



PCUS /PCUSM

Thermostat

User manual

Installation, use and maintenance manual



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ATTENTION

ATTENTION: the equipment must be installed in accordance with the rules, make sure that the power supply is disconnected.

ATTENTION: the electrical connections, the installation of the heat recovery units and their accessories must be carried out only by persons in possession of the technical-professional requirements to qualify for the installation, transformation, expansion and maintenance of the systems and capable of to verify the same for the purposes of safety and functionality. In particular, for the electrical connections, the following checks are required:

- Measurement of the insulation resistance of the electrical system
- Continuity test of the protective conductors.

ATTENTION: before carrying out any intervention, equip yourself with suitable personal protective equipment.

ATTENTION: Touching live components can cause a dangerous electric shock.

ATTENTION: also consult the installation manual supplied with the unit.



Before starting any operation, make sure that the general power supply line is disconnected.

- The electrical connections to the control panels must be made by specialized personnel according to the diagrams provided.
- Make sure that the voltage and frequency shown on the plate
- correspond to those of the electrical connection line.
- The use of adapters, multiple sockets and / or extensions is not allowed for the general power supply of the recuperator.

Make the connection with cables with a section suitable for the power used and in compliance with local regulations. Their size must in any case be such as to achieve a voltage drop in the starting phase of less than 3% of the nominal one

- It is the installer's duty to install the power supply disconnecter as close as possible to the unit and what is necessary for the protection of the electrical parts.
- Connect the unit to an effective earth socket, using the appropriate screw inserted in the unit itself.

1. COMPOSITION OF PCUS CONTROLLER

1.1 PCUS UNIT

The PCUS control system consists of two parts, an LCD display and setting and a control unit which contains the interface relays to be connected to the devices to be controlled, the connection inputs for the temperature probes. The PCUSM system differs from the PCUS in the addition of a Modbus RTU part.

2. PCUS REMOTE CONTROL INSTALLATION AND OPERATION

2.1 INSTALLATION OF PCUS REMOTE CONTROL

To secure the display to the electrical box:

- release the front plate of the control, gently acting on the interlocking fasteners placed on the lower part
- fix the base of the controller to the electrical box with two screws
- reposition the front plate

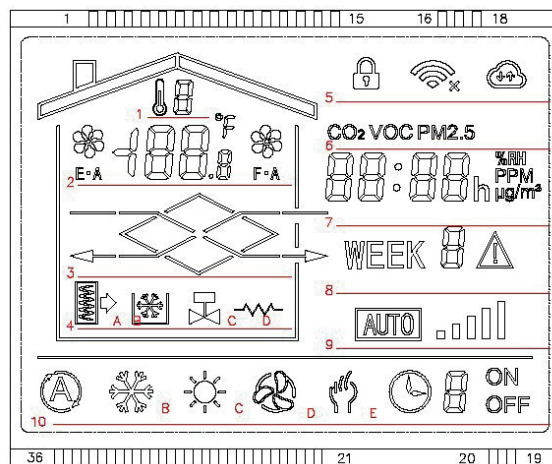
The control unit is contained in the electrical box on the machine

2.2 USER INTERFACE OF PCUS REMOTE CONTROL



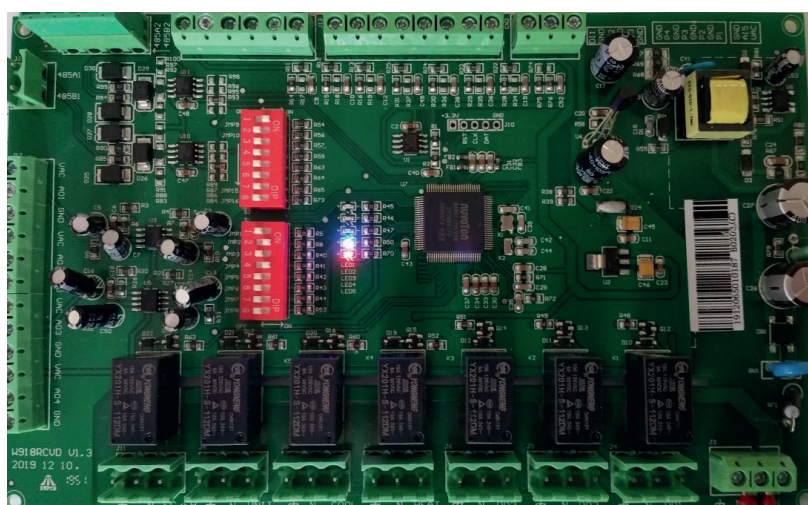
1. On/Off Button
2. Mode Button
3. Ventilation Button
4. + Button
5. - Button
6. Ventilation Symbol Area

