1C.51

DIGITAL TOUCH CHRONOTHERMOSTAT





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TECHNICAL DATA

Power supply: 2 Alkaline Batteries 1.5 V AAA

WINTER temperature range: (+5...+37)°C

SUMMER temperature range: (+5...+37)°C MANUAL temperature range: (+5...+37)°C

FROST protection temperature range: (+2...+8)°C

Temperature differential ΔT: (0.1...0.9)°C Internal sensor accuracy: +/- 0.5°C

Minimum programming interval: 1 hour

Degree protection: IP20

Output: relay 1 CO (volt-free contact)

Contact rating: 5A 250VAC

Mounting: recess mount in wall or box

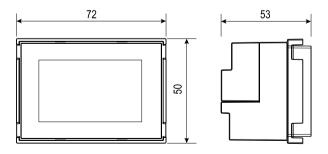
ADDITIONAL NOTES

There are 3 audible alerts:

- SHORT BEEP: confirmation that key is pressed
- 3 LONG BEEPS: confirmation that the information is saved

- TRILL: error

DIMENSIONS



INSTALLATION

SAFFTY REQUIREMENTS

Before connecting to this programmable thermostat, make sure that the load (heater, pump, etc.) is not connected to the supply and that the load is within the ratings marked on the thermostat.

POSITIONING

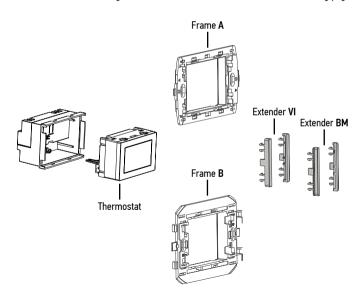
Install the programmable thermostat away from sources of heat (heaters, direct sunlight, kitchens) and from doors/windows, at a height of about 1.5 m above the floor.

CI FANING

For cleaning-use only a damp cloth.

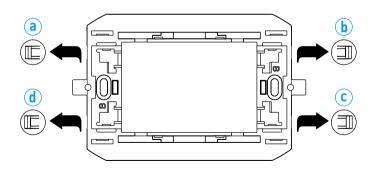
START UP

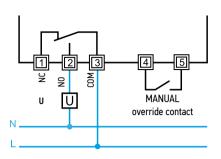
Install the thermostat using the correct accessories (see the table in the following page).



		Frame A	Frame B	Extender VI	Extender BM
ABB	Chiara				
ABB	Mylos				
Ave	Serie 44				
Bticino	Living, Light, Light Tech, Livinglight, Axolute				
Bticino	Matix		*		
Gewiss	Chorus		*		
Vimar	Arke				
Vimar	Eikon, Eikon Evo, Plana				
Vimar	Idea				
Bticino	Livinglight Air	with 01C.51			

 \star = remove the side supports (a - b - c - d)







Insert the batteries into the battery compartment, observing the correct polarity.



ATTENTION

- Incorrect placement of the batteries (reverse polarity) may damage the thermostat
- If the battery charge falls below the minimum level, the thermostat is placed in the OFF state and the output relay releases
- If the thermostat remains unused for long periods it is advisable to remove the batteries The thermostat provides 3 different reports of battery condition:



- With the battery ON (STEADY), operation of the thermostat will soon be compromised
- With the battery FLASHING imminent replacement of batteries is necessary
- With the **BRŁ/OFF FLASHING** the thermostat is in the OFF state and the output relay releases

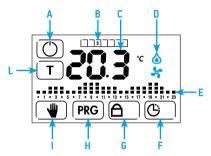
NOTE

Replacing the batteries at the initial warning ON (STEADY) and taking no more than 40 seconds, the date and time will not be erased.

Insert the batteries and for a few seconds the display will show all the symbols, keys and the software version - before entering the time and date routine.

Set the latter by using the keys \bigcirc to modify the values and \bigcirc K to confirm (see pages 10/11).

After that, the thermostat will revert to the main screen:



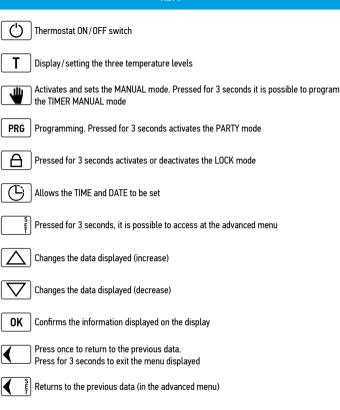
- A Thermostat ON/OFF switch
- B Days of the week (indicated numerically from 1 to 7)
- C Temperature display in Celsius
- D Active icons (eg: fan = Cooling ON, flame = Heating ON)
- E Time/temperature profile (The column corresponding to the current time will flash)
- F Allows the TIME and DATE to be set
- G Key to activate or de-activate the LOCK mode
- H Key to enter programming
 - Key to activate MANUAL
- L Key to set the 3 levels of temperature

NOTE

A tap to the center of the display will activate the back-light for 4 seconds.

