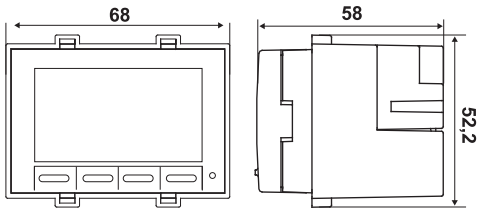
CH133RR

Flush mounting thermostato for fan-coils, 3 speeds + automatic

CH133RR is a kit composed by a thermostat for fan-coil (2 or 4 pipes) and a remote actuator. It controls the room temperature both in heating and cooling mode and it is able to control up to two valves and the speed of the fan coil (3 speeds or automatic function)

Dimensions (mm)



KIT COMPOSITION TABLE

KIT CODE	THERMOSTAT CODE	ACTUATOR CODE	CONNECTION TYPE
CH133RR	CH133	CH172D	2 wires

CODICE	Mounting	Temperature regulation range	Body admissible temperature	Power supply	N° relay	Power supply	Protection degree
CH133	wall mounting	2 ÷ 40 °C	45 °C	actuator CH172D	-	-	IP20
CH172D	6-module DIN rail		45 °C	230V-50Hz	5	5(3)A 250Vac	IP00
CH172DS*	6-module DIN rail		45 °C	230V-50Hz	5	5(3)A 250Vac	IP00

*CH172DS is used to control more fan-coils.

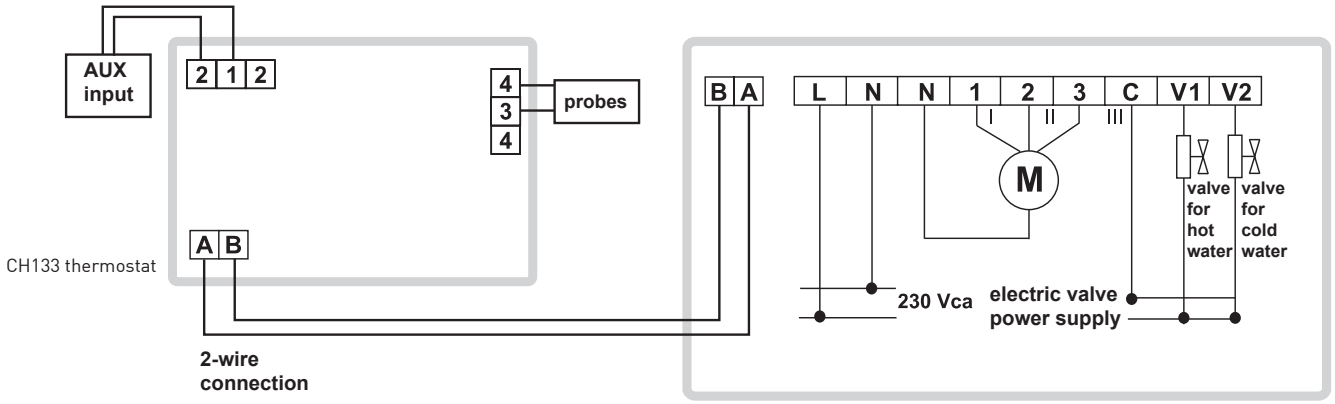
"MULTIPLATE" KIT

Suitable for all the plates (3 module) thanks to the KIT consisting of: programmable thermostat, coloured plates(white, silver and anthracite), frames and adaptors