Graphical Area



- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Probe indicator displayed on line 2 2. Room temperature and fan icons display 3. Visualization of recuperator with air flows 4. Icon 4A indicating dirty filters Icon 4B active antifreeze signal
Icon 4C signaling Water valve on
4D icon indicating Electric heater On | <ol style="list-style-type: none"> 8. Day of the week 9. Fan current value bars 10. 10A icon indicating automatic temperature adjustment 10B icon indicating cold temperature adjustment 10C icon indicating hot temperature adjustment 10D icon indication of active ventilation only 10E icon indicating active time bands with indication of the current active band |
|--|--|

2.3 CONTROL UNIT OF PCUS



2.4 TECHNICAL DATA

Power Supply	230V +/-10%
Power	<5W
Load current	10A (resistive load)
Display Dimensions	130x90x25 mm
Display Installation	Wall mounted on box size 503
Power unit dimensions	185x120x255 mm
Max distance Power Unit Display	15 m max (variable value in relation to the installation conditions)
Control board display connection cable (not supplied)	AWG22 4 conductors shielded

2.5 FUNCTION OF THE KEYS

The On / Off button (1) allows the unit to be switched on / off. The Mode / Menu key (2) allows you to switch between heating / cooling operating mode if this switch is envisaged, together with the + key (5) it allows you to access the user parameters.

The ventilation key (3) allows you to select between the min / med / max speeds of the fans with the unit on, if pressed for a long time it allows you to activate the operation at time bands. The - key (4) and the + key (5) allow you to modify the temperature set point.

2.6 ELECTRICAL CONNECTION

Refer to the attached connection diagram.

2.7 PCUS DESCRIPTION

The PCUS control system is a thermostat capable of controlling three-speed ventilation units, or with EC fans, 230V on / off solenoid valves or modulating valves with 0-10Vdc signal and 230V on / off dampers..

It is also equipped with an internal clock with the possibility of programming four switching on / off time bands, setting the set point and fan speed for three different types of time bands: weekly Monday-Friday (days 1 to 5) called Week 1, Saturday (day 6) called Week 6 and Sunday (day 7) called Week 7.

The PCUS control unit can connect up to four temperature probes NTC 10k type external temperature probes to manage the various functions.

There is also the possibility of an additional 0-10V analog probe (CO2 or RH) to modulate the ventilation according to an adjustable set point for the measured quantity.

The operation of the ventilation is adjusted manually with the appropriate ventilation key (3) or automatically if the operation mode with external probe is selected.

The heating / cooling valves are activated, according to the chosen operating mode, according to the difference between the set point and the chosen control probe, which can be the room temperature probe or the supply temperature probe. In both cooling and heating mode and provide reliable and accurate operation in all conditions all year round.

2.8 OPERATION DESCRIPTION

An important feature of the PCUS system is its adaptability to various possible solutions through the destination programming of hardware inputs / outputs through the use of dip switches and parameters at the manufacturer level. There is a user parameter menu accessible for changing the various set points.

The manufacturer parameters are set directly in the factory in the unit construction phase and must not be changed under any circumstances since incorrect programming does not allow the unit to function properly.

In normal operation, the fans operate at low, medium, high speed and the transition from one speed to another occurs by pressing the ventilation button (3).

The indication of the active speed is shown by the vertical bars of line 9, where two bars on indicate low speed, three bars on indicate medium speed, five bars on indicate high speed.

The temperature is adjusted through the use of active devices (if any) such as water valves or electric resistances. The modification of the set point is possible with the + and - keys and is automatically saved after a few seconds of waiting without having pressed any key.

It is possible to adjust the temperature in hot mode, in cold mode or automatically in accordance with the mode chosen with the Mode key as long as this adjustment is appropriately configured at the manufacturer level.

