V3IS00715-010

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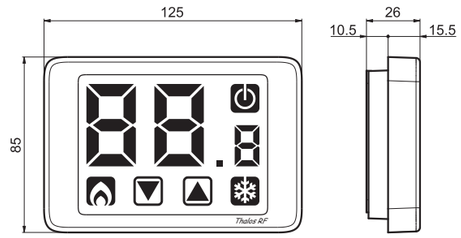
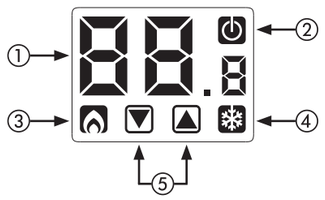
Mod. THALOS RF

CE

2 DIMENSIONS



3 INSTRUMENT DESCRIPTION



① Ambient temperature display
② Active off-mode indicator
③ Boiler activation indicator (heating mode)
④ Air conditioner activation indicator (cooling mode)
⑤ Programming keys

Attention: the keys are active only if the instrument is hooked to the base

USE, CLEANING AND MAINTENANCE

Press the keys with your fingers. The use of sharp objects may cause damage to the instrument.

To clean the display use a soft, slightly damp and lint-free cloth, without using excessive force.

1 User Manual
RADIOFREQUENCY ELECTRONIC TOUCH SCREEN THERMOSTATS
⚠ Read carefully all the instructions

Thalos RF is an electronic touch screen thermostat to regulate the ambient temperature both in heating and in cooling to control a remote actuator through radiofrequency signal.
Powered by two batteries of AAA type, Thalos Rf doesn't need any wiring.
This allows to install the thermostat anywhere inside your room, without any intervention of masonry.
The wide touch screen display with backlighting on by pressing a key allows a clear view even in the dark.

Code	Model	Description
VE480000	Thalos RF Bianco	Radiofrequency thermostat white color
VE481800	Thalos RF Nero	Radiofrequency thermostat black color

SAFETY WARNINGS

During product installation and operation it is necessary to observe the following instructions:

1) The instrument must be installed by a qualified person, in strict compliance with the connection diagrams.
2) Do not power the instrument if any part of it is damaged
3) The instrument must be installed and activated in compliance with current electric system standards
4) Do not use the instrument for purposes different from the one specified.
5) In case of malfunction do not perform repairs and contact immediately the technical support.
6) The instrument can be used in environments with category of measurement III and pollution degree 2.

TECHNICAL CHARACTERISTICS

- Power supply: 2 alkaline batteries from 1.5V (AAA type)
- Battery life: about 1 year
- Wall-mounting installation or to cover the 503 box
- Summer (cooling) / winter (heating) / off (with antifreeze) operating mode
- Regulation type:
  - on/off with settable differential (0.1 ÷ 1°C)
  - P8 proportional with 0.8°C band (-0.3 ÷ +0.5°C) and period 8 minutes
  - P15 proportional with 1.5°C band (-0.7 ÷ +0.8°C) and period 15 minutes
- Measurement precision: ±0.5°C
- Measurement temperature resolution: 0.1°C
- Settable setpoint range: 2°C ÷ 35°C
- Operating temperature: 0°C ÷ +50°C
- Storage temperature: -10°C ÷ +65°C
- Operating humidity: 10% ÷ 90% non condensing
- Touch screen display with backlighting on with a key touch
- Password protected lock keypad
- Communication with the actuator through a radiofrequency signal 433.92 MHz
- Maximum distance between thermostat and actuator: 50 m in free field
- Protection degree: IP40

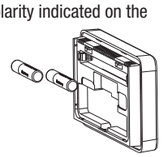
4 INSTALLATION

• Association between Thalos RF and remote actuator

Because the Thalos RF and a remote actuator can communicate correctly, it's necessary to perform a procedure called "self-learning", during which the remote actuator recognizes and stores the identity of Thalos RF.

