

BT TOUCH

MULTIFUNCTION USER INTERFACE AND REMOTE CONTROL PANEL WITH WIFI CONNECTIVITY



DESCRIPTION

The BTouch is a control panel with customizable graphics that can be used as a local user interface or in the "Crono" version as a remote control panel by adding a power supply module with communication bus adapter to the back side.

It is equipped with a dot matrix graphic display and seven CapSense technology keys, both with LED backlighting which allows excellent visibility in various light conditions.

On board there are a temperature sensor for detecting the ambient temperature, an acoustic buzzer and a WiFi module that allows connection to a WiFi network.

Wi-Fi connectivity allows remote control of the system via smartphone, using the appropriate application, assistance and updating.

In addition, it is possible to combine a practical and simple infrared remote control to easily interact in distance with the BTouch.

In the version without power supply module it is possible to connect the BTouch, by a practical 4-pole RAST connector, directly to the control board of an HVAC system, from which the power supply voltage is taken and information is exchanged via the UART communication channel.

In the "CRONO" version with power supply module and communication bus adapter, power is supplied by the power supply module, which is connected to the main power supply and for data exchange you can choose one of these alternatives:

- **Standard OpenTherm**, for combining with HVAC electronic control board of any manufacturer that is a member of the OpenTherm association.
- **Bus RS-485**, for the creation of multi-point networks such as the ModBus.
- **Relè**, where the closing of the contact allows a simplified management of the heating or cooling request.

GENERAL FEATURES

- Backlit 128x64 pixel dot matrix LCD graphic display.
- 7 touch keys with CapSense technology and acoustic feedback.
- 7 LEDs for key backlighting and diagnostics.
- WiFi connectivity.
- Infrared receiver for pairing with the remote control.
- Temperature sensor.

SOFTWARE FUNCTIONS

- Clock backup in case of power failure.
- Customizable menu and graphics on customer request.
- Firmware update via bootloader.
- Weekly programming.
- Control via App for Android and iOS smartphones.

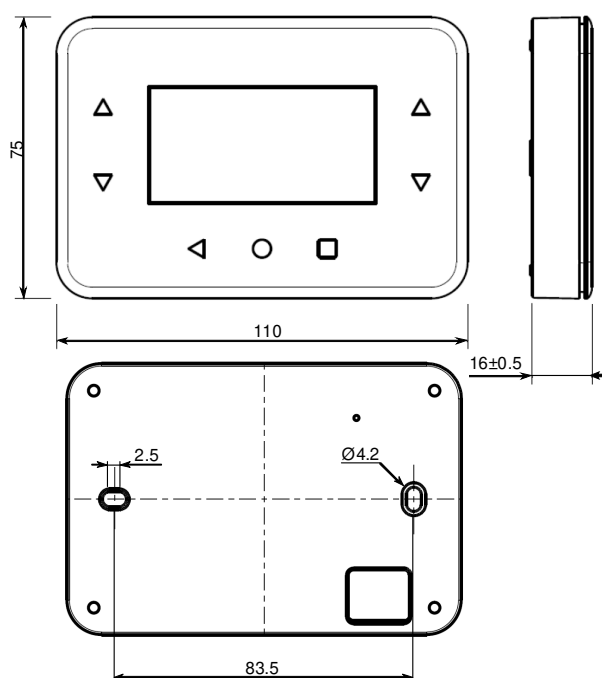
USER INTERFACE TECHNICAL DATA

Power supply:	5V _{DC} max 1W
Operating temperature:	0°C +60°C
Humidity:	95% max at 40°C
Degree of protection:	IP 40
Weight:	100g
Power in stand-by (version without WiFi):	0.15W
Power in stand-by (version with WiFi):	0.5W
Maximum cable length UART communication (version without power supply module):	1.5m
Dimensions:	110x75x16 mm
Connection:	RAST 4 poli Lumberg 3510 04 K20
Compliant:	2014/53/EU - Radio Equipment Directive

