Thermostat with display

Description

Thermostat with display for the control of the room temperature in temperature control systems.

This device can be used both if a temperature control central unit is present or not present; when appropriately configured it can be used as:
- MyHOME temperature control system probe;
- Hotel room thermostat;
- Residential system thermostat.

It has 4 keys that can be used to select the desired temperature and the various operating modes; when used with fan-coils it can manage the fan speed.

The thermostat can manage different operating modes: both automatic and manual, in addition to the Eco, Comfort, Antifreeze/Thermal protection, and OFF.

It can also be used in mixed heating/cooling systems, if the two functions are available at the same time on the same system.

A contact is also available on the back of the device, to change the operating mode of the thermostat (e.g. window contact, summer/winter switching, etc.).
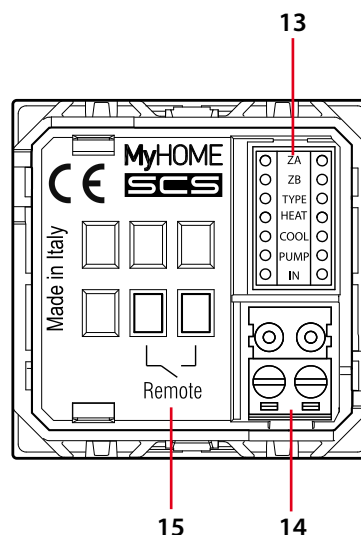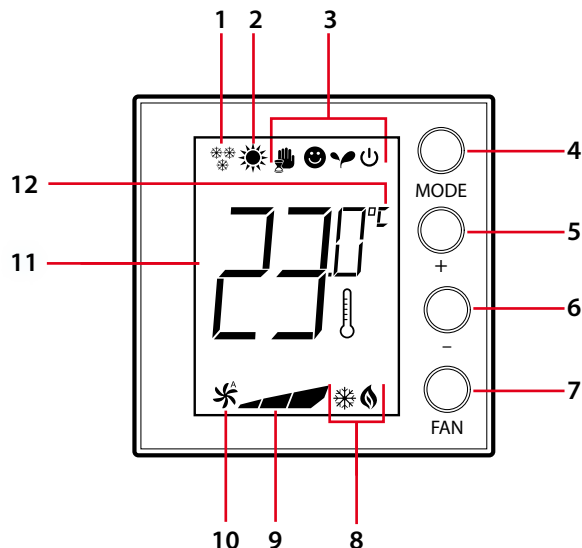

Technical data

Power supply from SCS BUS:	18 – 27 Vdc
Absorption:	14 mA with display off
	16 mA with low brightness display
	30 mA with high brightness display
Operating temperature:	0 – 40 ℃
Size:	2 module flush mounted
Recommended installation height:	150 cm from the ground
Controllable loads:	On/Off, Open/Close, 3-point or 0-10V valves.
	2-tube and 4-tube fan-coils with On/Off, 3-point, or 0-10V valves.
	Gateway Climaveneta.
	Fil Pilote.

Correlated devices

The thermostat must be used with the following actuator devices:
- F430/2: ON/OFF relay actuator;
- F430/4: ON/OFF 4-relay actuator;
- F430R8: ON/OFF 8-relay actuator;
- F430R3V10: ON/OFF 3-relay actuator with 2 x 0-10V outputs;
- F430V10: actuator with 2 x 0-10V outputs;
- F430FP: actuator for Fil Pilote devices

Legend

1. Heating function
2. Cooling function
3. Operating mode icons
4. MODE key: a short pressure changes the mode of operation of the device; an extended pressure (unless used as MyHOME probe) changes the function
5. + key: increase the set value
6. – key: decrease the set value
7. FAN key: set the fan coil speed on 3 levels + automatic
8. Heating/cooling on indicator
9. Fan coil speed indicator, 3 levels
10. Fan coil in automatic mode indicator
11. Measured (thermometer symbol on) / set (thermometer symbol off) temperature indicator
12. Unit of measure: ℃ or ℉
13. Configurator socket
14. BUS connection
15. Local contact