To perform the self-learning proceed as follows:

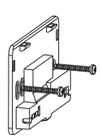
1. Activate the channel configuration of the remote actuator (see the instructions). The actuator remains in configuration mode for a pre-set time, within which it must receive the configuration string from Thalos RF.
2. Insert the batteries in the Thalos RF, respecting the polarity indicated on the instrument (to access the batteries compartment it's necessary to unhook the thermostat from the base by pressing the tab at the bottom of the instrument). After about 3 seconds the Thalos RF initiates the configuration procedure (indicated by CnF on the display) followed by a short test procedure (indicated by tSt on the display) where Thalos RF sends the sequence on-off-on-off to the actuator.



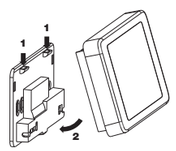
3. Upon receipt of the configuration string, the remote actuator is configured and resumes the normal operation while the Thalos RF displays the ambient temperature (the programming keys will be active only after you have hooked the thermostat at the base).

• Indications for placement

The Thalos RF is designed for wall-mounting installation or to cover the 503 box.



Fix the base on the wall using the screws supplied.



Attach the thermostat to the base, at first mating teeth first placed on the upper side.

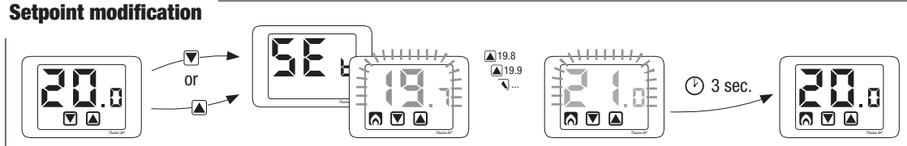
Place the thermostat at a height at about 1.5 m above the floor, away from direct sunlight, away from doors, windows, heat sources, locations with excess or total lack of aeration.
The actuator is usually placed near the boiler to pilot.

Attention: the maximum distance between Thalos RF and remote actuator is about 50 m in free field. This value is reduced if there are obstacles in the middle (for example, reinforced concrete walls).

5 OPERATION

During normal operation the Thalos RF displays the value of the measured temperature and the possible activation command to the remote actuator is indicated by the symbol (heating mode) or by the symbol (cooling mode).

Setpoint modification

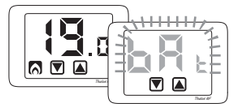


Normal operation

Modification of the desired temperature (setpoint), ▲ to increase ▼ to decrease

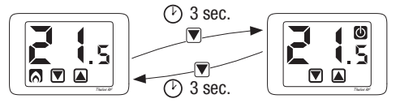
Normal operation heating on ( )

Depleted batteries signal



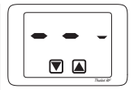
Replace the batteries as soon as possible! Dispose of the batteries in the appropriate recycling containers

Switch off



Note: in heating mode (winter), if the Thalos RF is off, it regulates the antifreeze **Toff** temperature in order to prevent freezing of the system.
Toff can have values from 1 to 10° C or be excluded; in this case any minimum temperature is guaranteed.

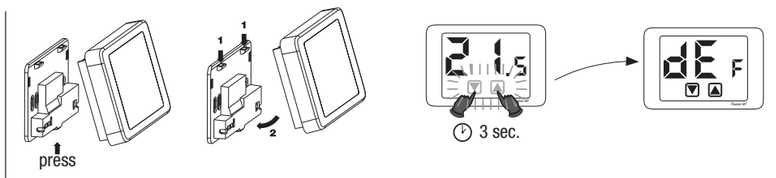
Error messages



Occurs for the following values of measured temperature:
t < 0°C
t >50°C

Occurs in case of probe failure.
In this case the Thalos RF activates the receiver for 10 minutes every 4 hours (if the antifreeze temperature **Toff** is active)

Reset



Unhook and re-hook the thermostat from the base. Press the keys for at least 3 seconds during the flashing.

