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Software Manual

bticino



Thermostat with display

MyHOME

Software Manual



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Start

General features

The thermostat with display can be used in both heating and air-conditioning systems and can adjust the temperature with five modes: Comfort, Eco, Antifreeze / Thermal protection, Automatic and Manual.

Depending on the use, the backlit display shows the following information: its function and mode (heating, cooling or automatic function; Comfort, Eco, Antifreeze/Thermal protection, Automatic, Temporary manual or Off), the room temperature measured, the temperature set point set, the fan-coil fan speed, the local contact status and the zone status.

The thermostat can be used in MyHOME temperature control systems (MyHOME probe with control unit), systems intended for hotel rooms or residential systems (single system). The configuration can be made by inserting the configurators in the seats in the back of the thermostat or using the MyHOME_Suite software.

The programming is simple and intuitive: to change from one mode to another just press the $MODE_r$, + or – pushbuttons.



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MyHOME_Suite project

The device can be configured by creating a new project, or by opening and existing one, which can then be changed and resent to the device.

	MyHOME Suite 3.2.78 - Official	- G - X -
Language Info		
English Deutsch Portugués EX/19/180 Po	ski Türkçe	
Dailano Español 酸体中文 Hrvatski py	cook max	
Français Nederlands 繁禧中文 Magyar Sk	veničina	
Recent files	The project	
0		English

1. Click to enter the software dedicated to the configuration of a new home system.



2. Select the device in the Catalogue area and drag it to the Design area

	MyHOME Suite 3.2.78 - Official	
Califying Search International Constraints	MACKE Sub 3.2.71: Official Project Time Versi () Med Y Decretors Versi () Versi ()	Configuration Config
bindens	Drag devices here	Andrew Processor
06	Plant not saved	English

3. After selecting the device to be configured the "Configuration" field will activate. This will be explained in detail below.

Thermostat configuration

Advanced Configuration

Configuration			ų ×
Advanced config	guration		
Description		ID	4
Module enabled	Yes 2		
Function	Master probe	Zone	1 🚍 5
Plant type	Hotel thermostat Residential thermostat Master probe	Number of slave probes	0 🗧 6

- 1. **Description:** Enter a description which identifies the thermostat in the system (e.g. "night zone thermostat")
- 2. Module enabled: Enable the device for the configuration via software
- 3. **Function:** Select a function. The selection of the function depends on the type of system where the thermostat is installed
 - Master Probe: the thermostat is installed in a MyHOME system managed by a control unit;
 - Hotel thermostat : The device manages the temperature control of a room or common area of a hotel and is controlled by the hotel supervision software (HotelSupervision).
 - Residential thermostat: the thermostat is part of a single temperature control system which may be made up of one zone.
- 4. **ID:** Enter the unique code which identifies the thermostat in the system, or find this datum automatically by means of the "System scan" function.
- 5. Zone: Set the system zone number where the thermostat is installed.

control unit will consider the average temperature read by the probes).

 Number of slave probes: The Slave probes associated with the Master probe are used to calculate the average temperature of large rooms or areas.
 Up to 9 probes without knob configured as SLAVE can be associated with each thermostat (the

Configuration				¢ ×
Advanced config	guration			
Description			I	۵ (
Module enabled	Yes	•		
Function	Master probe	•	Zone	1
Plant type	Heating	0	Number of slave probes	0
Plant settings	Heating Cooling Heating & cooling	Regulation band	Contact management	User interface

7. Type: select the type of management for which the thermostat will be programmed from those listed.

System settings

Type of system

The thermostat can manage all types of system, both heating and cooling; select your system from those in the list.

Plant settings	Set point	Loads and pumps	Regulation band	Contact man	agement	User interface
Heating			Cooling)		
	Syste	m type				
0	N/OFF	•				
Actuators 2 Actuators 2 Ac F	ppen/Close pipes fan co iateway il Pilote pipes fan co	oil with on/off valve	valve	Add 🕕		Delete 🚫
Function 4 P 2 4	pipes fan co pipes fan co roportional v pipes fan co pipes fan co	bil with on/off valves bil with proportional valve bil with proportional bil with proportional	valves incl speed control speed control	ion	N°	

La legrand®

Actuators – Pumps

The actuators and/or pumps to be managed must be set for each thermostat; indicate their function (heating only, cooling only or both). The software assigns the number in progressive order; you can modify the number assigned selecting it in the field. The numbers available are from 1 to 9.