A second tap within the 4 seconds will display the current time of day, for 4 seconds.

KEYS



SYMBOLS



Displayed during the TIME/DATE setup or when time is shown



Heating ON (in WINTER mode)



Cooling ON (in SUMMER mode)



Frost protection ON



Displays Low battery

°C

Unit of measurement



Temperature differential



Indicates the LOCK mode active



24 hour time/temperature profile

1 2 3 4 5 6 7 Displays the days of the week

1 2 3 4 5 6 7 Displays the days of the week selected

TIME / DATE SETTING

To set time and date press (E).

Data to be set appears in the following order:

HOURS/MINUTES/DAY/MONTH/YEAR

Figures that are flashing, can be changed using the keys \triangle .

Confirm with OK and advance to the next parameter.

To step back or exit from the menu, press .

EXAMPLE

Press 🕒 .

The HOUR flashes.

Enter the correct time through keys \triangle \bigcirc .



Pressing OK confirms the hour setting and it is then possible to set the MINUTES, using the same method.



Press OK to confirm the minutes setting.

Then proceed to set the DAY



Press OK to confirm the DAY and proceed to set the MONTH



Press OK to confirm the MONTH and proceed to set the YEAR



Press OK to confirm and exit the Time/Date setting menu. The display will then show the main screen.



NOTES

- Removing the batteries, the thermostat has a power reserve of 40 seconds, after which, settings, hours, minutes, day, month, year, will be lost
- The day of the week number is automatically set based on the calendar
- Pressing you can step back to the previous setting
- Pressing for more than 3 seconds, you will return to the main screen, saving however, all confirmed values up to that point with the key σκ

From the main screen press \P .

The display shows the manual temperature, previously set.



To change it, use \(\subseteq \) to increase or \(\subseteq \) to decrease the value. To confirm and exit, press \(\bigcup_{\text{\colored}} \).

NOTE

If you do not touch the display for 3 seconds, the screen will revert to show the current measured temperature.

To set a new temperature press either or .

To exit and return to the main screen, press .

DISPLAY LOCK

This function protects the thermostat from accidental touch, blocking ONLY the display. To activate, it is necessary to press \bigcirc for 3 seconds.

The symbol Δ flashes adjacent to the displayed temperature indicating that the lock is activated.

To deactivate, press 🛕 for 3 seconds.



(display locked)

NOTE

To use the DISPLAY LOCK, it is necessary that the PIN set in the FULL THERMOSTAT LOCK mode menu is **QQQ** (see page 28).

FULL THERMOSTAT LOCK MODE (WITH PIN)

This advanced feature, serves to completely lock the thermostat.

To enable it, you must set a 3-digit PIN that will be required every time you want to lock or unlock the thermostat.

To set and register the PIN:

- Turn off the thermostat with the key (
- Press for 3 seconds to enter into the ADVANCED SETTINGS
- Press OK until the screen shows **GRO** which then allows the personal

PIN code to be entered



Press keys or to attain the PIN number and confirm with OK.

It is now possible to exit from the Advanced settings, pressing key OK several times or key in until three beeps confirm that the PIN is successfully registered.

The thermostat remains turned off.



To activate the thermostat lock function with the PIN, press (5) to turn on the device and then press (a) for 3 seconds.

The following screen appears



Using keys or enter the PIN previously set in the advanced settings and press or 3 beeps will confirm that the lock is active and the display will show the following screen



To unlock the thermostat, press and hold key for 3 seconds.

Enter the PIN and confirm with OK

3 beeps confirm that the lock has been disabled.

ATTENTION

After 3 failed attempts, it will not be able to enter any PIN for 20 seconds.

The ERR message will remain fixed on the display.

NOTE

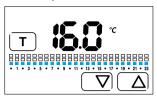
Also, on removing and inserting the batteries, the thermostat will remain with the display locked.

If you forget the PIN it is possible to enter the unlock code 513.

Once unlocked, you may want to return to the advanced settings to check and/or change the PIN, previously entered.

TEMPERATURE SETTING

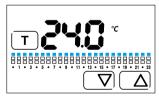
Press T, and the first level of temperature will flash.



Set the desired temperature using the keys \triangle or ∇ . Press \top to confirm and to pass to next temperature level.



Set the desired temperature using the keys \triangle or $\boxed{\nabla}$. Press $\boxed{1}$ to confirm and to pass to next temperature level.



Set the desired temperature using the keys \triangle or ∇ . Press \top finally to return to the main screen.

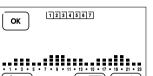
NOTE

- Level 1 will be the lowest temperature of the 3 levels. Levels 2 and 3 being progressively higher.
- With the SUMMER setting, the association between Level and temperature is reversed (ie. Level 3 represents the lowest temperature).