Configuration

The thermostat can be configured:
- Through physical configuration, by connecting the configurators to the appropriate housings on the back of the device. This quick mode is ideal for basic functions, and gives the possibility of setting, in addition to the zone address, also a heating load, a cooling load, up to 2 system pumps, and a quick function for the remote contact.
- Using MyHOME_Suite (*), where a dedicated wizard will guide the user through the procedure for correctly configuring the device. The MyHOME_Suite software gives the possibility of customising the device and provides a higher degree of functionality, such as:
- The possibility of changing some default parameters (select the unit of measure for the temperature, change the permitted operating temperature, manage the backlighting level, disable some device pushbuttons, etc.).
- Configure a higher number of loads (up to 9 heating and/or cooling actuators and 9 pumps), and assign slave probes (max. 9).
- Enable advanced functions, like automatic switching between heating and cooling.
- Manage dedicated fan-coil settings (e.g. fan speed change threshold settings, or fan activation delay, etc.).
- Set a delay or a timeout for the actions generated by the status change of the remote contact (in addition to allowing a higher number of combinations than through the physical configuration).

1.1 ADDRESSING

By connecting two configurators with value 0-9 in the ZA and ZB sockets, it is possible to set the device address. The controlled actuators will have to be configured with the same address.

Socket	Function	Physical configuration
ZA/ZB	Zone address	from 01 to 99

1.2 OPERATING MODE

By configuring the positions **TYPE, HEAT, COOL, PUMP and IN**, it is possible to set the desired operating modes and the types of loads to manage.

TYPE=Type of operation

Parameter/setting	Physical configuration
MyHOME temperature control system probe [(1)]	0
Hotel room thermostat	1
Residential system thermostat	2

(1) If the device is used as a MyHOME system probe with temperature control central unit, the subsequent positions HEAT, COOL, and PUMP must not be configured. The settings for actuators and pumps will be defined directly from the central unit menu.

HEAT= Heating load. Configure the corresponding actuator with N=1.

Parameter/setting	Physical configuration
No device	0
ON/OFF valve	1
Open/Close valve	2
2-tube fan-coil with ON/OFF valve	3
Gateway	4
Fil Pilote	5
2-tube fan-coil with 3-point or 0-10V valve	6
4-tube fan-coil with ON/OFF valves	7
4-tube fan-coil with 3-point or 0-10V valves	8
3-point or 0-10V valve	9

COOL= Cooling load. For the configurations from 1 to 9 configure the corresponding actuator with N=2. In case of CEN configurator the actuator will be N=1.

Parameter/setting	Physical configuration
No device	0
ON/OFF valve	1
Open/Close valve	2
2-tube fan-coil with ON/OFF valve	3
Gateway	4
2-tube fan-coil with 3-point or 0-10V valve	6
4-tube fan-coil with ON/OFF valves	7
4-tube fan-coil with 3-point or 0-10V valves	8
3-point or 0-10V valve	9
Same load managed for heating and cooling [(2)]	CEN

(2) in case of common heating/cooling load, the configurator set in the HEAT position will have to be different from 0 (no device) or 5 (Fil Pilote).

PUMP= Number and types of pumps to control

Parameter/setting	Physical configuration
No device	0
Pump with N= 1 For heating [(3)]	1
Pump with N= 2 For cooling	2
Pump with N= 1 For heating + pump with N= 2 For cooling [(3)]	3
Pump with N= 1 For both heating and cooling [(3)]	4

(3) With this mode it is not possible to define the Fil Pilote device in the HEAT position (configurator 5)

IN= Function activated by the change of status of the contact on the back of the device

Contact status/function		Physical configuration
OPEN	**CLOSED**	
Contact disabled	Contact disabled	0
Thermal protection	Return to the previous status	1
OFF	Return to the previous status	2
ECO	Return to the previous status	3
COMFORT	Return to the previous status	4
Switch to heating [(4)]	Switch to cooling	5

(4) This function cannot be selected when the device is used as probe in MyHOME systems with temperature control central unit.

Note (*):   -   software downloadable from the website www.homesystems-legrandgroup.com;
   -   the functions are available from version 1.3.