 Automatic change = in systems with 4-pipe fancoils enabled for both heating and cooling or in systems where the water circulation systems for heating and cooling are completely independent, you can enable this function to manage the switching between heating and cooling automatically.
 N.B. This function cannot be activated if the device is configured as "Master Probe".

Set-point

The software has three pre-set temperature levels for both cooling and heating; or:

- 1. Eco = temperature which allows a relative energy saving
- 2. Comfort = temperature considered ideal for your wellbeing
- 3. Thermal protection (for cooling) or Antifreeze (for heating) = temperature which can be set, e.g. when the system is not working to avoid superfluous consumption without however risking damaging the system.

You can customise the basic values remaining however within the Min (3 °C) and Max (40 °C) levels

The software does not accept the setting of conflicting values (e.g. Antifreeze cannot be higher than Eco, etc.)



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Loads and pumps

You can set some parameters for the operation of the pumps and fans (for fan-coils) both for cooling and heating.

Plant settings	Set point	Loads and pumps	Regulation band	Contact manag	ement	User interfac	e
 Heating 							
Activation dol	au for boat	ing pumpo			0	: 0	1
Activation dei	ay for field	ing partips			mm	SS	
Heating fan o	oil continue	ous ventilation funct	tion			V	1
Heating fan o	oil continue	ous ventilation funct	tion timeout (minut	es) 0			Ð
Heating prope	ortional spe	ed 1 (%)				33	
Heating prope	ortional spe	eed 2 (%)				67	
Heating prope	ortional spe	ed 3 (%)				100	
Heating anti-s	seizing up p	protection					3
Heating fan d	lelay				0	: 0	•
Cooling							
Activation dol	av for cool	ing pumps			0	: 0	
Activation oci	ay for coor	ing painps			mm	SS	
Cooling fan co	oil continuc	ous ventilation funct	ion			E	
Cooling fan co			ion timeout (minut	es) 0		-	Ð
Cooling propo	ortional spe	ed 1 (%)				33	-
Cooling propo	ortional spe	ed 2 (%)				67	-
Cooling propo	ortional spe	ed 3 (%)				100	
							8

- 1. **Delay pump activation:** you can set a delay time for the activation of the pumps thus avoiding them starting before the zone valves have opened.
- Continuous ventilation function: for best use of the fan-coil temperature you can decide to extend the operation of the fan even after the valves have closed. If the fan speed is in "Automatic" you can set the duration between 1 minute and 254 minutes, or infinite duration. If one of the three speeds is selected the duration is infinite. Note: Enabling this function excludes being able to activate the "Fan delay" function.
- 3. **Proportional speed percentage:** just for fan coils with this function you can vary the setting of the basic set percentages for the three speeds.
- 4. **Anti-block protection:** If the system does not work for a long time, this function activates the zone valves for two minutes every week to prevent them blocking.
- 5. **Fan delay:** set a delay time for activating the fan to avoid, for example, for the heating, that switching the fan on too suddenly could blow cold air in the room.

Regulation (adjustment) range

With MyHOME_Suite you can set the thermostat operation threshold and other advanced functions which depend on the type of thermal system installed.

Plant settings	Set point	Loads and pumps	Regulation band	Contact management	User interface	-
 Heating 						
Threshold sett	ing for auto	matic heating			1	1
Regulation bar	nd for heati	ng			2 0.1	1
Heating PID re	gulation ba	and (°)			1.6	5
Heating PID in	nertia			(Medium inertia	-
	rtional gair				100	D ÷
						5 ÷
	ative gain				100	D 🗘

- 1. **Setting automatic threshold:** enabling this parameter, the adjustment range will be the default (0.1 °C). Instead on disabling this you can set as follows.
- 2. Regulation (adjustment) range: this parameter determines the operation threshold with respect to the set point set; for example with a set point of 20.0 °C for heating and a threshold of 0.1 °C the system will switch off when the temperature is higher than 20.1 °C and will switch on at 19.9 °C. For fan-coil systems the threshold can have values from 0.1 to 1 °C. Other types of system have threshold values from 0.1 to 0.5 °C.