If at the manufacturer level only heating mode adjustment is envisaged, this mode will be fixed with the 10C icon always active and pressing the Mode key will have no effect.

Similarly, if at the manufacturer level only adjustment in cold mode is provided, the 10C icon will be permanently active and pressing the Mode key will have no effect.

Finally, if no temperature adjustment is selected at the manufacturer level, none of the icons 10 A, 10B, 10C will be active and pressing the Mode key will have no effect.

In the graphic area identified by line 3 in the figure you can see the recovery section represented by the central diamond, the flashing arrows indicate the status of the fans in operation.

This line is noteworthy because there can be different signals on unit operation: if only the recovery section without the arrows is visible, it means that the fans are not in operation (typically this situation occurs when the unit is equipped with shutters and at start there is the shutter opening waiting time during which the fans are off); if, on the other hand, only the arrows are visible without the recovery section, it means that the bypass of the recovery section has been activated (typically this situation occurs when the free cooling or free heating operation is active if provided for in the unit).

Also in this line, the activation of the recovery defrost function (if active) is highlighted, detectable by the fact that the recovery section starts flashing.

The icons of the exhaust air fan (identified by E A) and fresh air (identified by F A) and the temperature of the ambient probe if the unit is equipped with this probe are visible in the graphic area indicated by line 2.

In the graphic area identified by line 4 there are four icons that indicate respectively: dirty filters signal, active antifreeze signal, active water valve signal, active heater signal.

These signals will be visible when the unit is equipped with these devices and if one or more of them are active. Lines 7 and 8 display the current time and day of the week respectively.

2.9 DISPLAY OF TEMPERATURE VALUES

By pressing and holding the On / Off key, the number of the probe currently displayed is displayed on line 1. Keeping the key pressed, the various probes connected are scrolled in sequence.

When the key is released, after a few seconds the display returns to the default probe which is the room temperature probe.

If the unit is not equipped with temperature probes, there will be no temperature displayed in line 1.

If the probe is faulty or disconnected, the message Ex is displayed in line 1 where x takes on the value of the faulty probe. When normal probe operation is restored, the error disappears automatically.

The probes, if present on the unit, are identified as follows:

- 1 = Ambient air temperature probe
- 2 = Outside air temperature probe
- 5 = Inlet air temperature probe
- 6 = Expelled air temperature probe

2.10 CHANGE TIME AND CURRENT DAY

By pressing at length the M key, you enter the hour and day of week modification mode.

When you enter the change mode, the minute digits begin to flash, change them with the + and - keys.

By pressing the M key you can change the time and then the day.

- By continuing to enter the time slots settings menu.
- There are two daily time bands identified with numbers from 1 to 4 with a weekly program, where you can set the time bands for the period Monday-Friday, for Saturday and for Sunday (therefore it is not possible to have different working days).

2.11 TIME BANDS SETTING

To set the time bands, enter the time and day setting menu. By continuing to set the time bands.

The setting is done in sequence and the time bands are set for week 1 which identifies the days from Monday to Friday, week 6 which identifies Saturday and week 7 which identifies Sunday.

The following can be selected: ventilation speed, temperature set point and time of band activation.

To activate / deactivate the time programming, long press the ventilation button

2.12 EXAMPLE OF PROGRAMMING TIME BANDS

This example illustrates step by step the procedure to set the unit to switch on from 8.00 to 12.00 and from 13.30 to 17.30 with different speed and temperature sets for the two time bands from Monday to Friday and to leave the unit off on Saturday. and the Sunday.

1. Long press the Mode key until the current hour and day are displayed, with the minutes flashing.
2. Briefly press the Mode key several times until you reach the setting screen of the first time band identified by the wording week 1 and the number 1 in the last line of the display.
3. At this point, the word ON or OFF is flashing at the bottom right, which represents the desired action for turning the unit on / off. To change it, simply press the + or - keys while it flashes. Set the word ON for now.
4. By pressing the M key once, the figure in the first line at the top starts flashing, which represents the desired speed for the fan (1 = low, 2 = medium, 3 = high), with key + set the desired speed (in this example 3, i.e. high speed).
5. By pressing the Mode key twice, the temperature indication that represents the desired temperature set starts to flash, you can change it with the + or - keys (in this example 22.0 ° C).
6. Press the Mode key again to switch to the minutes indication, which can be set with the + or - keys.
7. Press the Mode key again to switch to the hour minutes, which can be set with the + or - keys.
8. At this point, band 1 has been set, valid for the days from Monday to Friday, in the photo beside you can see how it looks for the example shown



