



SABIANA
IL CLIMA AMICO

WELCOME

Sabiana Spa

New residential fan coil Carisma CFF



Project status

March → September: moulds surface engraving for cabinet plastic components

April → July: moulds ready for the internal plastic components

April → September: performances tests on fan-coil on the complete fan-coil range


May → July: moulds ready for the plastic controls supports

May → September: punching dies ready for the frontal metal panel

June → October: performances data for catalogue and selection program

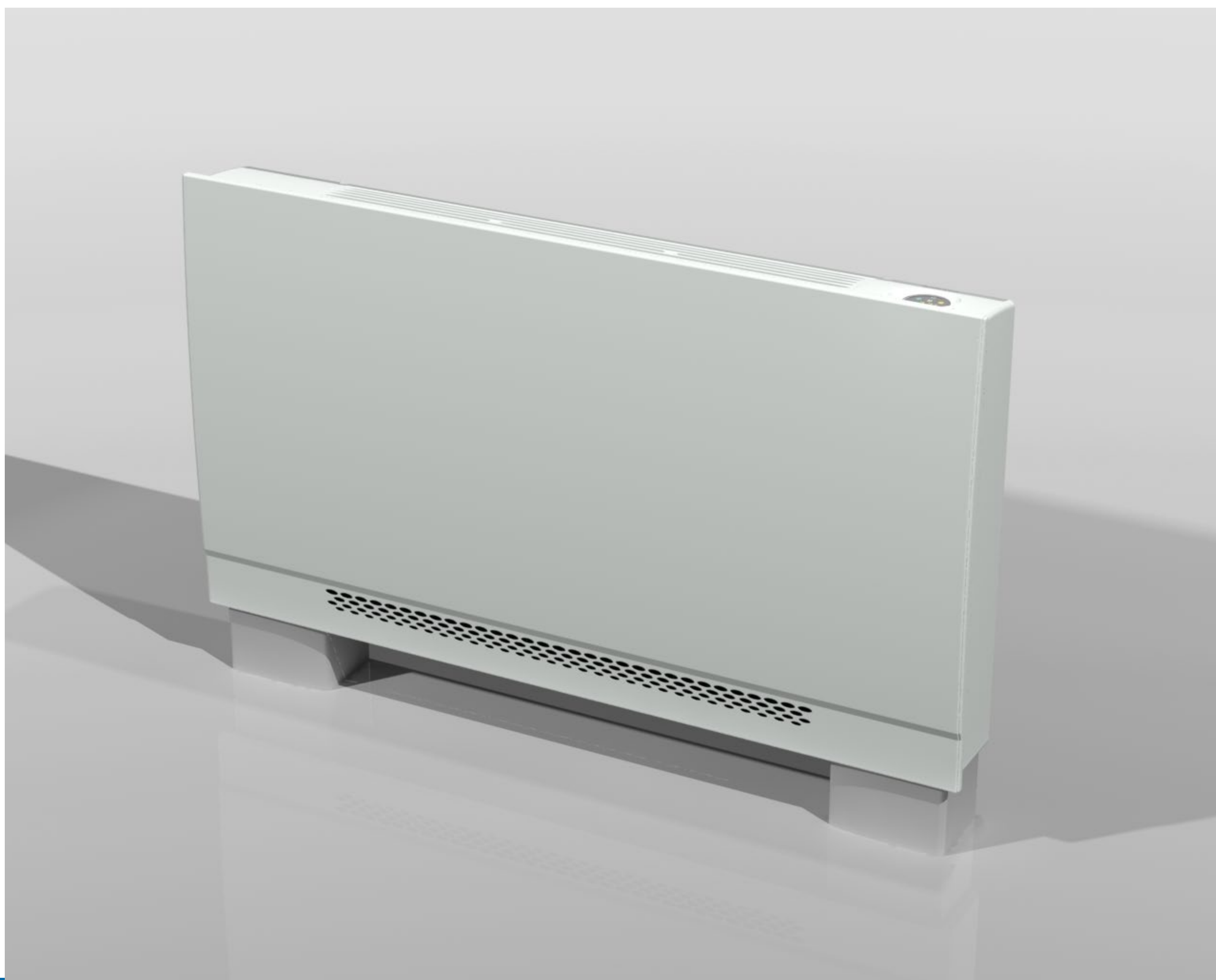
July → October: catalogues and instruction manual

July → October: APP for Android and IOS and controls firmware

- 
- ✓ New aesthetic design
 - ✓ Design spec
 - ✓ Main product features
 - ✓ Models range
 - ✓ Accessories list
 - ✓ Dimensions
 - ✓ Performances
 - ✓ Encoding
 - ✓ Construction details
 - ✓ Electrical details
 - ✓ Base version
 - ✓ CB-T Touch Control
 - ✓ CB-E Eco Control
 - ✓ Breeze
 - ✓ WiFi BlueTooth module
 - ✓ Sabiana App

New residential Fan Coil Carisma CFF











Design spec

- ✓ New residential fan coil range
 - ✓ 5 sizes
 - ✓ 2 versions
 - ✓ With casing
 - ✓ Concealed
 - ✓ Electronic motor
 - ✓ Tangential fan
 - ✓ Heat exchanger with left connections
 - ✓ Heat exchanger with right connections
 - ✓ Version with radiant panel (still to be developed)
-

Main features

- ✓ Motor is always fixed at right
- ✓ Same motor for all sizes
- ✓ 5 fan sizes (size 5 adopts 2 coupled fans)
- ✓ Motor stays at right side when heat exchanger connections are right
- ✓ Bottom steel protection grid
- ✓ G0 filter, polypropylene, L shape to take air from below and from front
- ✓ Outlet grid on tilting supports
- ✓ Control unit always fits at right, power board fits opposite to hydronic connections

Model Range

Versions

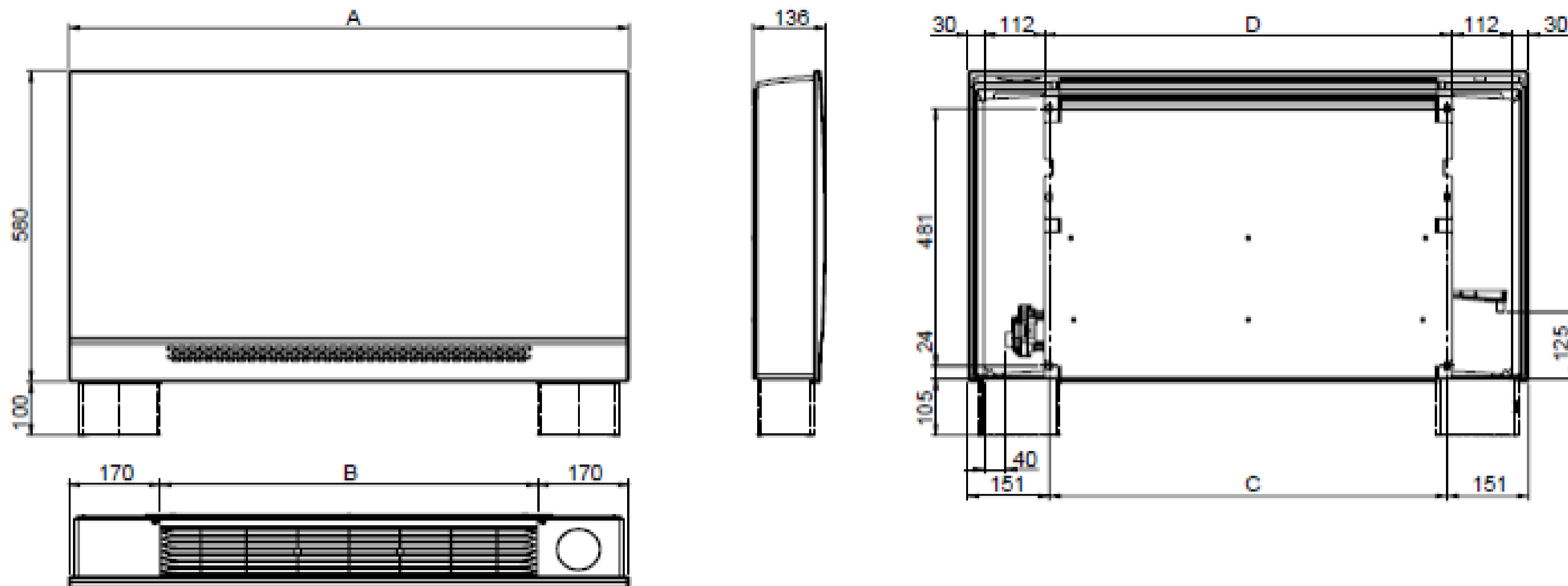
- ✓ Fan-coil without valve and without control
- ✓ Fan coil with fitted 2-way-valve without control
- ✓ Fan coil with fitted 3-way-valve without control
- ✓ Fan-coil without valve with fitted eco control
- ✓ Fan-coil with fitted 2-way-valve and fitted eco control
- ✓ Fan-coil with fitted 3-way-valve and fitted eco control
- ✓ Fan-coil with fitted 2-way-valve and fitted advanced control
- ✓ Fan-coil with fitted 3-way-valve and fitted advanced control

Accessories list

- ✓ Breeze frame kit for wall concealed installation
- ✓ Feet
- ✓ 2 or 3-way-valve kit
- ✓ Eco power board
- ✓ Eco CB-E control
- ✓ Advanced power board
- ✓ Advanced CB-T touch control
- ✓ Air and water probes T1 – T2 – T3
- ✓ Wall mounted WM-AU control to be connected to advanced power board
- ✓ Wall mounted T-MB control to be connected to advanced power board

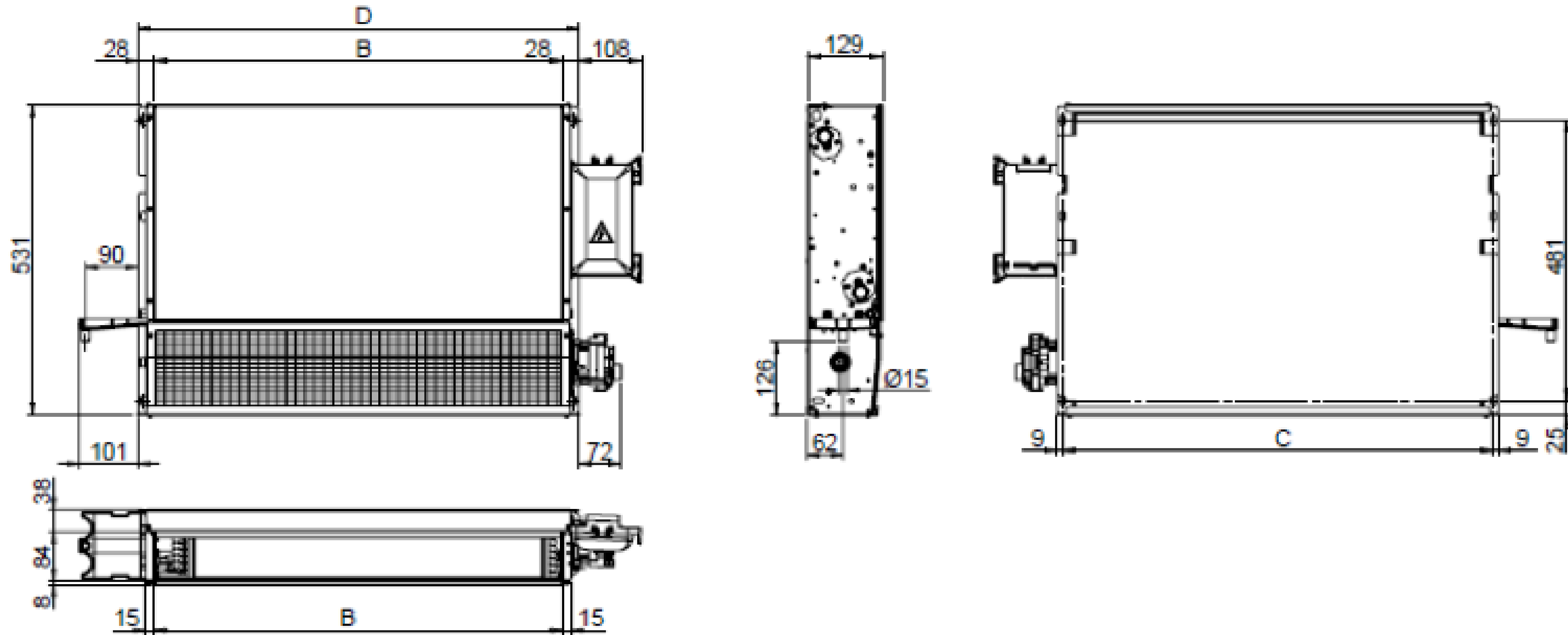
Note: there is no space for condensing pump, therefore is not supplied

Dimensions MV version with casing



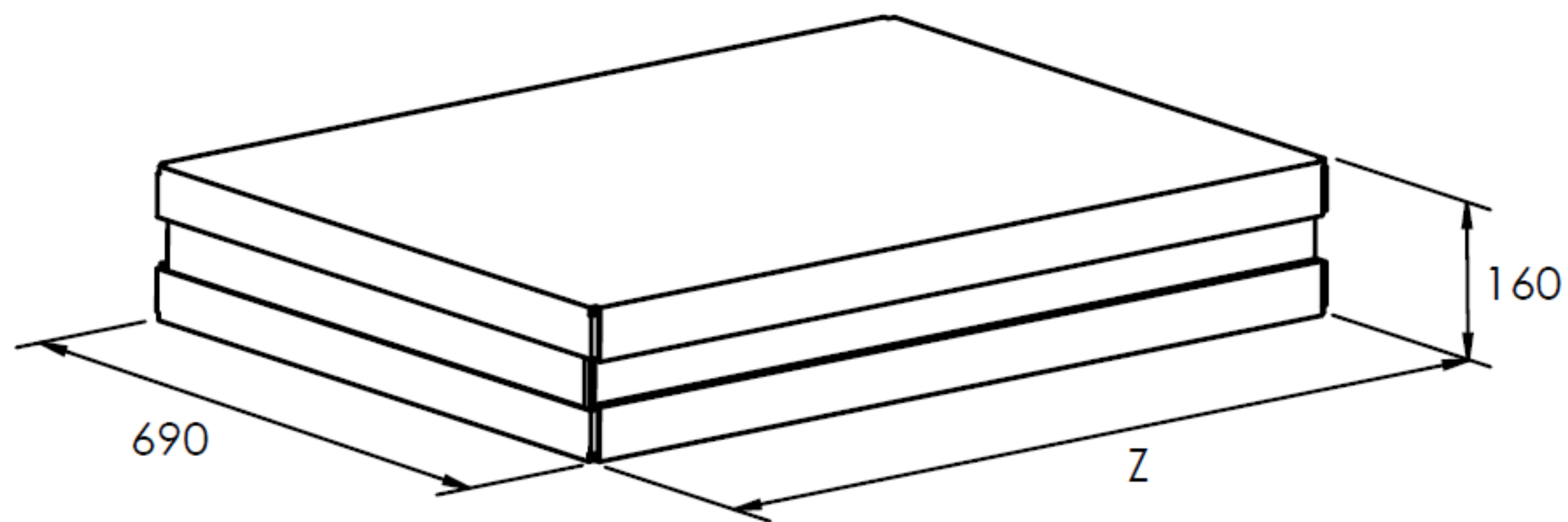
Modello	1	2	3	4	5
A	640	840	1040	1240	1440
B	300	500	700	900	1100
C	338	538	738	938	1138
D	356	556	756	956	1156

Dimensions IV concealed version



Modello	1	2	3	4	5
A	640	840	1040	1240	1440
B	300	500	700	900	1100
C	338	538	738	938	1138
D	356	556	756	956	1156

Packaging and weights



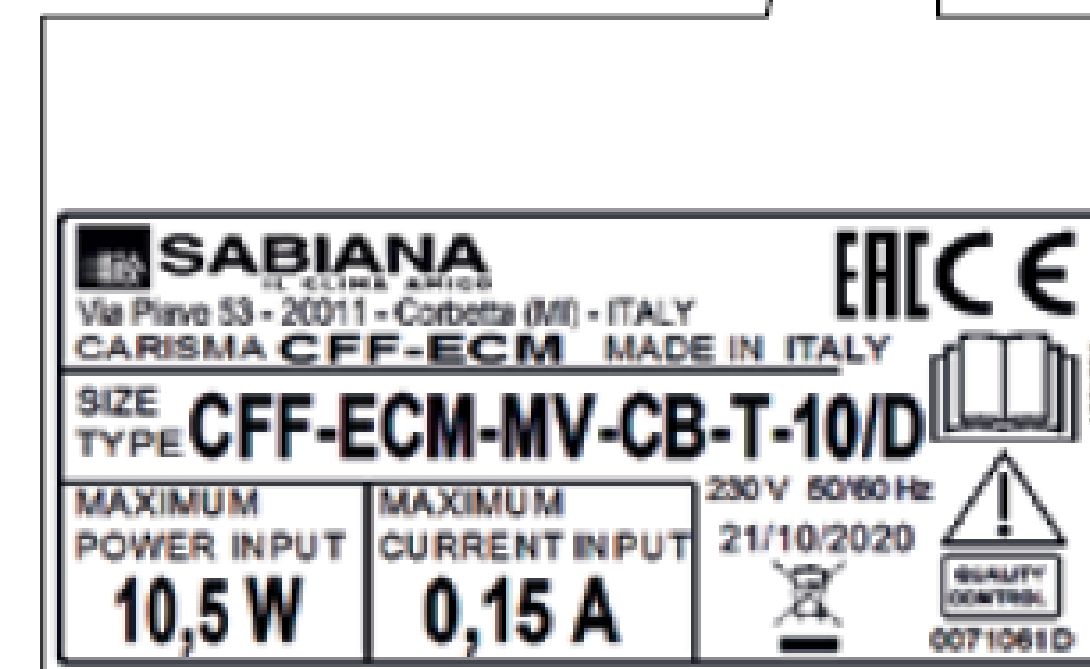
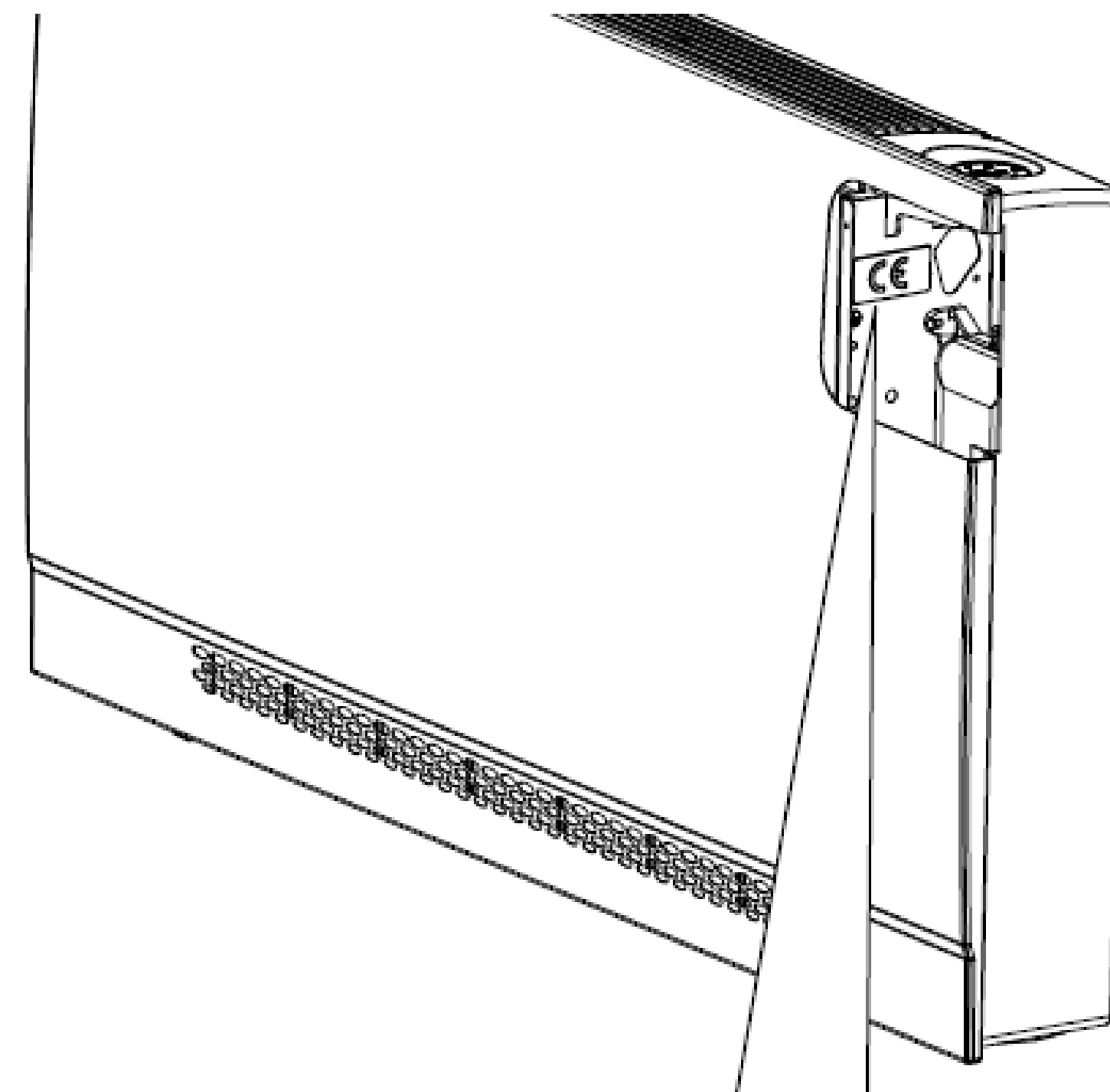
Modell		1	2	3	4	5
Z	mm	720	920	1120	1320	1520