CARATTERISTICHE ELETTRICHE

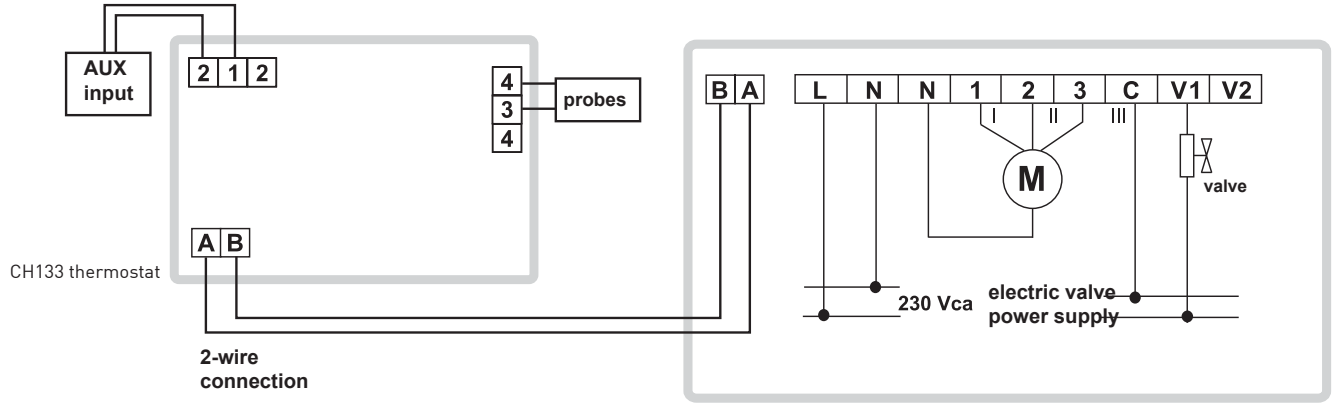
Power supply from a remote actuator
Remote actuator with 5 output relays, voltage 250 Vac.
Contacts rating 5(3)A.

4-TUBE INSTALLATION



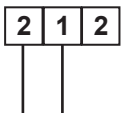
remote actuator CH172D

2-TUBE INSTALLATION



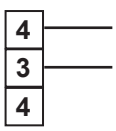
remote actuator CH172D

AUX INPUT CONFIGURATION



Input supplied with
24 Vdc/Vac

- not used
- ON/OFF
- SUMMER/WINTER



- not used
- return probes
- SUMMER/WINTER control
- minimum window/thermostat contact
- reverse contact (minimum window/thermostat)

HOMOLOGATION AND STANDARDS

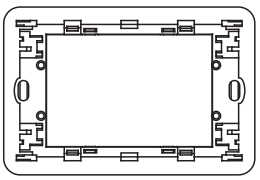
Complies with EN60730-1, EN60730-2-9.
Complies with 2006/95/CE, 2004/108/CE, 1993/68/CE
ErP: ErP Class IV; 2% (Reg. EU 811/2013 -813/2013)

CE EAC

INSTALLATION

Flush-mounting in 3-module 503 embedded boxes by means of 2 screws (supplied).
Two-wire connection with the user.
Install the thermostat at 1,5 meters above the floor, away from kitchens, heat sources, windows and doors.
Can be applied, without any connection accessory, the following plates:

INCLUDED IN THE PACKAGE: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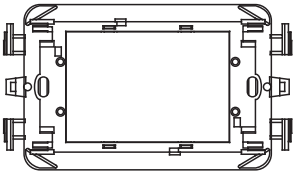
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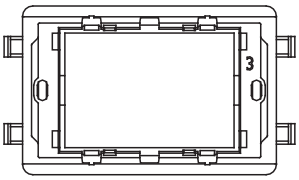

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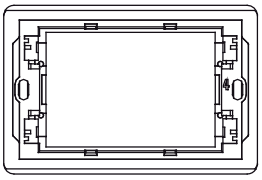
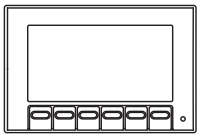
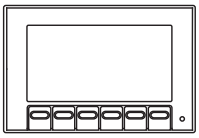


