MyHOME

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Energy display

Installation Manual

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MyHOME

legrand®

bticino

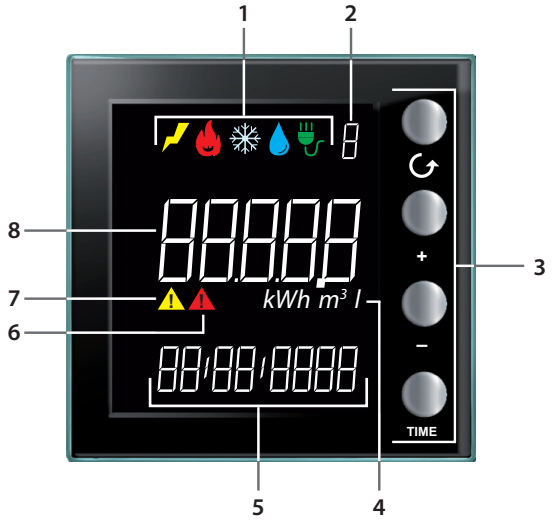
Contents

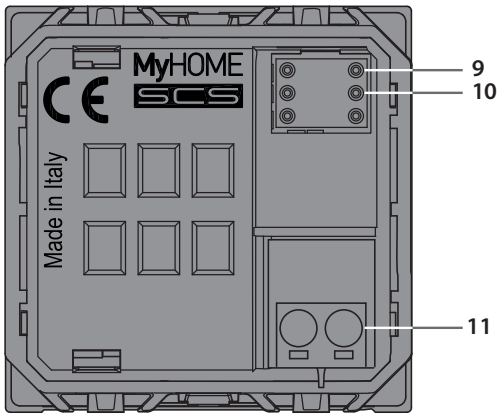
General description

Energy Display gives the possibility to display energy consumptions: electricity, cooling, heating and water consumption.
The information displayed is the following:

- instantaneous or cumulative consumption (daily, monthly or yearly)
- identification of the line monitored (from 1 to 9)
- type of energy measured
- if the system is fitted with a load management unit, the device displays the status of the actuators (enabled, disabled, forced) and allows forcing of the loads controlled by them.

Icons and keys





1 - Line display icons (see Icon of consumptions measured): only the icon for the selected line stays on.

2 - Displayed line number (from 1 to 9).

3 - Keys for the programming of the displaying of the data on the display (see Key table).

4 - Unit of measure.

5 - Current time (4 digits) or date (8 digits).

6 - Disabled load status icon (only if configured with load control).

7 - Forced load status icon (only if configured with load control).

8 - Consumption value.

9 - Socket M1 for setting the operating mode *(see technical sheet)*

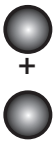
10 - Socket M2 for setting the operating mode *(see technical sheet)*

11 - BUS connection clamp

Icon of consumptions measured

	Electricity icon.
	Heating icon.
	Cooling function.
	Water consumption icon.
	Load control icon.

Key table

Key	In consumption display	In load control	In user settings
	- it gives the possibility of selecting the line shown on the display.		- to exit the menu User settings
	- based on the measuring period set with the TIME key (day, month, or year), it gives the possibility of displaying the previous or the next period	- forcing of the selected load (+), or return to the controlled status (–).	- display brightness adjustment - audible signal enable - threshold setting - date and time setting
 TIME	- selection of the display period: daily, monthly, or annual consumption	with advanced actuator: - display of actuator status - display of instantaneous consumption - display of total consumption	- it confirms the displayed setting, and moves to the next

Configuration

The Energy Display can be configured in two ways:

- Physical configuration: by connecting the configurators to the appropriate M1 and M2 sockets.

- Configuration performed using MyHOME_Suite software downloadable from the website www.homesystems-legrandgroup.com

For the list of modes and the corresponding meanings refer to the indications of the technical sheet.

Putting into operation

Display notifications

When switched on, the display may appear different, depending on the type of configuration (physical or virtual), and the status of the device.