9. Press the Mode key again to go to time band 2. Leaving the desired action on for now, proceed with setting the switch-off time which in our example is 12.00, ignoring the setting of the speed and temperature. The photo below shows what is indicated in this point



10. Press the Mode key to move to the setting of band 3 and select the ON value as the desired action, the desired set at 20.0 ° C and the low speed as speed. The photo below shows what is indicated in this point



11. Press the Mode key to move to setting band 4. Leaving the desired action to On for now, proceed with setting the switch-off time which in our example is 5.30 pm, ignoring the setting of the speed values and temperature. The photo below shows what is indicated in this point



12. Press the Mode key to switch to the setting of band 1 on Saturday identified by the wording Week 6 and set the desired action to OFF

13. By pressing the Mode key again, you move to setting band 2 on Saturday identified by the wording Week 6 and set the desired action to OFF

14. By pressing the Mode button again, you move to setting band 3 on Saturday identified by the wording Week 6 and set the desired action to OFF

15. By pressing the Mode button again, you move to setting the band 4 on Saturday identified by the wording Week 6 and set the desired action to OFF

16. By pressing the Mode button again, you move to setting band 1 on Sunday identified by the word Week 7 and set the desired action to OFF

17. By pressing the Mode button again, you move to setting band 2 on Sunday identified by the word Week 7 and set the desired action to OFF

18. By pressing the Mode key again, you move to setting band 3 on Sunday identified by the wording Week 7 and set the desired action to OFF

19. By pressing the Mode key again, you can move to setting band 4 on Sunday identified by the wording Week 7 and set the desired action to OFF

20. Press the Mode key again to exit the time band setting procedure and return to the main screen

21. Now go back to the time bands setting procedure by pressing the Mode button for a long time and go to Week 1 band 2 confirming all the previously set values by pressing the Mode button several times

22. Change the setting of the desired action from ON to OFF with the + or - keys.

The photo below shows what is indicated in this point



23. Continue with the Mode key until you reach band 4 of Week 11 confirming all the values previously set by pressing the Mode key several times

24. Change the setting of the desired action from ON to OFF with the + or - keys. The photo below shows what is indicated in this point



25. Continue by pressing the Mode key repeatedly until you exit the time bands setting procedure, which is now complete.

By way of summary, below are the photos of the four time bands for the days from Monday to Friday as set up to now.

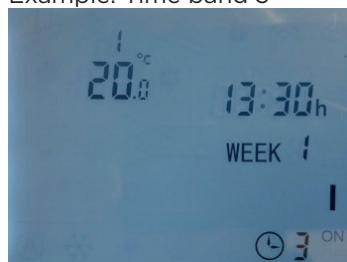
Example: Time band 1



Example: Time band 2



Example: Time band 3



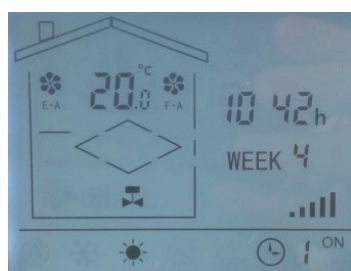
Example: Time band 4



To activate the operation of the time bands, press and hold the ventilation button until the clock icon with the number of the currently active time band appears in the lower part of the display.

The photo below illustrates the operation with time band 1 active.

To disable the operation of the time bands and return to normal operation, press the ventilation button until the clock icon disappears.



2.13 USER PARAMETERS

Press at length the M and + key until the first parameter 0.0 is displayed and then with the M key pressed again you pass to the next parameter, if you press it at length you pass to the next menu.

You can modify the parameters with the + and - keys and then press M to confirm the values.

The user parameters table is shown below.

