

Automation upgrade

Pandion eco EDX-E -> Pandion MDX-E

NOTE!

This instruction covers upgrade from a Mitsubishi to a Mitsubishi heat pump.

If the unit has a heat pump by another manufacturer installed,
contact technical support for further assistance.

Fan rotation guards must be disabled in the new eAir settings.

Continuously check and compare the electrical diagrams at the end
of this instruction as the upgrade progresses!

Warning!

According to regulations, an ordinary electricity consumer is only allowed to perform some minor service tasks.

**According to Finnish regulations,
a list of the allowed tasks can be found at the Tukes home page (www.tukes.fi).**

Always make sure that the power supply is turned off before opening the service door.

Wait two minutes before beginning the maintenance work. The fans rotate for some time by themselves, and the heating element may be hot even if the power supply of the ventilation unit is switched off. Electrical housing may be opened only by a trained electrician.

Electrical installations must comply with local regulations.

**Continuously check and compare the electrical diagrams at the end
of this instruction as the upgrade progresses!**

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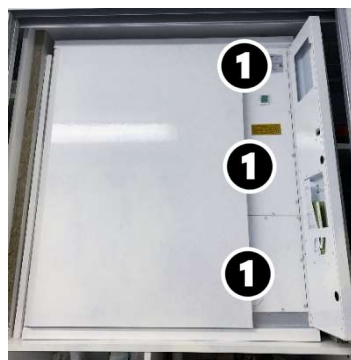
Open **the small door (1)** by pressing on it.



Disconnect **the power cord (1)** and turn off the power to the heat pump outside unit.



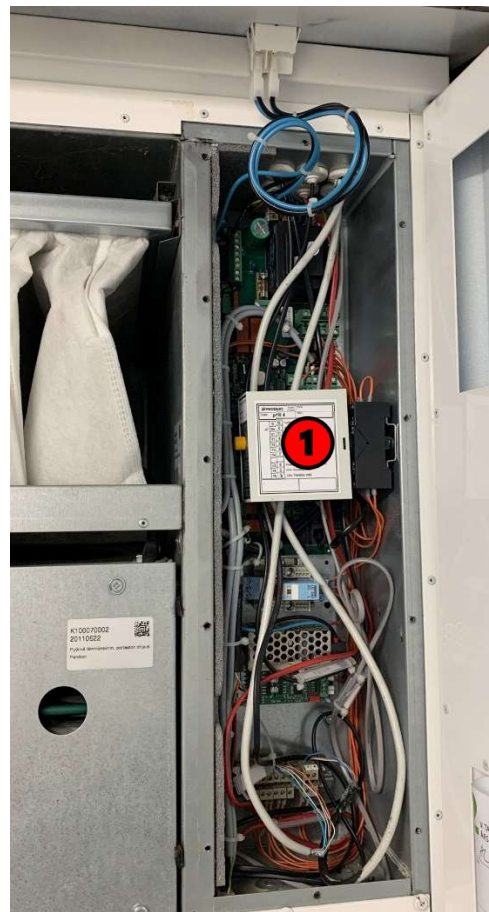
Open the service door by **turning the three locks (1)** counterclockwise.



Remove the screws and release the cover to **the electrical box (1)**.



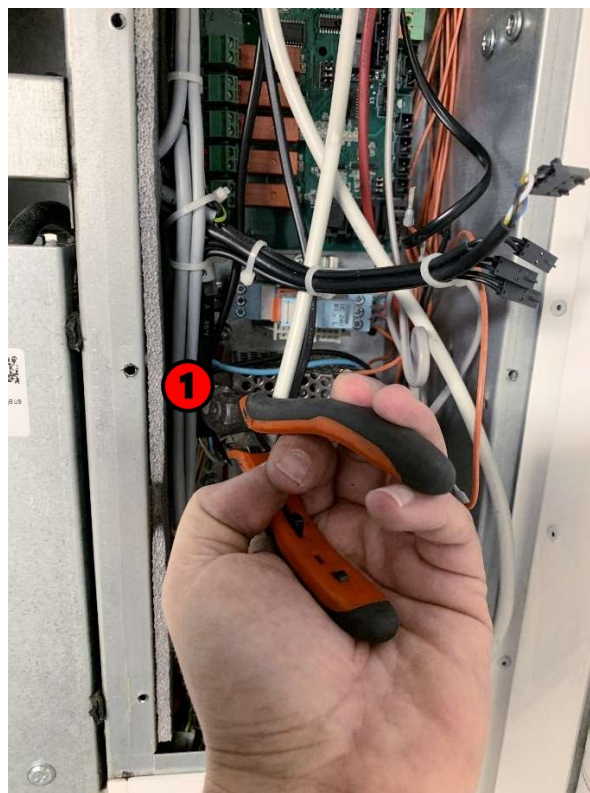
Mark the wires and disconnect **the PYR4 or AO2 controller (1)**.



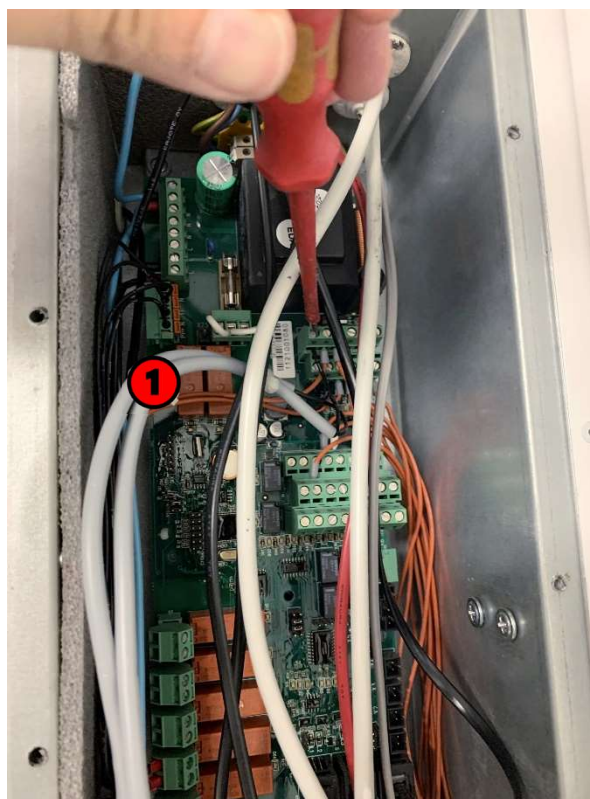
Mark **the sensors (1)** and disconnect them from the main board.