Plant settings	Set point	Loads and pumps	Regulation band	Contact management	User interface
 Heating 				and a second	
Threshold setti	ing for auto	matic heating			
Regulation bar	nd for heati	ng			0.1
Heating PID re	gulation ba	and (°)		3	1.6
Heating PID in	iertia			(Custom inertia 🔹
Heating propo	rtional gain	1		Δ	Low inertia Medium inertia
Heating integr	ative gain			· · · · · · · · · · · · · · · · · · ·	High inertia
Heating deriva	tive gain				100
Fancoil speed g					

- PID (Proportional Integral Derivate) regulation (adjustment) range: this parameter determines the operation threshold with respect to the setpoint set.
 For proportional loads use this parameter instead of the two preceding parameters.
- 4. **PID thermal inertia:** the thermostat manages the temperature in advanced mode controlling the opening of the valves or the speed of the Fan coil fans, using some parameters which depend on the type of system installed; comfort can thus be optimised and consumptions rationalised in the best way.

The software has three pre-set temperature levels for both cooling and heating.

Thermal inertia	Heating	Cooling
Low	Fan-coil	Fan-coil
Medium	Radiators	Panels
High	Floor system	Floor system
* Customised	* Advanced configuration	* Advanced configuration

* For more expert installers, the "**Customised**" option lets you modify the individual parameters which determine the algorithm of this function; before making any modification you should however consult the heating engineer responsible for the system.

Fan-coil speed

For systems made with Fan-coil and ON-OFF or Proportional valves you can set the operation thresholds relative to the change of fan speed with respect to the set-point set.

Plant settings	Set point	Loads and pumps	Regulation band	Contact managemen	t User interface
 Heating 					
Threshold sett	ing for auto	omatic heating			
Regulation bar	nd for heati	ng			0.1
leating PID re	gulation ba	and (°)			1.6 🚔
leating PID ir	nertia			M	edium inertia 👻
leating propo	ortional gain				100
leating integr	ative gain				5 ≑
leating derivation	ative gain				100 🗘
ancoil speed	grafh: HEA	TING			
•					
S 🖌					
+ 0.1°	35 OI	FF	3	OFF	
SatDoint	\$ _	-	3	OFF	
SetPoint	55 _	-	3	OFF	
2 -0.1°	55 _	_	51	-	
-0.6	30		S		
-1.0	50				
Max -3°					
	Inc.	nperature	l	Decreasing 🗸	

- 1. Automatic threshold setting: Disable this function to make the customised setting.
- 2. **Regulation (adjustment) range:** The value set determines the switching on/off of the fancoil(s) at speed 1.
- 3. **Operation thresholds:** in these fields you can set the thresholds (temperature differentials) at which the fancoil fans will change speed at speeds 2 and 3.



Contact management

You can associate a specific action which must be carried out on the system, e.g. on opening the zone 1 window the heating will switch off in the zone itself, to the change of state of the local contact (Open/Closed).

These settings are possible and can be differentiated for both heating and cooling.

Plant settings Set point Loads	and pumps Regulation band	Contact management Us	ser interface
Number of local contact Heating 	Disabled		•
Preset	1		-
Local contact opening	Heating eco		•
Local contact closing	Previous state		•
		Ope	ening
		0	: 0 🗧
Activation delay for local contact		mm	SS
Activation delay for local contact		Clo	sing
		0	: 0 🗧
		mm	SS
		Ope	ening
		0	: 0 🗧
Times and fear land, and a short a shire		hh	mm
Timeout for local contact action		Clo	sing
		0 🗘	: 0 +
		hb	mm

- 1. Number of local contact: On enabling a list address you can use the scs system "contact" function.
- 2. **Preset:** there are three preconfigured settings, on selecting one of these, you will see the corresponding action when Opening and Closing the contact in the fields below.
 - 2.1 **Custom:** when the preconfigured solutions are not satisfactory you can select the Custom option which allows you to customise the contact opening and closing actions, selecting from those in the fields.

Plant settings Set point Loads and	pumps	Regulation band	Contact managem	ent User	interface
Number of local contact Heating 		Disabled			•
Preset	Cus	stom			•)
Local contact opening	Hea	ating eco			-
Local contact closing	No action Protection Off Previous state Manual				
Activation delay for local contact	Hea	ating eco ating comfort			
				0 💽 :	55
				Openir	ng
				0 :	0
Timeout for local contact action				hh	mm
				Closin	g
				0 🕂 :	0 -
					mm

- 1. Preset Custom: Customised setting.
- 2. Local contact opening/closing: setting the action following the change of status of the thermostat local contact.

