.1.2.1 2.4.1.3.1 2.4.1.4.1	TPR/Week ZONE Tmp Program type * Weekly program *
SET A PROGRAM Standard (STD), Weekday (WD), Weekend (WE), etc Copy a program	2.4.1.1.1 2.4.1.2.1.1 2.4.1.3.1.1 2.4.1.4.1.1	#EX From To REC 27.0 Tmp 07:30 12:00 25.0 Sum 13:00 17:00 24.0 Std 19:00 22:30 26.0 Program timeslots

ASSOCIATE A PROGRAM TO THE DAYS OF THE WEEK Copy a weekly program	2.4.1.1.1.2 2.4.1.2.1.2 2.4.1.3.1.2 2.4.1.4.1.2	#ZONE 1 Tmp X MO:Std TU:Std WE:Std TH:Std FR:Std SA:Fer SU:Fes Associate a program To a day of the week
SET THE TIMESLOTS FOR ECONOMY MODE ON THE SELECTED SYSTEM	2.4.1.5.1	* SYS[1]
SET THE TIMESLOTS FOR ECONOMY MODE ON Ux	2.4.1.6.1	# AHU[1] ECO FROM TO AHU 07:30 12:00 20 ECO 13:00 17:00 50 19:00 22:30 30 Program timeslots
SET THE TIMESLOTS ACTIVATION FOR TWO EXTERNAL DEVICES THROUGH INTEGRATED RELAYS	2.4.1.7.1 2.4.1.8.1	AUX 1
CHANGE SYSTEM AND PROGRAM SETTINGS	3	Technical Menu
SET THE SEASON (SUMMER/WINTER)	3.1 3.1.1	Set season mode SEASON Winter Press PRG for Manual/Automatic
SET AUTOMATIC OR MANUAL CHANGE OF SEASON N.B. only for systems hydraulically set for automatic operation	3.1.1.1	Auto Set change:22.0 °C Sampling:030 sec Neutral Tmp.:1.0 °C
SET DATE AND TIME	3.2 3.2.1	Set Date and Time of the control unit -hhmm- Fri 16 37 -ddMMYY- 05 November 2010 Modify date values hh-mm dd-MM-YYY

SET A PERIOD WHEN THE SYSTEM MUST REMAIN OFF (E.G.: HOLIDAYS)	3.3 3.3.1	Set holidays Holiday Timer HOLIDAYS Enable From: 24 December 2010 To: 05 January 2011 Set holidays timer
MODIFY SYSTEM NAMES OR FUNCTIONAL PARAMETERS	3.4	† [TECHNICAL MENU] Access TECHNICAL menu
SELECT WHAT TO MODIFY System Zone Dehumidifiers	3.4.1.1	<pre>CUM> Main System: * Zones: * Dehumidifiers: *</pre>
MODIFY SYSTEM PARAMETERS Modify system name Modify settings: Climate Winter climate Summer climate Adjustment Type of structure (delta structure) Dynamic compensation	3.4.1.1.1 3.4.1.1.1.2.1 3.4.1.1.1.2.2 3.4.1.1.1.2.3 3.4.1.1.1.2.4 3.4.1.1.1.2.5 3.4.1.1.1.2.6	<pre>Names: * Settings * \$\displaysum \text{Settings} \text{*} \$\displaysum \text{SYS Name} \text{01} SYS[1] \text{01} Setting Definition of parameters for mixing</pre>

MODIFY TONE DARAMETERS Modify system name Modify settings: Climate Winter climate Summer climate Adjustment Type of structure (delta structure) Dynamic compensation	3.4.1.1.1 3.4.1.1.1.2.1 3.4.1.1.1.2.2 3.4.1.1.1.2.3 3.4.1.1.1.2.4 3.4.1.1.1.2.5 3.4.1.1.1.2.6 3.4.1.1.1.2.7	Type:External/Room Season:Win + Sum: Climate and season Min Max Off TExt:-05.0 20.0 0.0 TDel:45.0 22.0 Winter compensation curve SYS[1] SumComp 01 Min Max Off TExt:23.0 32.0 0.0 TDel:20.0 15.0 Summer compensation curve SYS[1]Adjustment 01 <pgm man=""> tmp Hum Summer: 2.0 10 Winter: -2.0 -10 Eco. adjustment Manual program SYS[1] DELTA STR.01 Delta Structure: 2.0 Type of screed SYS[1] DynComp 01 Enable:Yes Pilot:01 KDSum:3 KDWin:03 TMin:10.0 TMax:50.0 Room dynamic compensation SUMMER WINTER TMin:10.0 TMax:50.0 Room dynamic compensation Compensation</pgm>
MODIFY ZONE PARAMETERS Modify zone name	3.4.1.1.2	ZONE Name 01
MODIFY DEHUMIDIFIER PARAMETERS Modify dehumidifier name	3.4.1.1.3	DEHUMID. Name 01 AHU[1]



ACTIONS ON THE MENUS

In the following pages are described all the user menus.

The screenshot is presented with a brief description of its features and symbols.

EXAMPLE

ADDRESS 2 SYSTEM-ZONE MENU/ 2.2 SYSTEM-ZONE SET / 2.2.1 SET VALUES/

2.2.1.2 Zone Set Values Screenshot



By accessing the "Set Sum. (Summer)/Win (Winter) values" submenu, you can establish the Temperature/Humidity comfort values (the latter only in summer) for the various zones. These values come into play when the zone activation status is "Man" (see 2.1.1.1 - "Zone Status"). The zone and dehumidifier activation behaviour, together with the activation differentials and setpoints, are schematically summarised in figures 2.2.1, 2.2.2, 2.2.3 in the following page, where the temperature and humidity values of the relative season are considered. As for the sets, the system "On" and "Off" statuses are indicated.

Table	Table of variables		
No.	Description		
0	Temperature value		
2	Humidity value		

Table of movements					
	Button	Screen	Screenshot		
	Esc	2.2.1	SET VALUES		

The following are represented:

- on top the path to access the screenshot.
- in the centre a graphical representation of the screenshot with the relative interpretation of the variables.
- on the left a description of the screenshot and the directions for use.
- on the right two tables:
 - the first one describes the variables in the screenshot and the possible options.
 The example shows the temperature and humidity values that can be modified.
 - The second represents the screenshot that can be accessed by pressing the various buttons.

 The example shows the screenshot that can be accessed; by pressing "ESC" you access the screenshot "2.2.1 Set Values".

SYMBOLS



The cursor flashes in a different way whether there are:

- several systems = in such case you can scroll through them)
- only one system $oldsymbol{\mathbb{E}}$.



By pressing the UP and DOWN arrows, the values shift from "off" to "on" and viceversa.



For further information on button and screenshot functions, refer to the first few pages of the manual marked with the thumb index:

Info: Address:1 Ident:001 Board:SN

Device:WI-SA Rel: X.X.X

Release: <DD-MM-YYYY>

By pressing **ESC+DOWN** simultaneously, you can assess the general information menu.

In this section you can view in succession:

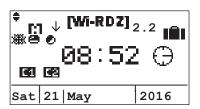
Address :Plan address.
Ident : Supervisor address.

Device: Name of the controller category.

Rel: Programme release.

Issue: Date of issue for the software.

O Main Screenshot



This screenshot is displayed in the following situations:

- upon system start-up;
- after a settable amount of user inactivity time (the motion icon in the top left corner of the display flashes).

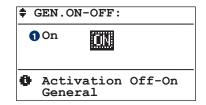
Warning!

This screenshot displays the system status and it cannot be modified.

For example, to activate the "Holidays - holiday timer" function, you need to access the "Holidays" screenshot ("3 Settings Menu" -> "3.3 Holidays") pressing the "ARROW DOWN", and set the activation and the start and the end of this period.

Table	Table of icons						
lcon	Description						
\	The symbol \downarrow means that the protocol of the interface connected with J5 is P-LAN.						
•	The symbol ↑ means that the protocol of the interface connected with J5 is Modbus						
m	If this icon is visible, the "Antifreeze" mode is activated.						
X.X	Software version						
**	Season Ж = Winter X = Summer						
8	Control unit activation status ■ = Activated □ = Deactivated						
•	If this icon is visible, the "energy source" mode is activated.						
4	Output C1 activated						
3	Output C2 activated						
IÊI	Control unit in "holiday" mode						

Table of	Table of movements					
Button	Screenshot					
Prg	2.4	PROGRAMMING				
•	3	SETTINGS MENU				
•	2.3	READOUTS				
•	1	GENERAL ON-OFF				



Warning! This screenshot is displayed only if the control unit manages more than one mixing system.

On: implies the activation of all the functions according to the settings of the various systems and zones configured.

Off: if you choose to deactivate the systems (general Off), everything will stop.

Should you wish to reactivate the system (general ON), the systems will start operating again according to the previously set status.

The activation mode is summarised in "System and associated zones behaviour".

Only the zones belonging to the system that were active before turning the system OFF are restored in their functionality.

Table	Table of variables			
No.	Description			
0	General system status			
	ON			
	OFF			

Table of movements					
Button	Screenshot				
Esc	0	MAIN			
•	0	MAIN			
•	1	GENERAL ON-OFF (Modify values)			
•	2	SYSTEM/ZONE MENU			

Behavi	Behaviour of the system and associated zones											
	STATUS							FUNCTION ACTIVATION				
	al ON- FF	System ON- OFF ON-OFF-PGM-PGM/MAN Zone			N Zone	SYSTEM STATUS	ZONE STATUS (2)					
OFF	ON	OFF	ON	OFF	ON	PGM	PGM/ MAN	(1)	Temp.	Humidity	Ventil.	Renewal
Х		*	*	*	*	*	*	OFF	OFF	OFF	OFF	OFF
	Х	X		*	*	*	*	OFF	OFF	OFF	OFF	OFF
	Х		Х	Х				ON	OFF	OFF	OFF	OFF
	Х		X		Х			ON	SET	SET	PGM	PGM
	Х		Х			Х		ON	PGM	PGM	PGM	PGM
	Х		Х				Х	ON	SET + PGM	SET + PGM	PGM	PGM

Where the symbols used in the table have the following meaning:

X: situation of the setting.

*: irrelevant setting situation.

(1) SYSTEM STATUS:

- OFF: Deactivated system. Mixing is disabled and all the zones associated to the system are deactivated. Operates in ANTIFREEZE mode during winter.
- ON: Activated system. Mixing is enabled according to the calculated temperature setpoint. The system zones operate according to their set status.

(2) ZONE STATUS:

- OFF: Deactivated zone function.
- SET: The zone is activated or deactivated according to the manual set. This status refers to both the temperature and humidity.
- PGM: Activation occurs according to the timeslots and corresponding sets.
- SET+PGM: Activation occurs according to the timeslots and manual sets.



Table of	Table of movements						
Button	Screenshot						
Esc	0	MAIN					
•	1	GENERAL ON-OFF					
•	2.1	SYSTEM/ZONE STATUS					
•	3	SETTINGS					

Through menu 2 "System/Zone Menu" you can:

menu 2.1 = define the system operating status (On/Off) and of the zone it belongs to (Off/Del/Pgm).

menu 2.2 = modify operating parameters that characterise the system and the zones (if set to Manual - MAN).

menu 2.3 = read all the operating values of the various systems and correlated zones.

menu 2.4 = set every week the required temperature, humidity and functions (air renewal or ventilation) for every hour of the day in the various zones (if set during programming - PGM).