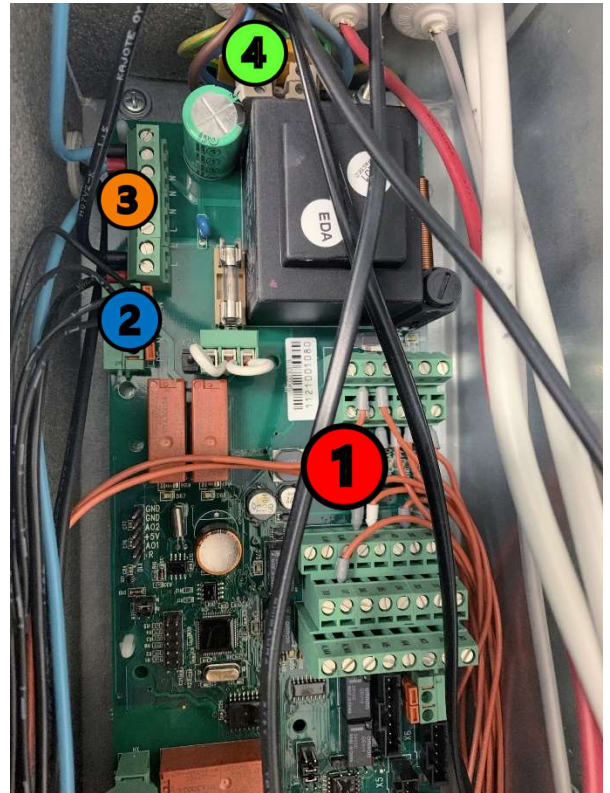
Cut and remove **the cable ties (1)**.



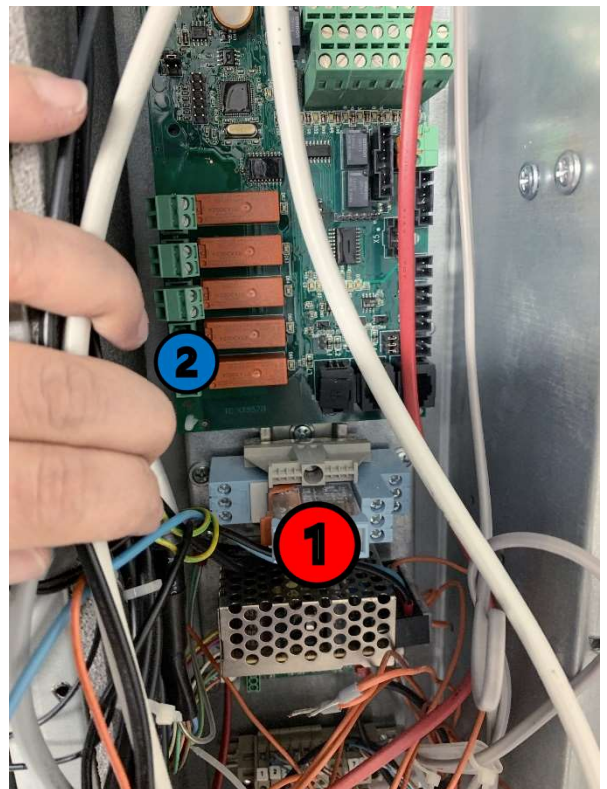
Mark **the fan control cables (1)** and disconnect them from the main board.



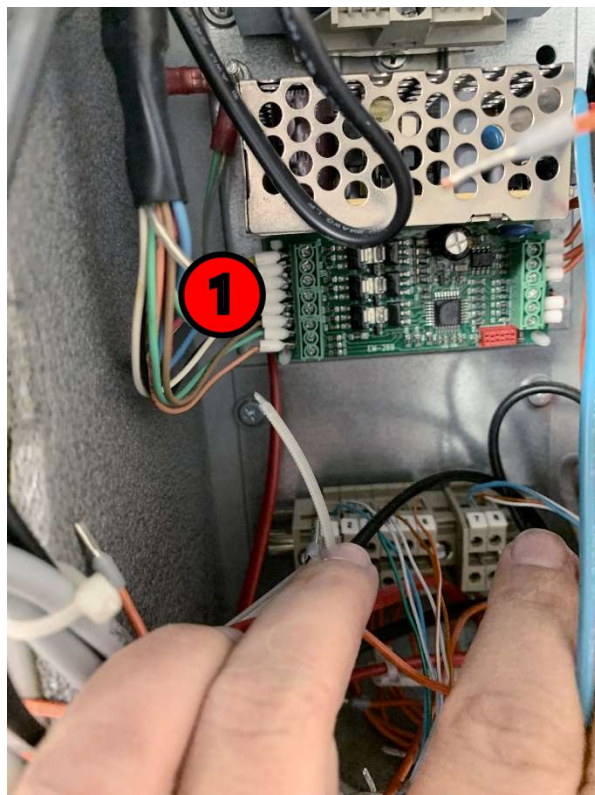
Mark and disconnect all **the control wires (1)**.
 Mark and disconnect **the fan power wires (2)**.
 Mark and disconnect **the power supply wires (3)**.
 Mark and disconnect **the power supply cable (4)**.



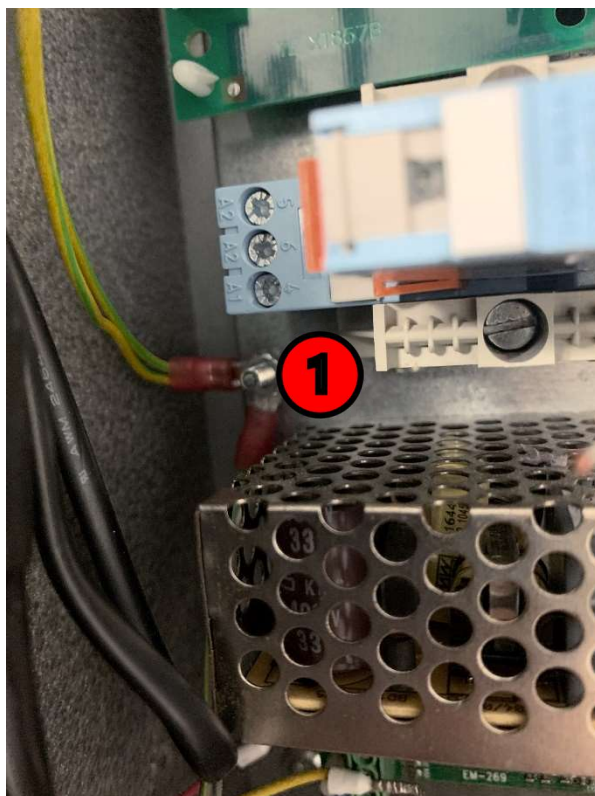
Mark and disconnect all the wires from **the relay (1)**.
 Mark and disconnect all the wires from **the relays on the main board (2)**.



Disconnect **the HRW cable (1)** from the circuit board.



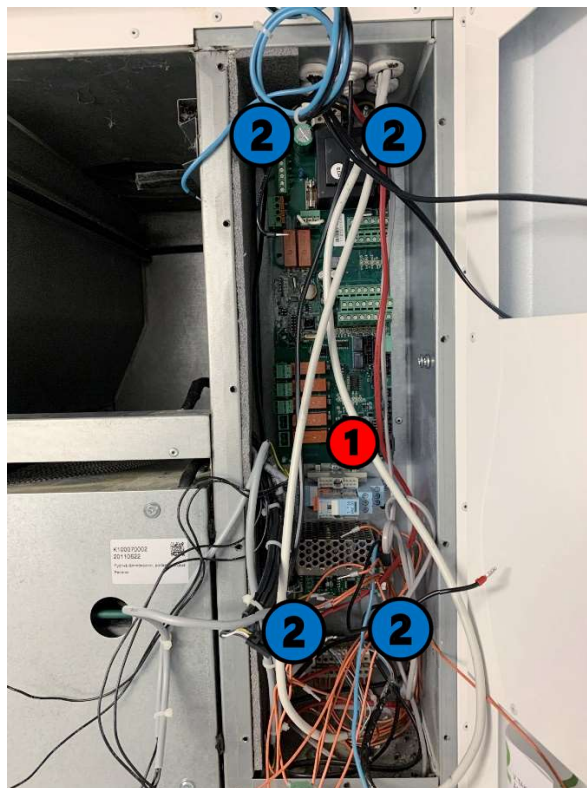
Disconnect **the ground cables (1)** from the automation base.