No configuration

The symbol shown flashes quickly; this means that the device needs to be configured.

Virtual configuration being completed

The symbol shown flashes slowly; wait for the configuration procedure to be completed.

Wrong physical configuration

If this screen flashes quickly, check the physical configuration; for more information refer to the technical sheet of the device.

Self-learning procedure not completed

This symbol only appears in case of physical configuration if the self-learning procedure has not been completed, or if after completion no device from which to obtain consumption data has been detected.
Check the configuration and repeat the self-learning procedure (see Self-learning)

Time and date not set

The correct time and data settings are necessary for proper operation of Energy Display. The symbol on the side shows that the set-up procedure has not been completed.
Complete the set-up, otherwise the device will not work (see Time and Date).

Data acquisition

After the initial set-up, Energy Display acquires the data saved by the measurement devices.
During the first data acquisition, the display appears as shown on the side. The ID of the relevant line flashes slowly.

The indication that the acquisition procedure is being performed is the flashing of the line number until the completion of the procedure. The procedure can take up to four hours. While the procedure is being completed, consumption data will not be true.

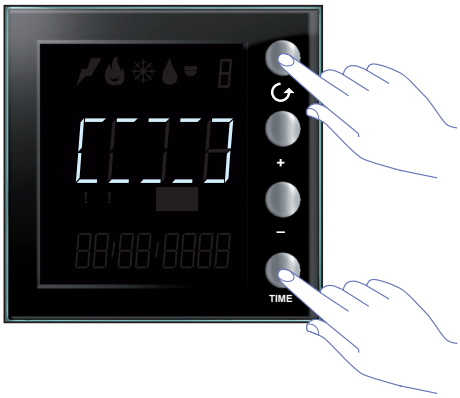
Error notifications

Error notification on one line (from Er001 to Er255).
Indicated line operation check.

Serious error indication (from Er300 to Er303).
Contact the technical support service

Self-learning

If the display has been configured physically, it will be necessary to acquire the system using the following procedure:



When switched on, the display appears similar to the one on the side: to activate the self-learning procedure press ↻ and TIME at the same together for more than 7 seconds.

The self-learning procedure is compulsory in case of PHYSICAL configuration, while it should not be performed in case of ADVANCED configuration using MyHOME_Suite. In the second case, pressing the two keys at the same time will have no effect.

During the learning procedure, the symbol at the centre of the display flashes slowly, with the line affected from time to time by the procedure appearing.

At the end of the procedure the display shows the screen for the first line.

Settings

Press TIME for more than 7 seconds access the programming procedure.
The procedure requires the setting of the following parameters: display brightness level, audible signal, alarm threshold, time and date.
After setting all the parameters (display brightness level, audible signal, alarm threshold, time and date), the settings are saved.

Press TIME for over 7 seconds to access the settings.

A 5 min. time-out is set for the completion of the procedure, at the expiry of which no new settings will be saved.
Exiting the settings menu will be possible at any time by pressing ↺

Display brightness

This setting is used to adjust the brightness of the display when the device is in stand-by.

Use the "**+**" and "**–**" keys to set the desired brightness level.
Set a value between 1 to 10, or set OFF mode.
The display shows the value set when adjusting the brightness.

Press the TIME key once, to go to the next setting.

Audible signal

It is possible to enable/disable the audible signals in case of disabling of a load (for systems with load management), or in case of signals relating to the consumption threshold set for electric line 1. (see Consumption threshold).

"**+**" and "**–**" keys enable or disable the audible signal. The display shows the "b" symbol, and the ON or OFF function status.

Press the TIME key once, to go to the next setting.

Note: this setting is only available when managing the load control system, or the threshold for the electric consumption.

Consumption threshold

For consumptions relating to electric line 1, it is possible to set a warning threshold for instantaneous consumption; the device emits an audible signal and a display warning both when the threshold is exceeded and when consumptions return to within the set values.