Modell		CFF-ECM 1	CFF-ECM 2	CFF-ECM 3	CFF-ECM 4	CFF-ECM 5
Net weight	kg	11,6	14,9	18,5	21,9	25,7
Gross weight	kg	10,1	13,2	16,4	19,6	23,0

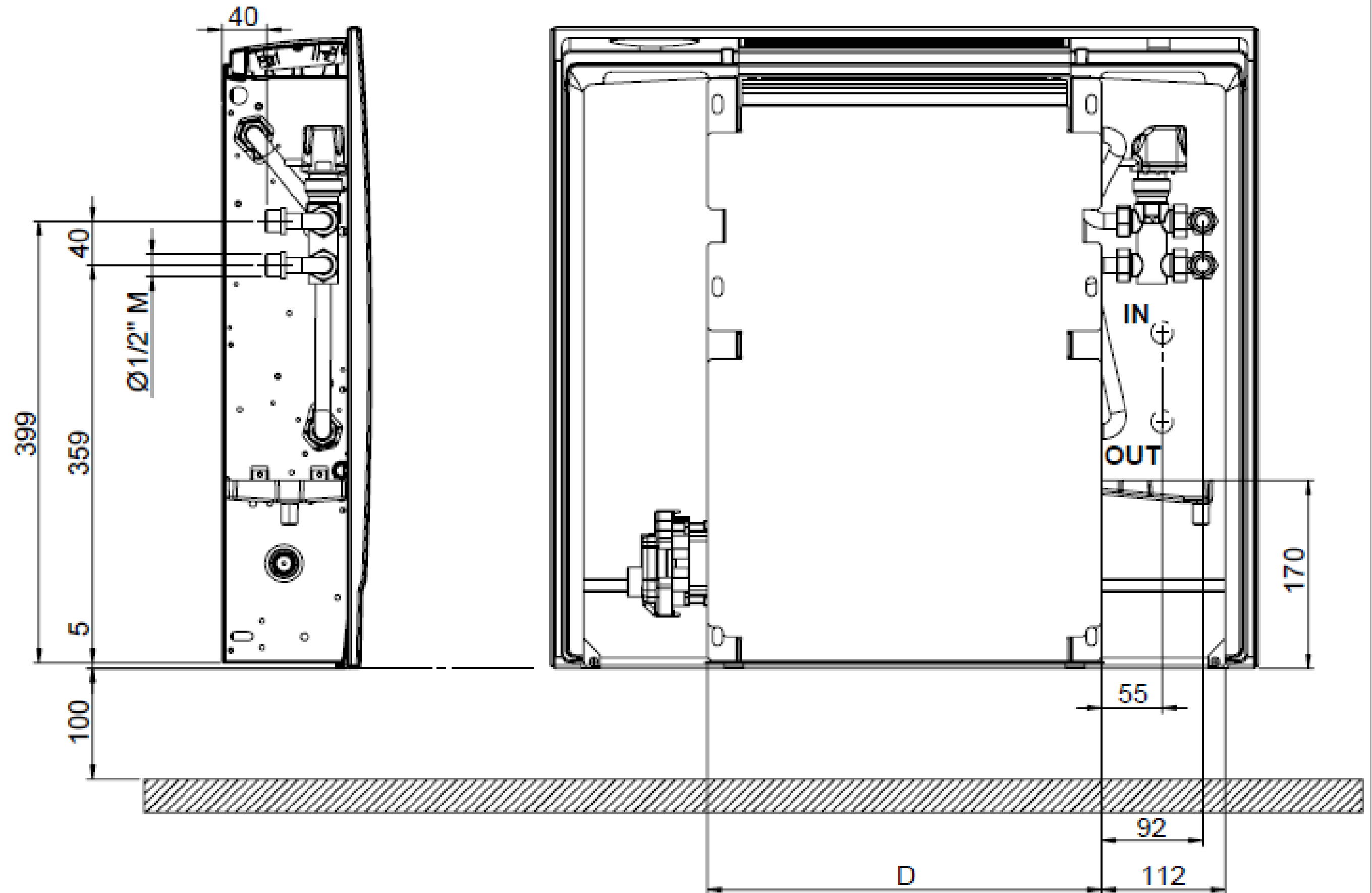
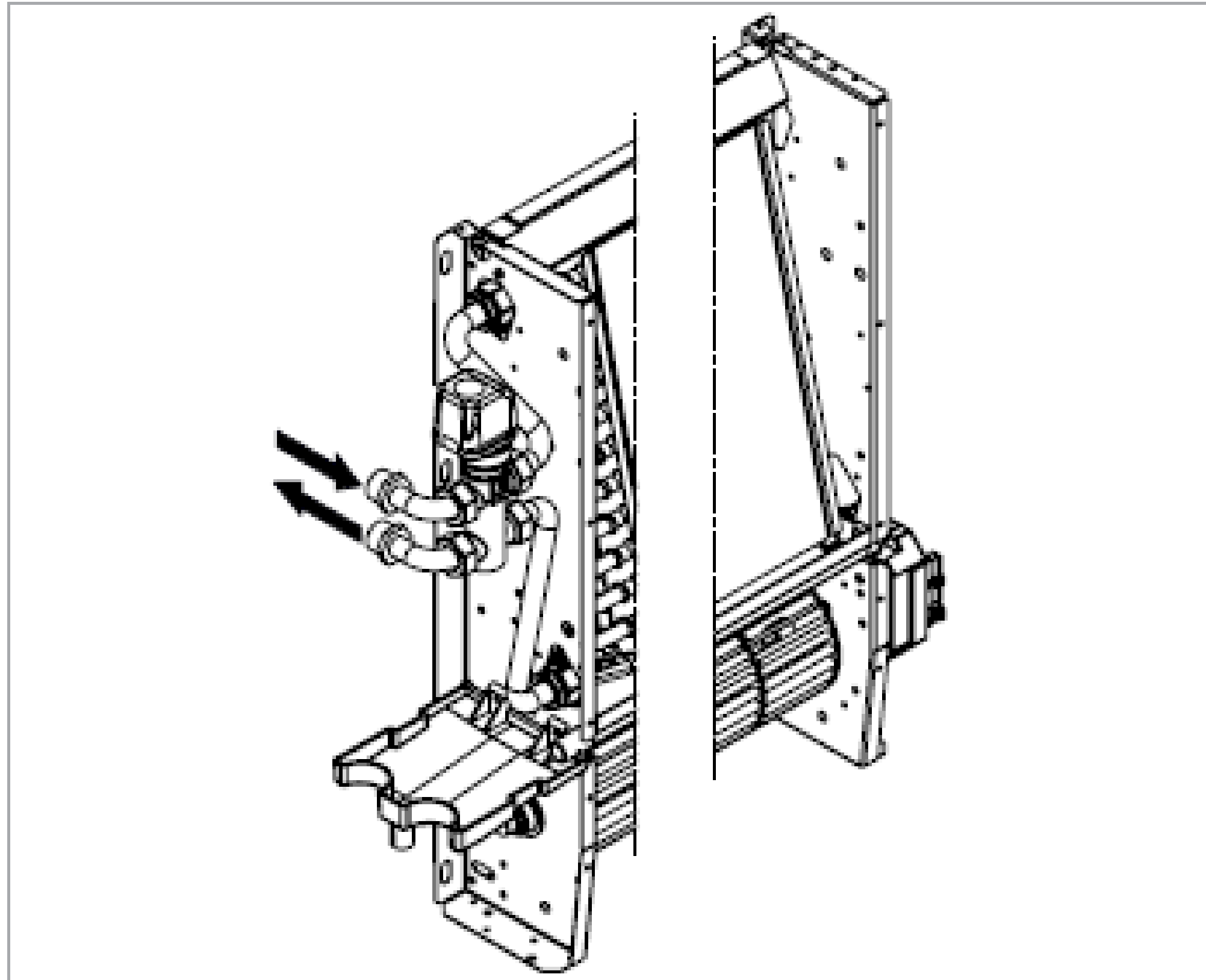
Labels and Logo



PET Gloss silver material



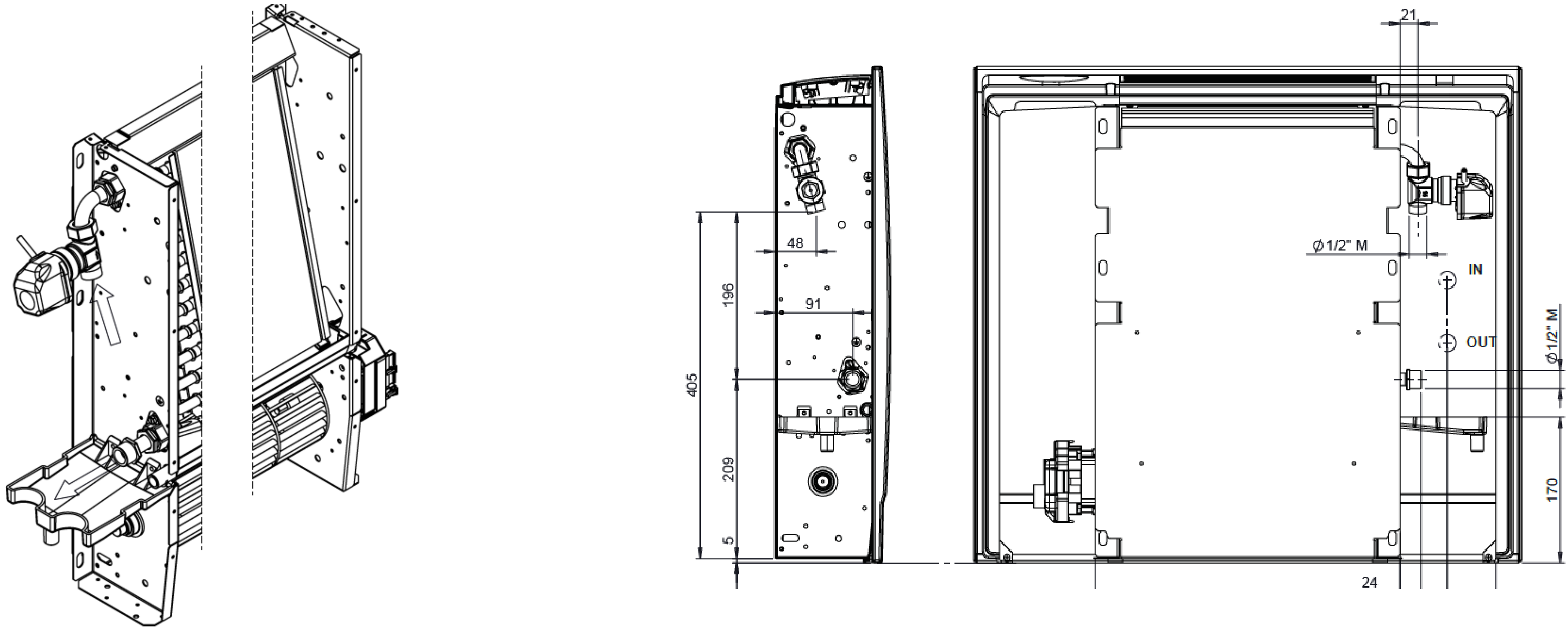
Version with 3 way-valve kit



Water valves:

- _ DN 1/2" - Kvs 1,6
- _ 230 volt on/off electrothermic actuator
- _ Power consumption: 2,5 W

Version with 2 way-valve kit



Water valves:

- _ DN 1/2" - Kvs 1,6
- _ 230 volt on/off electrothermic actuator
- _ Power consumption: 2,5 W

Performances

Model	Air flow	Noise power level dB(A)	Fan	Cooling total emission	Heating emission
	[m ³ /h]	[dB(A)]	Watt	[kW] *	[kW] **
CFF 1	75 - 205	31-50	3 - 10	0,40 - 0,92	0,5 - 1,10
CFF 2	125 - 305	33-52	4 - 14	0,67 - 1,62	0,97 - 1,81
CFF 3	190 - 470	32 - 53	4 - 22	0,92 - 2,61	1,52 - 2,90
CFF 4	220 - 575	33 - 55	5 - 25	1,14 - 3,36	1,79 - 3,62
CFF 5	255 - 645	34 - 55	58 - 30	1,44 - 3,81	2,19 - 4,20
[kW] *	Cooling total emission: air temperature 27 °C d.b. - 19°C w.b. - water 7/12 °C				
[kW] **	Heating emission: air temperature 20 °C - water 45/40°C				

Encoding

✓ Versions with casing:

✓ Base

✓ With valve

✓ With control

✓ With valve and control

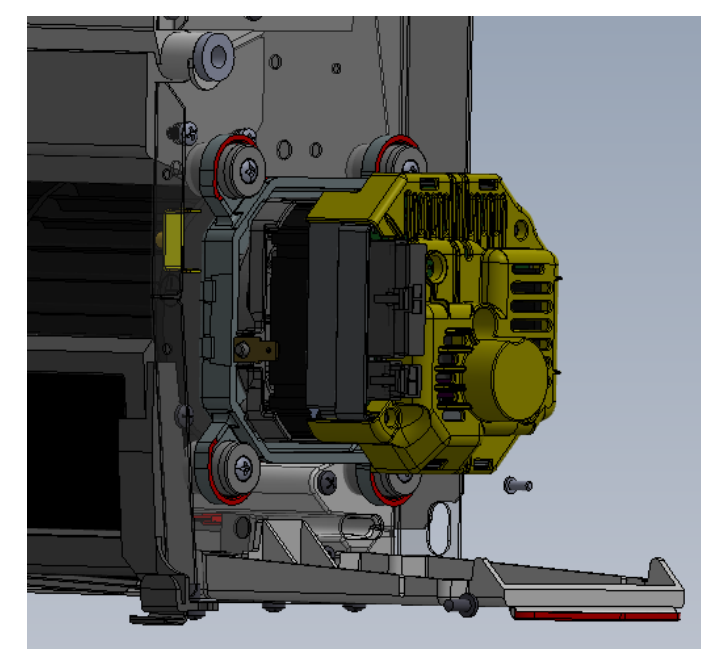
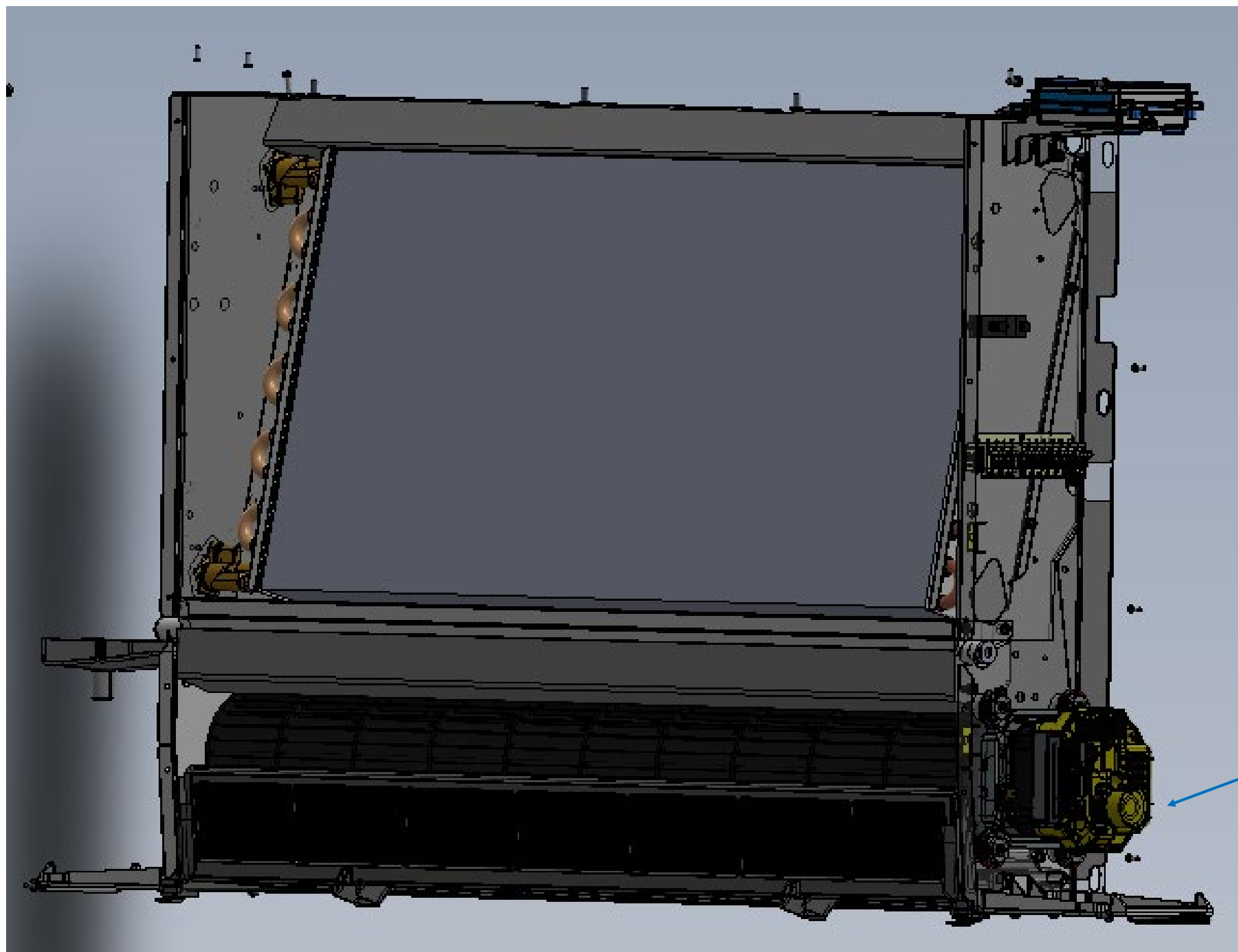
✓ Concealed versions

:

✓ Base

✓ With valve

Construction details

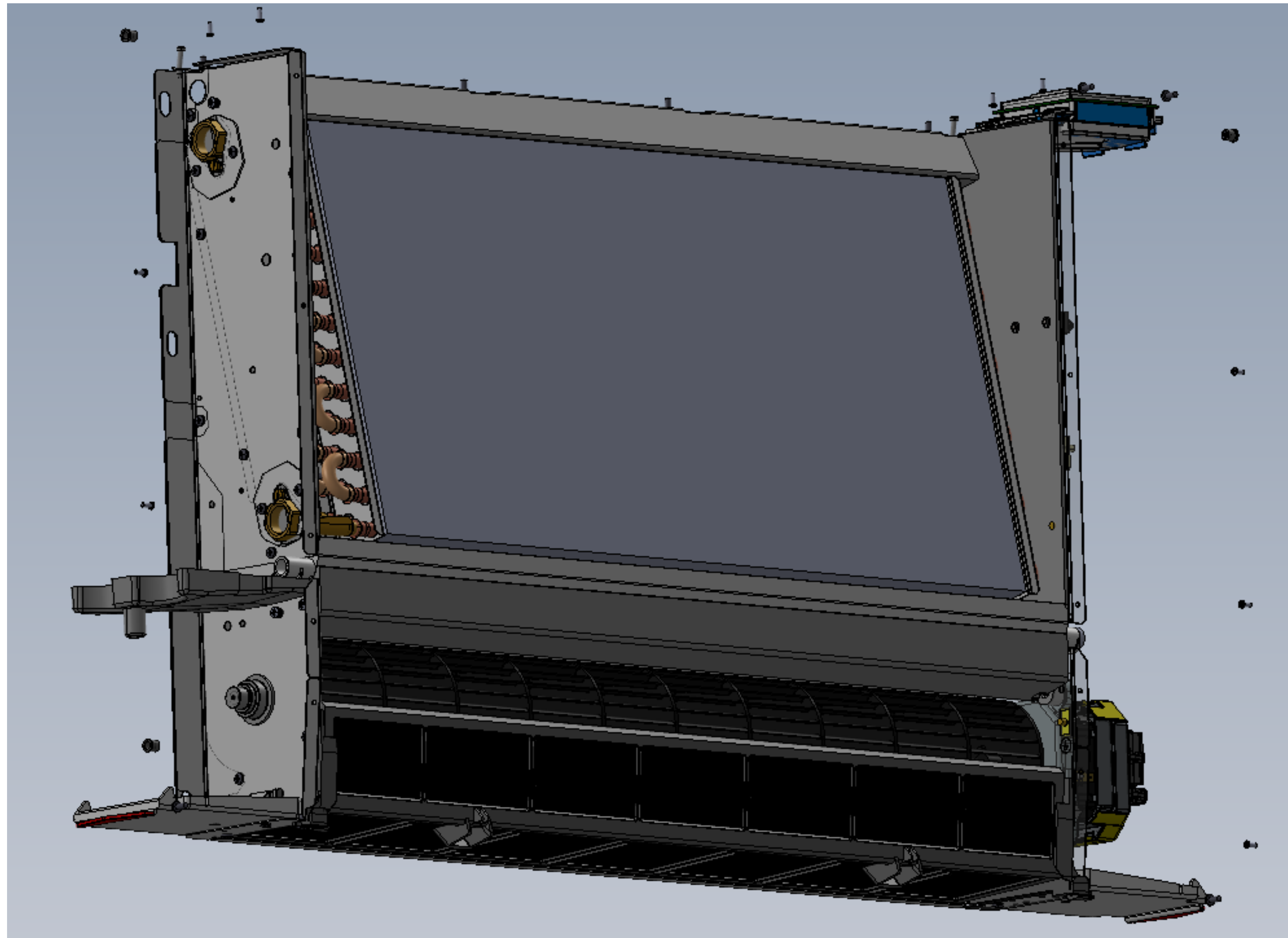


***Brushless motor with
integrated electronic driver***

Construction details

Auxiliary drain pan

Lower closing

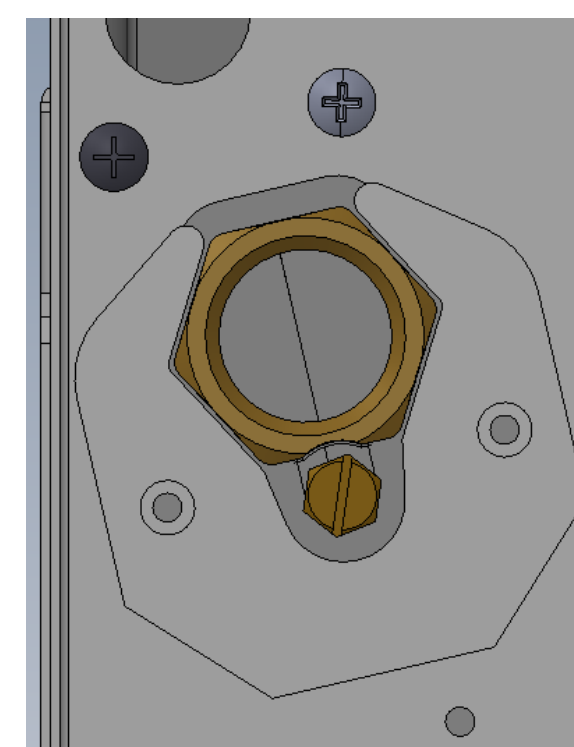
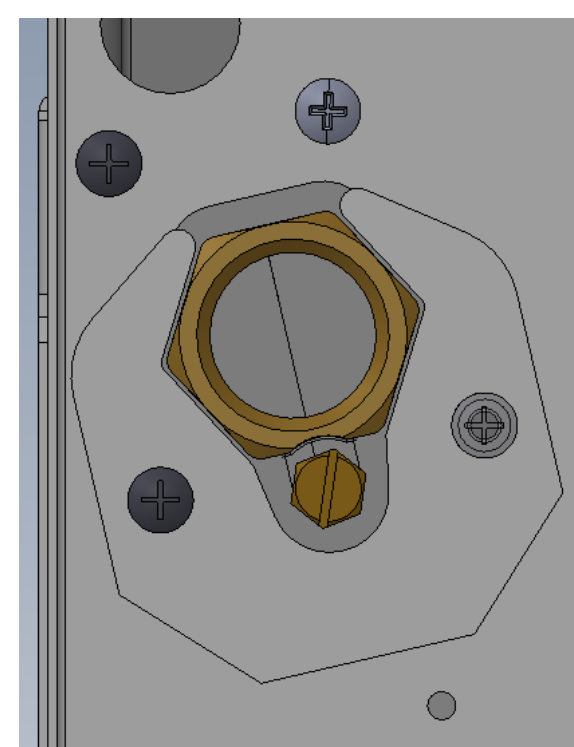
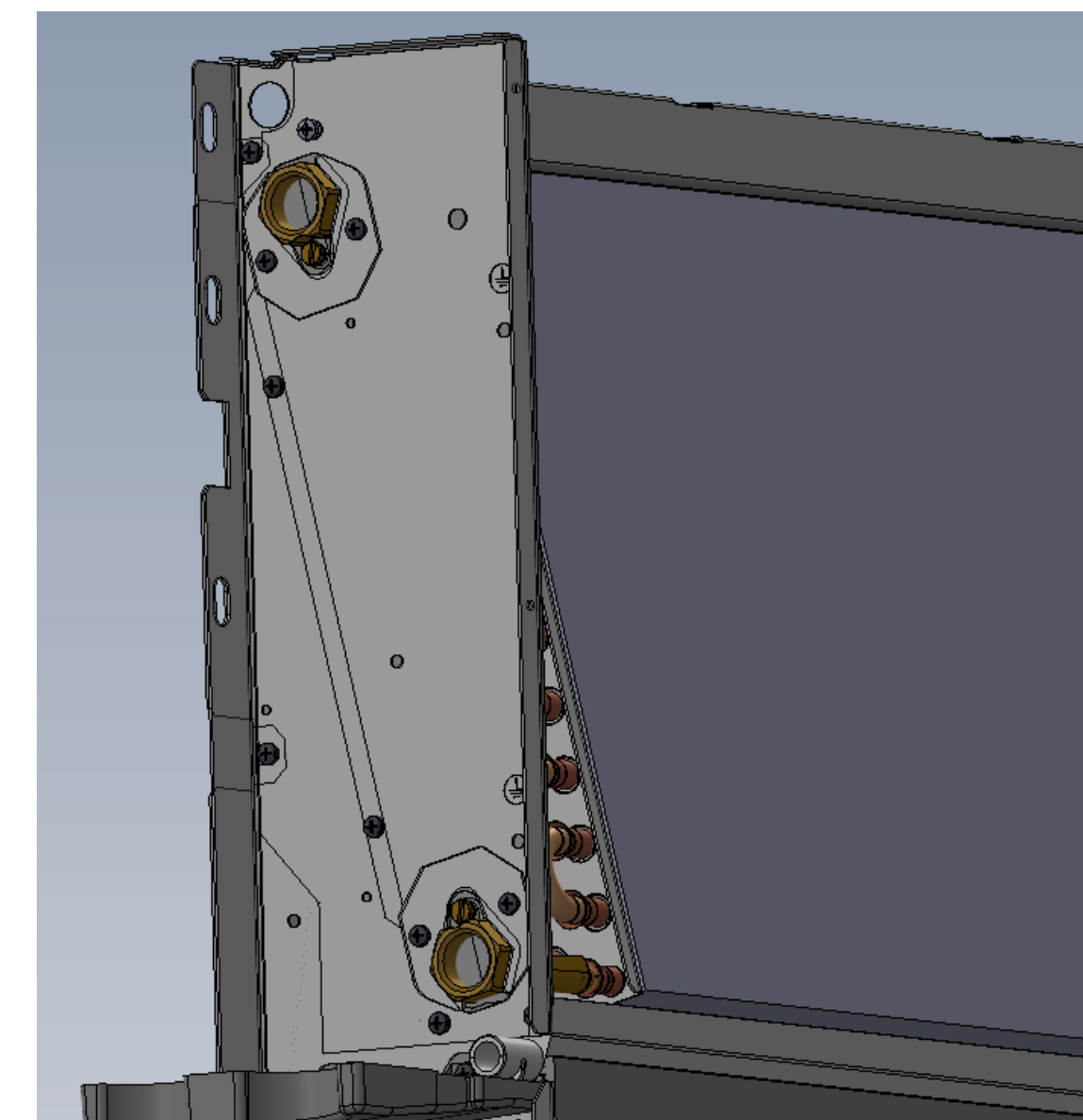


Cross flow fan

Air filter «L» shape

Construction details

To avoid header rotation by installer, there is a false block key, with holes diameter slightly bigger than screw holes, in order to allow minor adjustments

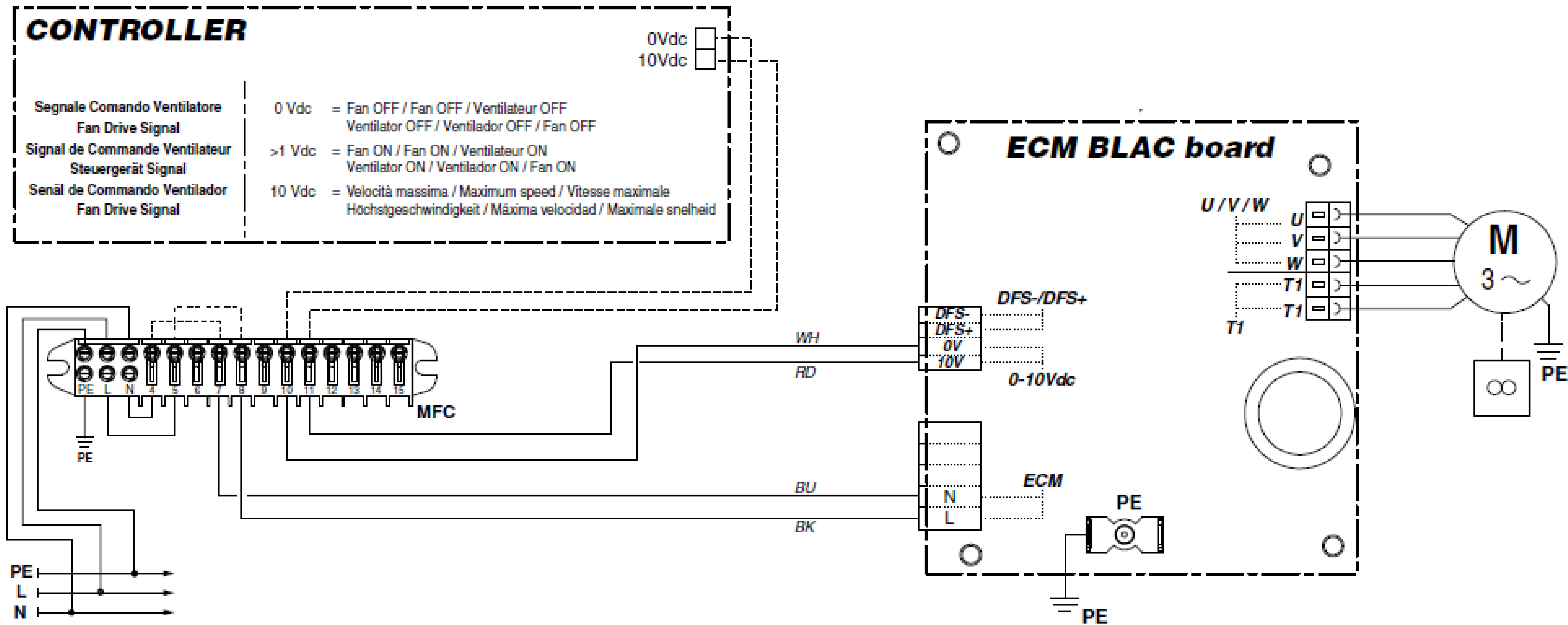


Electric features

- ✓ Basic version with no control
Terminal block for 230 V 50 Hz power supply and for 0-10 V control signal
- ✓ Version with fan speed control CB-E
- ✓ Version with CB-T touch control with color display and room thermostat

Basic version with no control

Terminal block to be wired to an external wall mounted control



Version with CB-T touch control

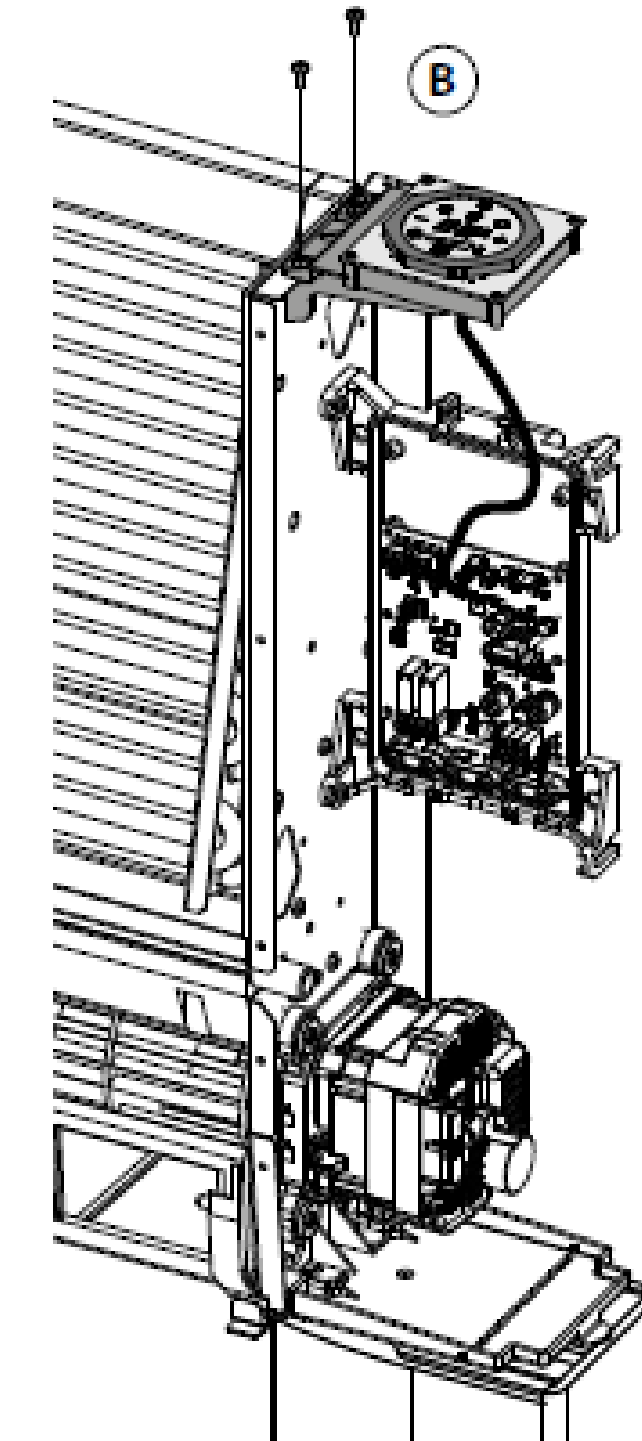
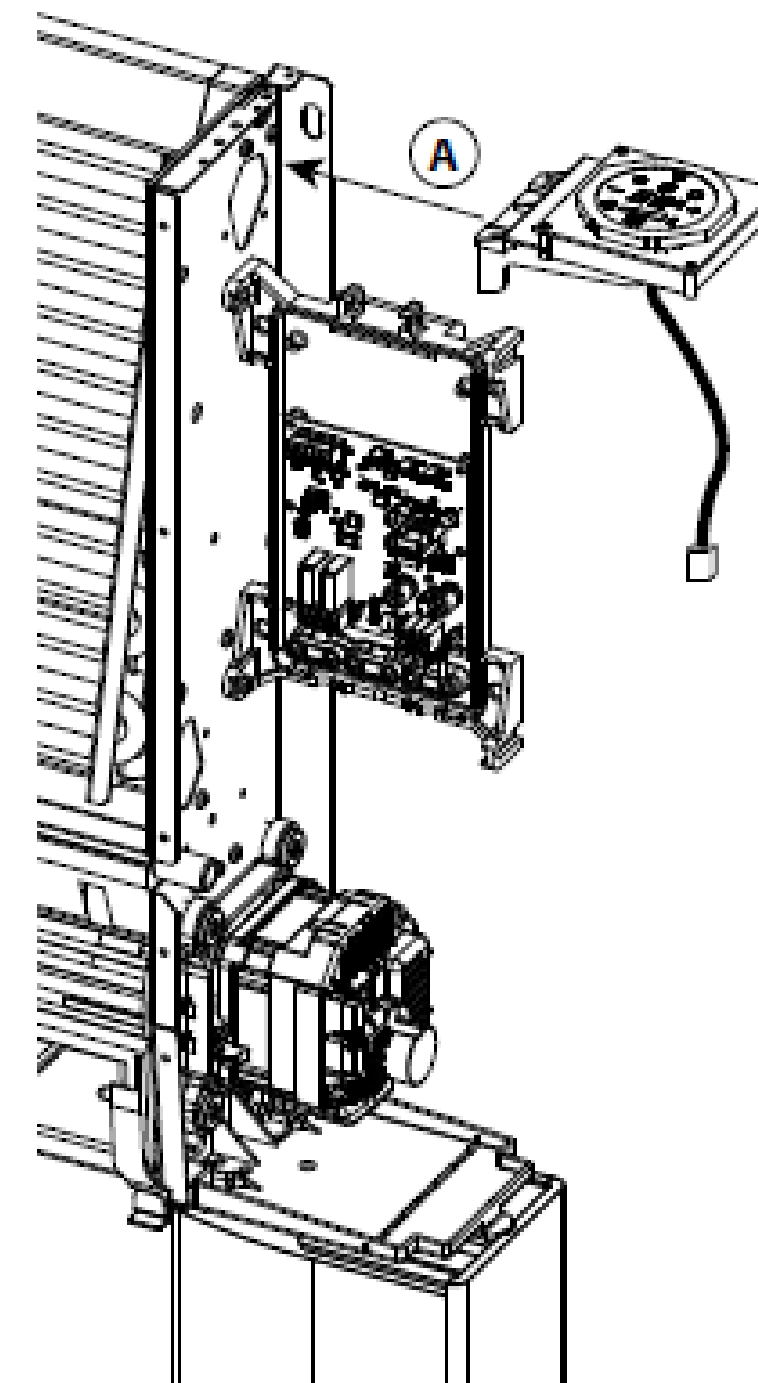
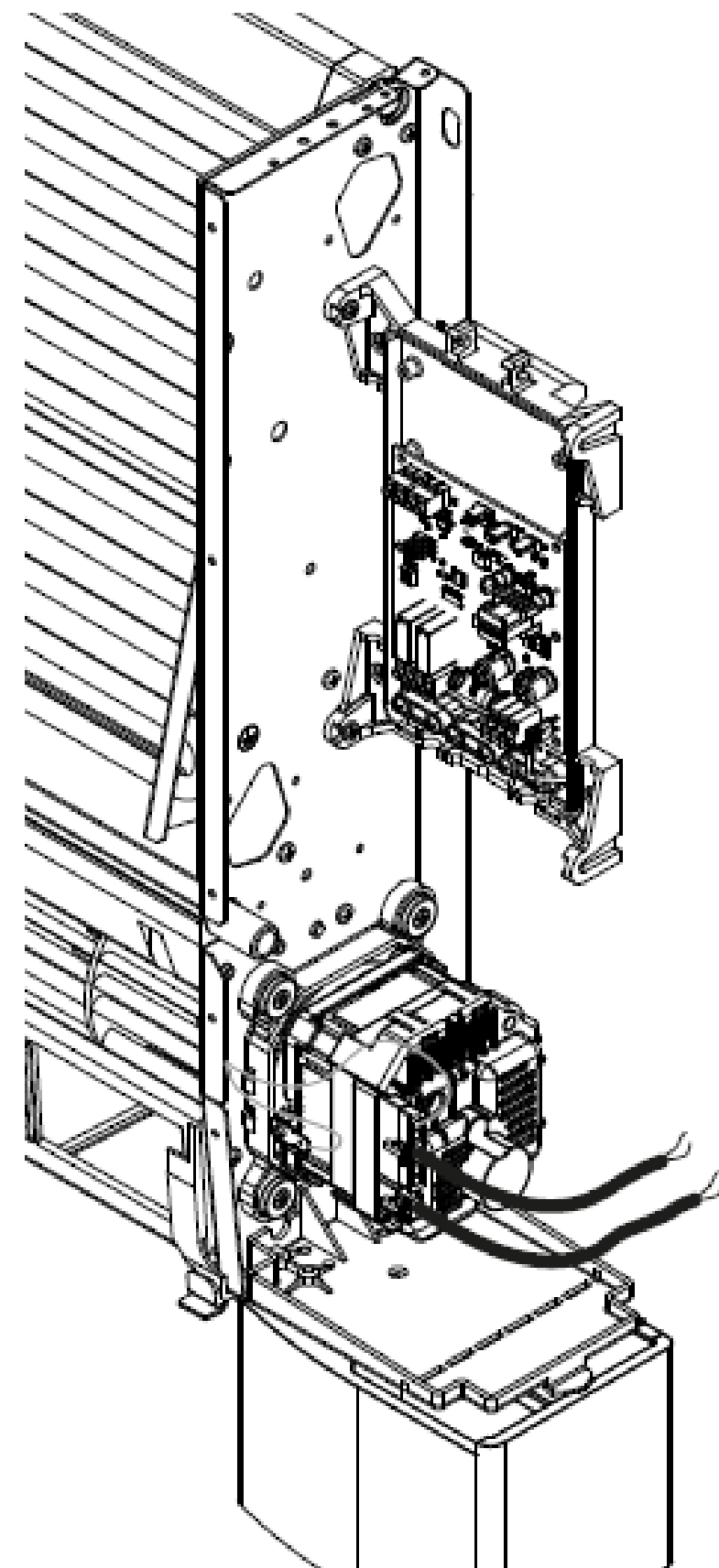