Address 2 System-Zone Menu

2.1 System/Zone Status screenshot

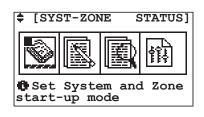


Table of movements					
Button	Screen	Screenshot			
Esc	0	MAIN			
•	2	SYSTEM/ZONE MENU			
•	2.1.1	SYSTEM STATUS			
•	2.2	SYSTEM/ZONE SET			

Menu 2.1 "System/zone status" allows defining the operating status of the system and its zones.

Example

A house with a system associated to every floor:

System 1 - Ground Floor

System 2 - First Floor

System 3 - Second Floor

etc

Every system (floor) is divided into zones that can be managed separately:

System 1 (ground floor):System 2 (first floor):System 3 (second floor):Zone 1 - kitchenZone 1 - room 1Zone 1 - bathroomZone 2 - living roomZone 2 - room 2Zone 2 - room 4Zone 3 - laundryZone 3 - room 3Zone 3 - study

For every $\underline{\text{system}}$ you can define the status (ON/OFF) and for every $\underline{\text{zone}}$ you can define the type of operation (OFF/MAN/PGM).

OFF: zone Deactivated.

MAN: the zone is activated in Manual mode with the settings configured in menu 2.2 "System/Zone Set".

PGM: the zone operates in <u>Programmed</u> mode with the settings configured in menu 2.4 "Programming".

PGM/MAN: This zone functions in programming mode according to timeslots set in menu 2.4 "Programming" and temperature/humidity set in menu 2.2 "System / Zone Setting".

2.1.1 System Status Screenshot

This screenshot allows defining the operating status (On or Off) of the displayed system (e.g.: SYS[1]).

If the control unit manages more than one system, the screenshot pertaining to the configured systems will be displayed in sequence.

The cursor flashes on the top left corner; by pressing "ENTER" you can move it in the text field: by pressing "ARROW UP" and "ARROW DOWN" you can modify the setting in the field (e.g.: from "On" to "Off").

- "Off" setting: switches off the system (maintaining the ANTIFREEZE* function) and all the zones associated to it.
- "On" setting: starts the system according to the operating status of the associated zones.

Setting the system to "On" ensures the setpoint values set by the user in the zones in timeslots, outside of which the temperature setpoint attenuation shall be applied.

* ANTIFREEZE FUNCTIONS:

If the system is OFF and the control unit detects a zone with a temperature below 5°C, the system is activated to take it to 6°C. This function prevents damage to the system caused by frost.

‡	SYSTEM STATUS 01
No	SYS[1] On 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0 2	Activation Status Systems and Zones

Table	Table of variables						
No.	Description						
0	System status						
	ON						
	OFF						
2	Allows accessing the settings of the zones belonging						
	to the system						

Table of movements						
Button	Button Screenshot					
Esc	2.1	SYSTEM/ZONE STATUS				
~~	2.1.1.1	ZONE STATUS				

Address 2 System-Zone Menu/ 2.1 System-Zone Status / 2.1.1 System Status /

2.1.1.1 Zone Status Screenshot

This screenshot allows defining the operating status of the selected zone.

The "On" status of the system allows the zones to operate according to the set operating status.

The status of the zones involves its deactivation: this status automatically switches off the zone, regardless of the set status of the selected zone.

The ITT = status enables zone operation according to the measured Temperature/Humidity and set setpoint (menu 2.2 "System / Zone Set").

The status enables zone operation according to the timeslots and the Temperature/Humidity programming settings (menu 2.4 "Programming").

The status Pom activates the zone relating to the timeslots (menu 2.4 "Programming") and to the manual settings for Temperature/Humidity (menu 2.2 "System/Zone Set").

The **"Locked"** status locks setpoint modification from bus or wireless terminals.

The **"Unlocked"** status allows setpoint modification from bus or wireless terminals.

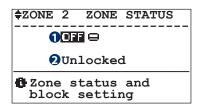


Table	Table of variables							
No.	Description							
	Zone status ■■ = Off							
0	ITEN							
2	Sensor block: appears only in presence of wireless or bus terminals.							

Table of movements			
Button	Screenshot		
Esc	2.1.1	SYSTEM STATUS	

Warning! The zone operating status is always related to the status of the system associated to it!

If, for example, the system is Off, all the correlated zones

will be deactivated.

2.2 System/Zone set screenshot

Menu 2.2 "System/Zone Set" allows modifying the operating parameters that characterise the system and the zones.

<u>System variations:</u> you can set the variation to introduce in the system delivery temperature calculation (parallel shift).

Zone variations: if the zone operates in Manual mode, you can set at which temperature and humidity it must be configured.

Example:

If you want "zone 1" to operate in Manual mode (to be set through menu 2.1" System / Zone Status"), at 24°C -> you must set this value in menu 2.2.1.2" Zone set values".

When in "zone 1" the temperature drops below the set value, heating is activated and will turn off once a temperature of 24°C is reached.

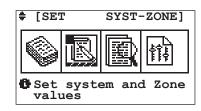


Table of movements			
Button	Screenshot		
Esc	0	MAIN	
•	2.1	SYSTEM/ZONE STATUS	
•	2.2.1	SET VALUES	
•	2.3	SYSTEM/ZONE READOUTS	

Address 2 System-Zone Menu/ 2.2 System-Zone Set /

2.2.1 SET VALUES SCREENSHOT

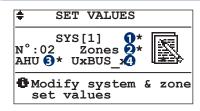


Table of variables				
No.	Description			
0	When it flashes you can access the "Parallel shifting" screenshot			
2	When it flashes you can access the "Zone Set Values" screenshot			
8	When it flashes you can access the "AHU Set Values" screenshot			
4	When it flashes you can access the "UxBUS_xx" screenshot			

Table of movements					
Button	Screenshot				
Esc	2.2	SYSTEM/ZONE SET			
(4)	2.2.1.1	PARALLEL SHIFTING			
(4) (4)	2.2.1.2	ZONE SET VALUES			
(4) (4) (4)	2.2.1.3	DEHUMIDIFIERS			
	2.2.1.4	UxBUS_xx			

This section allows modifying the operating parameters that characterise the system, zones and air handling units.

ADDRESS 2 SYSTEM-ZONE MENU/ 2.2 SYSTEM-ZONE SET / 2.2.1 SET VALUES /

2.2.1.1 Parallel Shifting Screenshot

\$SYS[1] Set Sum

Parallel shift:0.0°C 1

ID-Remote:* 2

By accessing the system setting subscreenshot, you can set the "Parallel shifting" parameter according to the season operating mode.

This parameter manages the shift that can be introduced in the system delivery temperature calculation obtained through the compensation line.

Table of variables				
No.	Description			
0	When it flashes you can modify the value			
2	When it flashes you can access the "Type of Signal" screenshot			

Table of movements			
Button	Screenshot		
Esc	2.2.1	SET VALUES	
e e e	2.2.1.1.1	DIGITAL INPUTS	

2.2.1.1.1 DIGITAL INPUT SCREENSHOT

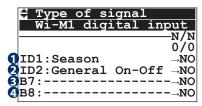


Table	Table of variables		
No.	Description		
0	Digital Input 1 Setting		
2	Digital Input 2 Setting		
3	Digital Input 3 Setting		
4	Digital Input 4 Setting		

Table of movements				
Button	Screenshot			
Esc	2.2.1.1	PARALLEL SHIFTING		

You can define the meaning of each of the 4 digital inputs on the WI-M1 board. The admitted values are:

- -----
- Chiller Alarm
- Boiler Alarm
- Remote thermostat for low temp. Sys.1
- Remote thermostat for low temp. Sys.2
- Remote thermostat for high temp.
- General On-Off
- Season
- boost UCxx1
- boost UCxx2
- Economy/Comfort

A value is allocated according to the chosen meaning

NO (=normally open)

NC (=normally closed)

N.B. For the expansion WI-Sx it is possible to configure only the inputs for low- and high-temperature call.

ADDRESS 2 SYSTEM-ZONE MENU/ 2.2 SYSTEM-ZONE SET / 2.2.1 SET VALUES/

2.2.1.2 Zone Set Values Screenshot

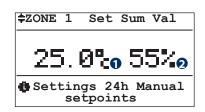
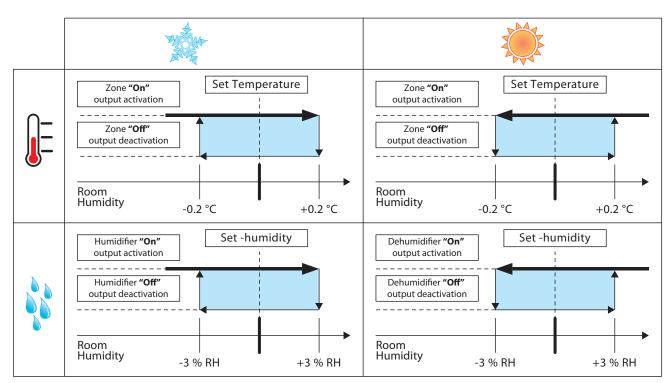


Table of variables		Table of movements		
No.	Description	Button	Screenshot	
0	Temperature value	Esc	2.2.1	SET VALUES
2	Humidity value			

By accessing the "Set Values Sum. (Summer)/Win (Winter)" submenu, you can establish the Temperature/Humidity comfort values for the various zones. These values come into play when the zone activation status is "Man" (see 2.1.1.1 - "Zone Status"). The zone and dehumidifier activation behaviour, together with the activation differentials and setpoints, are schematically summarised in figures 2.2.1, 2.2.2, 2.2.3 in the following page, where the temperature and humidity values of the relative season are considered. As for the sets, the system "On" and "Off" statuses are indicated.



2.2.1.2 AHU SET VALUES SCREENSHOT

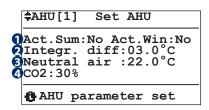


Table of movements			
Button	Screenshot		
Esc	2.2.1	SET VALUES	

Table	Table of variables				
No.	Description				
0	Summer/Winter Integration Activation				
2	Differential for the integration activation				
8	Reference temperature for neutral air				
4	CO2 value according to which AHU keeps air renewal on (only with QA sensor)				

Address 2 System-Zone Menu/ 2.2 System-Zone Set / 2.2.1 Set Values/

2.2.1.4 UxBUS XX SCREENSHOT

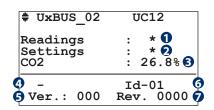


Table of movements				
Button	Screenshot			
Esc	2.2.1	READOUTS		
(4)	2.3.1.4.1	UxBUS_xx READOUTS		
(4)	2.3.1.4.2	UxBUS_xx SETTINGS		

Table	Table of variables		
No.	Description		
0	Enter the readings menu		
2	Enter the settings menu		
3	View CO2 value (with QA probe present)		
4	Referred to the Ux unit connected		
6	Referred to the software version installed in the unit.		
6	Referred to the number of the selected unit.		
7	Referred to the software revision installed in the unit.		