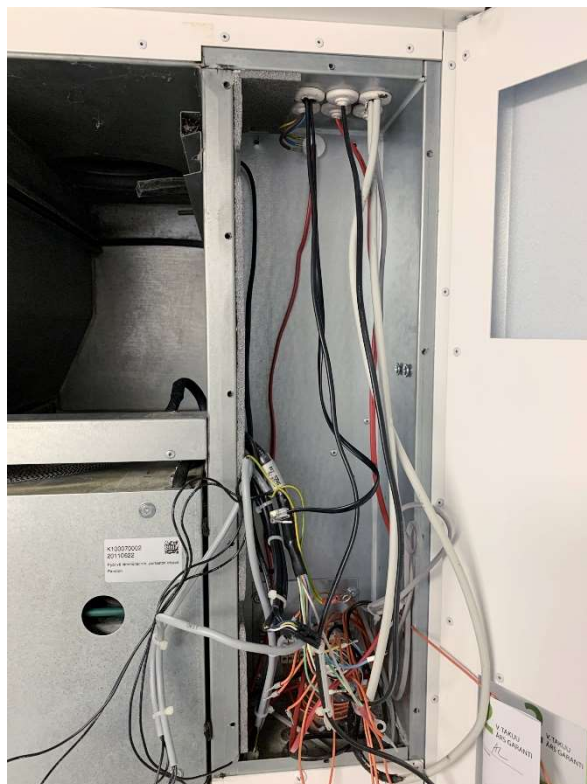
Disconnect **the display cable (1)** from the main board.

Now make sure all the cables/wires are marked and disconnected from the mainboard and from the components.

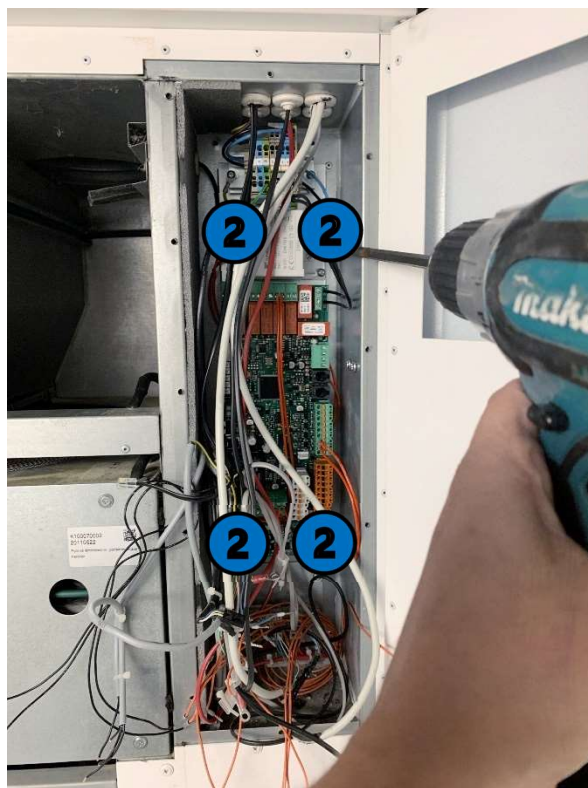
Remove the automation base by releasing **the four self tapping screws (2)**.



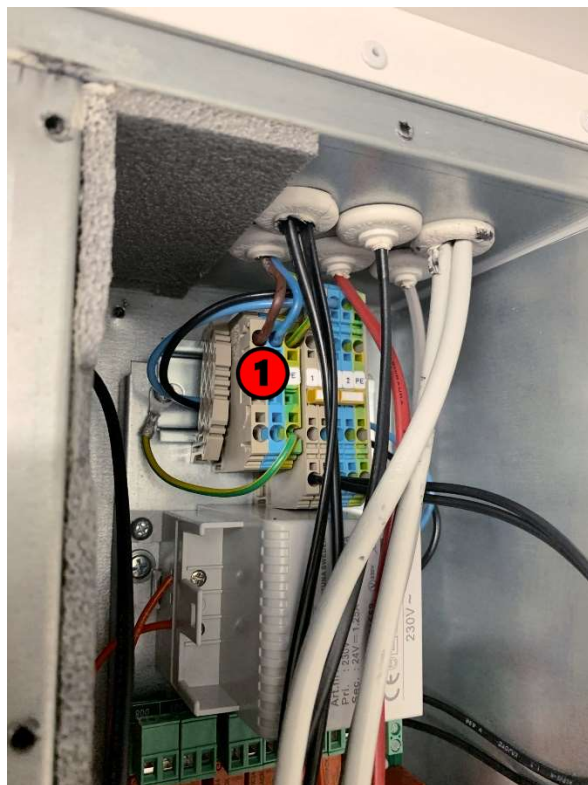
Automation base removed.



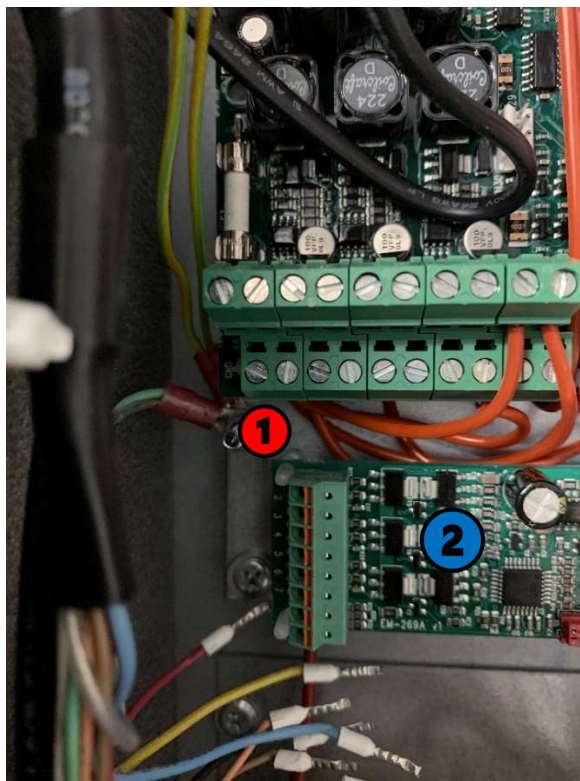
Install the new automation base with **the four self tapping screws (2)**.