CB-Touch

Version with CB-T touch control

Control board is always fixed at right side

Power unit is always fixed opposite to hydraulic connections



CB-T control with touch display

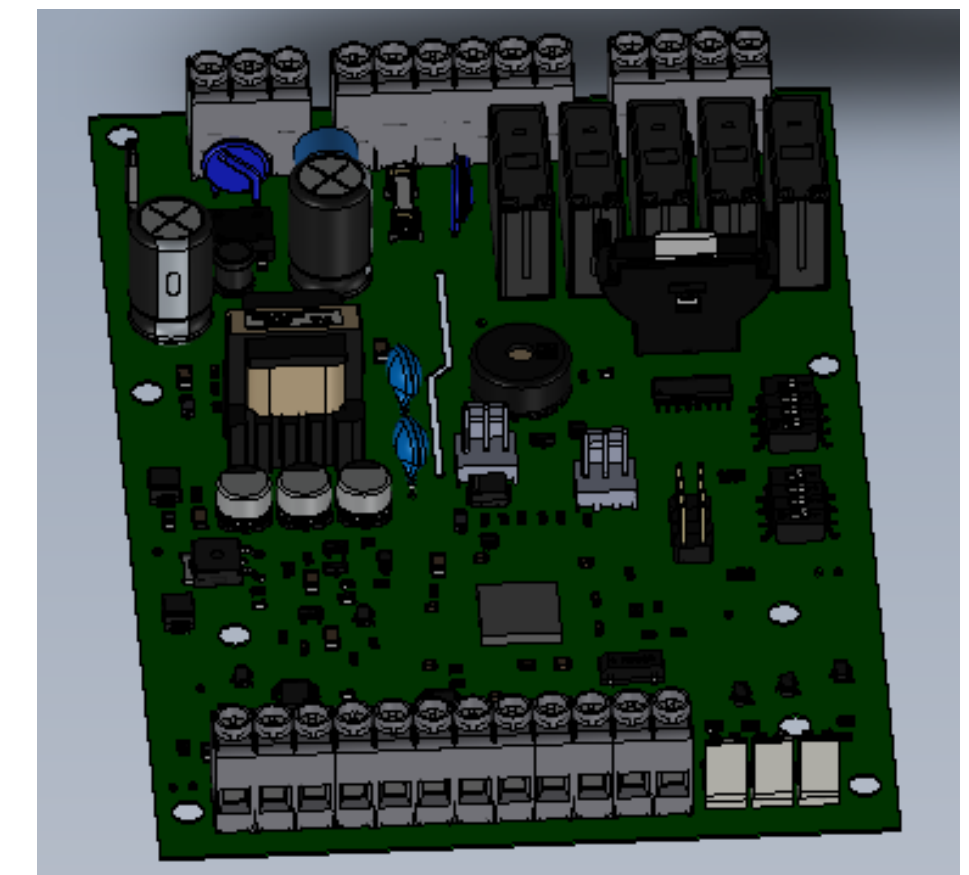
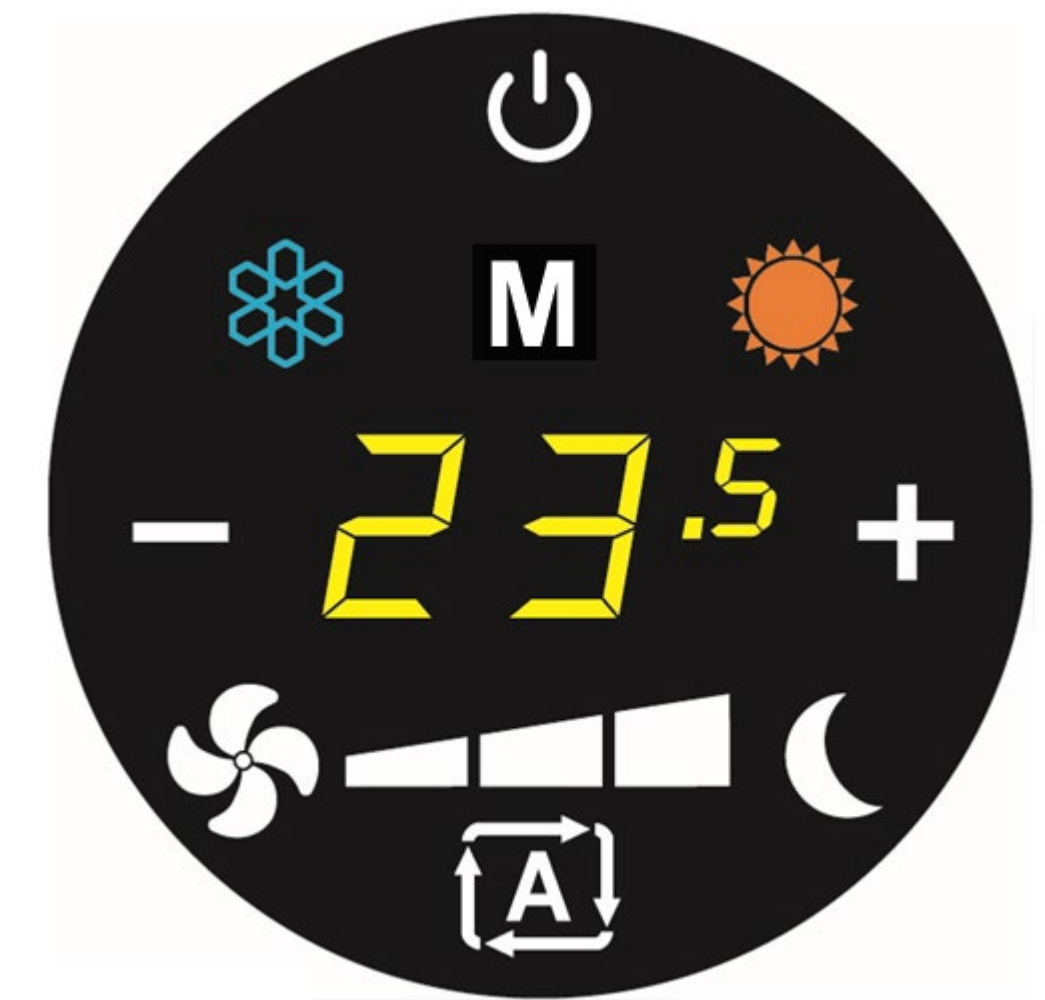
- ✓ CB-T touch control enables room temperature setting in a simple and intuitive way. You can heat, cool or ventilate your room, you can set room temperature and fan speed in accordance to your need. Max speed for a quick comfort and low speed for silence operation.
- ✓ When heating, T3 probe avoids too low air leaving temperature. The fan starts only when water temperature inside the heat exchanger reaches 30 °C.
- ✓ To improve comfort by night, it is possible to set night operation that lets the fan work at low speed and changes automatically room temperature setting.
- ✓ CB-T touch can be controlled by smart phone with bluetooth or wi-fi connection.

CB-T touch – Main functions

- ✓ User interface with color touch display
 - ✓ On/off
 - ✓ Mode selection
 - ✓ cooling
 - ✓ heating
 - ✓ ventilation only
 - ✓ night operation

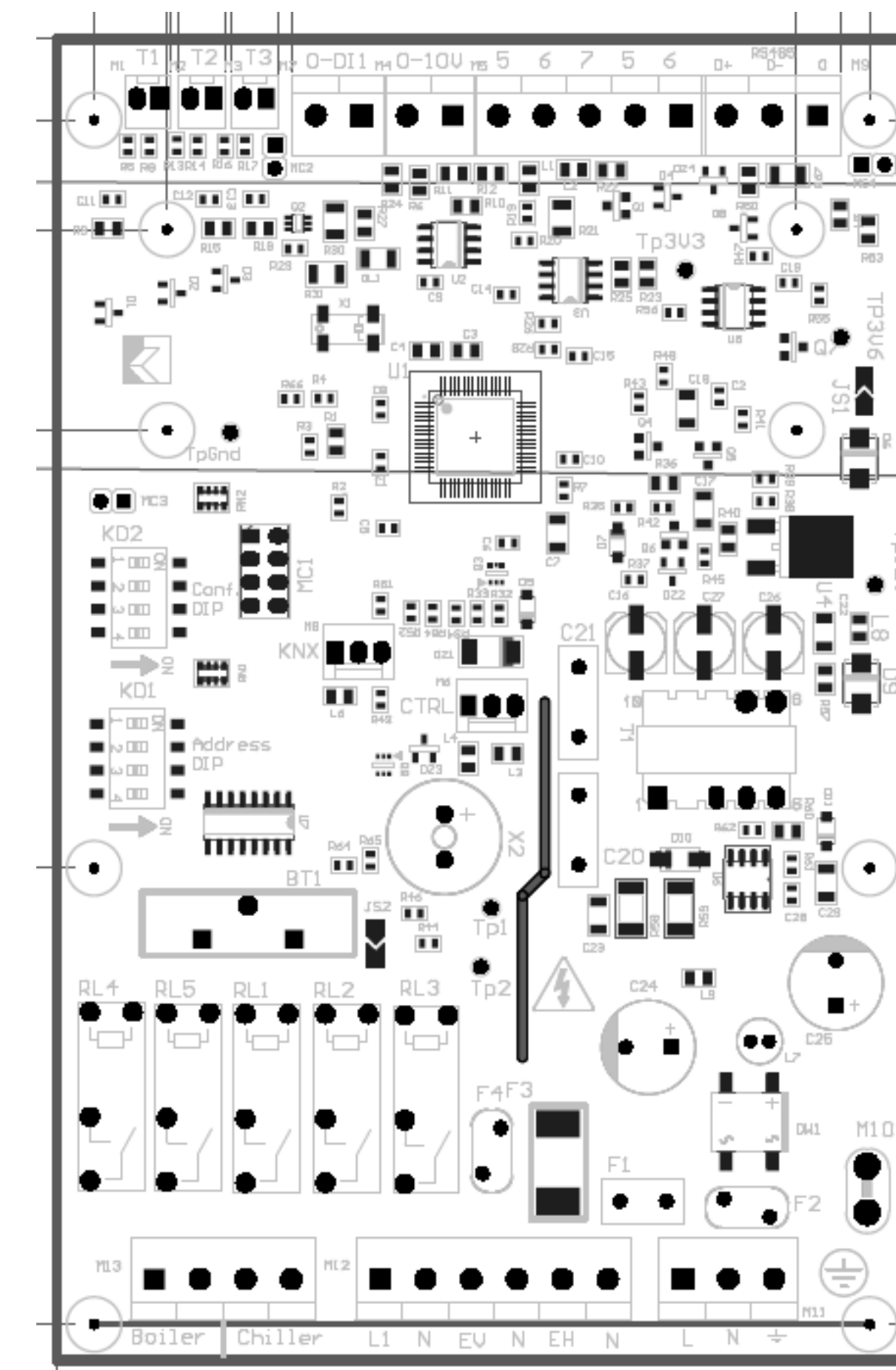
- ✓ Room temperature setting
- ✓ Step by step or auto fan speed setting

Modbus power board

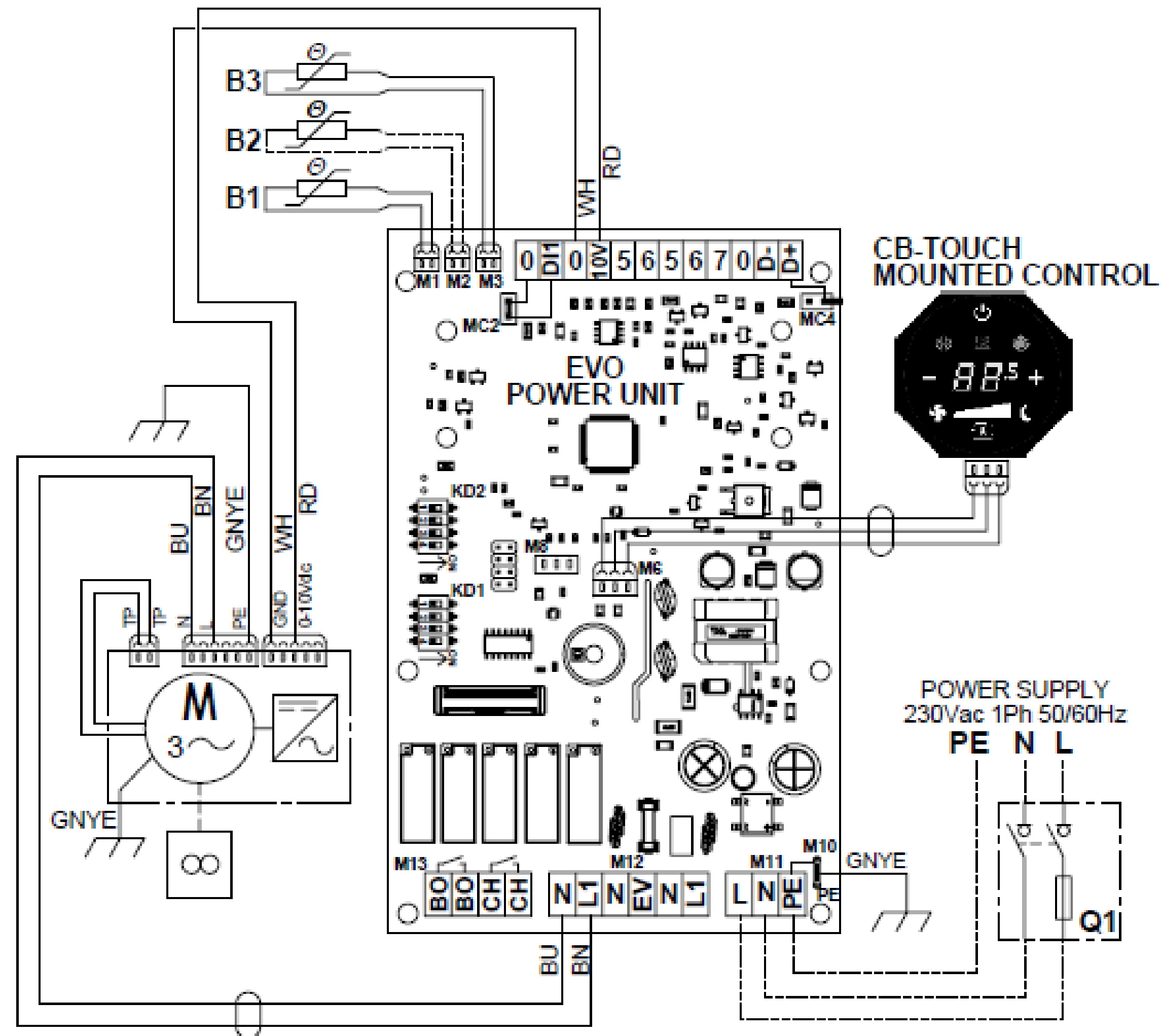


Power board Up-Touch to be used with CB-T T-MB and WM-AU

- ✓ Connectors for T1, T2 and T3 probes (T1 and T3 probes fitted at factory, T2 optional)
- ✓ Free contact for remote On/Off
- ✓ Modbus terminal block
- ✓ On/Off inverter relay
- ✓ On/Off valve actuator relay
- ✓ On/Off electric resistance relay (radiant version)
- ✓ Free contact to start chiller or heat pump
- ✓ Free contact to start boiler
- ✓ Clock battery
- ✓ Terminal block for wall mounted T-MB or WM-AU control
- ✓ Terminal block for Master/Slave connection
- ✓ KNX expansion board (to be developed)



Wiring diagram





CB-E control

CB-E control switches the unit on/off and sets fan speed. Room temperature can be set by a remote chronothermostat, as well as valve on/off.

CB-E control

- ✓ Eco control to be connected to remote thermostat or to remote on/off control
- ✓ User interface
 - ✓ On / off (if external switch is on and CB-E control in off, unit is off)
 - ✓ Speed setting
- ✓ Power board connected to remote thermostat:
 - ✓ On/off
 - ✓ Valve on/off
 - ✓ Power board can connect air temperature and water temperature sensors



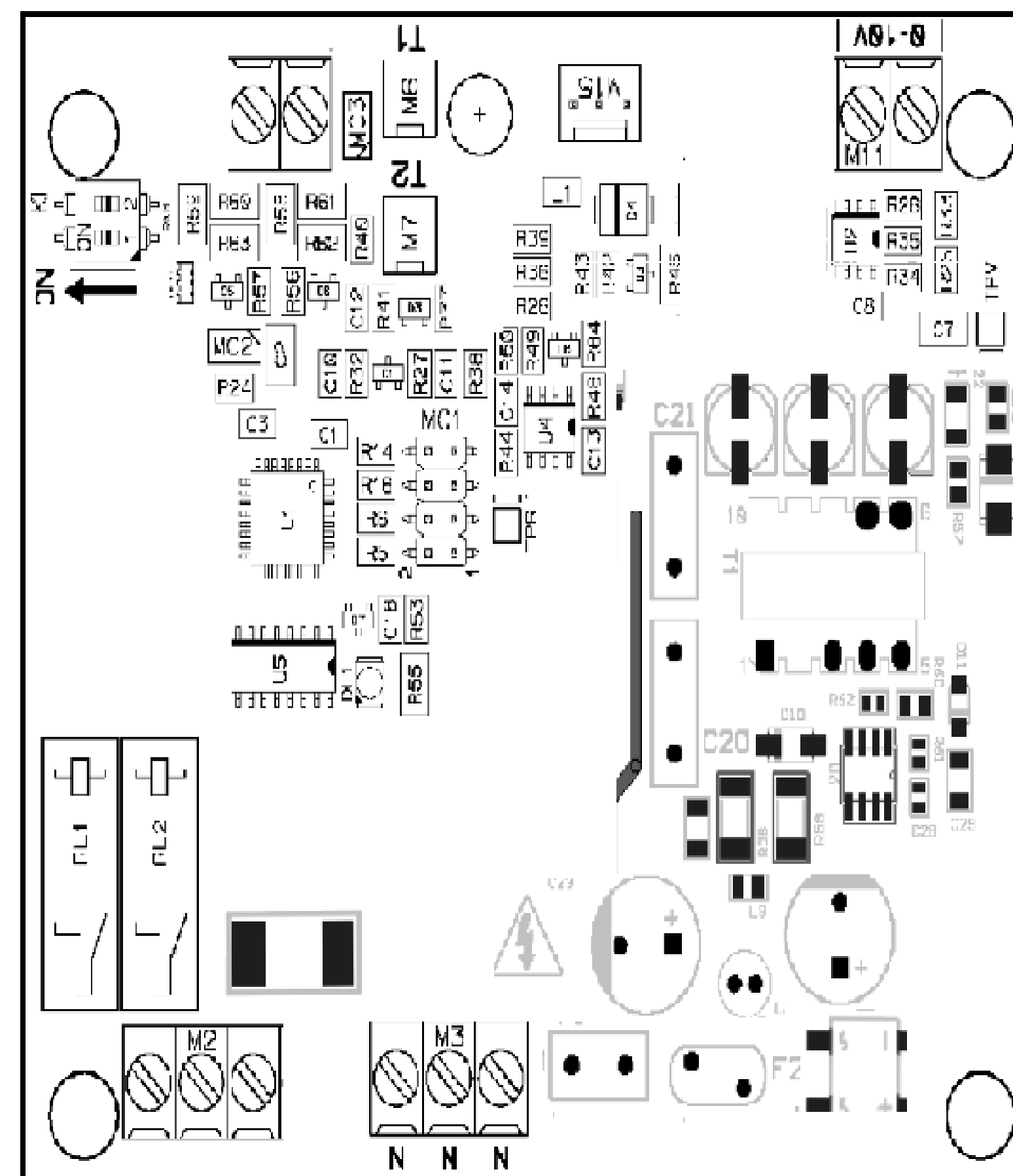
UP-Eco power board

- ✓ Remote on/off
- ✓ On/Off water valve actuator relay
- ✓ Inverter on/off relay
- ✓ 0-10 Volt fan speed