INDIRIZZO 2 SYSTEM-ZONE MENU/ 2.2 SYSTEM-ZONE SET / 2.2.1 SET VALUES / 2.2.1.4 UxBUS_xx

2.2.1.4.2 UxBUS XX SET VALUES SCREENSHOT

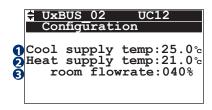


Table	Table of variables		
No.	Description		
0	Summer supply temperature setting		
2	Winter supply temperature setting		
3	Room flow rate		
	Summer flowrate: It sets the room inlet air flow.(*)		
	Winter flowrate: It sets the room inlet air flow. (*)		
	(*) only for UAP 200		

Table of movements		
Button	Screenshot	
Esc	2.2.1.4	UxBUS_xx

2.3 System/Zone Readout Screenshot

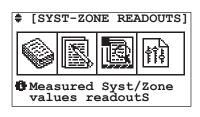


Table of movements			
Button	Screen	Screenshot	
Esc	0	MAIN	
•	2.2	SYSTEM/ZONE SET	
•	2.3.1	READOUTS	
•	2.4	PROGRAMMING	

Menu 2.3 "System/Zone Readouts" allows reading all the operating values detected by the various systems and zones correlated to them.

ADDRESS 2 SYSTEM-ZONE MENU/ 2.3 SYSTEM-ZONE READOUTS /

2.3.1 Readout Screenshot

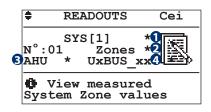


Table of movements		
Button	Screenshot	
Esc	2.3	SYSTEM/ZONE READOUTS
(4)	2.3.1.1	SYSTEM READOUTS
(4) (4)	2.3.1.2	ZONE READOUTS
(4)	2.3.1.3	AHU READOUTS
	2.3.1.4	UxBUS_xx READOUTS

The Readout section allows displaying the essential SYSTEM and ZONE operating data.

Table	Table of variables			
No.	Description			
0	When it flashes you can access the "System Readouts" screenshot			
2	When it flashes you can access the "Zone Readouts" screenshot			
8	When it flashes you can access the "AHU Readouts" screenshot			
4	When it flashes you can access the "UxBUS_xx Readouts" screenshot			

Address 2 System-Zone Menu/ 2.3 System-Zone Readouts / 2.3.1 Readouts /

2.3.1.1 System Readout Screenshot

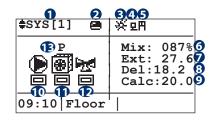


Table	Table of variables		
No.	Description		
0	Name of the system		
2	System Activation Status ■ = Activated ■ = Deactivated		
8	Season		
4	Low Temperature production external request from a remote contact		
6	High Temperature production external request from a remote contact		
6	Mixing valve opening percentage		
7	External temperature		

Table of movements		
Button	Screenshot	
•	2.3.1.2	ZONE READOUT
Esc	2.3.1	READOUTS

No.	Description		
8	Detected delivery temperature		
9	Detected calculated delivery temperature		
10	System pump activation status ■ = Activated □ = Deactivated		
1	Production activation status = Activated = Deactivated Production Type = Cooling = Heating		
P	Mixing valve activation status ■ = Activated ■ = Deactivated		
B	It appears only in winter season P = Hot water produced through Heat Pump C = Hot water produced through Boiler		

2.3.1.2 Zone readout screenshot

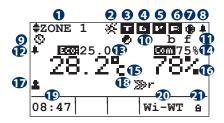


Table of movements		
Button	Screenshot	
Esc	2.3.1	READOUTS

Table	of variables			
No.	Description			
0	Name of the zone			
2	Season			
8	Off On Status of the digital output (potential free contact) available on the electronic board associated to the Zone. Related to the Zone energy supply according to the temperature setpoint. If the zone is in programming mode, the "Comfort" or "Economy" status is displayed with the programming set corresponding to the operating time.			
4 (A)	The zone dehumidification Off (available only when the Zone is configured with a TA/H sensor and a Dehumidifier). If the zone is in programming mode, the "Comfort" or "Economy" status is displayed with the programming set corresponding to the operating time.			
4 (B)	The zone humidification Off / On Status (available only when the Zone is configured with a TA/H sensor and a humidifier). If the zone is in programming mode, the "Comfort" or "Economy" status is displayed with the programming set corresponding to the operating time.			
6	The zone ventilation Off 🗹 / 🛂 On Status (available only when the Zone is configured with a TA/H sensor and a Dehumidifier with ventilation).			
6	The zone Air Renewal Off 🖪 / 🖪 On Status (available only when the Zone is configured with a TA/H sensor and a Dehumidifier with Air Renewal).			

No.	Description		
7	Dehumidification Pump in operation		
	·		
8	Zone alarm active		
9	Zone status		
	■ = Off		
	■ = On		
	= Programming		
	Manual programming		
10	Integration in operation		
1	b = Boost in operating		
	f = Free-Cooling in operation		
P	Zone alarm active through external digital contact		
B			
	Temperature		
Displays the Comfort/Economy status + des			
Humidity			
Œ	Measured temperature		
16	, , , , , , , , , , , , , , , , , , ,		
	humidity" sensors).		
1	Zone Temperature/ Humidity activation through		
	external digital contact		
18	≫r Indicates that the zone is replicated		
19	Time		
20	Type of terminal		
4	Setpoint modification from terminal block		

In this screenshot it is also possible to change the functioning status of the selected zone.

The "On" status of the system allows the zones to operate according to the set operating status.

The status of the zones involves its deactivation: this status automatically switches off the zone, regardless of the set status of the selected zone.

The **MRR** status enables zone operation according to the measured Temperature/Humidity and set setpoint (menu 2.2 "System / Zone Set").

The status enables zone operation according to the timeslots and the Temperature/Humidity programming settings (menu 2.4 "Programming").

The status **Pomes** activates the zone relating to the timeslots (menu 2.4 "Programming") and the manual settings for Temperature/Humidity (menu 2.2 "Set Impianto/Zone").

2.3.1.3 AHU READOUT SCREENSHOT



Table of variables			
No.	Description		
1 (A)	AHU dehumidification Off 🕒 / 🔼 On status		
1 (B)	AHU humidification Off 🔟 / 🔟 On status		
2	AHU ventilation Off 🗹 / 🍱 On status		
3	AHU air renewal Off 🖪 / 🖪 On status		
4	AHU pump activated		
6	Integration request activated		

ĺ	Table of movements			
	Button	Screenshot		
	Esc	2.3.1	READOUTS	

No.	Description
6	Mixing calibration enabled
7	Value detected by the duct sensor
8	Calculated mixing temperature
9	Mixing valve output value
10	Mixing valve opening percentage
1	Presence of the air quality sensor
P	CO2 percentage value detected by the duct sensor
B	Too much CO2 in the air
1	Threshold for the quality of clean air

Address 2 System-Zone Menu/ 2.3 System-Zone Readouts / 2.3.1 Readouts /

2.3.1.4 UxBUS_xx Screenshot

‡ UxBUS_02	UC12
Readings Settings CO2	: * 1 : * 2 : 26.8%
4 - 5 Ver.: 000	Id-01 6 Rev. 0000 7

Table of variables		
No.	Description	
0	Enter the readings menu	
2	Enter the settings menu	
8	View CO2 value (with QA probe present)	

Table of movements			
Button	Screenshot		
Esc	2.3.1	READOUTS	
(4)	2.3.1.4.1	TEMPERATURE READINGS FOR UxBUS_xx	

No.	Description
4	Referred to the Ux unit connected
6	Referred to the software version installed in the unit.
6	Referred to the number of the selected unit.
7	Referred to the software revision installed in the unit.

ADDRESS 2 SYSTEM-ZONE MENU/ 2.3 SYSTEM-ZONE READOUTS / 2.3.1 READOUTS / 2.3.1.4 UxBUS_xx

2.3.1.4.1.1 UxBUS_xx Temperatures Readouts Screenshot

Temperature Readings
Supply temp.:000.0°c
Water temp.:000.0°c
Conden.temp.:000.0°c
Extern.temp.:000.0°c

TEMPERATURE

3 9 1 12

Table	Table of variables		
No.	Description		
0	Delivery air temperature.		
2	Inflow water temperature .		
3	Condensation coil temperature.		
4	Evaporation coil temperature.		
6	External temperature detected.		
6	Dehumidifier status: ■ = OFF ■ = ON		
7	Integration status: OFF ON		

Table of movements			
Button	Screenshot		
Esc	2.3.1.4	UxBUS_xx	
•	2.3.1.4.1.4	GENERAL INFO READINGS	
•	2.3.1.4.1.2	FAN READINGS	

No.	Description	
8	Fresh air renewal status: ■ = OFF	■ = ON
9	Ventilation status: I = OFF	► = ON
10	Free-cooling status: □ = OFF	Ft = ON
1	Boost status: ■ = OFF	■ = ON
P	Economy status:	E = ON

ADDRESS 2 SYSTEM-ZONE MENU/ 2.3 SYSTEM-ZONE READOUTS / 2.3.1 READOUTS / 2.3.1.4 UXBUS_XX

2.3.1.4.1.2 UxBUS_xx Fan Readings Screenshot

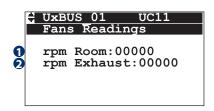


Table of movements			
Button	Screenshot		
Esc	2.3.1.4	UxBUS_xx	
•	2.3.1.4.1.1	TEMPERATURE READINGS	
•	2.3.1.4.1.3	DEFROST READINGS	

Table of variables		
No.	No. Description	
0	Speed for supply air fan	
2	Speed for exhaust air fan	

ADDRESS 2 SYSTEM-ZONE MENU/ 2.3 SYSTEM-ZONE READOUTS / 2.3.1 READOUTS / 2.3.1.4 UxBUS_xx

2.3.1.4.1.3 Defrost Readings Screenshot

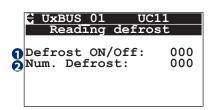


Table of variables			
No.	Description		
0	It shows the defrosting status		
2	It shows the number of defrosting cycles already		
	performed		

Table of movements				
Button	Screenshot			
Esc	2.3.1.4	UxBUS_xx		
•	2.3.1.4.1.2	FAN READINGS		
•	2.3.1.4.1.4	DA PARAMETERS READINGS		

Address 2 System-Zone Menu/ 2.3 System-Zone Readouts / 2.3.1 Readouts / 2.3.1.4 UxBUS_xx

2.3.1.4.1.4 DA PARAMETERS READINGS SCREENSHOT

	UxBUS 01 UC11 Parameters Readings
100	Superheat Temp: 00.0°c H2O P Pos.Valv.: 100% H2O C Pos.Valv.: 100%

Table of variables			
No.	Description		
0	Overheating temperature		
2	Position of the water valve for the pre-treatment coil		
3	Position of the water valve of the condensation coil		

Table of movements				
Button	Screenshot			
Esc	2.3.1.4	UxBUS_xx		
•	2.3.1.4.1.3	DEFROST READINGS		
•	2.3.1.4.1.5	FREE COOLING READINGS		

Address 2 System-Zone Menu/ 2.3 System-Zone Readouts / 2.3.1 Readouts / 2.3.1.4 UxBUS_xx

2.3.1.4.1.5 UxBUS_xx Free Cooling Readings Screenshot

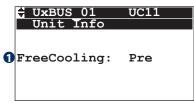


Table of variables		
No.	Description	
0	Free Cooling connection type	

Table of movements			
Button	Screenshot		
Esc	2.3.1.4	UxBUS_xx	
•	2.3.1.4.1.4	DA PARAMETERS READINGS	
•	2.3.1.4.1.6	GENERAL INFO READINGS	

2.3.1.4.1.6 UxBUS XX GENERAL INFO READINGS SCREENSHOT

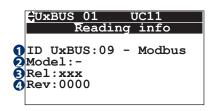


Table	Table of variables			
No.	Description			
0	Modbus net index.			
2	Model			
3	Software version installed			
4	Software revision installed			

Table of movements			
Button	Screenshot		
Esc	2.3.1.4	UxBUS_xx	

Address 2 System-Zone Menu

2.4 System/Zone Program Screenshot

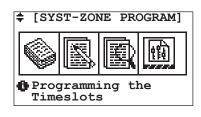


Table of movements				
Button	Screen	Screenshot		
Esc	0	MAIN		
•	2.3	SYSTEM/ZONE READOUTS		
•	2.4.1	PROGRAMMING		
•	2	SYSTEM/ZONE MENU		

Menu 2.4 "Programming" allows weekly setting the required temperature, humidity, ventilation and air renewal for every hour of the day.