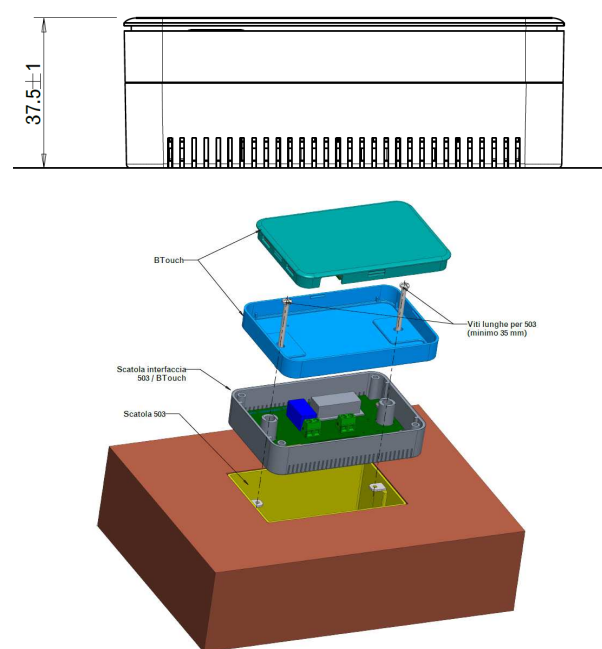
POWER SUPPLY MODULE TECHNICAL DATA

Extended range input voltage:	85V _{AC} ÷ 305V _{AC}
Frequency:	50/60 Hz
Output voltage:	5V _{DC}
Output power:	3W
Maximum output current:	0,6A
Insulation:	class II reinforced
Insulation resistance:	3000V _{AC}
Maximum cable length OpenTherm	50m
Maximum cable length bus RS485	50m
Weight:	120g
Dimensions (display + power supply module):	110x75x38 mm
Connections:	screw 2 poles

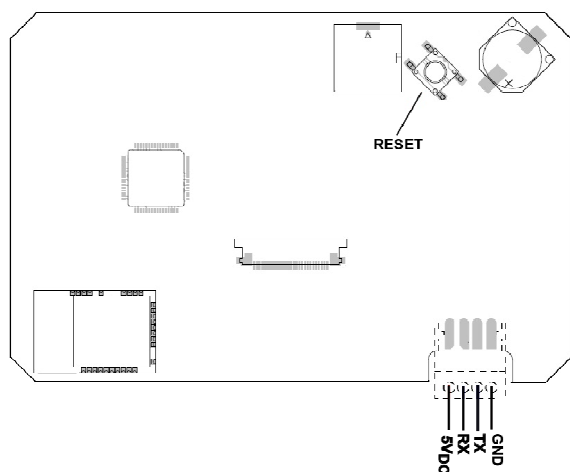
USER INTERFACE DIMENSIONS AND FIXINGS



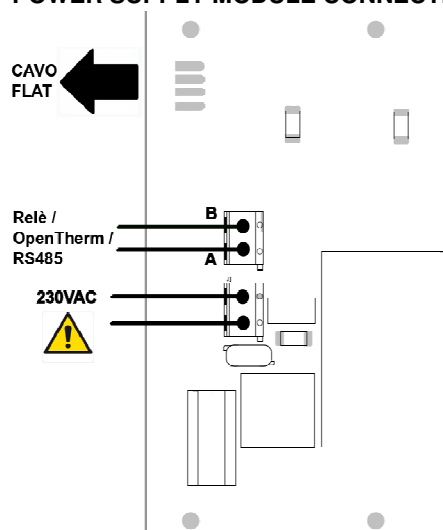
POWER SUPPLY MODULE DIMENSIONS AND FIXINGS



USER INTERFACE CONNECTIONS



POWER SUPPLY MODULE CONNECTIONS



INDICAZIONI PER L'INSTALLAZIONE

- The applicable national and European standards (ex. EN60335-1, EN60335-2-102) related to the electrical safety must be respected.
- Before starting the system check the wiring carefully. Wrong connections can damage the controllers and compromise the plant safety.
- Avoid putting control signals cables close to power cables.
- Avoid exposure to dripping water.