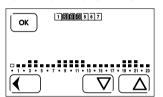
Press PRG to enter programming menu.

SELECT THE DAY(S) TO BE PROGRAMMED

Starting with day 1 (Monday) blinking, move across each day in turn by pressing \triangle



During this process select using the key OK those day(s) required to have the same time/temperature profile. Day(s) so selected will now appear on a black background. Press in the middle of the profile to pass to programming the time/temperature profile.



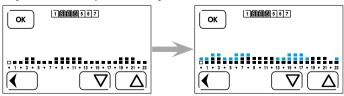
PROGRAMMING THE 24 HOUR TIME/TEMPERATURE PROFILE

Starting with the zero hour segment of the profile blinking.

With \bigcap or \bigvee select the required level of temperature.

Confirm with OK and pass to next hour segment.

Program in the same way, all the time segments.

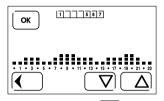


NOTE With it is possible to step back to the previous hour.

Pressed for 2 sec, it is possible to exit from the programming, saving all the changes confirmed until that moment

After all 24 hours have been programmed, 3 beeps will confirm acceptance of the program and the display will show only the days yet to be programmed (the days that at the beginning were not selected).

Now is possible to continue the programming of the remaining day(s), by the same process described above or exit from the menu with the key (



When the programming is finished, press the key to exit from the advanced menu. Everything confirmed with the key ok will be saved.

The display will then show the main screen.

NOTE

- At any time it is possible to exit from the programming by pressing for 3 sec, returning to the main screen
- To review the schedule for each day of the week. From the main screen, press PRG and scroll with the arrows, through the days, numbered 1-7
- Each day will show the profile programmed

COPY FUNCTION

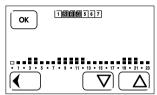
Press PRG to enter the programming menu.

Day 1 blinks (Monday).

Navigate between days by pressing 🛆 or 🔽

For example, to copy the program of day 2 into days 3 and 4, select (by OK) the day 2 before selecting the days 3 and 4.

These days will be highlighted by a black background



Press the time/temperature profile.

With the first hour of the profile flashing, press key for 3 seconds.

3 beeps confirm that the copy of the program is registered.

Press to exit the copy program.



NOTE

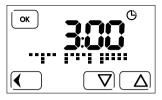
To review the schedule for each day of the week, from the main screen, press $\boxed{\tt PRG}$ and scroll with the arrows through the days numbered 1-7.

Each day will show the profile programmed.

TIMED MANUAL FUNCTION (VACATION PROGRAM)

This function serves to maintain a specified temperature for a specific time, set by the user. Starting from the main display press for 3 seconds.

You will see the following screen. With keys \triangle or ∇ set the time (hour) after which this function will terminate. The maximum is 9999 hours.



Confirm with OK and proceed to set the temperature in the same way by the keys OK or OK.



Following confirmation, a digital countdown plus a circular motion graphic will be displayed.



Press T to view the set temperature. To exit from the vacation program, press the key 1. The display has 3 different resolutions:

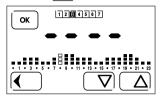
- Shows "hours:minutes" until 99 hours and 59 minutes
- Shows only the hours with the "h" symbol, until to 999 hours.
- Shows only the hours without the "h" symbol, from 1000 to 9999 hours

PARTY FUNCTION

With this function, you can temporarily change the values set for the 24 hour profile.

The function will last 24 hours and will not be saved.

Starting from the Main screen, press PRG for 2 seconds



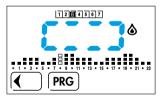
The display shows the profile for the current day, with the current time segment, flashing (eg hour 8).

With \triangle or ∇ it is possible to change the temperature level.

Confirming with ok move to the right towards the other hours of the day, while using the key () it is possible to go back to the previous hour value.

After the change(s) there is no need to press any other keys.

After a few moments, the function starts, indicated on the display by a sequential circular



NOTE

The changes you make will be active for 24 hours, then return back to original programming. After the operation, the display will show the main screen.

At any time, is possible to end the Party Function with (, while to view or edit the profile you will need to press | PRG | and repeat the process of change.

FROST PROTECTION FUNCTION

The frost protection function is active only when the thermostat is set to WINTER and is OFF. It serves to protect the system against very low temperatures.

Upon reaching the set threshold, the function will be activated and the display will show the icons \triangle \blacksquare .



At any time, press (b) to turn on the thermostat and view the main screen.

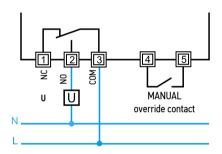
REMOTE CONTROL

Closing the remote control contact forces the thermostat into the MANUAL mode. In this state, the temperature can be adjusted only by using the \bigcap or \bigvee keys.