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Plant settings	Set point	Loads and pumps	Regulation band	Contact management	User interface	e
Number of loo Heating	cal contact		Disabled	*	-	•
Preset Local contact Local contact	opening closing	Cu 1 2	stom stom		•	
Activation del	ay for local	contact		0 mm 0 mm	Opening SS Closing SS Closing SS	
Timeout for lo	ocal contact	action		0 hh	Opening mm Closing Closing	

- 3. Activation delay: you can set a delay time between the contact opening/closing and the consequent action. For example: if I open the window the zone heating will switch off after 1 minute (set activation delay), if the window is closed in the meantime the heating will not switch off.
- 4. **Timeout for the action:** You can establish the maximum duration of the action determined by the local contact.

For example: opening the window causes the zone heating to switch off; after 1 hour (Timeout set) the heating switches on again even if the window is still open.

User interface

This software section allows you to set some functions concerning what is shown on the display and allows the user to interact with the thermostat.

Display

Plant settings	Set point	Loads and pumps	Regulation band	Contact management	User interface		
 Display 							
Backlight for	display star	ndby			V		
Backlight stand-by level			Level 10	Level 10 🗸			
Room temper	ature visua	lization					
Temperature format			Celsius	Celsius			
Window contact icon			Always O	FF	•		
Pushbutto	n						
Disable all pu	shbuttons						
Heating contact pushbutton locking			Disabled		-		
Heating pushi	button fan d	coil automatic speed					
Cooling contact pushbutton locking		Disabled		+			
Cooling pusht	outton fan o	oil automatic speed			V		
Changing mo	dality with p	oushbutton			V		
Calibration pr	ocedure				v		
User settings	procedure						

- 1. **Backlighting:** You can set the display backlighting when the thermostat is in standby, deciding whether to activate it and, if it is activated, set the brightness level.
- 2. Room temperature display: Enable/disable the display of the temperature measured locally by the thermostat.
- 3. **Temperature format:** You can set the temperature measurement unit which will be valid for all the displays; select the unit used locally, Celsius or Fahrenheit.
- 4. **Window contact icon:** This function allows you to establish if and when the icon which indicates activation of the local contact should appear on the display.

Plant settings	Set point	Loads and pumps	Regulation band	Contact management	User interface	
 Display 						
Backlight for	display star	ndby				
Backlight sta	nd-by level		Level 10		•	
Room tempe	rature visua	lization				
Temperature	format		Celsius		•	
Window cont	tact icon		Always O	FF	-	
Pushbutton		Always O ON when	Always OFF ON when open, OFF when closed Blinking when open. OFF when closed			
Disable all pu	Disable all pushbuttons		ON when	ON when closed, OFF when open		
Heating contact pushbutton locking		Blinking	Blinking when closed, OFF when open			
Heating push	button fan	coil automatic speed	1			
Cooling contact pushbutton locking		Disabled	Disabled			
Cooling push	button fan o	coil automatic speed				
Changing mo	dality with	pushbutton				
Calibration pr	rocedure					
User settings	procedure					

Pushbutton

Disable all pushbuttons		
leating contact pushbutton locking	Disabled	+
leating pushbutton fan coil automatic speed		
Cooling contact pushbutton locking	Disabled	•
cooling pushbutton fan coil automatic speed		
Changing modality with pushbutton		4 🔽 🛛
Calibration procedure		
Jser settings procedure		6 🔽

- 1. **Disable all the pushbuttons:** Activating this option prevents the user from using the pushbuttons to interact with the device.
- 2. Heating/cooling contact pushbutton locking: activating this option prevents the user from using the pushbuttons to interact with the device on the basis of the status of the local contact. The three possible choices are:
 - Disabled
 - Enabled when the remote contact is open
 - Enabled when the remote contact is closed.
- 3. **Pushbutton automatic speed in Heating / Cooling:** Enables or disables the possibility of selecting the automatic speed from the probe by means of the FAN pushbutton.
- 4. **Pushbutton to change heating/cooling:** enables or disables the change of function (heating or cooling or automatic change) by pressing the MODE key (for at least 7").
- 5. **Changing mode with pushbutton:** enables or disables mode selection (Eco/Comfort/Antifreeze/ Thermal protection depending on the type of system) by means of the MODE key.
- 6. **Calibration procedure:** allows you to activate or deactivate being able to enter the probe local calibration menu.
- 7. User settings procedure: allows you to activate or deactivate being able to enter the probe local settings menu.

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