Use the "**+**" and "**–**" keys to set the electric consumption threshold value (the value is expressed in Watt and can be set from 1 to 65535 or OFF).
The exceeding of the threshold will be indicated by 5 short beeps (if the buzzer is enabled), while the return of consumptions within the set limits will be indicated by an extended beep.

Press the TIME key once, to go to the next setting.

Time and date

The correct time and data settings are important for correct monitoring of electric consumptions.

Use the "**+**" and "**–**" keys to set the hour.
Press TIME to go to minutes and then to set the date.

Using the MyHOME_Suite software, it is possible to change the date display format from DD:MM:YYYY to MM:DD:YYYY.
Once the date is set, press time to save the settings and exit the menu.

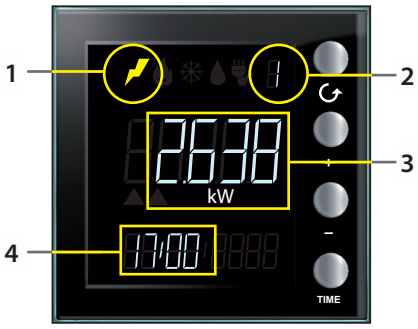
Types of consumptions displayed

Energy Display gives the possibility of displaying various types of consumptions: electric, water and gas (obtained from pulse counter interfaces), as well as the status of the actuators in systems including load management functions.

Electric consumptions

Electric consumption measures the data from the use of electricity, socket lines, electric cooling and heating systems, etc. The data are shown in watts (W) for instantaneous consumption mode, or in watts-hour (Wh) for total consumption mode.

E.g. screenshot for electric consumption



The display shows the following information:

1. icon corresponding to the type of consumption measured;
2. number of the line being monitored;
3. instantaneous consumption value and the corresponding unit of measure
4. current time.

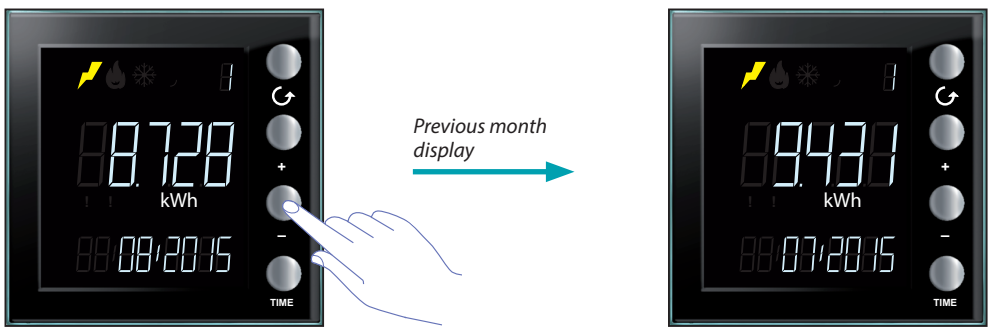
Note: if the consumption threshold is enabled, the electricity icon flashes slowly when the threshold value is exceeded.

The electric consumption value is expressed in Watts. If the value of 999 Watts is exceeded, the measurement is automatically converted in Kilowatts (1kW = 1000W).
Alternatively, consumptions can be shown in Watts-hour; also in this case they are automatically converted from Watts-hour into Kilowatts-hour when the 999 Wh threshold is exceeded (1kW = 1000Wh).

By pressing **TIME** the period of measurement displayed changes (instantaneous, daily, monthly, or annual); once the period has been selected, for example monthly, press "**–**" to switch to the previous month, and "**+**" to return to the current month. This gives the possibility of displaying:
- daily consumptions for the current day and all the days of the current month and the previous month;
- monthly consumptions for the current month and the thirteen previous months;
- annual consumptions for the current year and the two previous years.

E.g. monthly consumption for August

E.g. monthly consumption for July



By pressing **TIME** the display changes from instantaneous consumption to daily, monthly, or annual consumption.