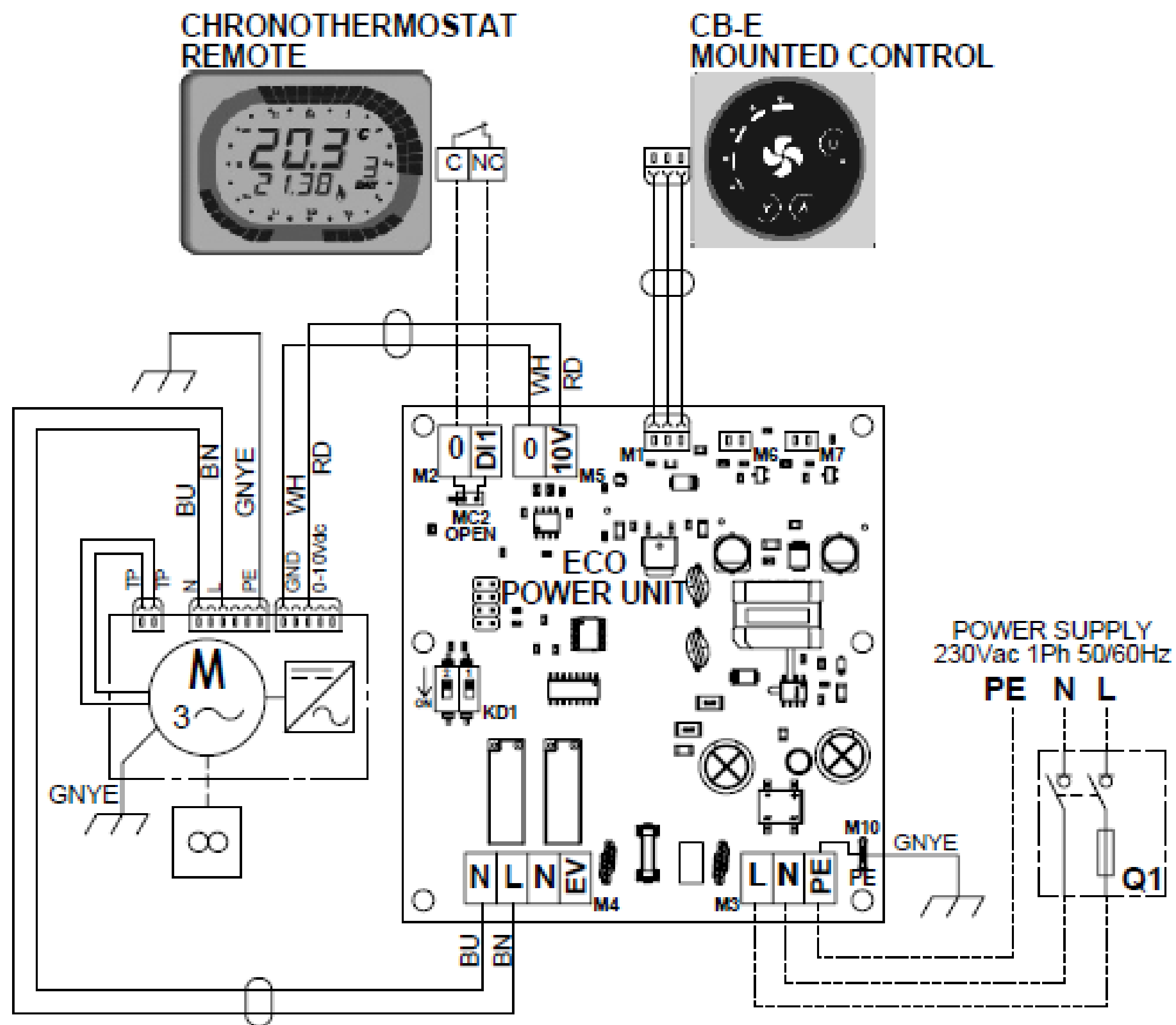
At the moment no yet formalized

On the board there are 2 connectors for:

- ✓ Air temperature probe T1
- ✓ Water temperature probe T3



Wiring diagram



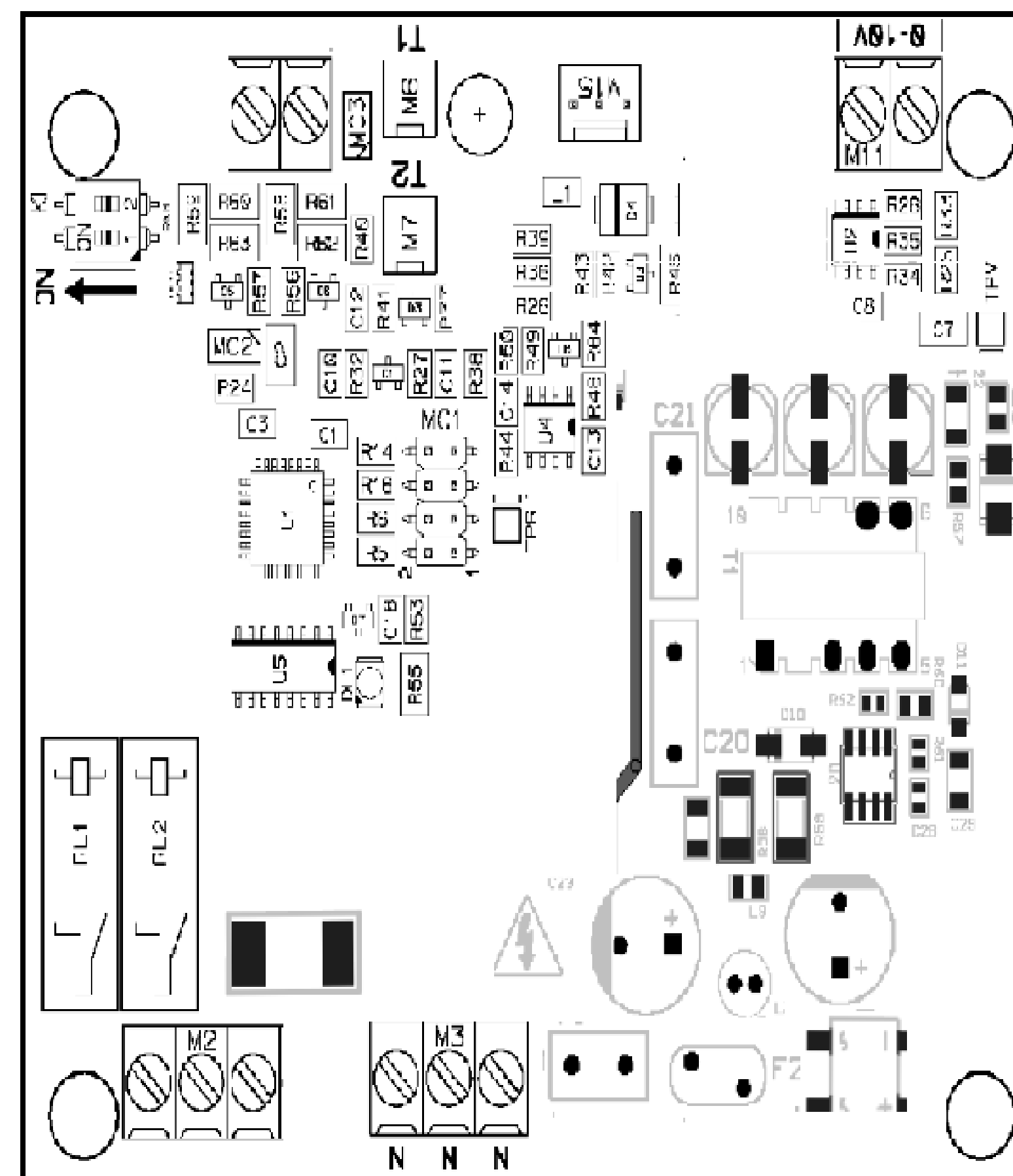
UP-Eco power board

- ✓ The UP-E can be used also in combination with CB-T
- ✓ At the moment this combination has not been formalized

On the PC board there are 2 connectors for:

- ✓ Air temperature probe T1
- ✓ Water temperature probe T3

When used, and connected to the CB-T, also the UP-E works as a controller, but without the Mod-Bus functionality



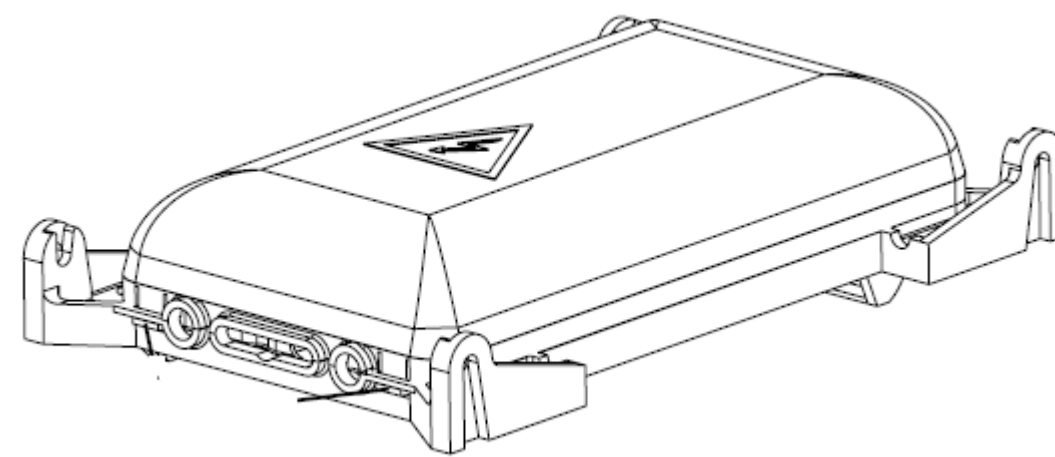


Controls sold separately

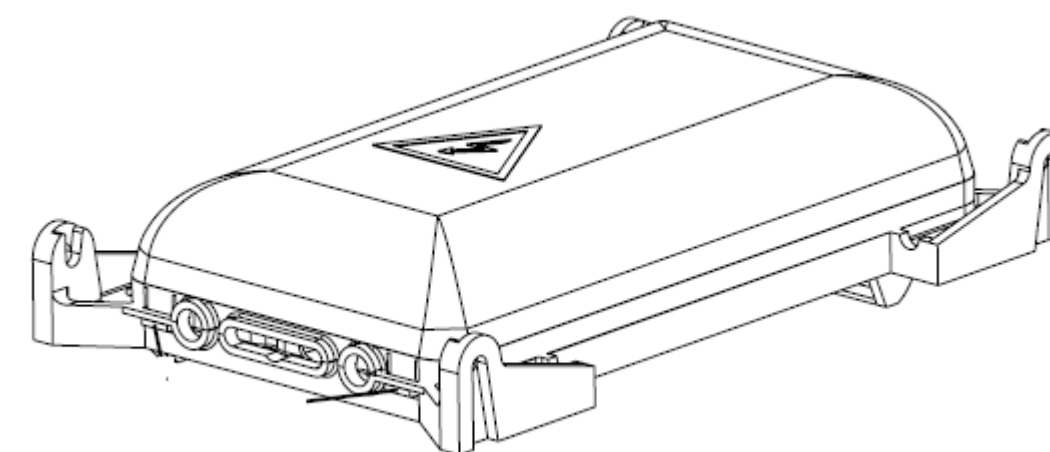
- ✓ UP-ECO 9071064
- ✓ UP-TOUCH 9071065
- ✓ CB-E on board control 9071060
- ✓ CB-TOUCH on board control 9071061

Controls sold separately

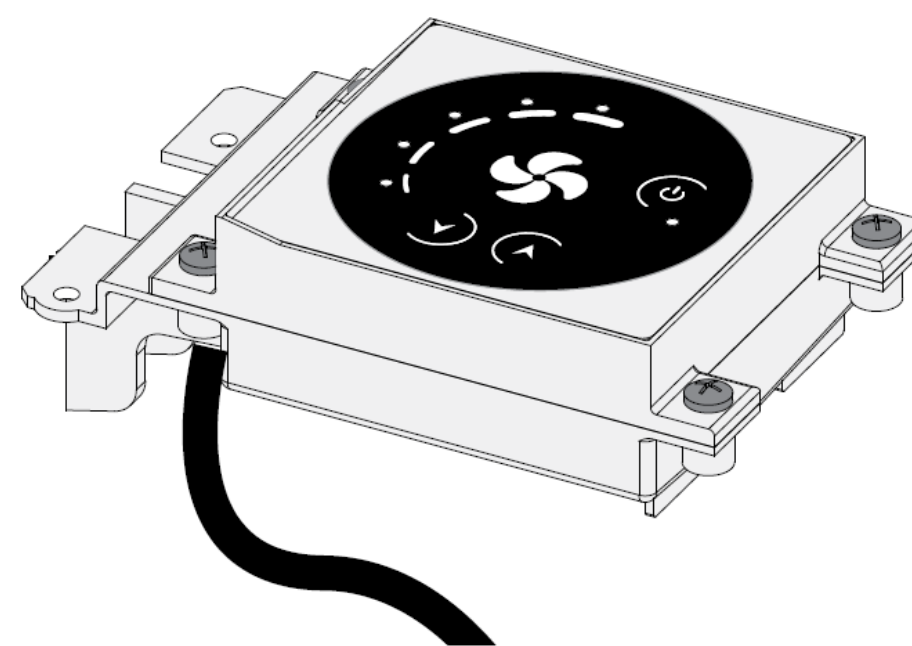
✓ UP-ECO 9071064



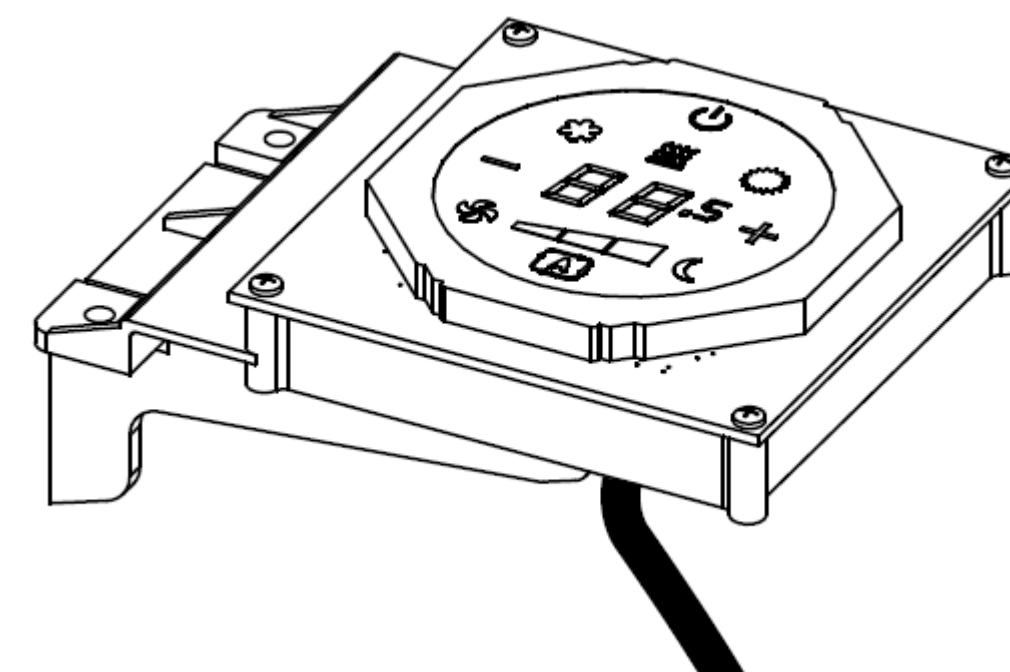
✓ UP-TOUCH 9071065



✓ CB-E on board control 9071060



✓ CB-TOUCH on board control 9071061



Wall Mounted controls

- ✓ The UP-T motherboard can be connected to ours wall mounted controls
- ✓ Each Control can be connected, as master/Slave, with up to 10 fan-coils

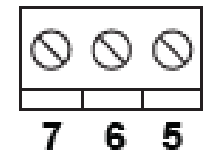
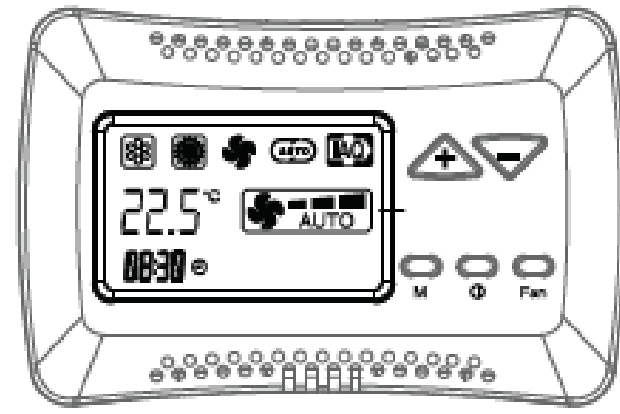


WM-AU

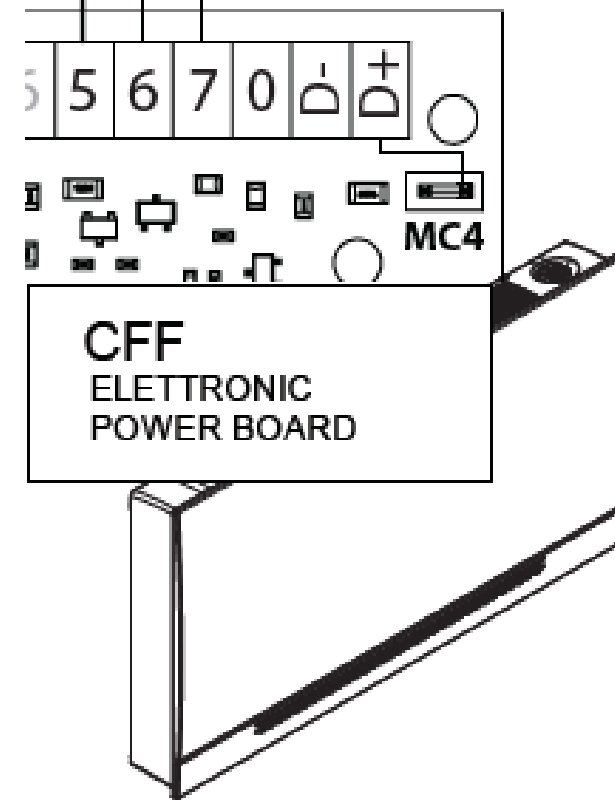


T-MB

9066331E

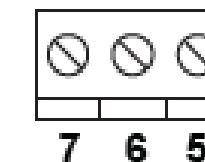
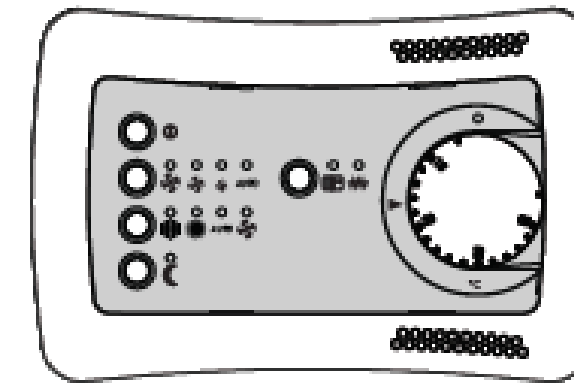