NB: The "Ventilation" and "Air Renewal" functions (where provided) allow respectively for dehumidifier operation in "ventilation only" mode and forced indoor air renewal with outdoor air.

The user must first set the <u>programs</u> (STD: standard, WD: weekday, WE: weekend, Pg1...Pg5: generic programs) to decide the desired temperature or humidity (ventilation/air renewal) around the clock.

For example, to manage the temperature, you can set the <u>STD program</u> as follows:

22°C from 06:00 to 12:00,

20°C from 13:00:00 to 18:00:00.

21°C from 18:00:00 to 22:30:00.

and to manage humidity, you can set program Pg1 as follows:

40% humidity from 08:00 to 12:00 (only in "SUMMER" mode),

30% humidity from 13:00 to 22:30 (only in "SUMMER" mode). and so on for all the available programs.

The temperature or humidity set by the user in the various timeslots are identified with the "COMFORT" status; on the other hand, whenever there is no temperature or humidity associated to the timeslot (in the example between 12:00 and 13:00 and between 22:30 and 6:00), the temperature or humidity will be identified with the "ECONOMY" status, also settable as you wish. Upon setting the various programs, the user must decide the ones to assign to every day of the week.

For example:

from Monday to Friday you can apply the "STD" program for the temperature and "Pg1" for the humidity; Saturday "WD" for the temperature and "Pg1" for humidity; Sunday "WE" for humidity and "STD" for ventilation, etc.

ADDRESS 2 SYSTEM-ZONE MENU/ 2.4 SYSTEM-ZONE PROGRAM /

2.4.1 Programming Screenshot

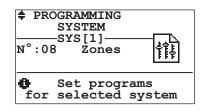


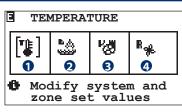
Table of movements			
Button	itton Screenshot		
Esc	2	SYSTEM/ZONE MENU	
•	2.4.1.1	TEMPERATURE	

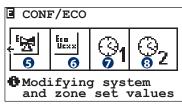
The programming menu dedicated to the zones that belong to the selected system **allows the user to activate some functions** in the desired timeslots.

In screenshot "2.4.1 Programming" you can select only the system to be programmed; the possible functions shall be analysed in detail at a later stage.

Address 2 System-Zone Menu/ 2.4 System-Zone Program / 2.4.1 Programming /

2.4.1.1	Temperature Screenshot
2.4.1.2	DEHUMIDIFICATION SCREENSHOT HUMIDIFICATION SCREENSHOT
2.4.1.3	VENTILATION SCREENSHOT
2.4.1.4	AIR RENEWAL SCREENSHOT





This screenshot allows selecting the parameter to be programmed in the next screenshot.

The parameters that can be modified are the following:

- Room temperature
- Dehumidification / Humidification
- Ventilation
- Air renewal
- System Economy
- UxBUS_xx Economy
- AUX1 Economy
- AUX2 Economy

•	NOGRAMMING /		
	2.4.1.5	System Economy Scrennshot	
	2.4.1.6	UxBUS_xx Economy Screenshot	
	2.4.1.7	AUX 1 Screenshot	
	2.4.1.8	AUX 2 SCREENSHOT	

Table of movements			
Button	Screenshot		
Esc	2.4.1	PROGRAMMING	
	2.4.1.1	TEMPERATURE	
	2.4.1.2	DEHUMIDIFICATION / HUMIDIFICATION	
	2.4.1.3	VENTILATION	
•	2.4.1.4	AIR RENEWAL	
	2.4.1.5	SYSTEM ECONOMY	
	2.4.1.6	UxBUS_xx ECONOMY	
	2.4.1.7	AUX 1	
	2.4.1.8	AUX 2	

Table	Table of variables		
No.	Description		
0	Temperature timeslot programming		
2	Dehumidification timeslot programming		
3	Ventilation timeslot programming		
4	Air Renewal timeslot programming		
6	System timeslot programming		
UxBUS_xx timeslot programming			
7	Auxiliary contact 1 timeslot programming		
8	Auxiliary contact 2 timeslot programming		

Example: To program weekly the temperature function, you can select icon 1)"Temperature" pressing "ARROW UP" and "ARROW DOWN" until the cursor flashes on the first symbol on the left.

Press "ENTER" to access its programming (screenshot 2.4.1.1.1 Type of weekly program).

Warning! The "Dehumidification" icon is only visible during summer; during winter, you will be able to view the "Humidification" icon. The functions are visible only if enabled during configuration.

ADDRESS 2 SYSTEM-ZONE MENU/ 2.4 SYSTEM-ZONE PROGRAM / 2.4.1 PROGRAMMING / 2.4.1.x/

2.4.1.x.1 Type of Program - Weekly screenshot

■ TPR/Week ZONE	Tmp
Type of Program Weekly program	* 1
6	

This screenshot allows customising the previously chosen parameter programming (TEMPERATURE / DEHUMIDIFICATION / HUMIDIFICATION / VENTILATION / AIR RENEWAL) for:

- Type of Program Std / Fer/ Fes / Pg1 / Pg2 / Pg3 / Pg4 / Pg5
- ZONE weekly program: weekly association MO / TU / WE / TH / FR / SA / SU of the various zones and dehumidifiers to the generic programs (Std / Fer / Fes / Pg1 / Pg2 / Pg3 / Pg4 / Pg5).

Table of movements		
Button	Screenshot	
Esc	2.4.1.1 2.4.1.2 2.4.1.3 2.4.1.4	TEMPERATURE DEHUMIDIFICATION / HUMIDIFICATION VENTILATION AIR RENEWAL
(4)	2.4.1.x(1).1.1	PROGRAMMING TYPE
(4) (4)	2.4.1.x(1).1.2	WEEKLY ZONE PROGRAM

Table	of variables
No.	Description
0	Access to the Programming Type screenshot
2	Access to the Zone weekly program screenshot

2.4.1.x.1.1 Type of Program screenshot

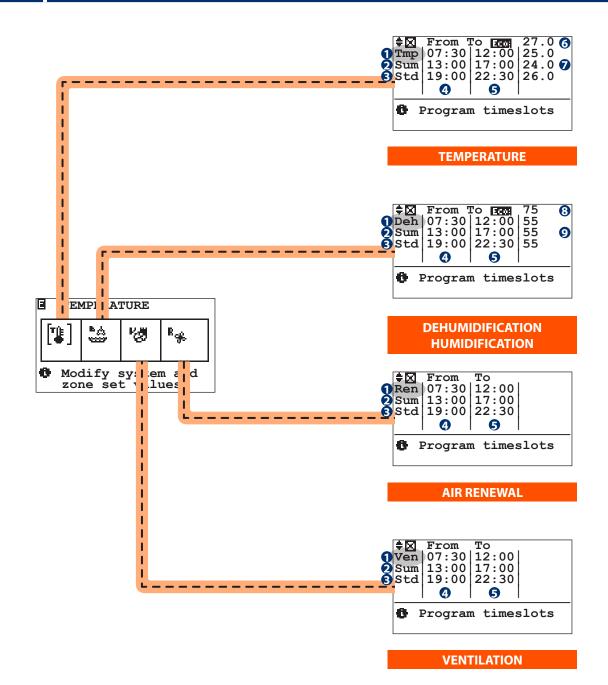


Table of movements		
Button	Screenshot	
Prg	-	COPY
Esc	2.4.1.x.1	TYPE OF PROGRAM/WEEKLY

Table	Table of variables				
No.	Descrip	otion			
0	Functions to be programmed:				
	Tmp = Temperature				
	Deh	= Dehumidification / Hum = Humidification			
	Ven	= Ventilation			
	Ren	= Air renewal			
2	Season				
	Sum	= Summer			
	Win	= Winter			

No.	Description	
3	Program TYPE:	
	Std = Standard	
	Fer = Weekday	
	Fes = Weekend	
	Pg1Pg5 = Program 15	
4	Starting Time	
6	End Time	
6	"Economy" Temperature	
7	"Comfort" temperature	
8	"Economy" Humidity	
9	"Comfort" Humidity	

Once the functions to be programmed in the previous menu (e.g.: temperature) have been defined, you can customise the programs:

- Std: Standard Program
- Fer: Weekday
- Fes: Weekend
- **Pg1**...Pg5: Program 1..5.

The first thing to do is define the operating set outside of the "**Economy Set**" programming.

Programming allows dividing the day in 3 programming slots. For each of these slots, you must define the starting time. "From" and the ending time "To" with the respective "Comfort set" (i.e., the temperature to be maintained).

<u>Dehumidification</u>, <u>ventilation and air renewal</u> selected in the previous menu 2.4.1.1 "Temperature / Dehumidification / Ventilation / Air renewal must be set the same way.

Warning!

Unlike for temperature and dehumidification/ Humidification, ventilation and renewal only require programming the function activation and switch-off slots. The weekly dehumidification program it is only available during the summer, whereas during winter only the Humidification program will be available. This must be set for all the TA/H zones. Reference to the dehumidifier is implicit in the TA/H sensor setting configured during the customisation phase.

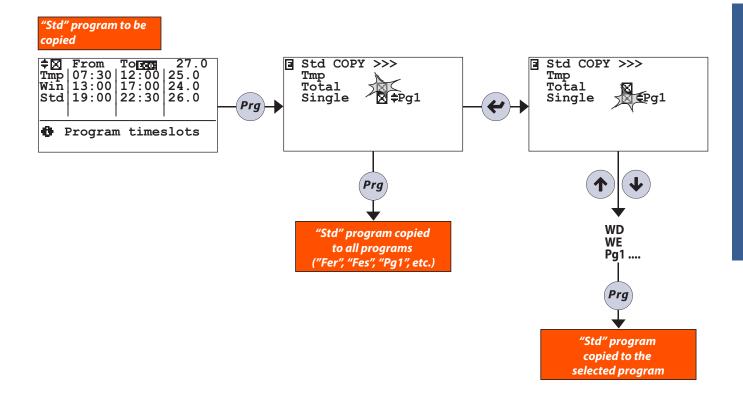
Copy program

In the event of similar programs, you can copy them in order to easily modify the differences between them.