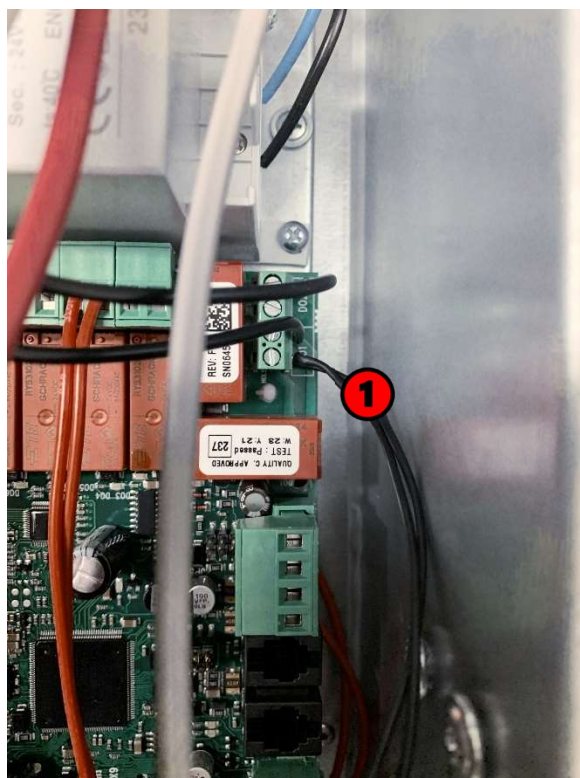
Connect **the power supply cable (1)** to the terminal.



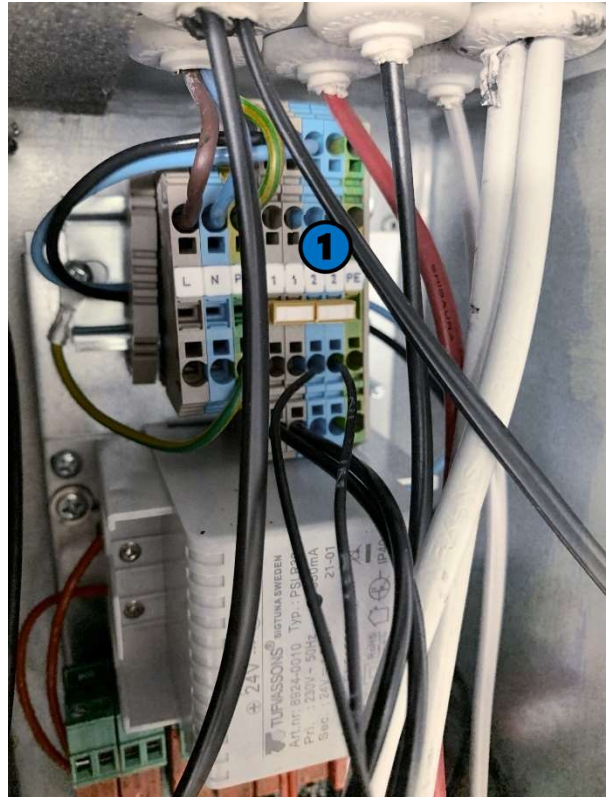
Connect **the ground cables (1)** to the automation base.
Move the **HRW control board (2)** from the old automation base to the new one.



Connect **the fan power wires marked "1" to "DO1" (1)** on the main board.

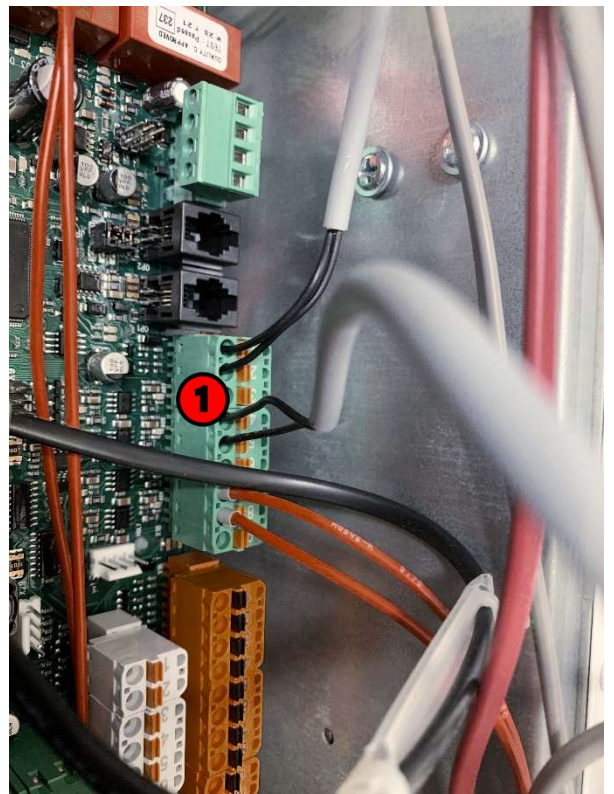


Connect **the fan power wires marked "2"** to the **blue terminals marked "2"** (1).



Connect **the fan control cables to the main board terminals (1)**.

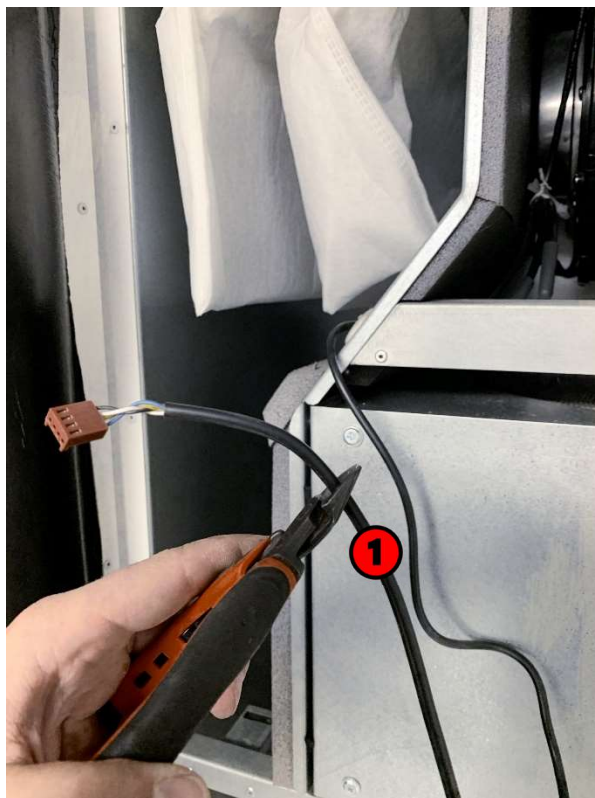
Supply air wire "1" > main board **green** terminal "1"
 Supply air wire "2" > main board **green** terminal "2"
 Extract air wire "1" > main board **green** terminal "4"
 Extract air wire "2" > main board **green** terminal "5"



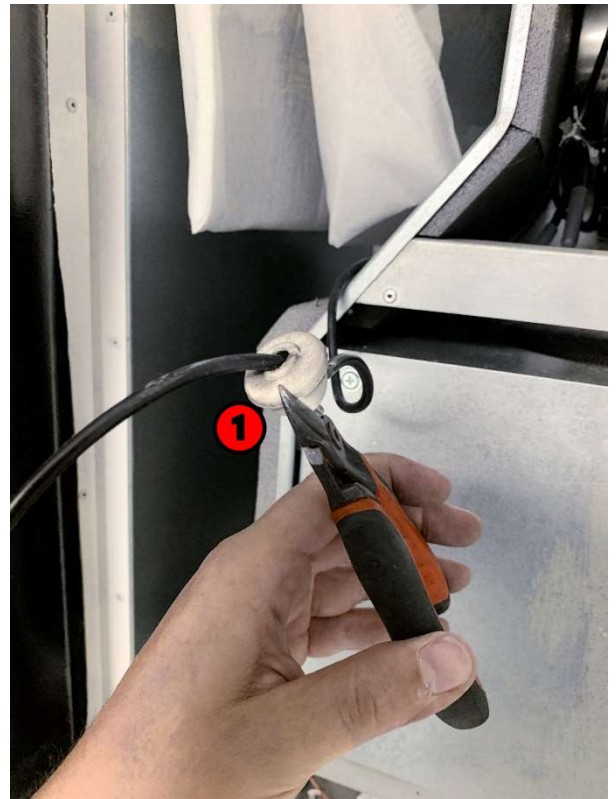
Disconnect **the sensor cable (1)** from **the sensor (2)**.