NOTE

The temperature initially displayed will be the temperature previously set in the Manual mode





ADVANCED MENU

The advanced settings are useful for customizing the thermostat.

The settings are:

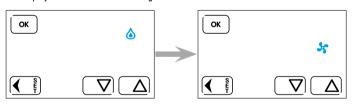
- 1 SUMMER-WINTER mode
- 2 FROST PROTECTION Function
- 3 TEMPERATURE DIFFERENTIAL
- 4 ANTI-SEIZE PUMP Function
- 5 DAYLIGHT SAVING Function
- 6 FULL THERMOSTAT LOCK mode (with PIN)
- 7 RESET

To enter to advanced settings, start from the main screen, press \bigcirc to turn off the thermostat.

Press the key for 3 second.

1 - SUMMER-WINTER mode

The display shows one of the following screens



Choose the desired mode using the key \(\sum_{\text{or}} \) or \(\sup_{\text{or}} \).

Press \(\text{OK} \) to confirm and proceed to the next menu.

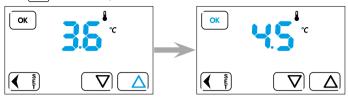
To exit, press or ox until the message OFF appears on the screen.

If a change has been made, 3 beeps will confirm it has been accepted.

2 - FROST PROTECTION function

After setting the Summer or Winter mode, pressing $\boxed{\sigma \kappa}$ the display will show the following screen.

With the keys \triangle or ∇ it is possible to set the desired value, between 2°C and 8°C. Press ∇ to confirm and proceed to the next menu.



To step back in the menu press (), while to exit, press the key () for 3 seconds or press ()K repeatedly until the message OFF appears on the screen. If something has been changed, 3 beeps will confirm the successful change.

3 - THERMAL DIFFERENTIAL

After confirming with the button of the desired value of the frost protection, the display will show the following screen.



Using keys \bigcirc or \bigcirc it is possible to set the value of the thermal differential between 0.1 and 0.9.

Confirm with the key OK and proceed to the next menu.



To step back in the menu press (), while to exit, press the key () for 3 seconds or press () repeatedly until the message OFF appears on the screen. If something has been changed, 3 beeps will confirm the successful change.

4 - ANTI - SEIZE PUMP function

After programming the thermal differential, press OK to display the following screen



(Anti-seize function OFF)

The anti-seize pump function is a function that will configure the thermostat as an asymmetrical timer. By setting a value between 1 and 99 hours, the thermostat will close the output contact for 30 seconds, every time the set time value has elapsed. Example:



By setting with keys \triangle or ∇ the value 48 (48 hours = 2 days) and confirming with \bigcirc K, the thermostat will close the relay contact for 30 seconds, every 2 days. After enabling the function in the menu, the count will start after the last switching off of the relay.

To step back in the menu press while to exit the Advanced Menu, press and hold the for 3 seconds, or press ok repeatedly, until the screen shows OFF.

If something has been changed, 3 beeps will confirm the successful change.

5 - DAYLIGHT SAVING function

This function allows you to set the thermostat such that:

- Daylight saving time changes automatically
- Daylight saving time does not change automatically The screens appear as follows:



Confirming with OK the thermostat will automatically change to daylight savings time. With the keys \triangle or ∇ it is possible to change this value to \square ZERO so that the daylight saving changeover does not happen automatically.



Press OK to confirm and proceed to the next menu.

To step back in the menu press while to exit from the Advanced Menu, press and hold the for 3 seconds, or press ok prepeatedly, until the screen shows OFF. If something has been changed, 3 beeps will confirm the change.

6 - FULL THERMOSTAT LOCK MODE (WITH PIN)

Through this menu, you can enable the LOCK function for just the display, or for the entire thermostat, thus avoiding tampering (see p. 13 and 14).

On the Advanced Menu, press OK until the following screen is displayed:



To enable the lock mode for the display only, set the PIN to 000 using the \triangle or ∇ keys.

To enable the lock mode for the entire thermostat set the PIN to a number between 001 and 999.

When in service, if it is required to lock the display just press the key \bigcirc for 3 seconds (see pag. 13). To lock the entire thermostat press \bigcirc for 3 seconds, enter the PIN set previously, and confirm with \bigcirc (see p.14).

To unlock, repeat the same procedure.

NOTE

If the PIN has been forgotten, enter the $unlock\ code\ 513.$

Once unlocked you may want to return to the advanced menu to verify and/or change the PIN previously entered.

7 - RESET

This will restore all factory settings.



Using \triangle or $\overline{\nabla}$, set $\ref{eq:5}$!



Confirming with OK the thermostat will turn off completely and then turn back on showing first the version of the software and then the main screen.

The product will be reset to its factory settings.

NOTE

Time and date will not be cleared/reset.

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