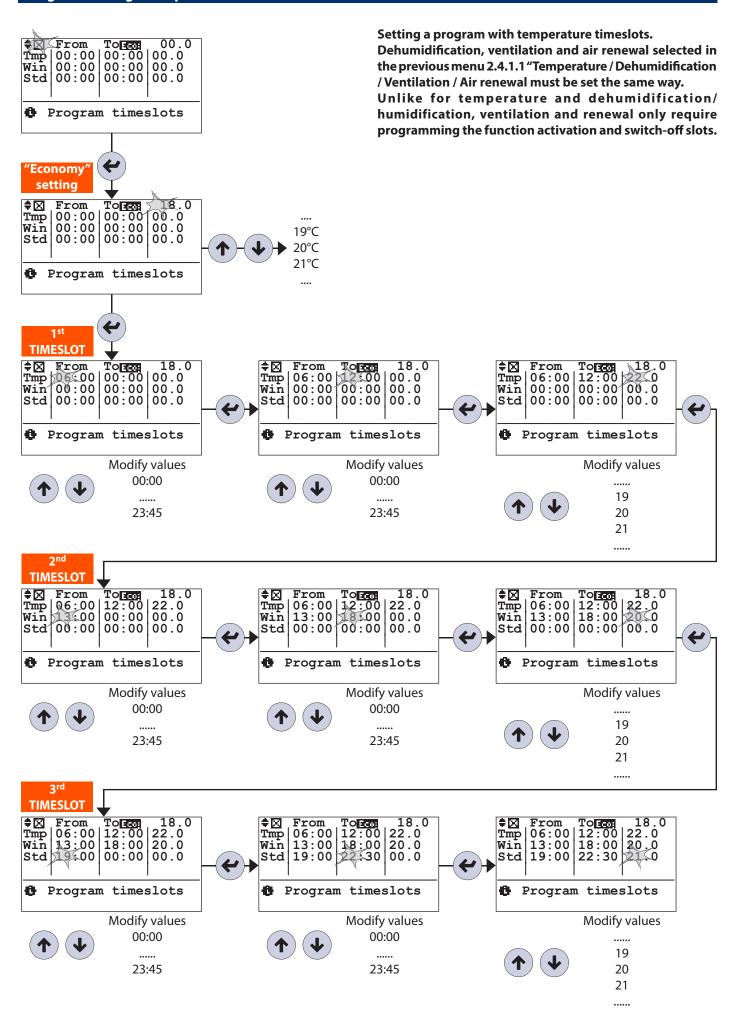
Upon selecting the type of program (e.g.: Win Tmp Std), press PRG to access the copy program screenshot.

There are two ways to copy a program:

- Total: The program (e.g.: Win Tmp Std screenshot "A") will be copied to all the programs "Std / Fer / Fes / Pg1 / Pg2 / Pg3 / Pg4 / Pg5 ".
- **Single**: The program (e.g.: Win Tmp Std) will be copied only to the selected program (e.g.: Win Tmp Std to Pg1).

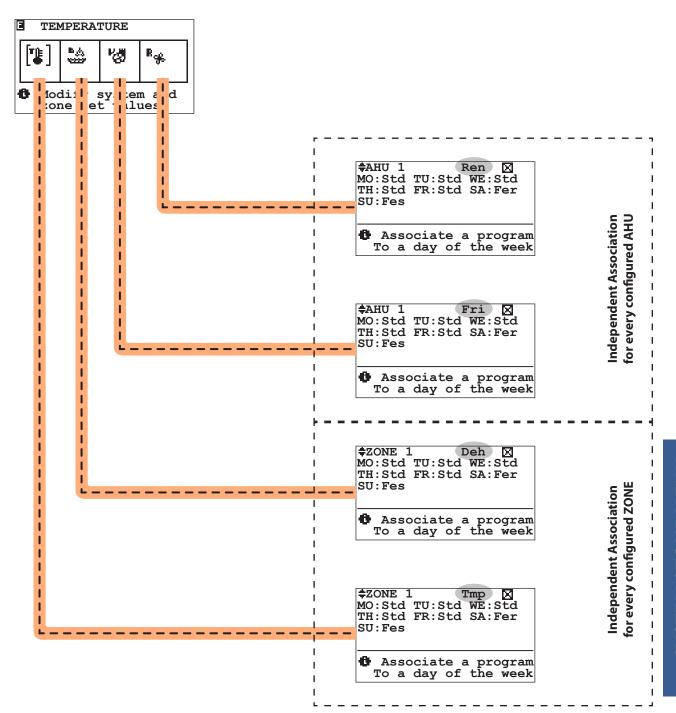


Program setting example



2.4.1.x.1.2

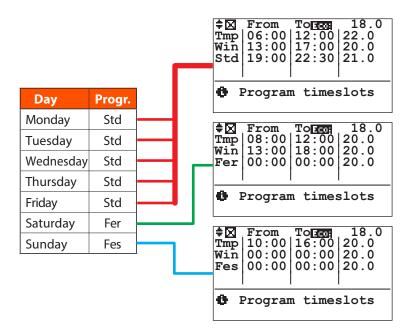
WEEKLY SCREENSHOT



Once the programs have been set (refer to menu 2.4.1.1.1.1 "Type of program"), you can associate the days of the week: MO / TU / WE / TH / FR / SA / SU other types of program:
Std / Fer / Fes / Pg1 / Pg2 / Pg3 / Pg4 / Pg5/ Off / Man.

Table of movements		
Button	Screenshot	
Esc	2.4.1.x.1	TYPE OF PROGRAM/WEEKLY

Example of weekly assignment

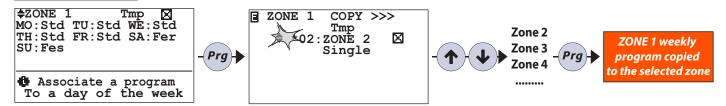


Copy of a weekly program

In the event the control unit manages more than one zone, you can copy the program set for one zone to another. Below you can find an example of how to copy a temperature program from ZONE1 to ZONE2.

Example: Upon selecting the zone to which you want to copy the program, press PRG to proceed. This procedure can be used for all the ZONES configured in the system.

"ZONE 1" weekly program to be copied



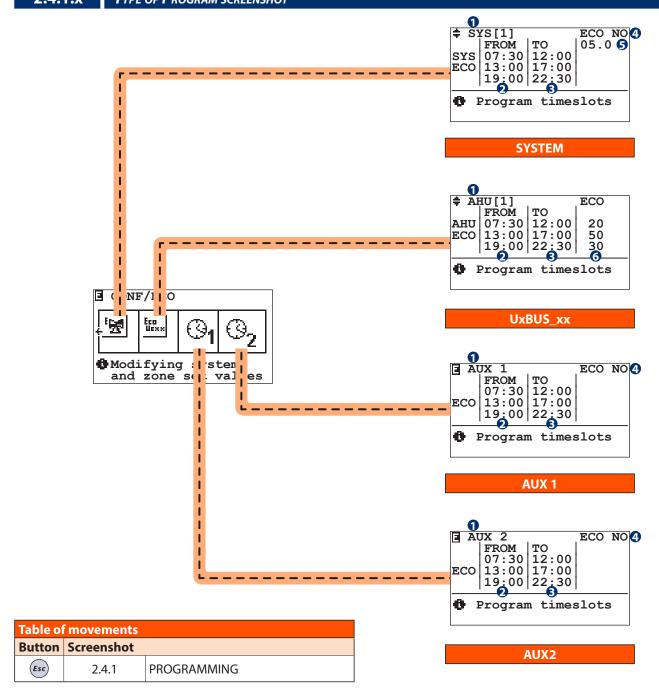
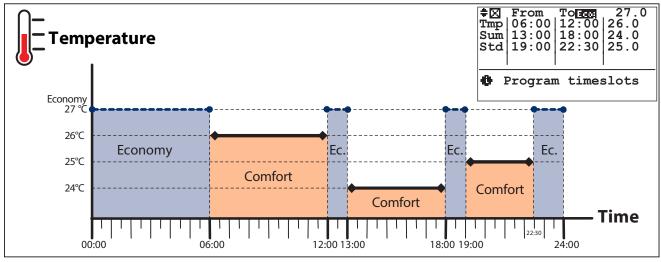
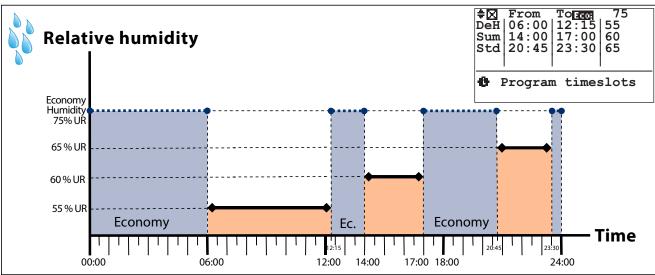


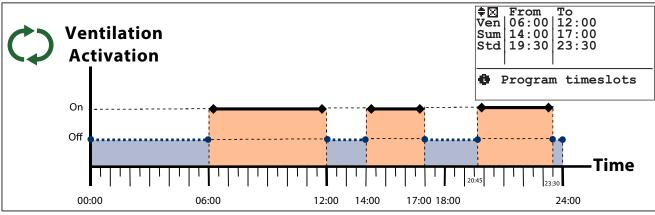
Table of variables		
No.	Description	
0	Programmable operations: Sys = System (different for each system) Ahu = UCxx (different for each unit) Aux1 = Auxiliary contact 1 (NO5) Aux2 = Auxiliary contact 2 (NO6)	
2	Start time	

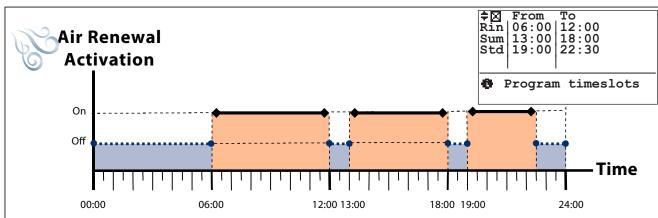
1	Vo.	Description
	8	Finish time
	4	Enable/Disable function programming
Adjustable delta on system calculated tem		Adjustable delta on system calculated temperature
	6	Flow rate adjustment percentage for UCxx