4

4 FRAMES
to provide
compatibility with
the most common
plates


A


B

3 COVER "A" for Bticino Axolute, Ave Sistema 44, Eikon Evo and Arkè
- ☐ WHITE
- ▒ SILVER
- ■ ANTHRACITE

3 COVER "B"
- ☐ WHITE
- ▒ SILVER
- ■ ANTHRACITE

3 PAIRS OF ADAPTERS
- ☐ WHITE
- ▒ SILVER
- ■ ANTHRACITE

1 PAIR OF ADAPTERS for Bticino Matix
- ☐ WHITE

COMPATIBLE PLATES

MODELS	COVER TYPE	FRAME TYPE	LATERAL ADAPTERS
Bticino Living International and Transizione Piana	B	1	NO
Bticino Living Light Air	B	3	NO
Bticino Light, Light tech	B	1	NO
Bticino Axolute	A	1	NO
Bticino Axolue Air	A	4	NO
Bticino Matix	B	2	YES (included)
Vimar Idea e Rondò	B	2	YES
Vimar Plana e Eikon	B	1	NO
Vimar Eikon Evo	A	3	NO
Vimar Arké	A	3	NO
Gewiss Chorus One, Lux, Art	B	2	NO
Ave sistema 45: Zama, Banquise, Yes, Ral	B	2	YES
Ave sistema 44: Zama, Personal, Tecnopolimero	A	1	NO
Legrand Cross, Vela quadra, Vela tonda	B	2	NO
ABB Elos	B	4	YES
ABB Mylos	B	4	NO

OPERATION

CH133 is supplied from the actuator and is able to drive two valves and also control a 3-speed fan-coil motor.

The backlight wide display shows the measured temperature, fan speed, the running program and the selected season.
The settings and data are stored in a permanent (nonvolatile) memory capable of keeping them even in the absence of power supply.

CH133 have 3 different operating modes:

- ☼ COMFORT: with the comfort operating mode, the thermostat regulates the heating or cooling installation operation in order to always keep the same prescribed comfort temperature
- ☾ ECONOMY with the ECONOMY operating mode, the thermostat regulates the heating or cooling installation operation in order to always keep
- the same prescribed economy temperature
- ⏻ (OFF), this function can be achieved by setting the fan speed to zero. In this case, the thermostat does not perform the regulation. The system will switch OFF completely and on display will appear the message "OFF".).

SUMMER-WINTER

- Suitable to control heating and air conditioning systems

FAN SPEED SELECTION

- MANUAL: fan speed can be set manually to free fixed levels (minimum, medium, maximum).
- AUTO: if the speed is set in Auto, the thermostat sets automatically the appropriate speed according to the difference between the set-point and the ambient temperature.

TECHNICAL MENU

CH133 has a technical menu to configure it for every installation with the following functions:

SYSTEM TYPE

- 2-TUBE SYSTEM: the thermostat will drive only the valve (on /off type) used for heating both during the heating and the cooling; in fact, the valve will control both hot water and cold water
- 4-TUBE SYSTEM: the thermostat will drive one valve (on /off type) used for heating, plus one additional valve (on /off type) used for cooling, based on the needs of the environment

EXTERNAL PROBE

- RESUMPTION: instead of the probe incorporated into the thermostat, an external probe can be used to read the ambient temperature and carry out heat regulation. Typically, this probe will be positioned under the fan-coil where air is sucked
- CHANGEOVER: the external temperature probe can be placed on the fan-coil delivery tube of a 2-tube system to perform automatic changeover between the "Summer" operation and the "Winter" operation
- MINIMUM WINDOW /THERMOSTAT CONTACT: when the contact is open, the thermostat will carry out heat regulation; when it is closed, the heat regulation will not be carried out.
- INVERTED MINIMUM WINDOW /THERMOSTAT CONTACT : the window contact will operate with an inverted logic with respect to the statements made in previous step 3.
- NONE : the external probe input will not be controlled by the thermostat.