Meaning			
U0.0	Temperature set point (°C)	min 15	max 35
U0.1	Temperature differential (°C)	min 0	max 5
U0.2	Antifreeze set point (°C)	min -10	max 5
U0.3	Antifreeze differential (°C)	min 0	max 10
U0.4	Set Point Defrost (°C)	min -10	max 5
U0.5	Defrost differential (°C)	min 1	max 10
U0.5	Analog regulation band for heating and cooling (°C)	min 0	max 10
U0.7	Delay on fans (s)	min 0	max 180
U0.8	Shut-off delay (s)	min 0	max 180
U0.9	Defrost type	0 - 7 nobody	1 - speed variation 2 - recirculation
U1.0	CO2 sensor range (ppm)	min 0	max 2000
U1.1	RH sensor range (%)	min 20	max 90
U1.2	VOC sensor range	min 0	max 50
U1.3	PM2.5 sensor range	min 0	max 900
U1.4	CO2 Adjustment band	400	
U1.5	RH Adjustment band	min 1	max 10
U1.6	VOC Adjustment band	min 10	max 10
U1.7	PM2.5 Adjustment band	min 200	max 200
U1.8	FAN adjustment band in AUTO mode (V)	min 1	max 10

3. LOGICAL DESCRIPTION OF THE PCUS REMOTE CONTROL

3.1 VENTILATION REGULATION

The PCUS control card is suitable for regulating units with standard three-speed fans or as an alternative to regulating the ventilation of units with EC fans.

The configuration of the type of fans is fixed at the manufacturer parameter level. In the case of standard three-speed fans, three 230V digital outputs are used, while in the case of EC fans, two 0-10V analog outputs are used. For standard fans, the ventilation is adjusted by pressing the ventilation button which allows the passage from one speed to the next.

For EC fans, regulation is always carried out by pressing the ventilation button, which however correspond to different voltages that correspond to the minimum, average and maximum voltage that can be set in the manufacturer parameters.

These values are by default 1V and 10V, i.e. the minimum speed corresponds to 1V, the average to 5.5V and the maximum to 10V.

The minimum and maximum values of the supply fan correspond to parameters L0.9 and L0.A of the manufacturer parameters, while the minimum and maximum values of the return fan correspond to parameters L0.B and L0.C of the manufacturer parameters. If it is necessary to have different voltage values with the same speed selected, it is possible to modify the minimum and maximum values of one of the two fans and the speed values will adapt according to these limits according to the following rule: low speed = V minimum medium speed = (V minimum + V maximum) / 2 high speed = V maximum

For EC fans it is also possible to adjust the operation in accordance with an external analogue CO₂, RH, VOC probe equipped with a 0-10V output. Depending on the type of sensor used, it is possible to set the reference set value and a regulation band within which the ventilation moves within the minimum and maximum values set.

3.2 TEMPERATURE REGULATION

Temperature regulation. if there are active devices, such as water valve or electric heater, it is activated by setting the desired set point with the + or - keys.

The control probe is by default the room temperature probe, however it is possible to select the inlet air probe by modifying the manufacturer parameter L0.6 from 0 to 1.

The adjustment can be: only hot, only cold, hot and cold.

In the case of heating only adjustment, the 10C icon will be lit and the actual activation of the water valve or the electric heating element will be highlighted by the lighting of icons 4C or 4D.

In the case of cooling only regulation, the 10B icon will be lit and the actual activation of the cooling water valve will be highlighted by the 4C icon lighting up.

In the case of hot and cold adjustment, the 10 ° icon will light up and the adjustment described in the paragraphs above will be active at the same time for only hot and cold only adjustment.

In the case of regulation with mixed valve, it is not possible to regulate hot and cold at the same time, but only hot and cold only settings are manually selectable.

The temperature regulation applies by default an energy saving logic that takes into account the external temperature and therefore, if this allows it, the water valve or the electric heater is not activated if the external air temperature conditions do not require it.

It is possible to exclude the influence of the external air temperature from the hot regulation logic by modifying the manufacturer parameter L0.3 by setting it to 1.

It is possible to exclude the influence of the external air temperature from the cold regulation logic by modifying the manufacturer parameter L0.4 by setting it to 1.

In the case of temperature regulation with modulating water valve (V3M) it is possible to define the temperature regulation band with respect to the set with user parameter U0.6.