Default values

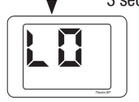
Heating setpoint	21°C
Cooling setpoint	25°C
Minimum settable setpoint - LO	2°C
Maximum settable setpoint - HI	35°C
Operating mode	(heating)
Antifreeze temperature	6°C
Regulation type	On /Off
Differential	0.3°C
Password	- - - (desabled)

Advanced programming

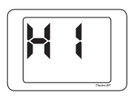
The advanced programming menu is divided into two parts: programming of operating parameters (Pr) and configuration/test of the radiofrequency transmission (rF).
To access it, press simultaneously the keys ▲ and ▼ for at least 3 seconds until Pr appears. At this point choose which menu to access with the keys ▲ or ▼.
You will enter the selected menu after 3 seconds without pressing any key.

Pr (parameters programming)

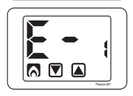
Note: the passage from a menu to the next one occurs after 3 seconds without keys pressures.



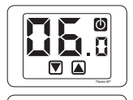
Minimum settable setpoint - LO
It's the minimum value settable as setpoint.
Settable values: 2 ÷ 35°C



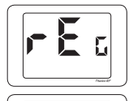
Maximum settable setpoint - HI
It's the maximum value settable as setpoint.
Settable values: LO ÷ 35°C



Operating mode - E- 1
if connected to the boiler (heating)
if connected to a cooling system



Anifreeze temperature - Toff
Minimum temperature maintained with Thalos RF off (see box «Switch off»).
Settable values: 1 ÷ 10 °C or --- (excluded function)



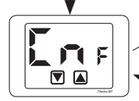
Regulation type - rEG - (only in heating)
0 = on/off with settable differential
P8 = proportional with band 0.8°C and period 8 minutes
P15 = proportional with band 1.5°C and period 15 minutes

Differential - d0.3 - (only for on/off regulation)
Differential (or hysteresis) for temperature regulation
Settable values: 0.1 ÷ 1°C

Password for keypad lock - PAS
Set a value between 001 and 999 to activate the keypad lock.
Set **"---"** to disable the lock.
If the keypad lock is active, pressing one key Loc appears and the password is required. If it's properly inserted the keyboard is unlocked for the next 30 seconds.

3 sec.

rF (radiofrequency configuration)



Configuration - CnF
Choose CnF to perform a new configuration, which sends an identifying string of Thalos RF to the actuator. To activate the configuration, press the key ▲ for at least 3 seconds until CnF stops flashing.
Note: before activating the configuration it's necessary to activate the configuration of the channel on the actuator.
After successful configuration Thalos RF performs the test phase.

Test - tSt
The test is used to verify the correct communication between Thalos RF and the actuator and it can last 10 minutes the maximum. To activate the test, press the key ▲ for at least 3 seconds until tSt will stop flashing. During the test the commands of on and off are sent to the actuator every 10 seconds. To stop the test, press the key ▲ for at least 3 seconds.

Note: if you do not press any key within 10 seconds the instrument exits the menu showing End.

REFERENCE STANDARDS

Compliance with Community Directives:
1999/5/EC (R&TTE) - 2004/108/EC (Electromagnetic Compatibility)
is declared with reference to the following harmonized standards:
• ETSI EN 300 220-1 • ETSI EN 300 220-2
• ETSI EN 301 489-1 • ETSI EN 301 489-3

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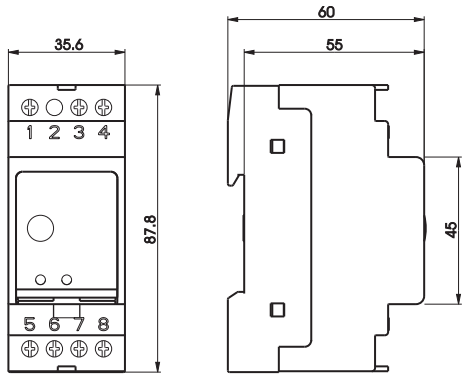
Mod. **RX1-8A**