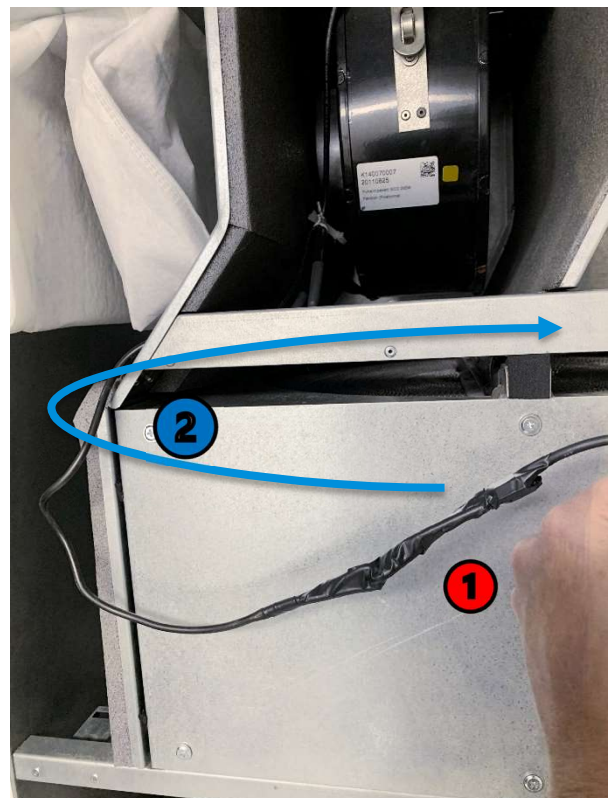
Cut **the sensor cable (1)**.



Cut **the rubber sealing (1)**.



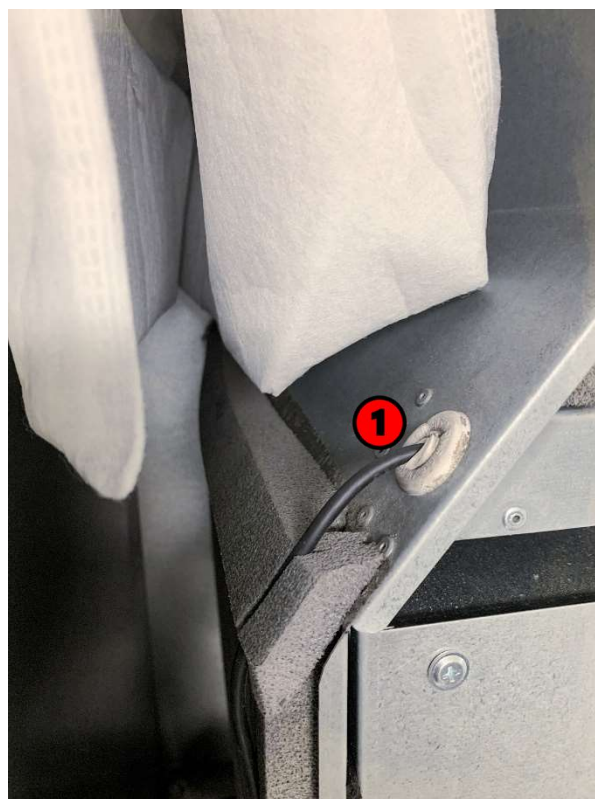
Attach **the old sensor cable to the new sensor cable (40029225) carefully with strong tape (1)**.
Push/pull and install **the new extract air sensor through the cable frame into the electrical box (2)**.



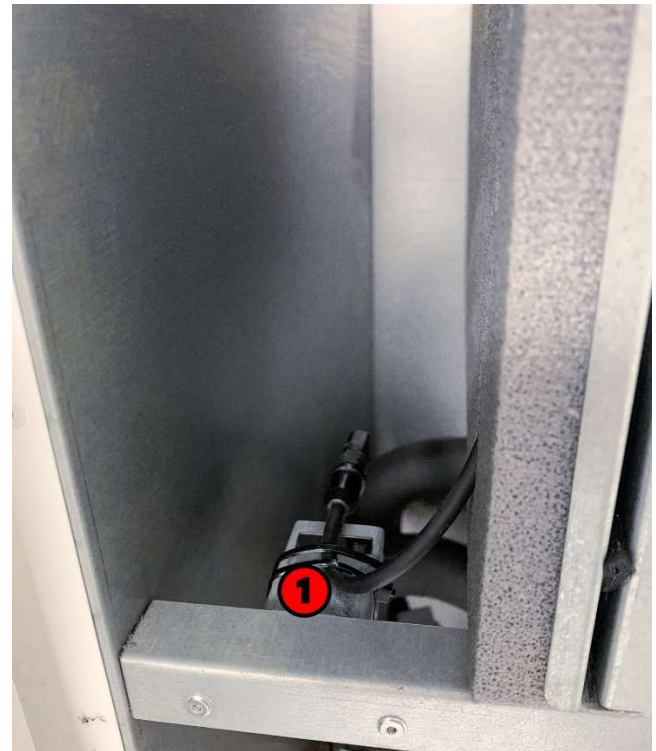
Cut **a gap in the insulation** and install the sensor cable **into the gap (1)**.



Reinstall **the rubber sealing (1)**.