Instantaneous consumption

Daily consumption

Monthly consumption

Yearly consumption

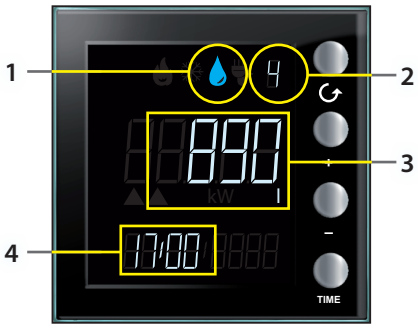
Volumetric consumptions

The consumption (hourly load) measures the data of gas and water.

For gas consumptions, the measured values are normally expressed in m^3. In this case, it is possible to select the display details, including from 0 to 3 decimals (using the ADVANCED configuration with MyHOME_Suite) based on the type of meter installed.

Water consumption is normally shown in litres. In this case, when the 999l threshold is exceeded, the value is automatically converted into m^3.

E.g. screenshot for volumetric consumption



The display shows the following information:

1. icon corresponding to the type of consumption measured;
2. number of the line being monitored;
3. instantaneous consumption value (hourly load) and the corresponding unit of measure;
4. current time.

By pressing **TIME** the display changes from instantaneous consumption to daily, monthly, or annual consumption.

Instantaneous consumption

Daily consumption

Monthly consumption

Yearly consumption

Setting the conversion coefficient

Based on the type of measurement (e.g. gas pulse counter meters; conversion from m^3 of gas into thermal Watts produced), it may be necessary to set a conversion coefficient different from the default coefficient. The enabling of the conversion coefficient can be done using the ADVANCED configuration of MyHOME_Suite, or using the PHYSICAL configuration (refer to the technical data sheet); this coefficient gives the possibility of obtaining a value as correct as possible, although it will still be an estimate.

Select the line for which you want to change the conversion coefficient using the ↻ key.

Press ↻ for more than 7 seconds to access the coefficient set-up section.

Use the "**+**" and "**–**" keys to set the correct coefficient.
The default value is **1.00**;
values between **0.01** and **100** can be set.

Press the TIME key to save the value set.
Press the ↻ key to complete the procedure without saving the data set.

Load control

If the system includes a load management solution, in order to prevent the disconnection of the electric meter, in addition to consumption data, for the relevant lines Energy Display also provides (see Electric Consumptions) actuator status information, the presence of any disabled load, and the load forcing status, if the case.

When a controlled line is selected, the display shows the status of the actuator. Press TIME to display the consumptions.

E.g. status of the load on line 6

E.g. consumption measured on line 6

Disabling of a load

If a load is disabled by a load management unit, the display immediately shows the relevant line with the status indication OFF, together with the red Warning icon. If the audible signal is enabled, the device also emits 3 beeps. The red icon remains visible as long as the disabled status of one or more loads persists, and will be shown for all the lines.

E.g. Display in stand-by

Disabling of a load

E.g. Load disabled on line 6

Forcing a load

The device gives the possibility of forcing a disabled load; Forcing is indicated by the yellow Warning icon; if several loads have been forced, the red icon will be displayed.

E.g. one or more loads displayed

E.g. line 6 load forced, no other disabled loads

E.g. forced load and other loads disabled at the same time

After selecting the relevant line, press "**+**" to force the status of the load

The forcing of the load is highlighted by the yellow icon appearing, while the status of the actuator changes from **OFF** to **ON**.
(The red icon went off because line 6 was the only disabled one, otherwise it would stay on).

Note: forcing time is 4 hours, after which the load returns to normal operation.

To remove the load forcing condition before the 4-hour period, press "**–**"

Resetting the consumptions measured by an advanced actuator

This procedure is used to reset the value of the total consumptions measured of the selected line; the measurement restart immediately after resetting. This provides a measurement for a set moment.
This function is only available if the measurement of consumptions is performed by an advanced actuator.

Press the "**+**" and "**–**" keys for more than 7 seconds to reset the meters.

The measurement restarts immediately after the reset of the device.

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