ESTAT RE

PROGRAMMABLE, SMART AND CONNECTED DIGITAL ROOM THERMOSTAT - WIRED FLUSH MOUNTED

Extra flat design, full color touch screen interface, multi-application, automatic programming with self-learning process, occupancy detection, window opening detection, gauge and indication of energy consumption in kWh, remotely-controlled thanks to a customizable mobile application

Overview

Main features

- Ambient temperature control
- Temperature setting
- Operating modes selection
- Quick heating of the room using the instant Boost
- Automatic and self-learning programming, customized
- Dual optimization feature

Applications

- Boiler
- Electric and hydraulic underfloor heating
- Unit heater
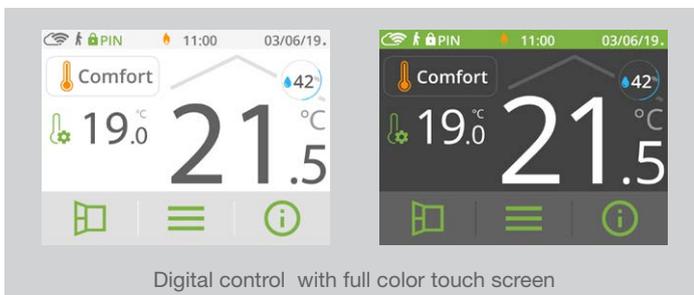- Heat pumps
- Other

Benefits

- **Contemporary and innovative, an exclusive and extra flat design, including an occupancy detector**
- **Connectable directly to the Internet** through the Internet provider box, without any other accessories
- **Remote control from smartphone, tablet or PC thanks to a dedicated and customizable mobile application**
- **Very versatile and adaptive:** control in heating or cooling mode of different equipment with adaptive controller according to inertia
- **Excellent ergonomic settings: revolutionary full color touch screen interface easy to read,** intuitive navigation and easy to use, 3 independant buttons: mode/back to the home screen and temperature setting
- **Adaptability: customizable display, interface adaptable to different user profils** (housing, hotels, offices, public buildings) to adapt to each need
- **Latest generation advanced electronics with OTA microprocessor for software remote update**
- **"Smart" electronic control:** this means stable and accurate temperature in the room all year round
- **Energy saving, comfort and performance**
- **Self-programming:** automatic programming by self-learning of the life patterns
- **Automatic changeover summer/winter time**
- **Works without batteries** by power supply
- **Permanent backup of parameters** even in the event of a power failure
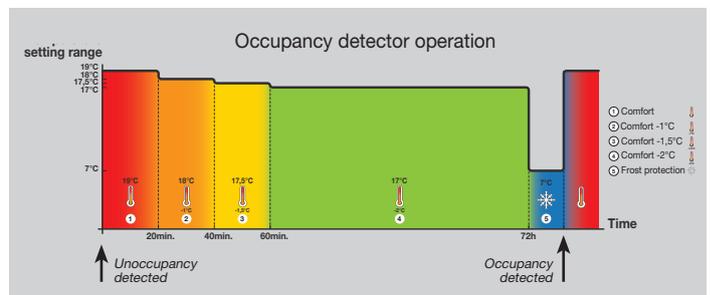- **Optional: additional external sensor for underfloor heating**

Cloud Highly secure

Functional specifications

Use

Comfort temperature setting	**Preset to +19°C**, adjustable from +7°C à +30°C **(heating)**; **preset to +26°C,** adjustable from 32°C à 19°C **(cooling)**
Comfort + temperature setting	**Preset to +21°C,** Comfort + 1°C temperature adjustable **(heating)**; **preset to +24°C,** Comfort - 1°C temperature adjustable **(cooling)**
Eco temperature setting	**Preset to +15,5°C,** adjustable from +5°C to +19°C **(heating)**; **preset to +28°C,** adjustable from +8°C to +38°C **(cooling)**
Frost protection temperature setting	**Preset to +7°C,** adjustable from +5°C to +12°C
Operating modes	Auto (programming), Comfort, Eco, Boost, Frost protection, Holidays
Boost	Adjustable between 30 and 180 minutes in 10 minutes intervals: to rise quickly the temperature and turn on the heating for a time period requested
Programmable holiday mode	Frost protection during a programmed absence period
Energy consumption gauge	Automatic indication of the energy consumption level according to the temperature setpoint
Power consumption indication in kWh	Posting of the estimated amount of energy consumed in kWh since the last 24 hours or since the last reset to 0 of the energy meter
Opened window detection	Automatic switching to Frost protection mode when a significant drop in temperature is detected
Window airing feature	Manual window airing can be enabled at any time
Occupancy detection	During an unoccupied period, the setting temperature is automatically and progressively decreased