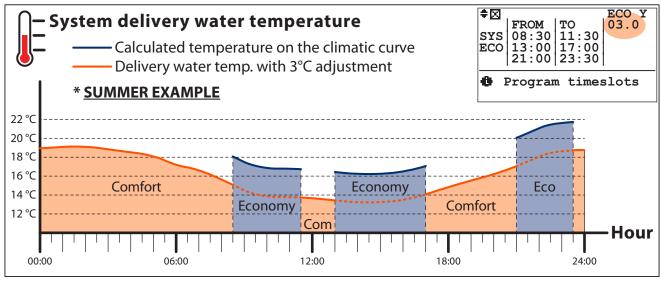
Example of weekly assignment

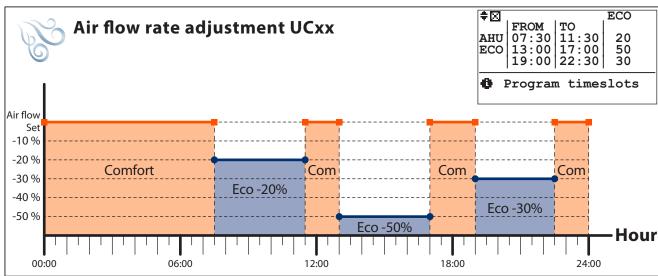


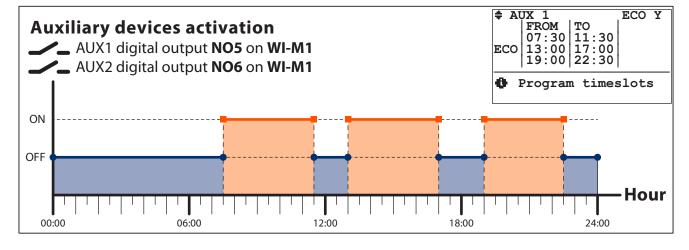




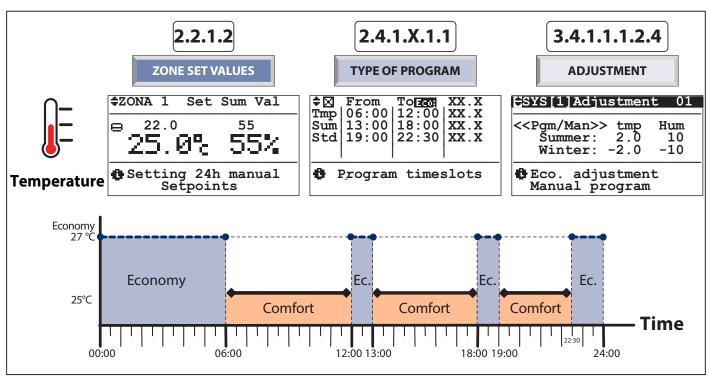


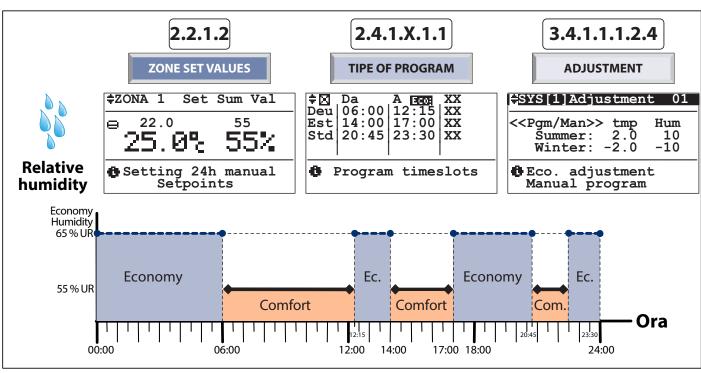






Example of manual operation (summer)





Example of weekly assignment

In the kitchen (zone 1) with the following Comfort set:

From MONDAY to FRIDAY:

22°C temperature between 06:00 ant 12:00

20°C temperature between 13:00 ant 18:00

20°C temperature between 19:00 ant 22:30

55% humidity: between 06:00 and 12:15

60% humidity: between 14:00 and 17:00

65% humidity: between 20:45 and 23:30

SATURDAY:

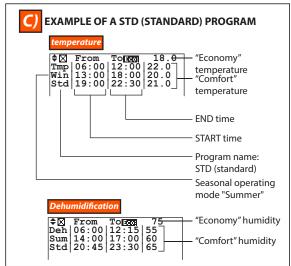
20°C temperature between 08:00 ant 12:00 20°C temperature between 13:00 ant 18:00 55% humidity: between 00:00 and 24:00

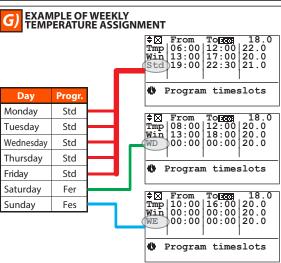
CLINIDAV

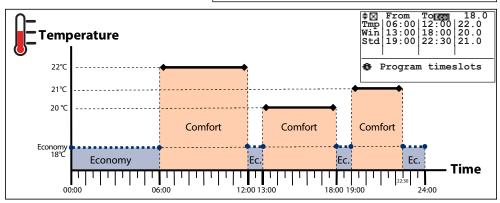
20°C temperature between 10:00 ant 16:00 55% humidity: between 00:00 and 24:00

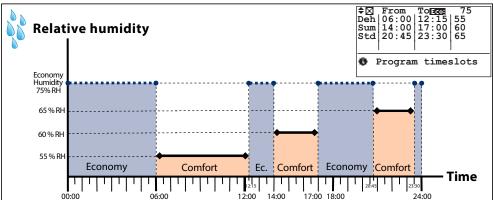
GUIDED PROCEDURE:

- A) If necessary, set the "Summer" mode -> refer to menu 3.1 "Set season"; this allows also setting the dehumidification function (this function is NOT available during the "Winter" season).
- B) If you haven't done it previously, you can assign a different name to "Zone 1" to simplify its identification (e.g. you can call it "kitchen well") -> refer to menu 3.4.1.1.2 "Zone Menu zone names".
- C) 1) Access menu 2.4.1.1 "Temperature / Dehumidification / Ventilation / Air renewal":
 - 2) Select the "**Temperature**" section -> menu 2.4.1.1.1 "Type of weekly program TPR/Week ZONE" will appear;
 - 3) Select "Type of program";
 - 4) Set the required temperature timeslots in the available programs ("Std", "WD", etc.) (for example set "**STD**" with the temperature timeslots that you wish from Monday to Friday; "**WD**" program for Saturday etc. (for the settings follow the indications provided in menu 2.4.1.1.1.1 "Programming").
- E) 1) Return to menu 2.4.1.1 "Temperature / Dehumidification / Ventilation / Air renewal";
 - 2) Select the "**dehumidification**" section -> menu 2.4.1.1.1 "Type of weekly program TPR/Week ZONE" will appear;
 - 3) Select "**Type of program**";
 - 4) Set the required humidity percentage in the various timeslots of the available programs ("Std", "WD", etc.).
- F) If necessary, set the timeslots for the "air renewal" and "ventilation" functions - where available.
- G) 1)Access menu 2.4.1.1.1 "Type of weekly program TPR/Week ZONE"; 2) Select "Zone weekly program"; 3) Associate the various programs for managing temperature and humidity (and if necessary ventilation and air renewal) to every day of the week. for example MON-FRI = "Std" for temperature and "Pg1" for humidity, SUN= "WE" For temperature and "Pg2" for humidity).









SETTINGS MENU SCREENSHOT

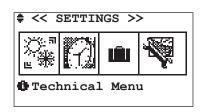


Table of movements			
Button	Screen	Screenshot	
Esc	0	MAIN	
•	2	SYSTEM/ZONE MENU	
•	3.1	SET SEASON	
•	0	MAIN	

Through menu 3 "Settings menu" you can:

menu 3.1 = Change season (SUMMER or WINTER)

menu 3.2 = Change/set the date and time

menu 3.3 = Set a time range within which the system shall remain off (for examples during holidays)

menu 3.4 = Change the system name (e.g., System 1 becomes: floor1), and zones (e.g.: Zone 1 becomes: Kitchen), and dehumidifiers or modify the system settings

ADDRESS 3 SETTINGS MENU/

3.1 Set Season Screenshot



Table of movements			
Button	Screen	shot	
Esc	0	MAIN	
•	3	SETTINGS MENU	
•	3.1.1	SEASON	
•	3.2	SET DATE-TIME	

ADDRESS 3 SETTINGS MENU / 3.1 SET SEASON /

3.1.1 SEASON SCREENSHOT

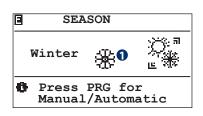


Table of movements		
Button	Screenshot	
Esc	3.1	SET SEASON
Prg	3.1.1.1	AUTOMATIC SEASON

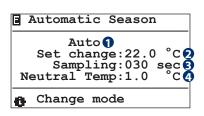
Table of variables		
No.	Description	
0	Set season: Set s	

In the SEASON section you can set the seasonal operating mode of the control unit. This setting is allowed only if the control unit is set to Winter/Summer operating mode and the digital input for the season is not configured (see screenshot 2.2.1.1.1).

This setting is not allowed if the control unit is configured in SLAVE mode (in a centralised system).

2 SETTINGS MENU

3.1.1.1 Automatic/Manual Season



The Man/Auto Freehold allows changing the season as follows: **Man:** the change of season is managed by the user through the Summer/Winter field

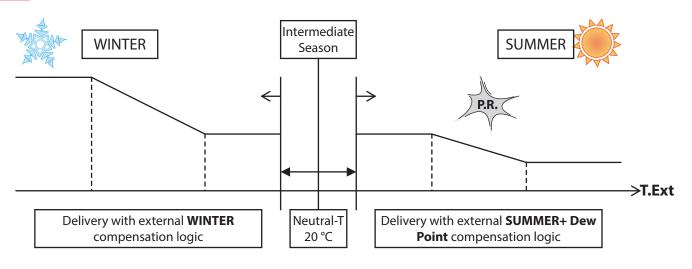
Auto: The change of season is managed by the control unit, according to set temperature. The control unit will decide whether to set the season to Summer or Winter and, according to the external temperature, whether the system must work in heating or in cooling mode.

Table of movements		
Button	Screenshot	
Esc	3.1.1	SEASON

Table	Table of variables		
No.	Description		
0	Set Auto/Manual Season		
2	External temperature value that determines the change of season		
8	Time elapsed between detections		
4	Differential beyond which a zone can request the change of season regardless of the external temperature.		

2, **3**, **4** variables are irrelevant if the change of season is set to MANUAL.

WARNING: This function is activated only for systems that can be hydraulically set to the automatic heating/cooling mode.



ADDRESS 3 SETTINGS MENU/

3.2 Set Date-Time Screenshot

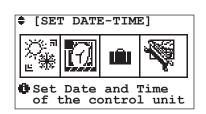
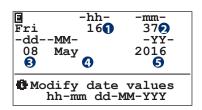


Table of movements		
Button	Screen	shot
Esc	0	MAIN
•	3.1	SET SEASON
•	3.2.1	DATE / TIME
•	3.3	SET HOLIDAYS

3.2.1 SET DATE-TIME SCREENSHOT



The "DATE/TIME" screenshot allows changing the date and time configured in the control unit.

N.B. This setting is not allowed if the control unit is configured in SLAVE mode (in a centralised system).