L = max 20m

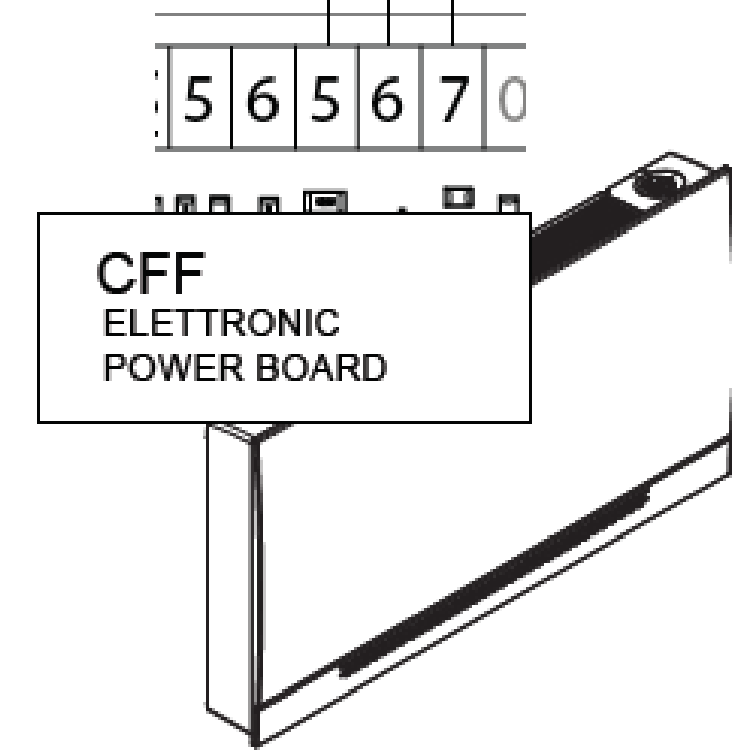


✓ UP-TOUCH 9071065

9066632



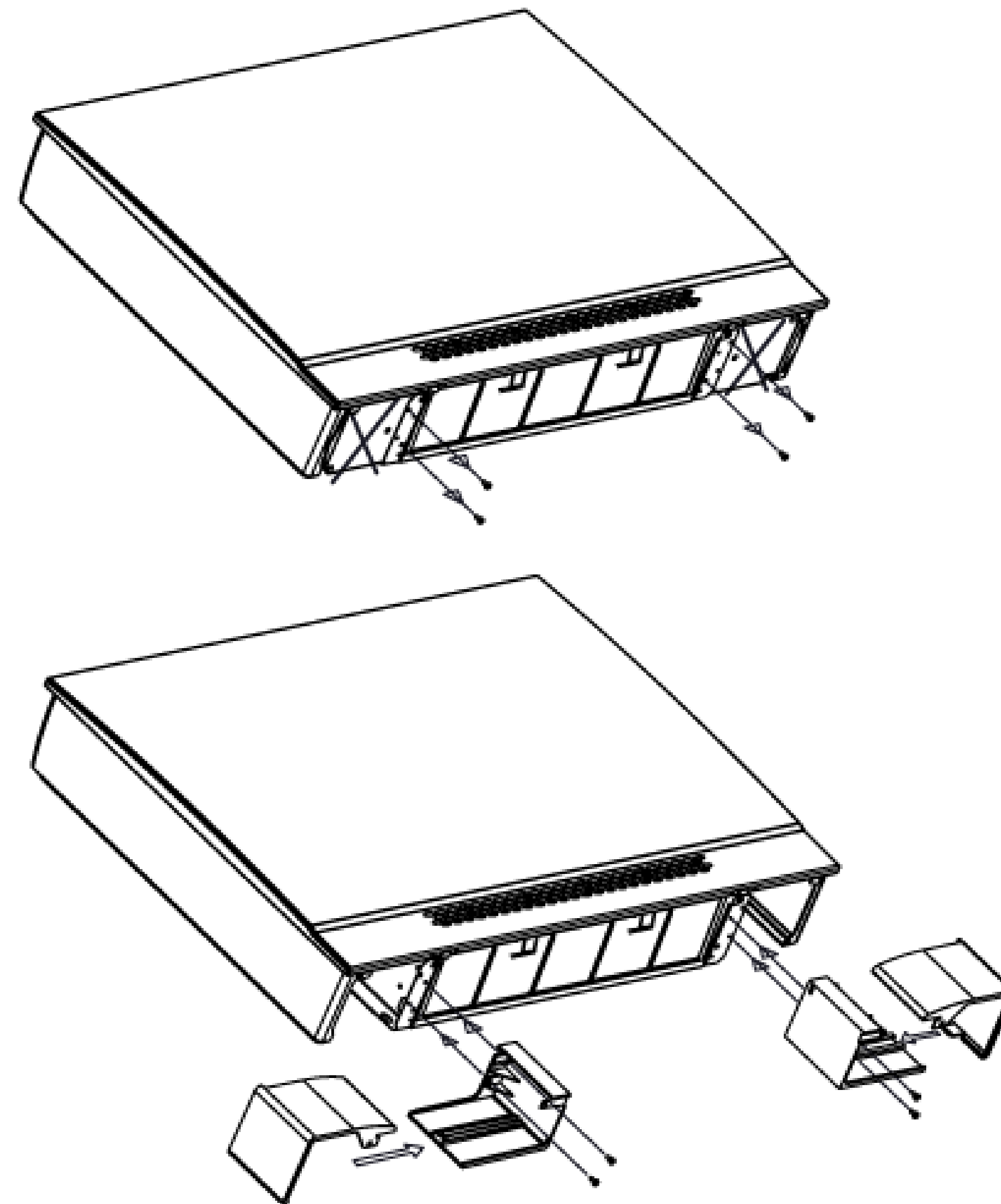
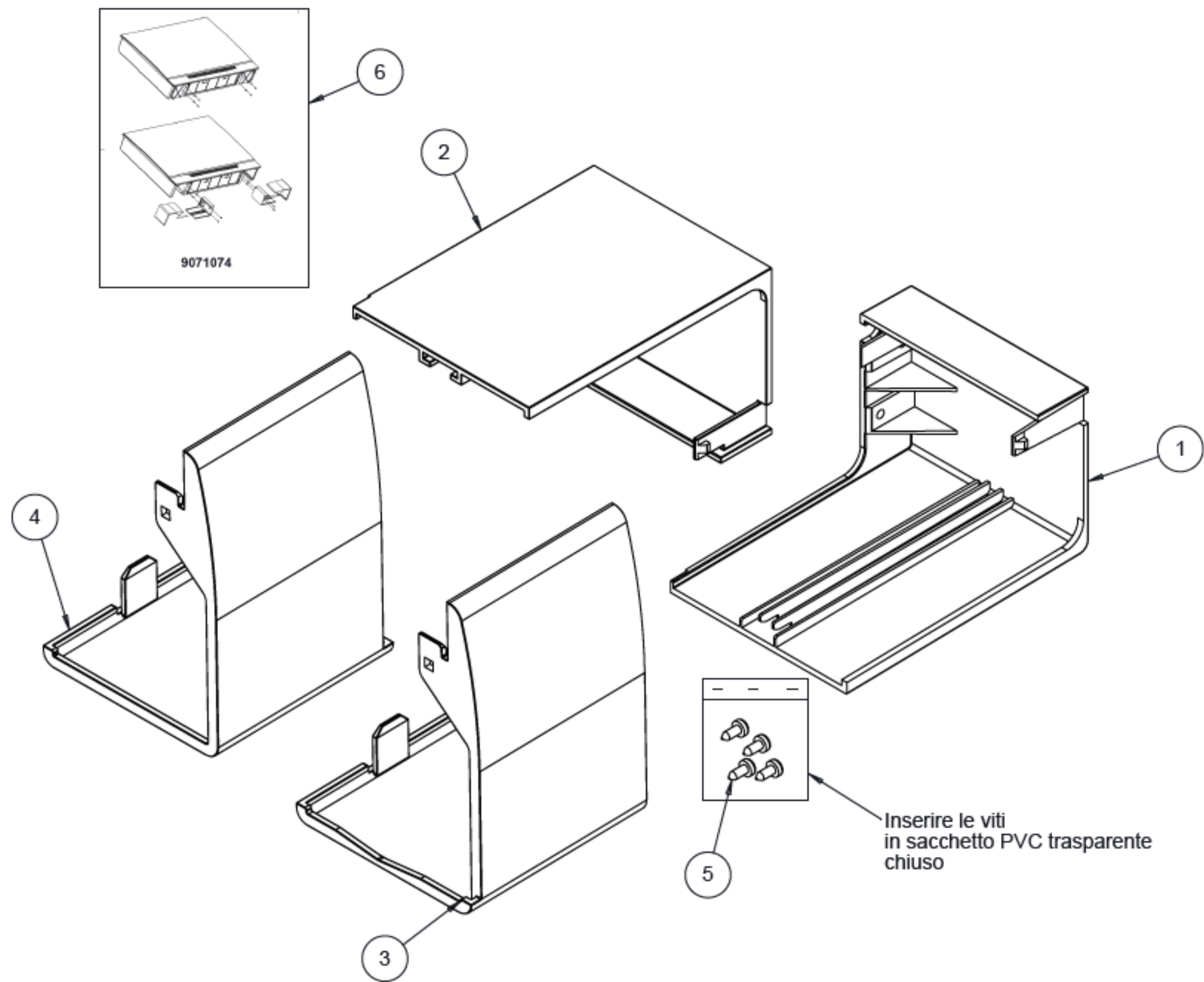
L = max 20m



✓ UP-TOUCH 9071065



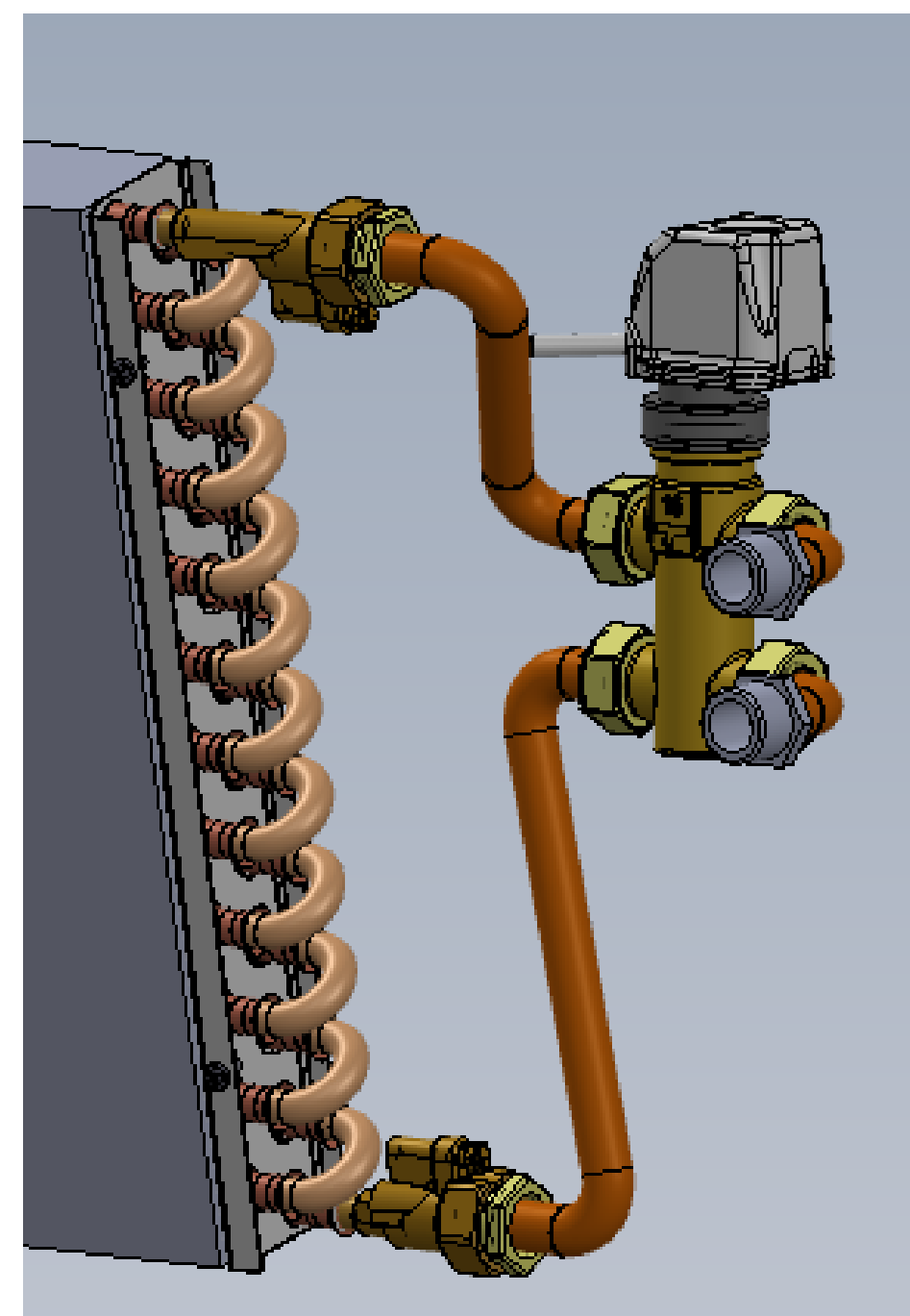
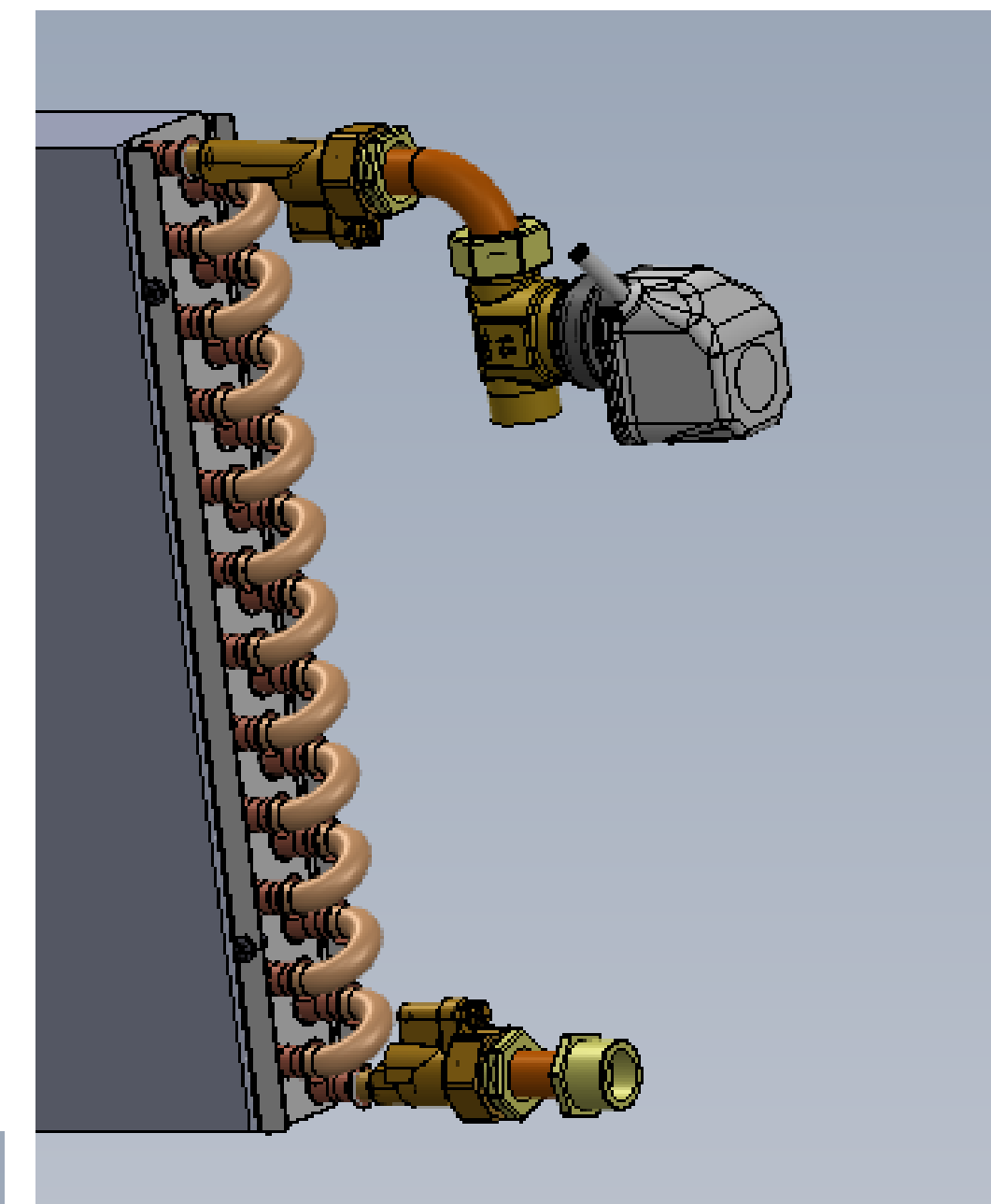
Feet accessory code 9071074



Water kit valves sold separately

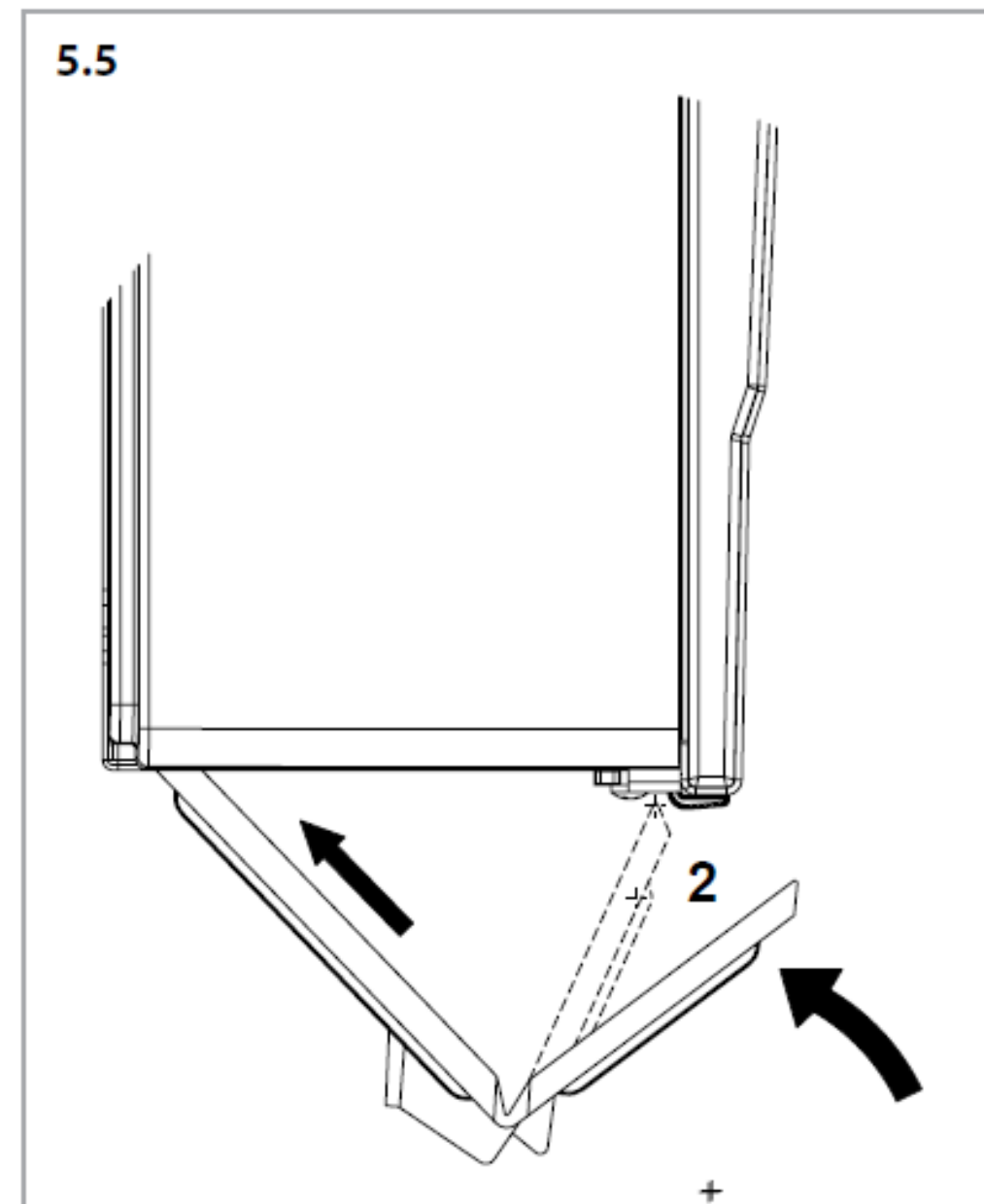
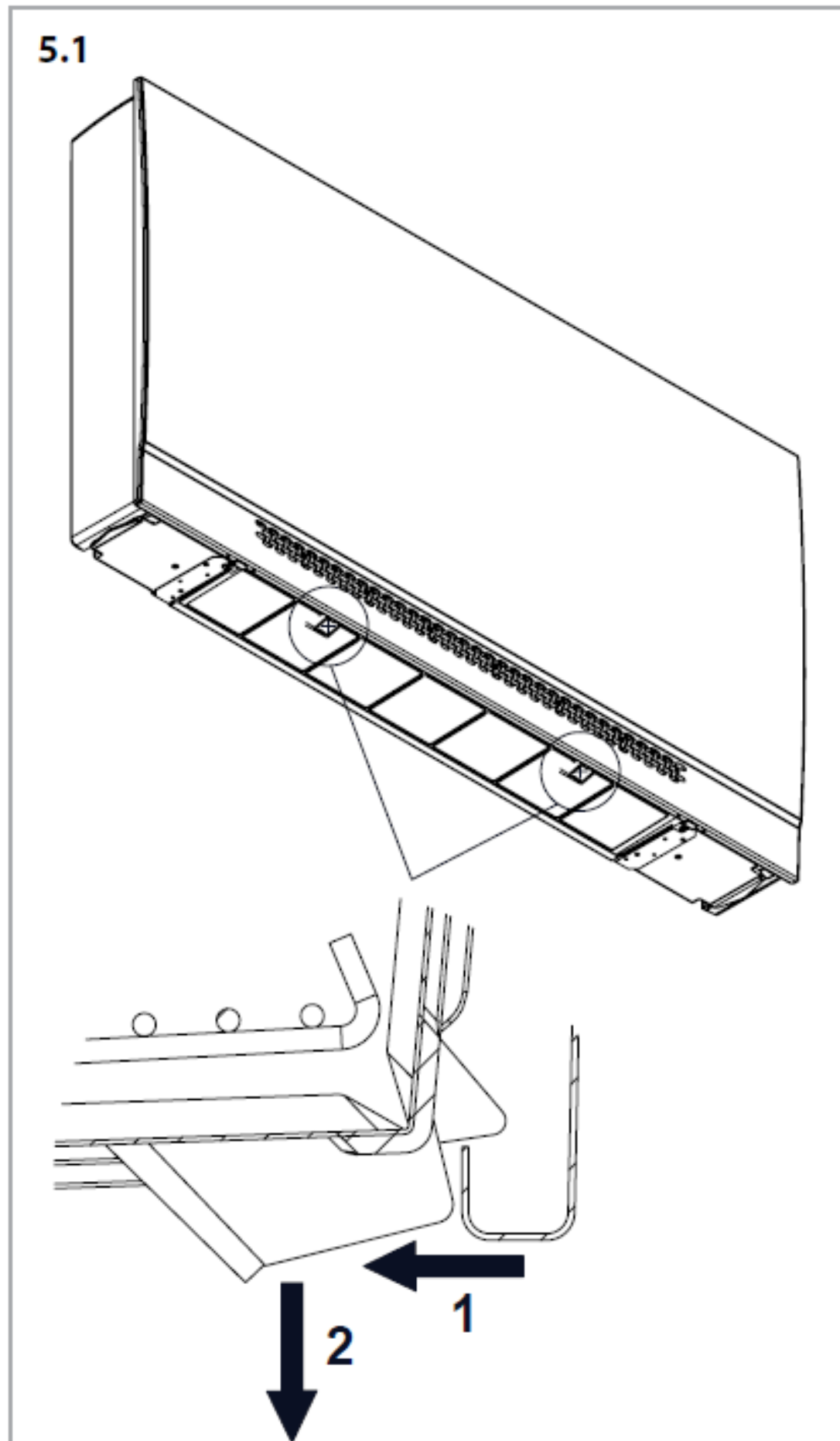
- ✓ 2 way kit valve on/off 230 volt 9071090W
Kvs = 1,7