Digital control with full color touch screen

Occupancy detector operation

Auto-programming	As soon as the device is switched on and without any initial adjustment, the device is in learning mode to understand and memorize the user's life patterns. The integrated smart algorithm is going to analyze this information in real time in order to optimize and adapt the programme for the coming weeks
Programming	- 10 different programming profiles pre-recorded for each day of the week: Auto-programming, P1, P2, P3, P4, P5, Permanent comfort, Permanent eco, Office, Hotel - Programming assistant for step-by-step assistance - Customisation of P1, P2, P3, P4, P5 programs, Permanent comfort, Permanent eco with Comfort + and Frost protection programming periods, Office, Hotel - Manual and temporary overriding of a programme
Dual optimization feature	Depending on different parameters of the room, the controller calculates and optimizes the programming of Comfort and economy periods (Eco) according to the choice of the user; **Eco oriented**, priority to savings or **Comfort oriented**, priority to comfort (by default)
Help for the visually impaired	- **The button Mode/Home is in relief** to be easily identifiable to the touch - **The - and + buttons of temperature setting are in relief**

Safety	- **Child anti-tamper:** touch screen locking
	- **Setting safety:**
	  - Min. and Max limits of the adjustment range of the Comfort setting temperature
	  - Customizable PIN code locking (prevents access to the Comfort mode, advanced and expert settings)
	- **Time, date and setting backup in case the mains power supply goes off**
	- **Internal protection against any overheating**

3 levels of settings	User, Advanced, Expert

Installation

Wall socket supplied, to be mounted directly on the wall
Easy to install: Designed to be attached to a 60mm standard flush-mounted box (not supplied)

Setup assistant	On first power-up : simple and fast procedure to setup the main settings Setup assistant can be accessed later to view and modify registered settings

User settings

Language use	**Preset to French,** English available
Wifi connexion	**Direct internet connexion** through the Internet provider box thanks to a dedicated mobile app
Display	Backlight duration and brightness, choice of a screen color theme possible
Regional units	Temperature unit, date and time format, automatic changeover summer/winter time can be disabled
Equipment	Choice of the type of equipment controlled by the thermostat: boiler, underfloor heating, unit heater or other
Underfloor heating, optional external sensor	Possibility of display measured temperature, adjustment of the min and max limits of the measured temperature to optimize the temperature of the floor
Heating/Cooling	Choice of thermostat operating mode: heating or cooling
Return to the user factory settings	

Advanced settings

Occupancy detection	**Enabled by default,** can be disabled
Automatic window-opening detection	**Enabled by default,** can be disabled
Min. setpoint temperature	**Preset at +7°C,** adjustable from +7°C to +18°C
Max. setpoint temperature	**Preset at +30°C,** adjustable from +19°C to +30°C
User profile	**4 profiles available** to meet each need: Individual housing, buildings receiving public, hotels or offices
Boost duration	**60 minutes by default,** adjustable from 30 to 180 minutes by 10 minutes steps
Window airing cycle duration	**30 minutes by default,** adjustable from 5 to 90 minutes by 5 minutes steps

Expert settings

PIN code locking	Initialization - Customization - Activation and deactivation
Type control choice	The thermostat automatically adapts the type of controller to the equipment it controls. However it is possible to modify it manually
Central heating installation - pump protection	**Enabled by default,** can be disabled
Temperature adjustment	Ambient temperature sensor adjustment with automatic adjustment
Relay position - NO/NC management	**Normally open (NO) by default,** switchable in Normally closed (NC)
Reset: return to the advanced and expert factory settings	

Technical specifications

Dimensional and finish specifications

Height	87 mm
Width	87 mm
Depth	18 mm
Colors	White or black
Net weight	0,27 Kg

Power supply

Operating voltage	230V AC+/-10% 50Hz
Maximum power	2000W resistive load
Power cord	1.5mm²

Control

Control type	Proportional integral derivative electronic regulation (PID) and on/off, triac engagement

Environment

Protection rate	IP20 after installation under the responsability of the integrator
Class	II after installation under the responsability of the integrator
Control class and energy contribution	IV according ERP/2009/125/EC and associated regulations
Operating temperature	0°C to +40°C
Temperature setting range	+7°C to +30°C
Storage temperature	-10°C to +65°C
Programming	10 programming profiles
NTC electronic temperature sensor	

Applicable directives

RED	2014/53/EU
RoHS	2015/863/EU and 2017/2102/EU

Applicable standards

RED	2014/53/EU
Safety	EN60730-1 ; EN60730-2-9: 2 ; EN62311
EMC	ETSI EN301489-1 ; ETSI EN301489-17
RF	ETSI EN300328-1
RoHS	2011/65/EU, amended by Directives 2015/863/EU and 2017/2102/EU : EN50581
Manufacturing	On certified site ISO 9001 V2015

Product codes

Codes	Descriptions
ERTREA	Smart and connected programmable thermostat, wired, white version
ERTREBA	Smart and connected programmable thermostat, wired, black version
In optional	
ACAEXSEA	External sensor for underfloor heating 5 meters class II, white

Product customization (style, features) possible on request. Please contact us.