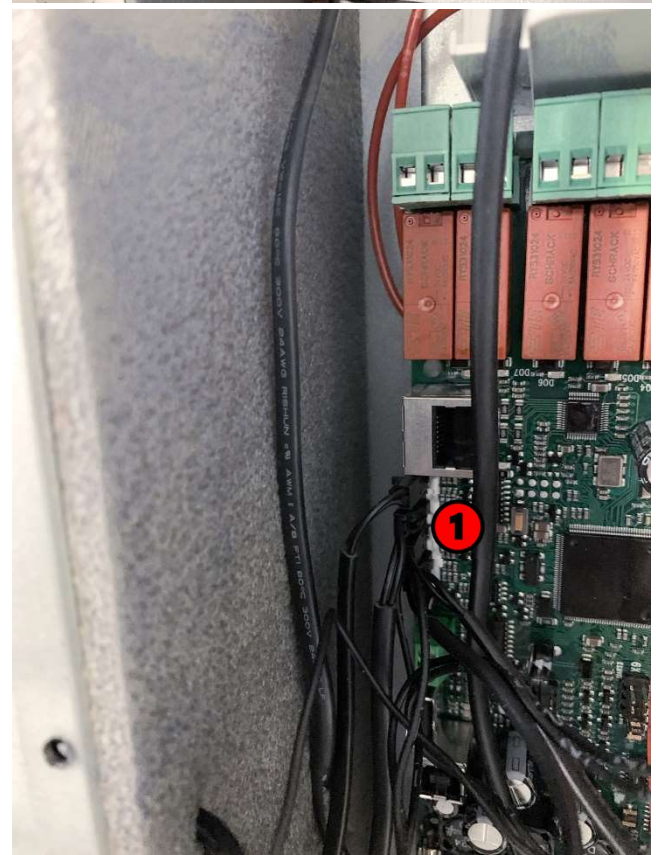


Install **the new extract air sensor on top of the old extract air sensor and attach it with cable ties (1).**

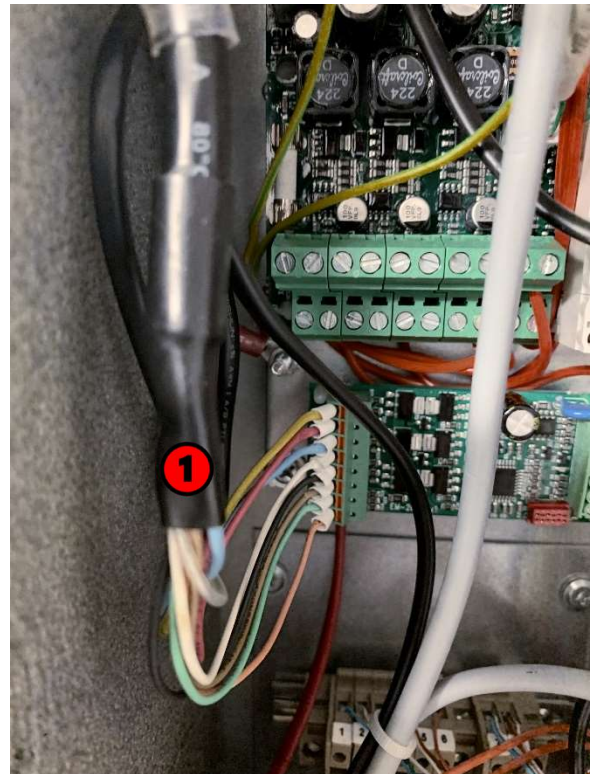


Connect the **sensors to the main board (1).**

- X1: Outside air
- X2: HRW supply air
- X3: Supply air
- X4: Waste air
- X29: Extract air



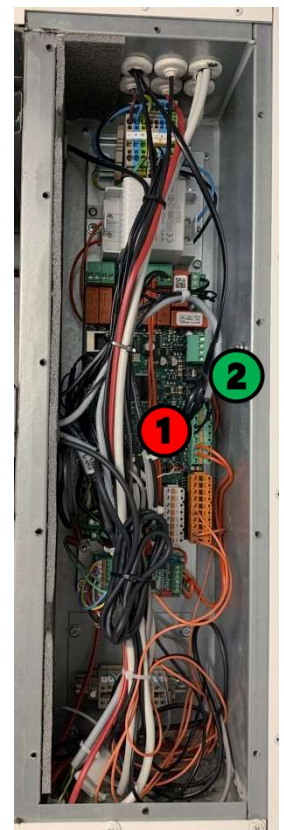
Connect **the HRW cable (1)** to the circuit board.



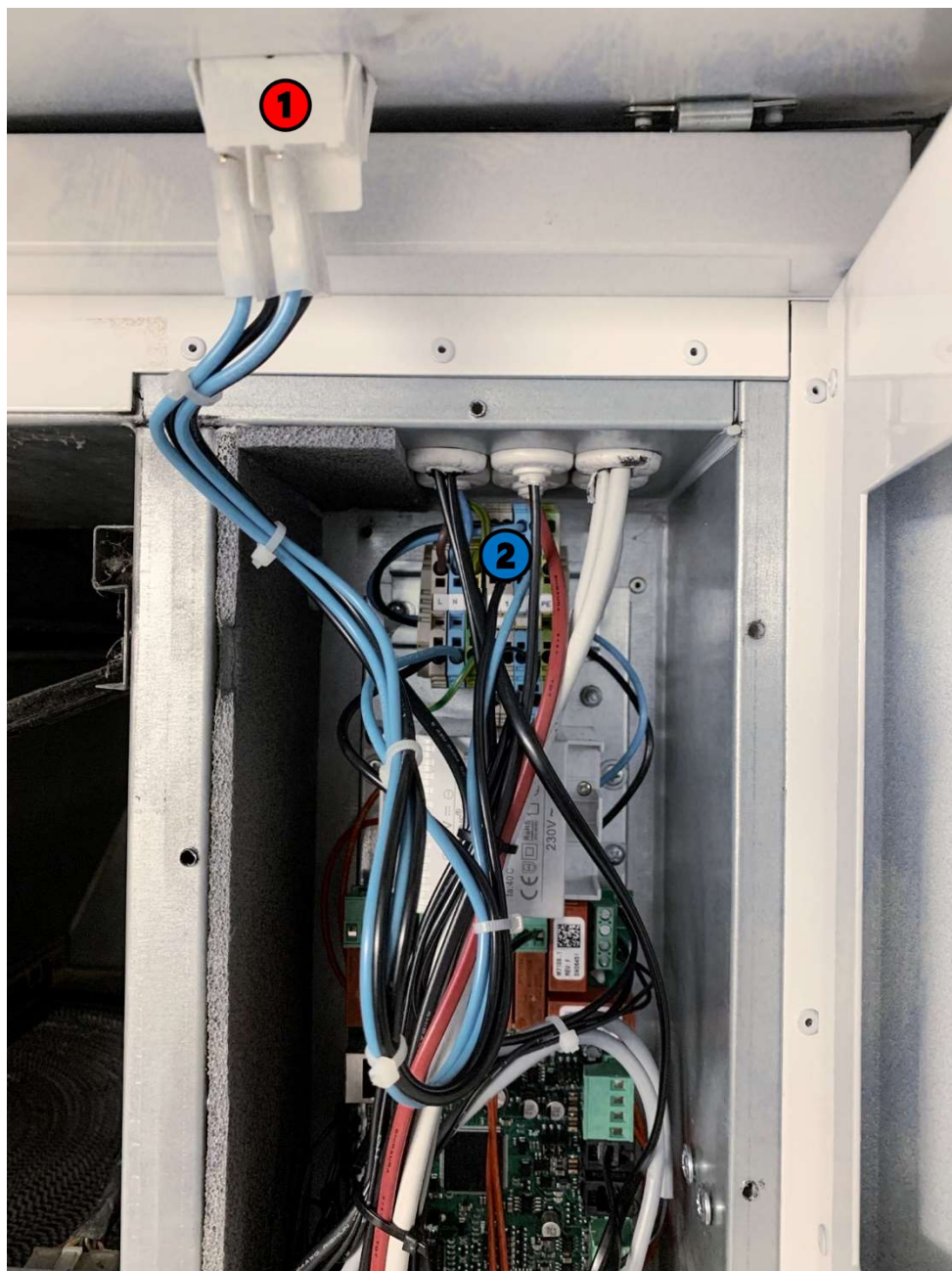
Connect the rest of the wires carefully according to the electrical diagrams.
For connection of "DI10" on X17 (1), you will need to take the adapter cable (40030313) apart and free **the blue wire** and connect it to TB141 (X2,3) on the Mitsubishi PAC controller (**page 27**).