- Evitare l'esposizione del sistema alla caduta di gocce d'acqua.



NOTES ABOUT PRODUCT DISPOSAL

The device contains electronic components and cannot therefore be disposed of as normal household waste. For the disposal procedure, please refer to the local rules in force for special waste.

CODING PLAN

BTOUCH CALDAIA: used as a user interface placed on a boiler.

BTOUCH CALDAIA β X.Hn.S

CODIFICATION		DESCRIPTION
β	Remote communication identification letter	E -> version without wifi
		W -> version with wifi
X	Last 4 digits of the electronic circuit board	1037 -> CS 81091037
Hn	Customer identification letter(s) and hardware progressive number	See document SAP n°3419 (see Note 1)
S	Software revision index U6	Progressive number to start from 00 (00, 01, 02 ecc.)

BTOUCH PELLET: used as a user interface placed in a pellet stove.

BTOUCH PELLET RC X.HW.S

CODIFICA		DESCRIZIONE
R	Letter identifying the type of pellet devices	_ -> with 1 air exchanger (simpler version)
		Z -> ducted stove (with 2 or more air exchangers)
		T -> Thermo stove (equipment suitable for generating hot water for heating use, with any sanitary option, intended for installation in the home)
		B -> Burner (heating equipment intended for installation in technical rooms, in combination with a boiler)
		C -> Boiler (equipment that integrate a boiler, suitable for the generation of hot water for heating use, possibly with sanitary option, intended for installation in technical rooms)
C	Letter identifying the type of connection	E -> version without wifi
		W -> version with wifi
		O -> versione with OpenTherm and without wifi
X	Last 4 digits of the electronic circuit board	1037 -> CS 81091037
H	Customer identification letter(s)	See document SAP n°3419
W	Type of electrical board associated with the product	(See Note 1)
S	Software revision index U6	Progressive number to start from 00 (00, 01, 02 ecc.)

BTOUCH CRONO: used as a remote control panel with dedicated power supply applied to the back side.

BTOUCH CRONO α β ω X.Hn.S.F

CODIFICA		DESCRIZIONE
α	Letter identifying the final application	C -> for wall mount boilers
		PC -> for heat pumps
		GA -> for air generators

β	Remote communication identification letter	E -> version without wifi
		W -> version with wifi
ω	Letters identifying the type of communication to the heating system	O -> version with OpenTherm
		RS485 -> version with RS485
		RELE -> version with Relay contact
X	Last 4 digits of the electronic circuit board	1037 -> CS 81091037
Hn	Customer identification letter(s) and progressive number	See document SAP n°3419 (vedi Nota 1)
S	Revision index of software U6 BTouch	Progressive number to start from 00 (00, 01, 02 ecc.)
F	Revision index of power supply software U2 (if is present)	Progressive number to start from 00 (00, 01, 02 ecc.)
		No number if software is not present

(Note 1) This device can have multiple hardware and software variants, making it impossible to enter all the options in the description, it decided to assign a NUMBER to the board and therefore to the finished product code that will be reported in the description and that:

- will be progressive by customer
- will indicate a particular hardware chosen by the customer and this hardware will be fully explained in a SPECIFICATION customized to the board.

ATTENTION: the same number used for different customers will not have the same meaning, it has to be considered only a progressive. The progressive hardware number goes hand in hand with the board code.

ATTENTION → Brahma S.p.A. accepts no responsibility for any damage resulting from customer tampering with the product.

BRAHMA S.p.A.

Via del Pontiere, 31

37045 Legnago (VR) - ITALY

Tel. +39 0442 635211 - Fax +39 0442 25683

<http://www.brahma.it>

E-mail: brahma@brahma.it

11/01/2021 Subject to amendments without notice