- ✓ 3 way kit valve on/off 230 volt 9071091W
Kvs = 1,6



Maintenance

Polypropylene washable air filter «L» shape



Breeze accessory kit

The accessory makes concealed application of the CFF units easy and very accurate in terms of installation

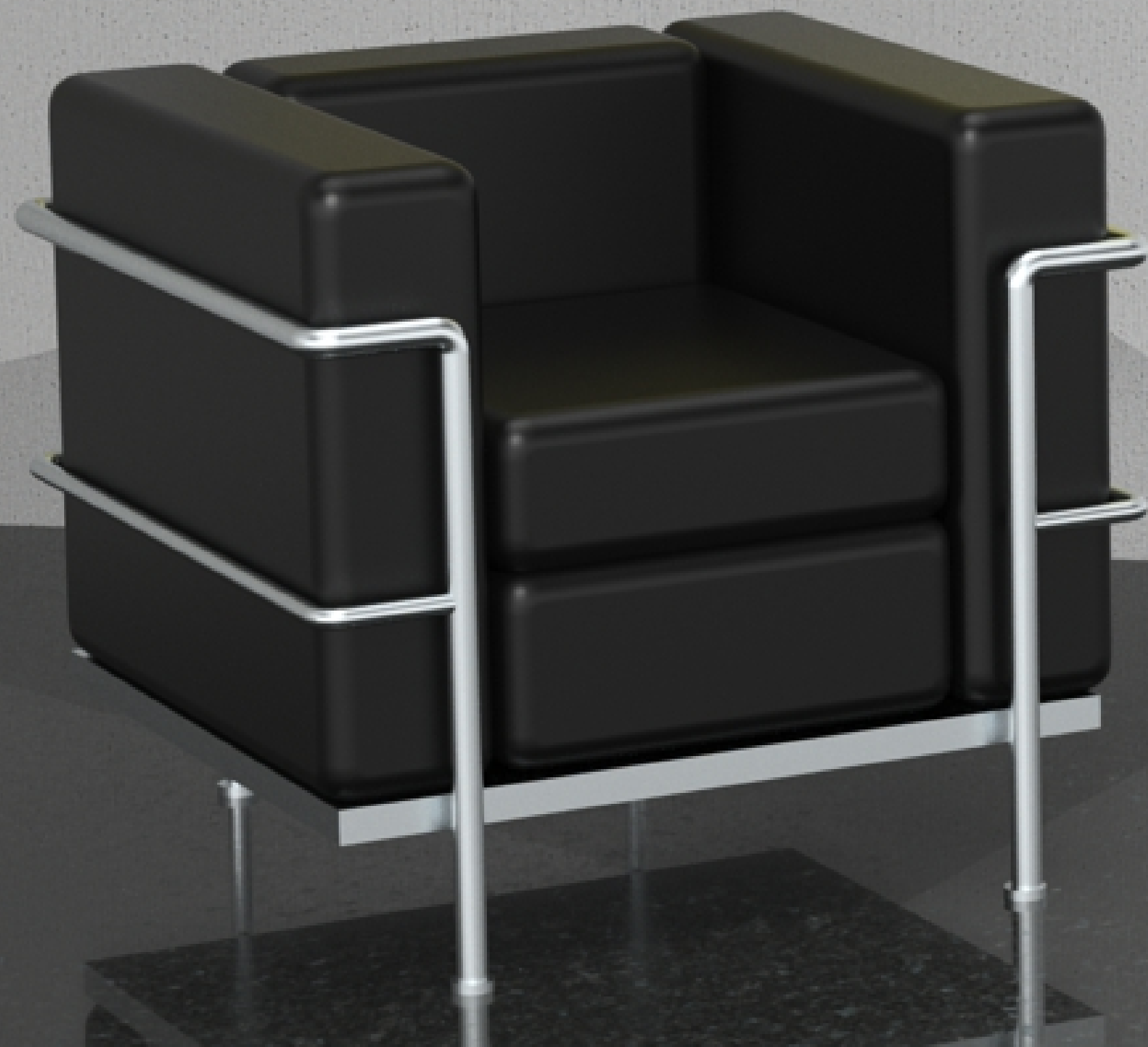
The reduced depth, only 142 mm, allows to install it on walls

Available for the CFF-IV models, sizes 2 – 3 – 4

The kit includes the recessed box kit, made in galvanized steel, and the aesthetic frontal panel

The lower part of the panel can be easily removed to access to the air filter

Washable-regenerable polypropylene filter





WiFi BlueTooth

Sabiana 2020

App Sabiana

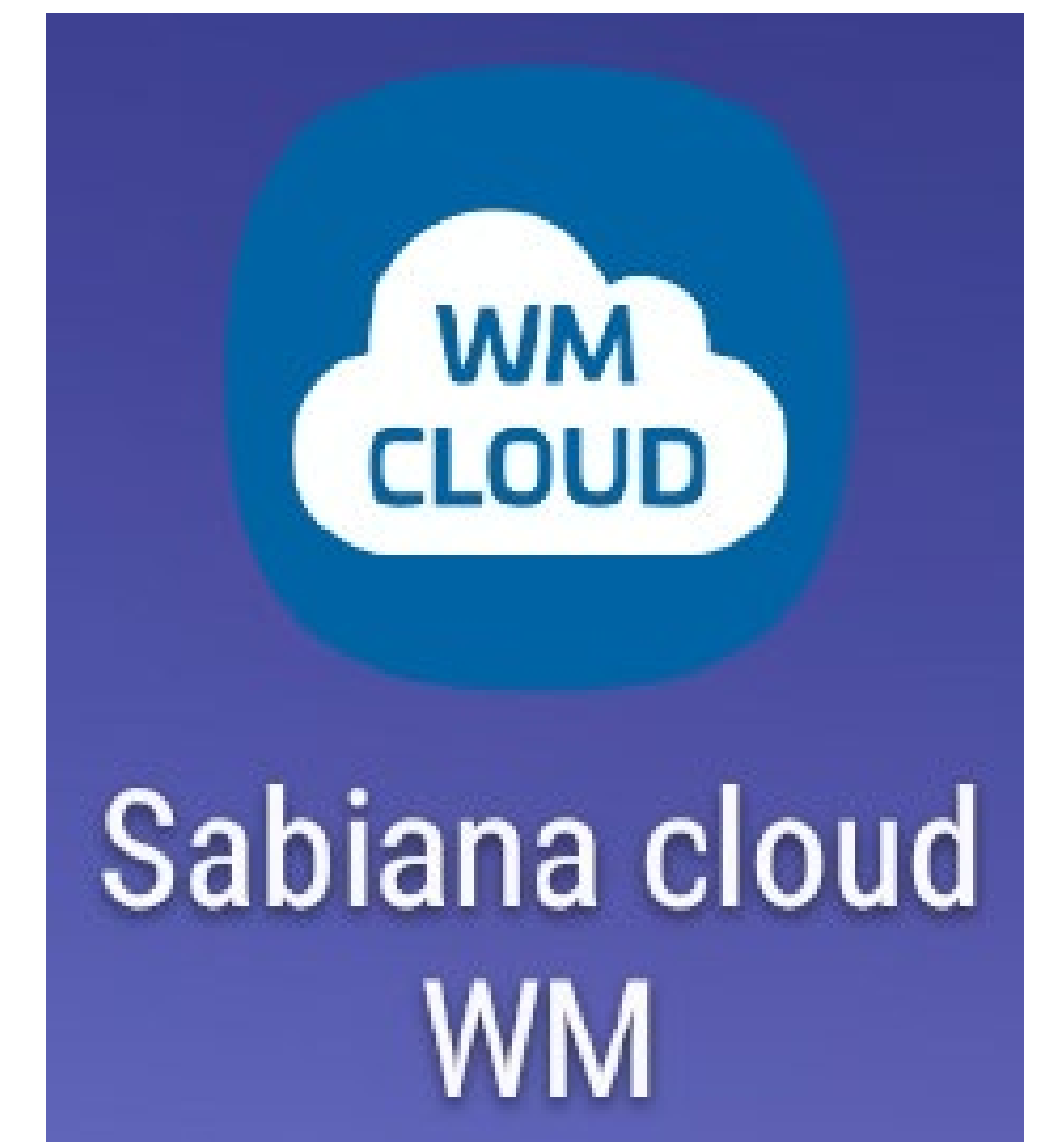
Currently available App Sabiana:

- ✓ Cloud Sabianet, via PC, tablet or smartphone
- ✓ Sabiana WM, via BLE (Bluetooth Low Energy), to connect wall mounted WM-NTC used by Cassette Jumbo
- ✓ Sabiana cloud WM will be the new App developed to control new Carisma CFF fan coil in BLE – Wi-fi



Touch control with wi-fi technology

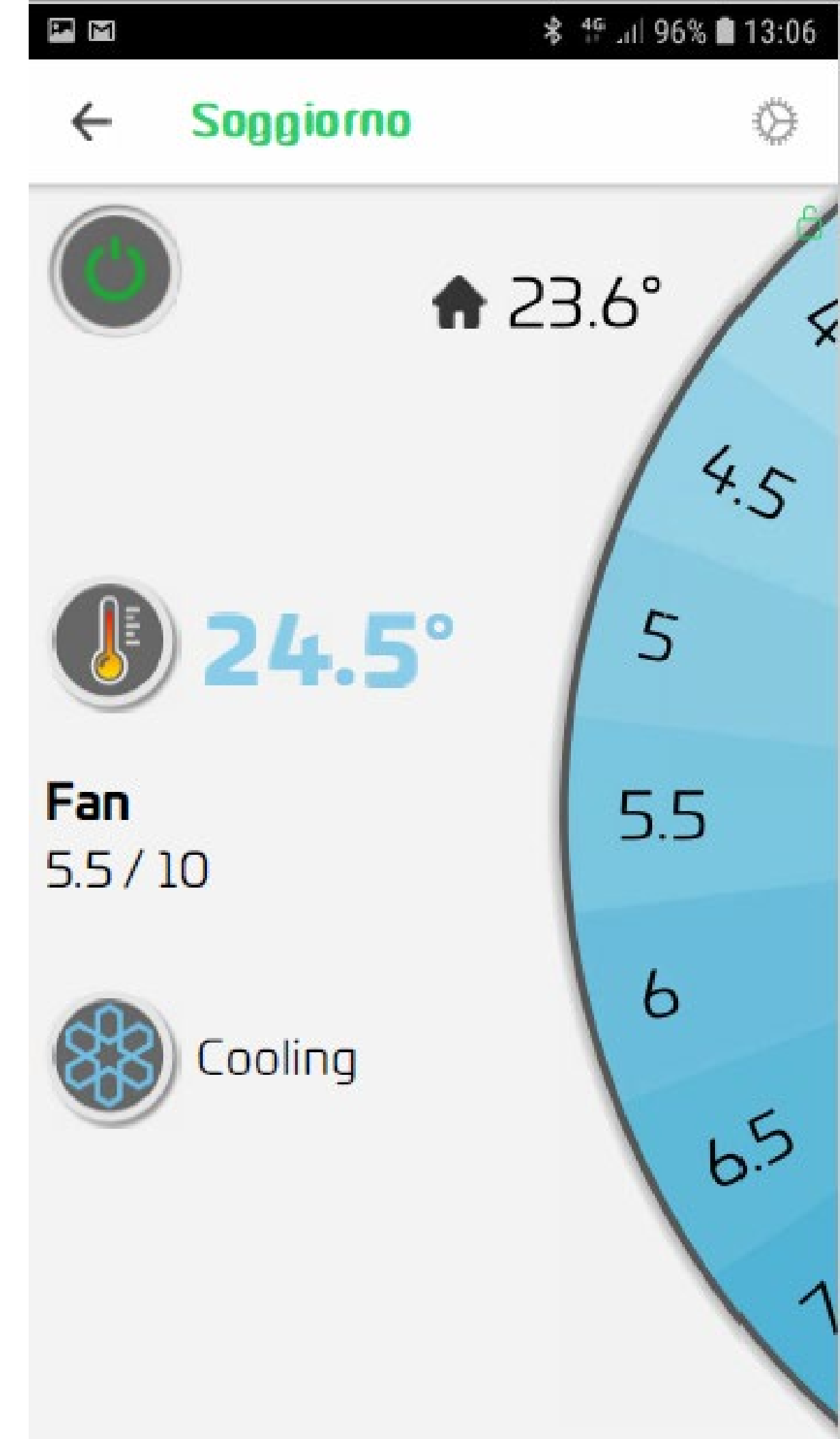
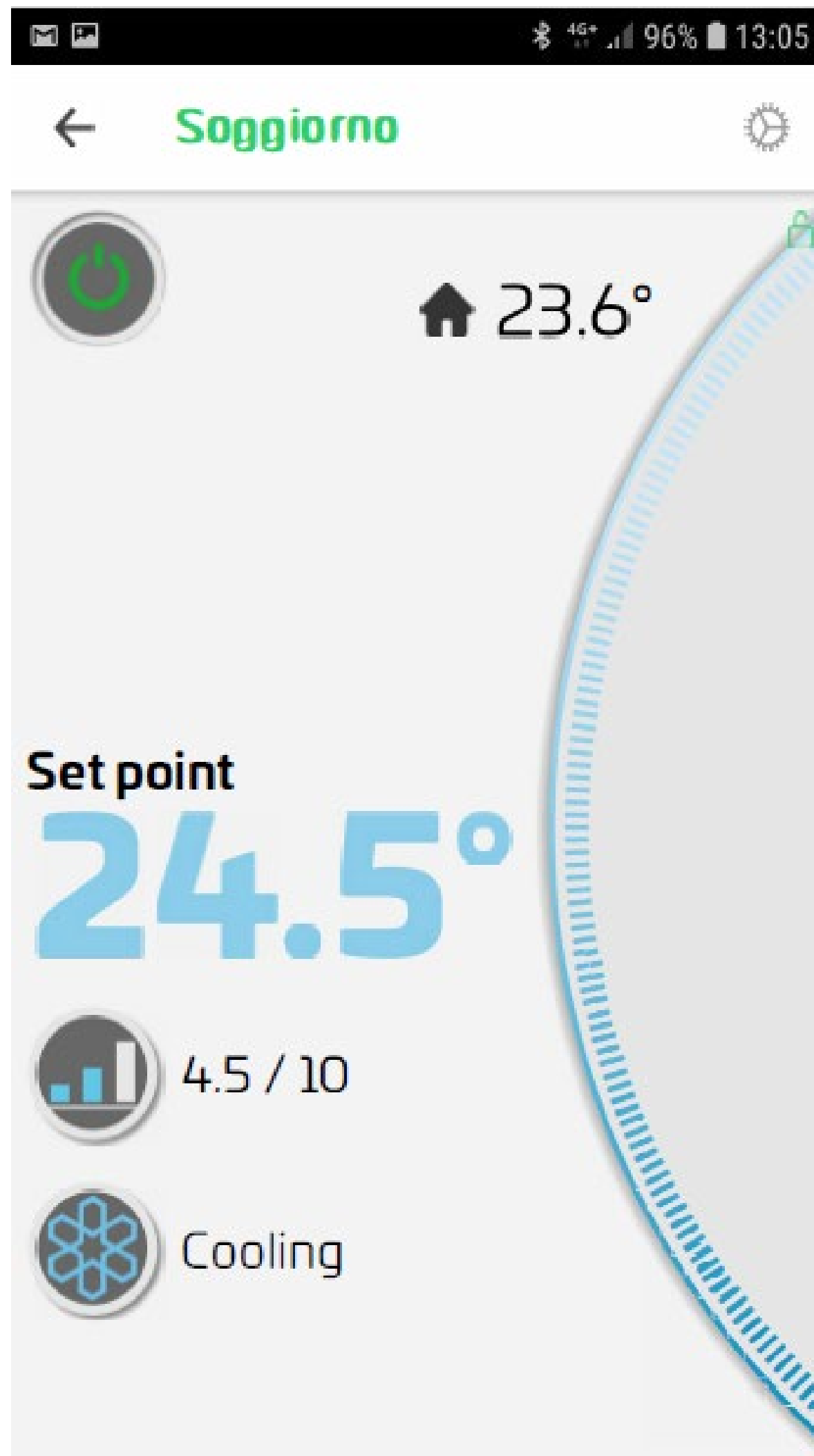
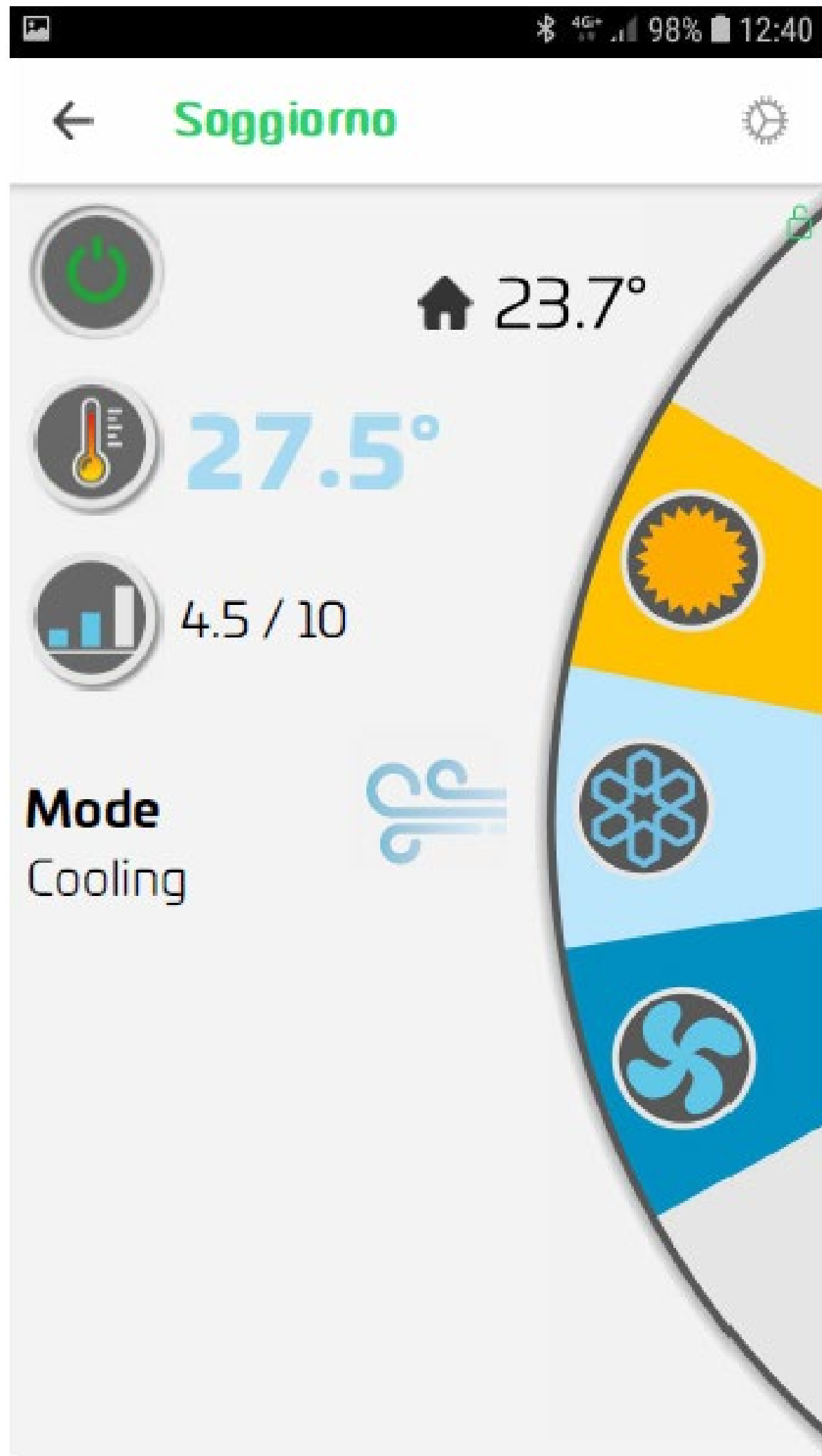
- ✓ Power board are equipped with a microprocessor that handles Bluetooth e wi-fi technology
- ✓ New App for Android e IOS smartphone: it connects by BLE each unit and creates a network to be managed through wi-fi connection