Attach the wires together with **cable ties** (40030997).

Connect **the display cable to the main board (2)**.



Connect **the main switch (1)**
to **the terminals (2)**.



Disconnect and remove the old display.

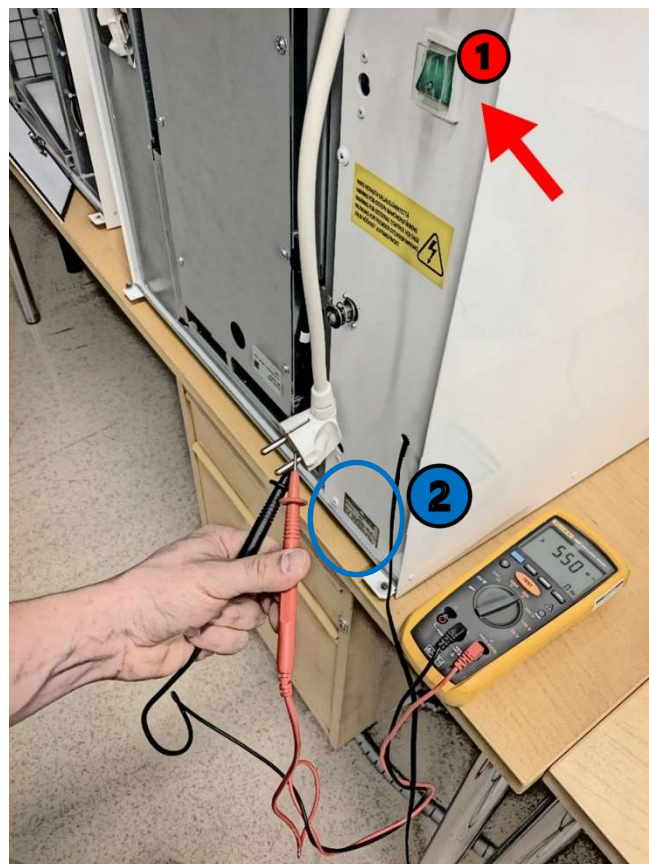


Install **the new display** (40031114) according to the display installation instruction.



Turn on the **main switch (1)** and perform insulation and ground continuity test according to regulations.

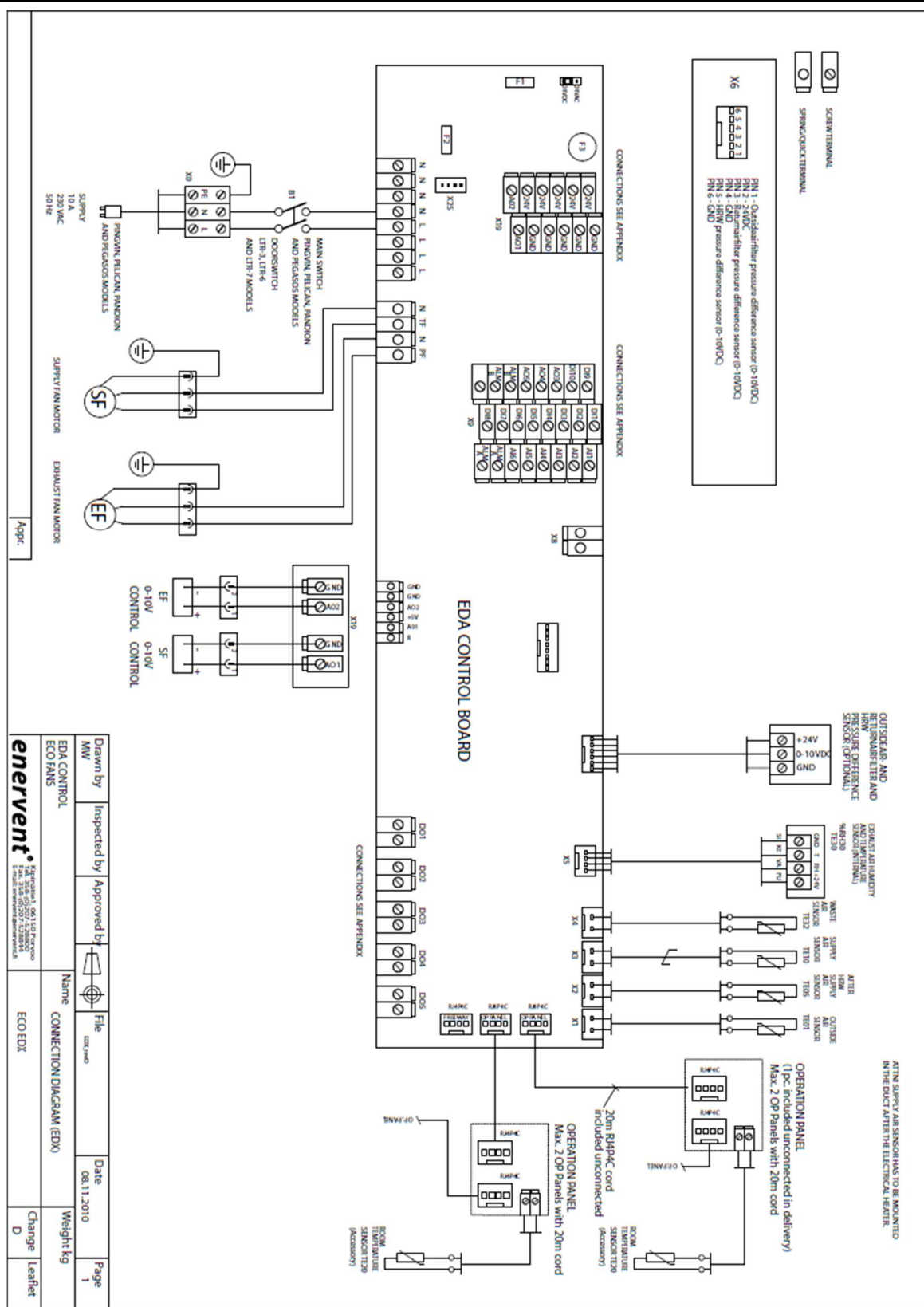
Install the new **type plate sticker (2)**.