Table of movements		
Button	Screenshot	
Esc	3.2	SET DATE/TIME

Table of variables	
No.	Description
0	Hour value
2	Minute value
3	Day value
4	Month value
6	Year value

Address 3 Settings Menu /

3.3 Set Holidays Screenshot



Table of movements			
Button	Screen	shot	
Esc	0	MAIN	
•	3.2	SET DATE/TIME	
•	3.3.1	HOLIDAYS	
•	3.4	TECHNICAL MENU	

Address 3 Settings Menu / 3.3 Set Holidays /

3.3.1 SET HOLIDAYS SCREENSHOT

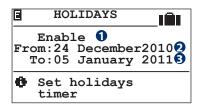


Table of movements		
Button	Screenshot	
Esc	3.3	SET HOLIDAYS

Table of variables		
No.	Description	
0	Holiday Settings Status Enabled/Disabled	
2	Holidays starting date	
8	Holidays ending date	

The "HOLIDAYS (Timer/Holidays)" section allows setting a time range within which the system remains off. The Holidays Timer can be **Enabled** or **Disabled**: When enabled, the control unit remains off in the time range between the two dates entered.

The time range provides for the following parameters:

- **FROM**: Date of the 1st day of absence dd-MM-YY (Day-Month-Year).
- **TO**: Date of the last day of absence dd-MM-YY (Day-Month-Year).

Address 3 Settings Menu /

3.4 Technical Menu Screenshot

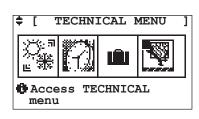


Table of movements			
Button	Screenshot		
Esc	0	MAIN	
•	3.3	SET HOLIDAYS	
•	3.4.1	PASSWORD	
•	3.4	SETTINGS MENU	

3.4.1 Password Screenshot

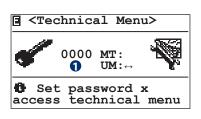


Table of movements			
Button	Screenshot		
Esc	3.4	TECHNICAL MENU	

Table of variables			
No.	Description		
0	Numerical field from entering the password		

By entering the correct password **[0123]** in the "TECHNICAL MENU" screenshot, you can access the menu that allows changing sensitive user details pertaining to the control unit settings, which are listed below.

ADDRESS 3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU /

3.4.1.1 Main Screenshot

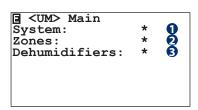


Table of movements			
Button	Screenshot		
Esc	3.4	TECHNICAL MENU	

Table	Table of variables			
No.	Description			
0	Access to system settings			
2	Access to the area for modifying zone names			
3	Access to the area for modifying dehumidifier names			

ADDRESS 3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN /

3.4.1.1.1 System Screenshot

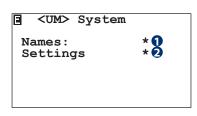


Table of movements		
Button	Screenshot	
Esc	3.4.1.1	MAIN

This section allows modifying the system name or the operating parameters.

Table of variables		
No.	Description	
0	Access to the area for modifying system names	
2	Access to system settings	

ADDRESS 3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN / 3.4.1.1.1 SYSTEM /

3.4.1.1.1 System Name Screenshot

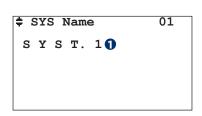


Table of movements			
on Screenshot	Button		
3.4.1.1.1 SYSTEM	Esc		
3.4.1.1.1 SYSTEM	Esc		

Table	Table of variables			
No.	Description			
0	Alphanumerical fields of the system names			

3.4.1.1.1.2 SETTINGS SCREENSHOT

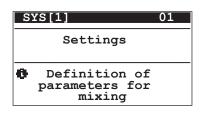


Table of movements			
Button	Screenshot		
Esc	3.4.1.1.1	SYSTEM	

In the event of multisystems, you must select the system on which to modify the parameters.

The 3.4.1.1.1.2 "Settings" section allows accessing and modifying the parameters that affect system operation. This is why these parameters must not be modified by unqualified personnel.

The Manufacturer cannot be held liable for system malfunctions caused by improper configuration of these parameters.

ADDRESS

3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN / 3.4.1.1.1 SYSTEM / 3.4.1.1.1.2 SETTINGS /

3.4.1.1.1.2.1

CLIMATE SCREENSHOT

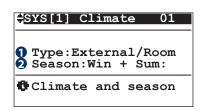


Table of movements			
Button	Screenshot		
•	3.4.1.1.2.7	SUPPLY LIMIT TEMPERATURE	
Esc	3.4.1.1.1.2	SETTINGS	
•	3.4.1.1.2.2	WINTER COMPENSATION	

Table of variables		
No.	Description	
0	Type of system climate control	
2	System seasonal operating mode	

Climate with external sensor

Only the external sensor is installed in this type of configuration.

Delivery temperatures calculated according to the external compensation curve. The system activates the boiler/chiller and the pump, adjusting the mixing valve to the required calculated temperature. Partial disconnection of the system is controlled by external controls by means of remote thermostats.

Season:

- Winter: Temperature control is activated only during the winter season.
- Winter + Summer Temperature control is activated during Winter + Summer.
- **Summer:** Temperature control is activated only during the summer season. Summer configuration requires extra caution on system external humidity control.

Climate with External + Room sensor

This type of configuration requires the installation of an external sensor and of at least one HT/H or HT room sensor.

Season:

- **Winter:** Temperature control is activated only during the winter season. The control unit will deactivate all the summer functions, dehumidifier control, etc. Compensation occurs considering the external temperature curve and (optional) room dynamic compensation.
- **Winter + Summer** Temperature control is activated inner Winter + Summer. Compensation occurs considering the seasonal external temperature curve and (optional) room dynamic compensation. During summer, in cooling mode, the logic will consider the limitation set by the room dew point.
- **Summer:** Temperature control is activated only during the summer season. The control unit will deactivate all the winter functions. Compensation occurs considering the external temperature curve and (optional) room dynamic compensation. The logic will consider the limitation set by the room dew point.

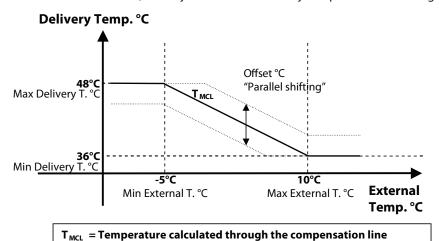
ADDRESS 3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN / 3.4.1.1.1 SYSTEM / 3.4.1.1.1.2 SETTINGS /

3.4.1.1.1.2.2 WINTER COMPENSATION SCREENSHOT

SYS[1] Win	nComp	01
Min TExt:-05.0 TDel:45.0	Max 20.0 22.0	Off 0.0
Winter (Compen	sation

Table of mo	vements	
Button	Screenshot	
•	3.4.1.1.2.1	CLIMATE
Esc	3.4.1.1.1.2	SETTINGS
•	3.4.1.1.2.3	SUMMER COMPENSATION

The parameters to be entered in the screenshot represent the characterisation of the compensation curve shown in the figure below. The control unit, will adjust the water delivery temperature according to the outdoor temperature.



Winter Compensation Line Reference Settings

	WALL	/CEILIN	IG	
Name	Min	Max	Name	Val
TExt	-5°C	10°C	Off.	0
Del.T	48°C	36°C		

	F	LOOR		
Name	Min	Max	Name	Val
TExt	-5°C	20°C	Off.	0
Del.T	45°C	22°C		

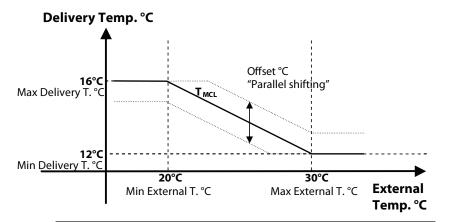
Address 3 Settings Menu / 3.4 Technical Menu / 3.4.1 Password Menu / 3.4.1.1 Main / 3.4.1.1.1 System / 3.4.1.1.1.2 Settings /

3.4.1.1.2.3 Summer Compensation Screenshot

SYS[1] St	ımComp	01
Min TExt:23.0 TDel:20.0	Max 32.0 15.0	Off 0.0
6 Summer Curve	Compen	sation

Table of movements		
Button	Screenshot	
•	3.4.1.1.2.2	WINTER COMPENSATION
Esc	3.4.1.1.1.2	SETTINGS
•	3.4.1.1.2.4	ADJUSTMENT

The parameters to be entered in the screenshot represent the characterisation of the compensation curve shown in the figure below. The control unit will adjust the water delivery temperature according to the outdoor temperature and to the dew point.



T_{MCL} = Temperature calculated through the compensation line

Summer Compensation Line Reference Settings

	WALL	/CEILIN	IG	
Name	Min	Max	Name	Val
TExt	20°C	30°C	Off.	0
Del.T	16°C	12°C		

	FI	LOOR		
Name	Min	Max	Name	Val
TExt	23°C	32°C	Off.	0
Del.T	20°C	15°C		

Address

3.4.1.1.2.4 Adjustment Screenshot

SYS[1]Adjustment 01
<pgm man="">> tmp Hum Summer: 2.0 1 102 Winter: -2.0 -102</pgm>
♠ Eco. adjustment Manual program

The parameters to be entered in the screenshot represent the adjustment to be added to the set values for temperature and humidity, in the economy section of the manual programming.

Table of movements		
Button	Screenshot	
•	3.4.1.1.2.3	SUMMER COMPENSATION
Esc	3.4.1.1.1.2	SETTINGS
•	3.4.1.1.2.5	TYPE OF STRUCTURE

Table	Table of variables		
No.	Description		
0	Differential for temperature setting in summer		
2	Differential for humidity setting in summer		
8	Differential for temperature setting in winter		
4	Differential for humidity setting in winter		

3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN / 3.4.1.1.1 SYSTEM / 3.4.1.1.1.2 **S**ETTINGS /

3.4.1.1.2.5 Type of Structure Screenshot

≑SY	S[1] DELTA STR.01
Del	ta Structure: 2.0
0	Type of screed

Table of movements			
Button	Screenshot		
•	3.4.1.1.2.4	ADJUSTMENT	
Esc	3.4.1.1.1.2	SETTINGS	
•	3.4.1.1.2.5	DYNAMIC COMPENSATION	

This screenshot allows entering a parameter that characterises the type of screed (wood, plasterboard, etc.). This parameter affects the system delivery temperature, which is calculated according to the thermal resistance of the structure used. Below are some indicative parameters according to the system structure:

	B!Klimax/Ceiling/Wall				
Thickness	Delta structure				
Between 3 and 3.5 cm	2	3			
Between 4 and 4.5 cm	3	4	2		
Between 5 and 6 cm 4 5	veen 5 and 6 cm 4 5 5				
Between 7 and 8 cm	n 7 and 8 cm 5 6				

ADDRESS 3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN / 3.4.1.1.1 SYSTEM / 3.4.1.1.1.2 SETTINGS /

3.4.1.1.2.6 Dynamic Compensation Screenshot

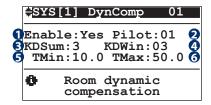


Table	Table of variables		
No.	Description		
0	Enable Dynamic Compensation		
2	Pilot Zone Value		
3	Summer compensation value		
4	Winter compensation value		
6	Minimum summer temperature		
6	Maximum winter temperature		

Table of movements				
Button	Screenshot			
•	3.4.1.1.2.5	TYPE OF STRUCTURE		
Esc	3.4.1.1.1.2	SETTINGS		
•	3.4.1.1.2.7	SUPPLY TEMPERATURE LIMIT		

In this section you can enable the dynamic compensation to calculate the delivery temperature by means of the **Enable** variable. Enabling the dynamic compensation provides for the allocation of a **pilot zone**, which affects the delivery temperature value obtained through the compensation line.