DISPLAY VISUALIZATION

- AMBIENT TEMPERATURE: the ambient temperature will be shown on the display
- SET-POINT: the current set point will be shown on the display

CENTRAL INPUT CONFIGURATION

- ON/OFF: in the event that several thermostats have been installed, you may decide either to drive all of them in the normal
- operation condition (ON) or taking advantage of the OFF function by controlling them through a central point. The thermostat will be configured to OFF when the input is powered with 24 V (d.c. with no polarity obligation or a.c.); on the contrary, it will remain active when the input is free from voltage
- SUMMER /WINTER : as in the previous case, the thermostat will be configured to "Summer" mode when the input is powered with 24 V; on the contrary, it will remain active in the "Winter" mode when the input is free from voltage.
- NONE : the thermostat will not carry out any operation, whatever the input status

SUMMER VALVE TYPE

- NORMALLY OPEN : in this case, the water flow is normally open and will be closed when the valve is supplied.
- NORMALLY CLOSED : when the valve is energized, it will open the water flow.

WINTER VALVE TYPE

- NORMALLY OPEN : in this case, the water flow is normally open and will be closed when the valve is supplied.
- NORMALLY CLOSED : when the valve is energized, it will open the water flow

AMBIENT TEMPERATURE CORRECTION

- It can be adjusted from –4.0 to 4.0°C. This parameter is used to correct the acquired ambient temperature. In fact, in some installations, the ambient temperature reading may not be satisfying, due to the probe location (i.e. internal or resumption). With this parameter, a constant value upon reading can be added to or subtracted from.

"WINTER " LOWER LIMIT SET-POINT TEMPERATURE

- It can be adjusted from 2.0 to 40.0°C. It represents the lower limit for all the set-points (Comfort and Economy) in the heating mode.

"WINTER " UPPER LIMIT SET-POINT TEMPERATURE

- It can be adjusted from 2.0 to 40.0°C. It represents the upper limit for all the set-points (Comfort and Economy) in the heating mode.

"SUMMER " LOWER LIMIT SET -POINT TEMPERATURE

- It can be adjusted from 2.0 to 40.0°C. It represents the lower limit for all the set-points (Comfort and Economy) in the cooling mode

"SUMMER " UPPER LIMIT SET -POINT TEMPERATURE

- It can be adjusted from 2.0 to 40.0°C. It represents the upper limit for all the set-points (Comfort and Economy) in the cooling mode

CHANGEOVER LOWER THRESHOLD

- It can be adjusted from 0 to 24°C. It defines the changeover function lower threshold. Below this temperature, the thermostat will be set to the cooling mode.

CHANGEOVER LOWER THRESHOLD

- It can be adjusted from 26 to 48°C. It defines the changeover function upper threshold. Above this temperature, the thermostat will be set to the heating mode.

TEMPERATURE RANGE

- Possibility to visualize Celsius or Fahrenheit temperature values
- Settable differential.

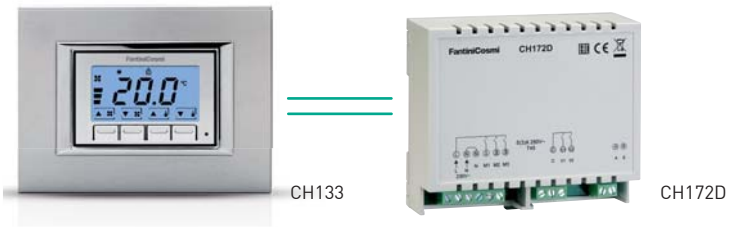
FEATURES

Auxiliary input for minimum window and/or thermostat contact using an external probe;
Dimensions (L x A x P) 68 x 52 x 58 mm;
External probe distance 10 m max;
Thermal gradient: 4K/h;
Maximum cable length actuator: 100m:
Screwed terminals;
⧈ double insulation.

CONNECTION EXAMPLE

A CH133 can control up to 5 fan-coil units simultaneously, using only two cables for connecting to the actuators.
One of these actuators must be a CH172D, while others, maximum four, will be CH172DS.

CONNECTION EXAMPLE 1 FAN-COIL



CONNECTION EXAMPLE MOST FAN-COIL (FROM 2 TO 5)