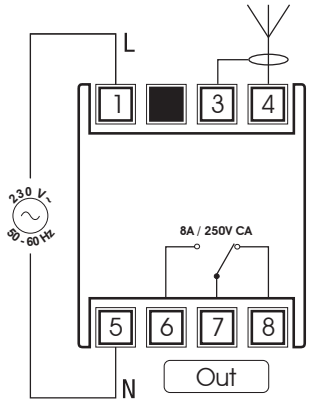
User Manual

REMOTE ACTUATOR MODEL RX1-8A
Read all the instructions carefully

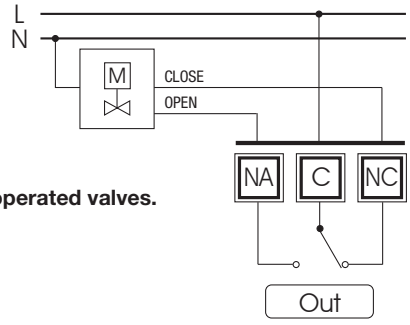
Dimensions



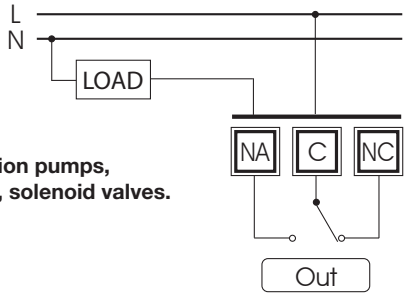
Connection diagram



Connection examples



Motor-operated valves.



Circulation pumps, burners, solenoid valves.

- The remote actuator **RX1-8A** is an independently mounted automatic control for heating and air conditioning applications, designed for radio comunications with **Athena** programmable thermostat and **Klio** digital thermostat.
- It provides a type 1B actions and it is designed for household and similar use with overvoltage category III (EN 61010-1) and normal pollution level (EN 60730-1).

SAFETY WARNINGS

During product installation and operation, the following safety instructions should be respected:

1) ***The appliance should only be installed by technical person support***
2) ***Take out power supply during product installation***
3) ***Do not power or connect the instrument if any part of it is damaged***
4) ***Follow the connection diagrams descripted on this manual and over the product***

Code	Model	Description
VE015400	RX1-8A	Remote actuator

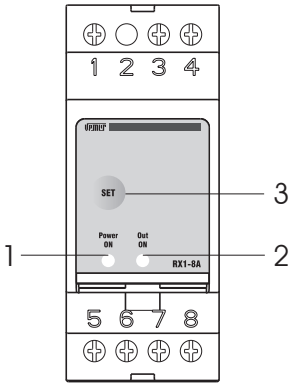
CARACTÉRISTIQUES TECHNIQUES

- Power supply: 230 VAC (-15%/+10%) 50/60 Hz
- Outputs:
  - 1 relay 8A 250 V AC (resistive load)
  - external antenna (on request)
- Operating temperature: 0°C ÷ 50°C
- Storage temperature: -10°C ÷ 65°C
- DIN-rail mounting
- Protection degree: IP40

USE

DISPLAY AND CONTROLS

1 – Green LED operation function
2 – Red LED relay function
3 – Reset and programmation SET BUTTON



OPERATION

- In starting phase, the red LED flasheses twice for some seconds (switching on- sequence).
- At the end of the switching on-sequence, the green LED signal normal device operation and the red LED relay status (light on = relay ON).
- The remote control (relay commutation ON/ OFF) request from **Klio** digital thermostat and **Athena** programmable thermostat take place only after channel setting-up.
- The radio connection break down for more than 15 minutes between the transmitter and the receiver disconnects the relay and the red LED lightened. Restore of operations is automatic.

Channel setting-up

- During normal operation, press the SET key-button for almost three seconds to enter in modality-configuration. Green LED switch-off, red LED flash.
- The appliance keep on modality-configuration for a maximum of 60 seconds within the actuator should receive a string configuration (see Athena and/or Klio instructions for string start-up modality).
- On receipt of string, channel is setted-up and the actuator is on standard functioning.
- For re-setting up, repeating the procedure.

- To reset channel setting-up, plug into configuration modality with SET button, then push the same one for three seconds and wait for green led switching on. A new channel setting up cancels the previous configuration.

STANDARDS REFERENCE

Conformity with EU Directives:
2006/95/EC (Low Voltage)
2004/108/EC (E.M.C.)
is declared with reference to the following standards:

- **Safety:** EN 60730-1
- **Electromagnetic compatibility:** EN 301 489-1/3 and EN 300 220-3