To identify this "Pilot Zone", the identification number of the zone, i.e., its position in the room sensor presence/type configuration. The value obtained from the difference between the required set and the measured temperature multiplied by the seasonal coefficient **KDEst/KDInv**, is added to the value of the temperature calculated through the compensation line (see cooling/heating curve T_{MCI}).

The value obtained will be valid if it falls within the "comfort" limit (limits due to the type of structure during winter and the dew point during summer) and the limits **TMin** for the summer value and **TMax** for the winter value.

Should the result not be valid, the calculated value will be the one set by the "comfort" limits (see delivery temperature calculation logic).

Address 3 Settings Menu / 3.4 Technical Menu / 3.4.1 Password Menu / 3.4.1.1 Main / 3.4.1.1.1 System / 3.4.1.1.1.2 Settings /

3.4.1.1.1.2.7 Supply Temperature Limit Screenshot

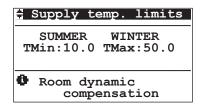


Table of movements			
Button	Screenshot		
•	3.4.1.1.2.6	DYNAMIC COMPENSATION	
Esc	3.4.1.1.1.2	SETTINGS	
•	3.4.1.1.2.1	CLIMATE	

lab	e of variables
No	Description
0	Minimum limit water temperature for mixed system
	for summer season
2	Maximum limit water temperature for mixed system
	for winter season

ADDRESS 3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN /

3.4.1.1.2 ZONE **S**CREENSHOT

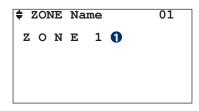


Table of movements			
Bu	tton	Screen	shot
(Esc	3.4.1.1	MAIN
Table of variables			
No.	Descri	ption	

Alphanumerical fields of the zone names

This section allows modifying the name (max 6 characters) of the zone.

ADDRESS 3 SETTINGS MENU / 3.4 TECHNICAL MENU / 3.4.1 PASSWORD MENU / 3.4.1.1 MAIN /

3.4.1.1.3 AHU SCREENSHOT

Table of movements			
Button	Screenshot		
Esc	3.4.1.1	MAIN	

Table of variables		
No.	Description	
0	Alphanumerical fields of the AHU names	

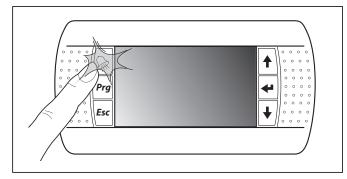
This section allows modifying the name (max 6 characters) of the AHU.

TROUBLESHOOTING

The red backlight on the "Alarm" button indicates that the control unit has detected a system failure or malfunction.

To display them, press the "Alarm" button: once pressed, the screenshot will display all the information regarding the error. In the event of several errors, you can scroll through them using the **UP-DOWN** buttons.

To return to the control unit menu press the "Alarm" button once again.



Below are described the possible screenshot explaining each error.

NB: When the problem is solved, the error will no longer be displayed when you access the alarm screenshot again. If everything in the control unit is working properly and you press the "Alarm" button, the screenshot indicating that there is no ongoing alarm shall appear.

Table D - Alarms

1) BOILER/HEAT PUMP ALARM

BOILER ALARM

Or

HEAT PUMP

Boiler/Heat Pump lock (Winter season). All the systems are disabled.

2) CHILLER/HEAT PUMP ALARM:

CHILLER ALARM

Or

HEAT PUMP

Chiller/Heat Pump lock (Summer season). All the systems are disabled.

3) ROOM SENSOR ALARM:

ZONE ALARM

ROOM PROBE

Enter to view

‡ZONE 1

Off Line:Yes Temp. :↓ Humidity:-

The presence of an error is indicated with \(\bullet\), while its absence with -. When the sensor is communicating, errors in detecting **Temp.** (Temperature)/**Humidity** may occur. The **Deh** (Dehumidifier) session indicates the presence of an alarm concerning the dehumidifier serving the zone. NB: All the functions corresponding to the type of error are deactivated.

4) SYSTEM ALARM — ROOM TEMPERATURE SENSOR/S:

Temperature Sensor/s Faulty-Disconnected

> Enter Display ALARM

NO ROOM TMP

SYSTEM: SYST[1]

This error occurs during winter when there is no temperature detection in the system, i.e., all the temperature sensors connected to the system are malfunctioning or disconnected.

NB: system Syst[1] is deactivated.

5) SYSTEM ALARM — ROOM TEMPERATURE/HUMIDITY SENSOR/S:

Temperature Sensor/s Faulty-Disconnected

> Enter Display ALARM

DEW POINT

SYSTEM: SYST[1]

This error occurs during summer when there is no temperature/humidity detection in the system, i.e., all the temperature/humidity sensors connected to the system are malfunctioning or disconnected.

NB: system **Syst[1]** is deactivated.

6) SYSTEM ALARM — EXTERNAL SENSOR:

÷

4

EXTERNAL TEMPERATURE

This error occurs when the control unit does not detect the external temperature signal. NB: all the systems continue to operate, considering, during winter mode, the external temperature value set to $+5^{\circ}$ C and the maximum set to $+30^{\circ}$ C

7) SYSTEM ALARM — DELIVERY SENSOR:

ALARM
 DELIVERY SENSOR

Enter Display

‡DELIVERY TEMPERATURE

SYSTEM: SYST[1]

This error occurs when the control unit does not detect the delivery temperature signal.

NB: system Syst[1] is deactivated

8) ROOM ANTIFREEZE:

ROOM ANTIFREEZE

Enter Display

ANTIFREEZE

SYSTEM: SYST[1]

This error occurs when, during winter, the temperature of a zone drops below 5°C (settable). All the zones are activated. The alarm is reset when the temperature in all the zones exceeds 6°C (settable)

9) THERMAL ALARM:

ALARM THERMAL

Enter Display

THERMAL

SYSTEM: SYST[1]

This occurs when, during winter, the delivery sensor detects a temperature of 45°C (settable) for a certain amount of time while the system is off

10) WI-Z UNIT ALARM:

Enter Display

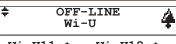
#Exp OffLine Wi- 1
Wi-Z11:# Wi-Z12:#

4

Wi-Z13: Wi-Z14: Wi-Z16: Wi-Z16: Wi-Z16: Wi-Z16: Wi-Z18: 4

In the event of failed communication, a bell will appear next to the expansion

11) WI-U UNIT ALARM:



In the event of failed communication, a bell will appear next to the expansion

12) MAIN UNIT ALARM:

OFF-LINE Main unit

Wi-M1: -Yes Wi-S2: **+**Yes Wi-M1: **+**Yes Wi-S2: **+**Yes In the event of failed communication, a bell will appear next to the control unit (provided that it is configured)

■YES = Main unit OFFLINE

-YES = Main unit ONLINE

-NO = Main unit not configured

13) MASTER UNIT ALARM:

MASTER OFFLINE

This alarm occurs only in the WI.NET control units in the event there is no communication with the WI.MASTER.NET board

14) UxBUS UNIT ALARM:

	-LINE JS-xx 4
UC-11:-No	UC-31:-No
UC-12:-No	UC-32:-No
UC-21:-No	UC-41:#Yes

In the event of failed communication, a bell will appear next to the UxBUS-xx unit (provided that it is configured)

≜YES = UxBUS OFFLINE

-YES = UxBUS ONLINE

-NO = UxBUS not configured

15) MANUAL INTEGRATION RESET:

UC-42:-No

#Manual Reset:No Integration							
U-1 U-2 U-3 U-4 Yes No No No							
U-5 U-6 U-7 U-8 No No No No							

In the event of a Ventilation/Air Renewal block in one of the AHUs, it allows resetting the integration function without waiting for restoring the conditions

16) UC ALARM:

UC-22:-No

Alarms UC- 0 Gas low pressure:-Gas high press. :-Compr.high temp.:-Bus communicat. :-Pres. + next Alm Gas low pressure: Low pressure alarm on the refrigerating circuit (Unit of coolant discharge).(*)

(*) Gas Missing in case of UAP 200

Gas high press.: High pressure alarm on the refrigerating circuit.

Compr. high temp: High temperature alarm on compressor.

Bus communicat.: BUS communication alarm.

Alarms UC- 0 Defrosting: High Temp.water: Fan 1: Fan 2: Pres. +1 next Alm

<u>Defrosting</u>: Ice presence alarm.

High Temp. water: High temperature alarm on water.(*)

(*)Water Low Temp in case of UAP 200

Fan 1: Fan input alarm. Fan 2: Fan expulsion alarm.

Errors/Faults UxBUS

Enter Display

Allarms UC- 0 Overload Evap.:b

Pres. #1 next Alm

Overload Evap.: It shows the alarm for the evaporator overload in DA units. (*)

(*) on DA unit

Allarms UC- 0 Gas Low Pressure.:b

Pres. +1 next Alm

Gas Low Pressure: It shows the gas low pressure due to lack of ventilation.(*)

(*) on UAP 200 unit

Res.All. UC-i B U-1 11-2 **U-3** U-4Ι U-8 U-6 U-7 บ-5

On this window you can reset the alarms of the DA units, by enabling the function on the top right. The input is sent by changing the value for each unit.

(*) on DA unit

17) UxBUS BLOCK ALARM: **Supply sensor:** Failure of the flow sensor (NTC1 sensor). # Errors/Faults UC- 0 **Evaporation sensor:** Failure of the evaporator sensor Supply sensor: -(NTC2 sensor). Evaporation sensor: -**Undercool. sensor:** Failure of the subcooling sensor C2 Undercool. sensor:-Overheating sensor:-(NTC6 sensor). **Overheating sensor:** Failure of the overheating sensor Pres. + next Alm (NTC4 sensor). **Undercooling sens.** Failure of the subcooling sensor C1 Block Alarm # Errors/Faults UC-0 (NTC5 sensor). UxBUS Water temp. sensor: Failure of the water temperature Undercooling sens.:-Water temp. sensor:-Compr.temp.sensor:-Enter to view sensor (NTC7 sensor). **Compr. temp. sensor:** Failure of the compressor Outdoor.temp.sens.:temperature sensor (NTC3 sensor). Pres. +1 next Alm Outdoor. temp. sens.: Failure of the external temperature sensor (NTC8 sensor). **Pressure transduc.:** Failure of cooling transducer # Errors/Faults UC-0 pressure.(*) Pressure transduc.:-(*) Capacitor probe (in case of UAP 200) Press. transduc.A:-Press. transduc.B:-**Press. transduc.A:** Failure of differential pressure sensor in the renewal area. **Press. transduc.B:** Failure of differential pressure sensor Pres. +1 next Alm in the expulsion area.

18) FAILURE AQ SENSOR ALARM:

AQ-1:- AQ-5:-AQ-2:- AQ-6:-AQ-3:- AQ-7:-AQ-4:- AQ-8:-

AQ out of order

In this screen through the display of the alarm, you can see if the (configured) AQ sensor, not noticing a correct value, shows an error.



- = Configured sensor is running or the sensor is not configured