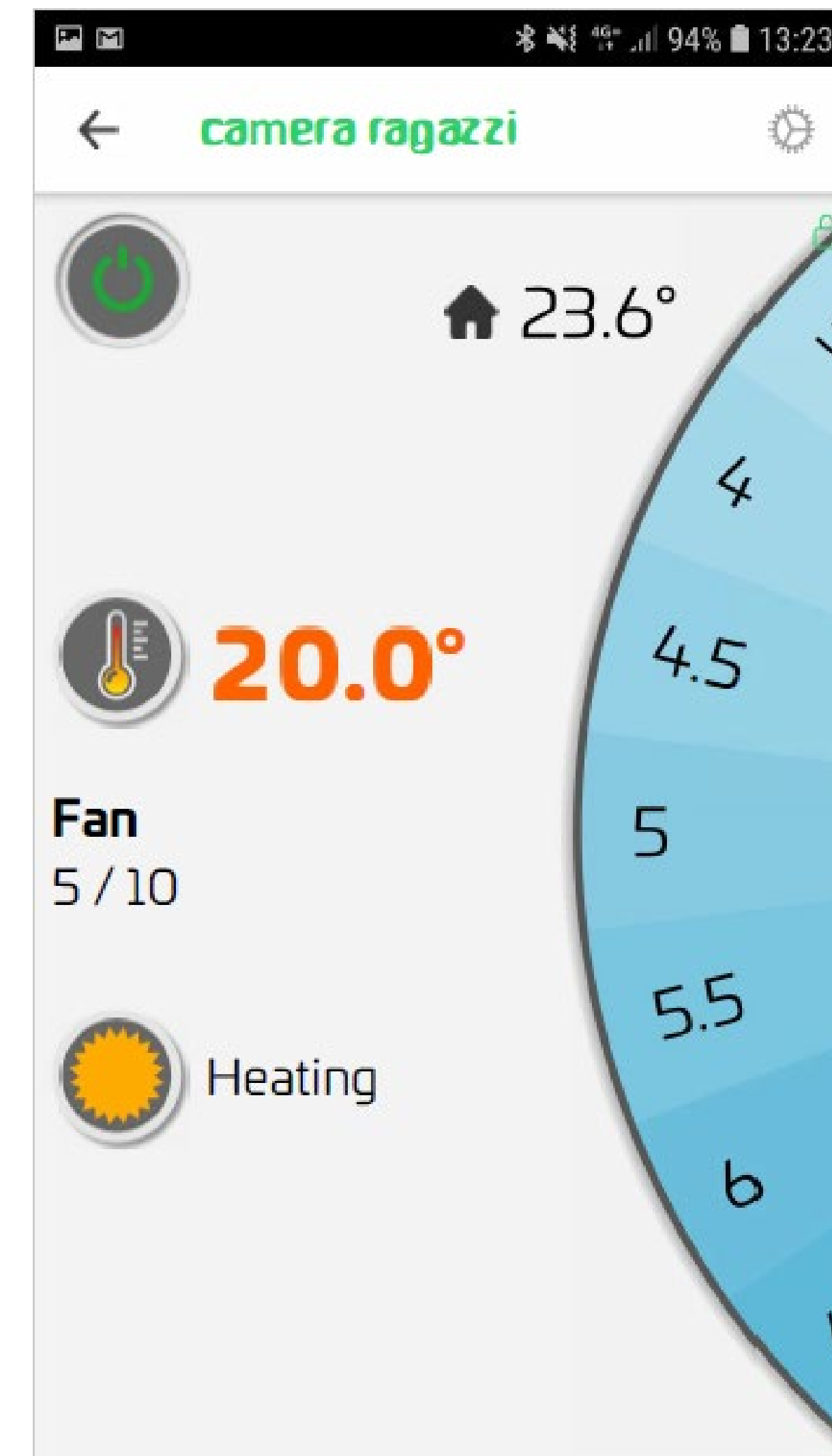
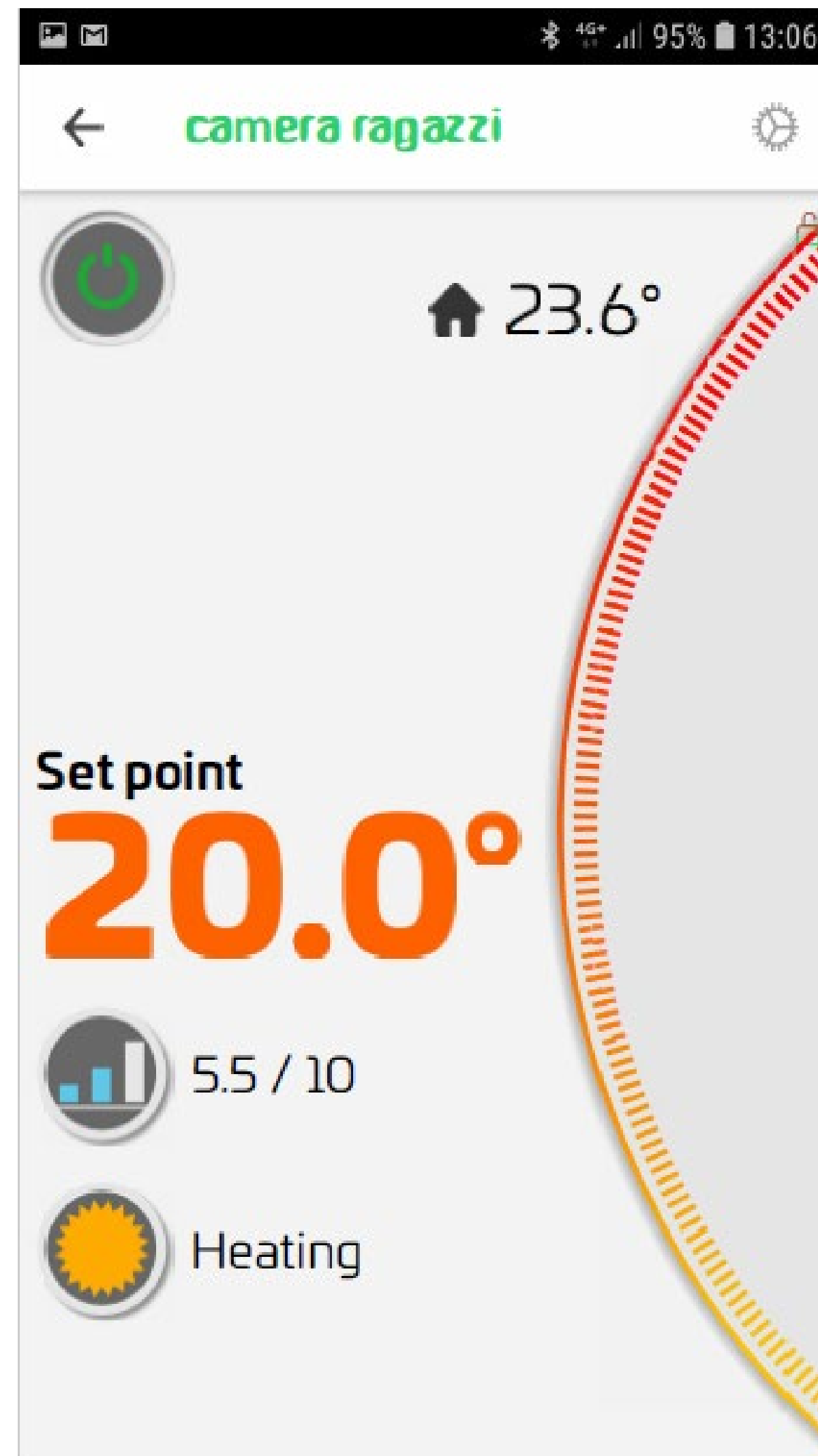
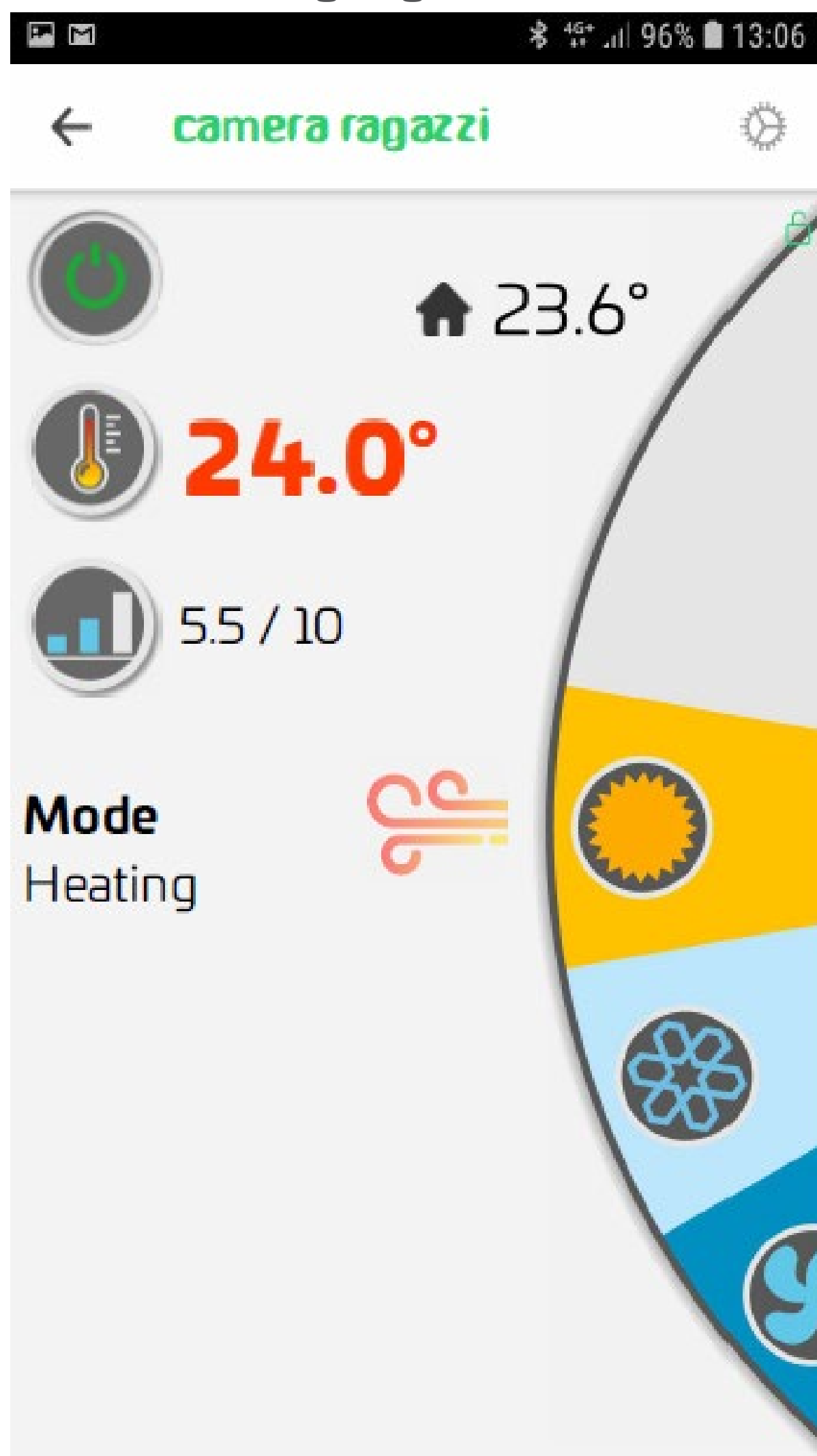
Easy to use

- ✓ App Sabiana Cloud, allows unit selection, unit name and group creation to simplify system set up and system control.
- ✓ Once created, the network can be shared with other smartphone
- ✓ App guides the user along the entire procedure
- ✓ It is possible, via smartphone, to monitor each unit or a group of units by modifying the main functions:
 - ✓ On/off
 - ✓ Operating mode
 - ✓ Temperature set
 - ✓ Fan speed
 - ✓ Weekly program

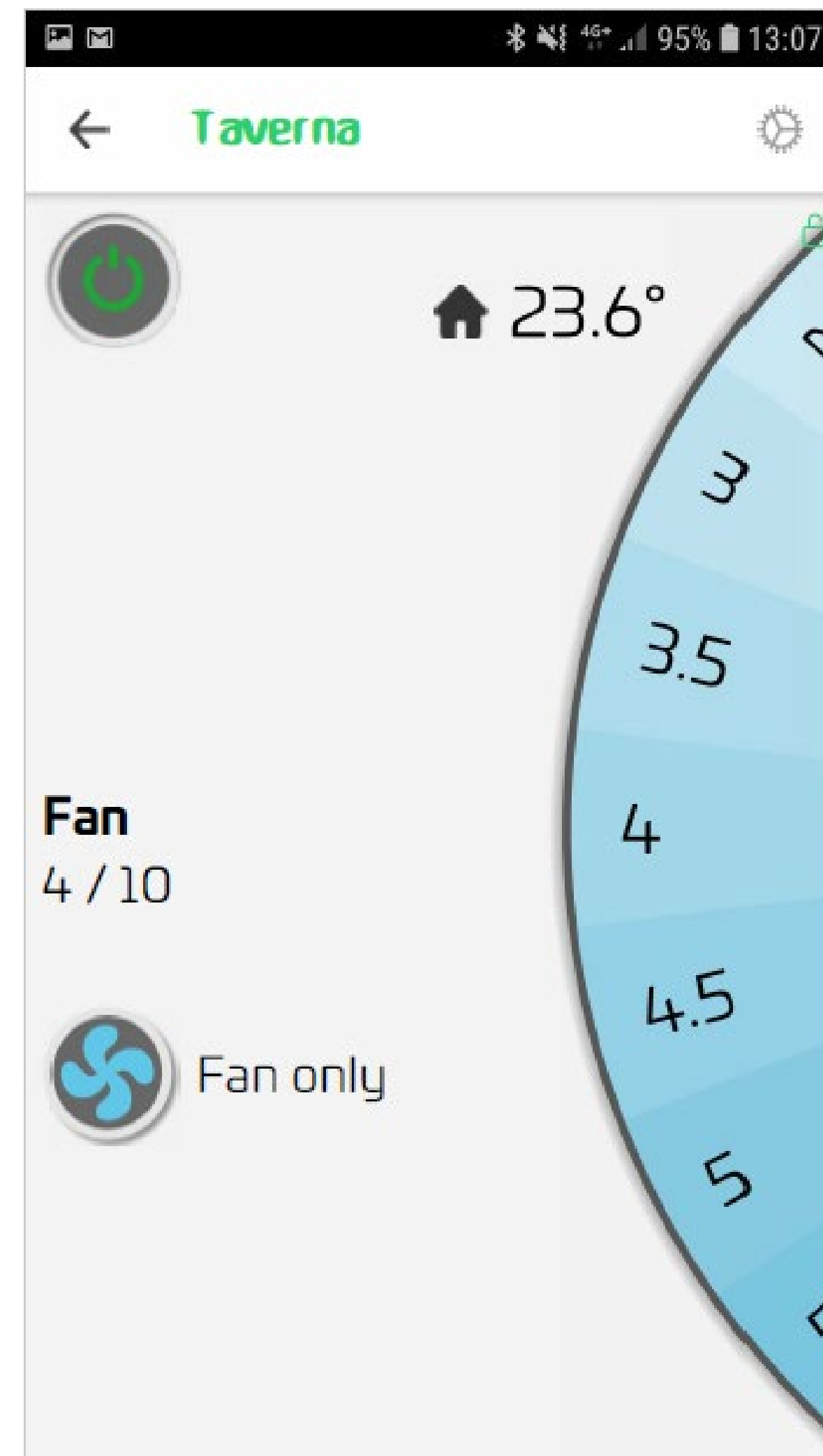
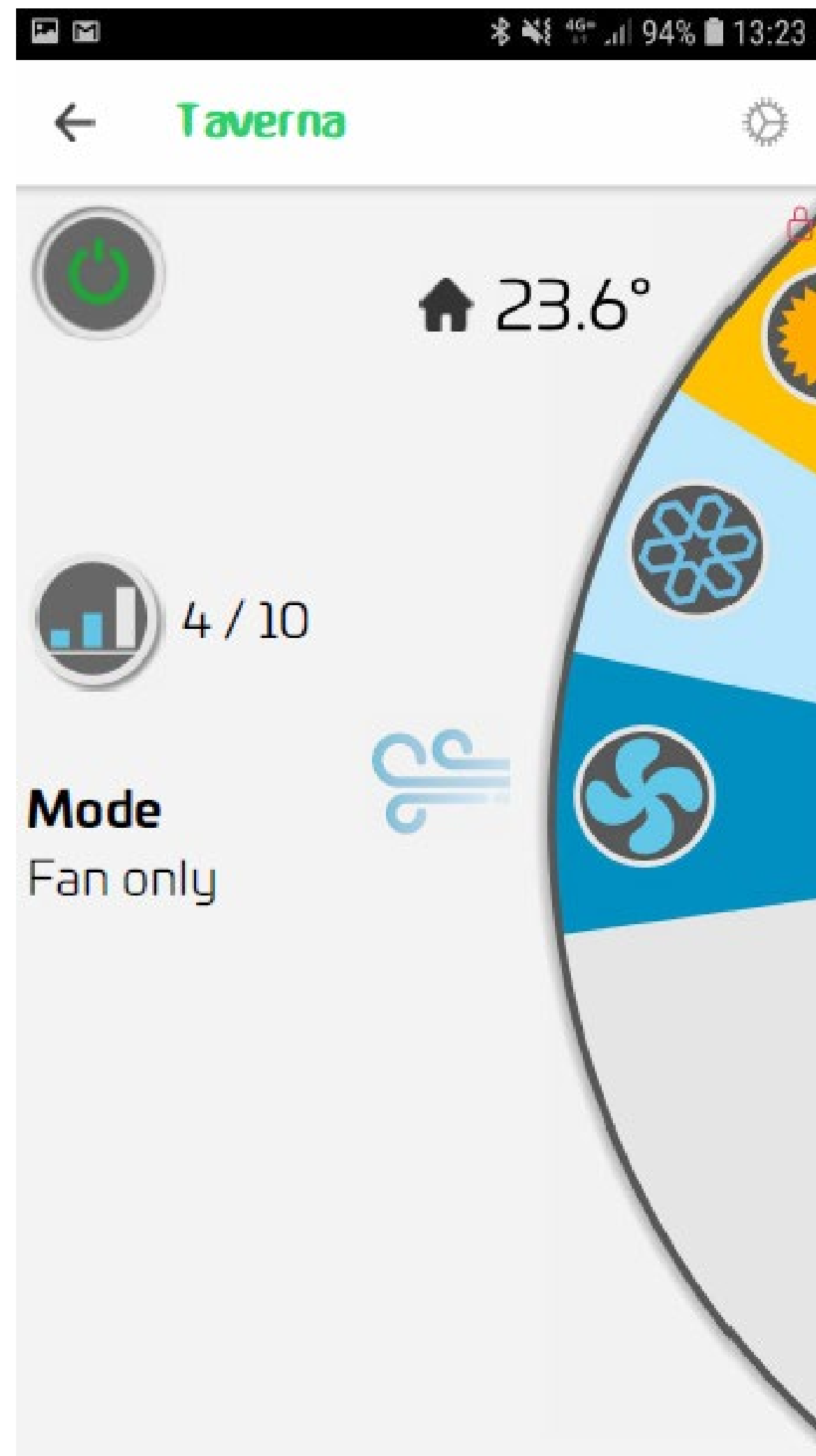
App Sabiana



App Sabiana



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Grazie

www.sabiana.it



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