For example, with U0.6 = 2 °C, the maximum opening of the water valve will occur when the difference between the desired set point and the detected temperature is equal to or greater than this value, while it acts in a proportional way to this difference when it is included. within 2 °C.

3.3 OPERATION OF HEAT RECOVERY DEFROST

The recovery defrost action is possible if the unit is equipped with the expulsion temperature probe.

If the expulsion temperature drops below parameter U0.4, the defrosting action is activated and ends when the expulsion temperature rises above U0.4 + U0.5.

The defrost action can take place in three ways that can be set in parameter U0.9.

U0.9 = 1 speed reduction of the EC fans

U0.9 = 2 closing of the inlet / outlet air dampers and opening of recirculation damper (only with unit equipped with these dampers)

U0.9 = 4 activation of the electrical preheating resistance.

3.4 ANTIFREEZE OPERATION

The anti-freeze protection function is intended to prevent the formation of ice on the water coil (if the unit is equipped with a water coil).

The function is activated when the contact opens on a digital input suitably configured by manufacturer parameters. If digital input 2 is used, set L1.3 = 2 and L1.4 = 1, if digital input 3 is used, L1.5 = 2 and L1.6 = 1 must be set. When the protection intervenes, the fans are turned off, the air inlet / outlet shutters closed and the water valve is activated, whether it is on / off or modulating (if heating mode is selected).

3.5 AIR INLET / OUTLET DAMPER OPERATION

The PCUS control is able to operate air inlet / outlet dampers equipped with on / off servocontrol. When the unit is switched on, the shutter opening signal is activated and after a settable waiting time the fans are switched on. The waiting time can be set by user parameter U0.7 in an admissible range between 0 and 180 seconds.

3.6 FREE HEATING / COOLING LOGIC OPERATION

The operating logic provides for the activation of an on / off type output for the activation of the recovery bypass. The activation of this output occurs when the external air conditions allow it. If the outside air temperature is higher than the desired set and the room temperature is lower than the desired set, the free heating function is activated. If the outside air temperature is lower than the desired set and the ambient temperature is higher than the desired set, the free cooling function is activated.

To avoid oscillations of the bypass there is a differential defined by parameter U0.2 which by default is set at +1 °C.

3.7 DIRTY FILTER INLET SIGNAL

The PCUS control has an on / off type input for the dirty filter signal. The preset input is DI1 and by default the dirty filters function is activated when the input contact is closed.

The manufacturer parameter L1.1 equal to 1 activates the dirty filters function, while the parameter L1.2 allows to invert the logic of the signal.

L1.2 equal to 0 causes the dirty filters signal to be activated when the contact is closed, L1.2 par to 1 causes the signal to be activated when the contact is opened.

The activation of the dirty filters function activates the signal given by the 4th icon, however by default it does not perform any action allowing normal operation of the fans, if instead you want the dirty filters functionality to stop the ventilation, the manufacturer parameter must be set to 1 L0.2.

3.8 REMOTE ON/OFF SIGNAL

Remote switching on / off of the unit with the help of an external switch is possible using the DI2 input by setting the manufacturer parameter L1.3 = 1, while the manufacturer parameter L1.4 inverts the contact logic. With L1.4 = 0 the ignition of the unit occurs with closed contact, while with L1.4 = 1 the ignition occurs with open contact. If remote on / off is selected, it overrides the on / off button on the display, ie if the unit is turned off from the display it turns on again immediately, and vice versa if it is turned on it turns off immediately.

3.9 EXTERNAL ALARM INPUT

The external alarm function is possible with the aid of a digital input (DI3), which allows the immediate stop of the ventilation. Use only a clean contact for this function, which can be activated by setting the manufacturer parameter L1.5 = 3.

3.10 ALARM OR UNIT SIGNAL OUTPUT ON

It is possible to use a digital voltage output (230V ac) to interface with external devices for two possible functions of alarm present or unit on. For example, to use output DO1 as an alarm present, the manufacturer parameter L2.1 = 4 must be set and L2.2 allows the logic to be inverted, with L2.2 = 0 the output will be active if there are no alarms and will be disabled if there are alarms while with L2.1 =

1 the output will be active if there are alarms and deactivate with no alarms.

If the DO1 output is already intended for another use, the same functionality is possible with one of the other outputs on the controller. Again as an example, in order to use the DO1 output as an On unit, parameter L2.1 = 3 must be set and L2.2 allows you to invert the operating logic as specified for the example above.

3.11 NOTE ON MANUFACTURER PARAMETERS

The manufacturer parameters allow to modify the functionality of all the inputs and outputs of the device and if not correctly set they can compromise the regular operation of the unit, for this reason it is absolutely necessary to avoid their modification other than what is not expressly reported here.

4. RTU MODBUS

4.1 INTRODUCTION

The PCUS control board is, in the PCUSM version, equipped with a Modbus RTU port which allows an external supervision system to communicate with the controller. The connection is two-wire and the use of twisted and shielded 2x0.5 mmq cable is recommended.

The transmission port is able to communicate with the following settings: 38.400 bps, N, 8, 1 (fixed parameters that cannot be modified).

Below is the list of variables available through the modbus port, the variables are of the holding register type and therefore function codes 0x03, 0x06 are supported.

CODE	BIT	ACCESS	NAME	MEANING	RANGE
40001		R/W	L0.9	Minimum supply fan speed	1..9 (V)
40002		R/W	L0.a	Maximum supply fan speed	da L0.9..10 (V)
40003		R/W	L0.b	Minimum return air fan speed	1..9 (V)
40004		R/W	L0.c	Maximum return air fan speed	da L0.9..10 (V)
40016		R/W	U0.0	Set temperature	15,0..35,0 (°C)*
40017		R/W	U0.1	Temperature differential	0,0..5,0 (°C)*
40018		R/W	U0.2	Antifreeze set	-10..+5 °C
40019		R/W	U0.3	Antifreeze differential	0..10 °C
40020		R/W	U0.4	Defrost set	-10..5+5 °C
40021		R/W	U0.5	Defrost differential	1..10°C
40022		R/W	U0.6	Hot / Cold proportional band	-10+10 °C
40023		R/W		Fan speed set	0 = low speed, 1 = medium speed, 2 = high speed, 3 = Auto (with external probe)
40025		R		Dip switch position	
				Ambient temperature (if present)	(°C)*
40027		R	AI2	External temperature (if present)	(°C)*
40028		R	AI3	Inlet temperature (if present)	(°C)*
40029		R	AI4	Exhaust temperature (if present)	(°C)*
40030	0	R		AI1 alarm	
	1	R		AI2 alarm	
	2	R		AI3 alarm	
	3	R		AI4 alarm	
	4	R		AI5 alarm	
	5	R		Alarm P1	
	6	R		Alarm P2	
	7	R	Filter status	Dirty filters alarm	
40031		R		P1 temperature	
40032		R		P2 temperature	
40035		R/W		Set CO2	Ppm
40044		R/W		On / Off from modbus	0=off, 1= on

* Values expressed without comma, for example 20.0 ° C will be read as 200.

5. DIP SWITCH

5.1 DIP SWITCH POSITIONING

There are sixteen DIP switches on the control board.

Generally the position of the DIP switches is set during the unit construction phase and therefore it is not necessary to change the assigned positions.

If it is necessary to change the position of one or more DIP switches, it is imperative to disconnect the power supply to the electronic board before proceeding with the modification.

The following table shows the meaning of the DIP switches.

NUMBER	MEANING	VALUE
1	Unit with three speed fans	0 = NO 1 = YES
2	Unit with EC fans	0 = NO 1 = YES
3	Type of antifreeze	0 = Digital - 1 = Analogic
4	Heating/cooling valves	0 = On/Off / 1 = Modulating
5	Heating type	0 = Water valve / 1 = Electric heater
6	Air inlet presence / Expulsion dampers	0 = NO 1 = YES
7	Presence of FH/FC damper	0 = NO 1 = YES
8	AI5 sensor presence	0 = NO 1 = YES
set-16	Modbus address (PCUSM reserved)	From 1 to 244 (least significant 9-bit DIP switch, most significant 16-bit DIP switch) / Example: 00000001 address 1

Due to LENNOX EMEA ongoing commitment to quality, the specifications, ratings and dimensions are subject to change without notice and without incurring liability.

Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.

Installation and service must be performed by a qualified installer and servicing agency.



brand of LENNOX EMEA

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