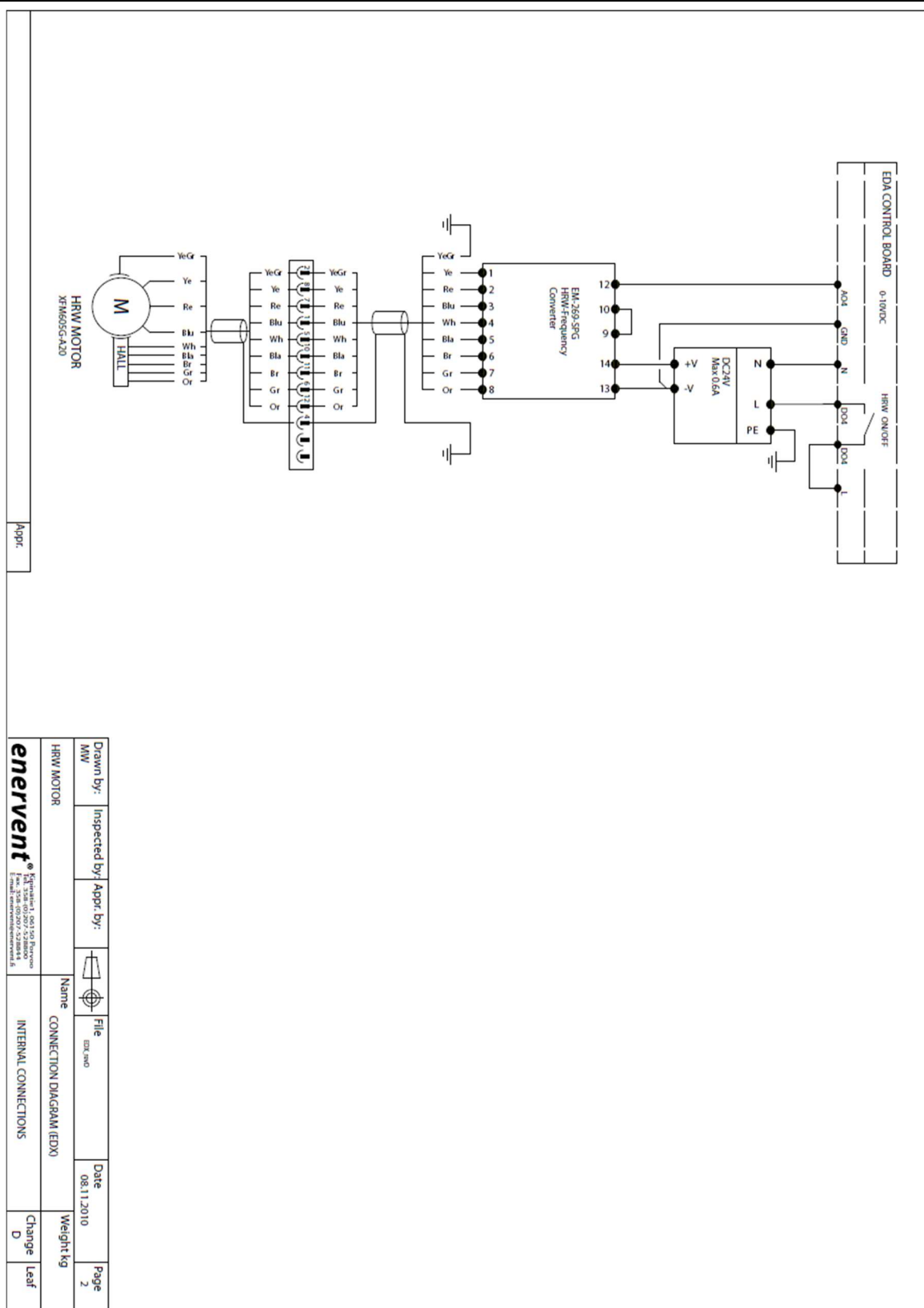


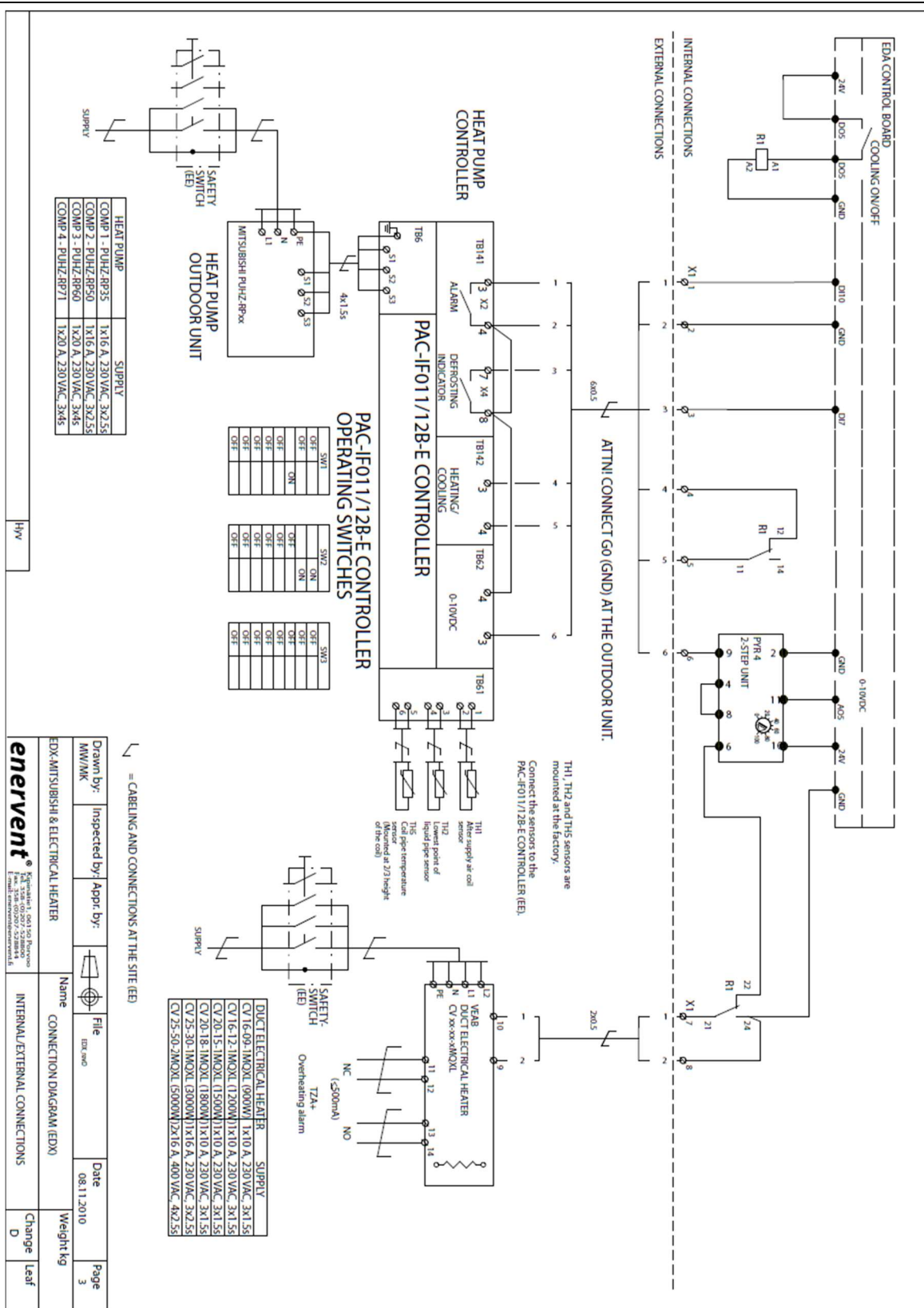
Connect **the power cord (1)** and turn on the power to the heat pump outside unit.

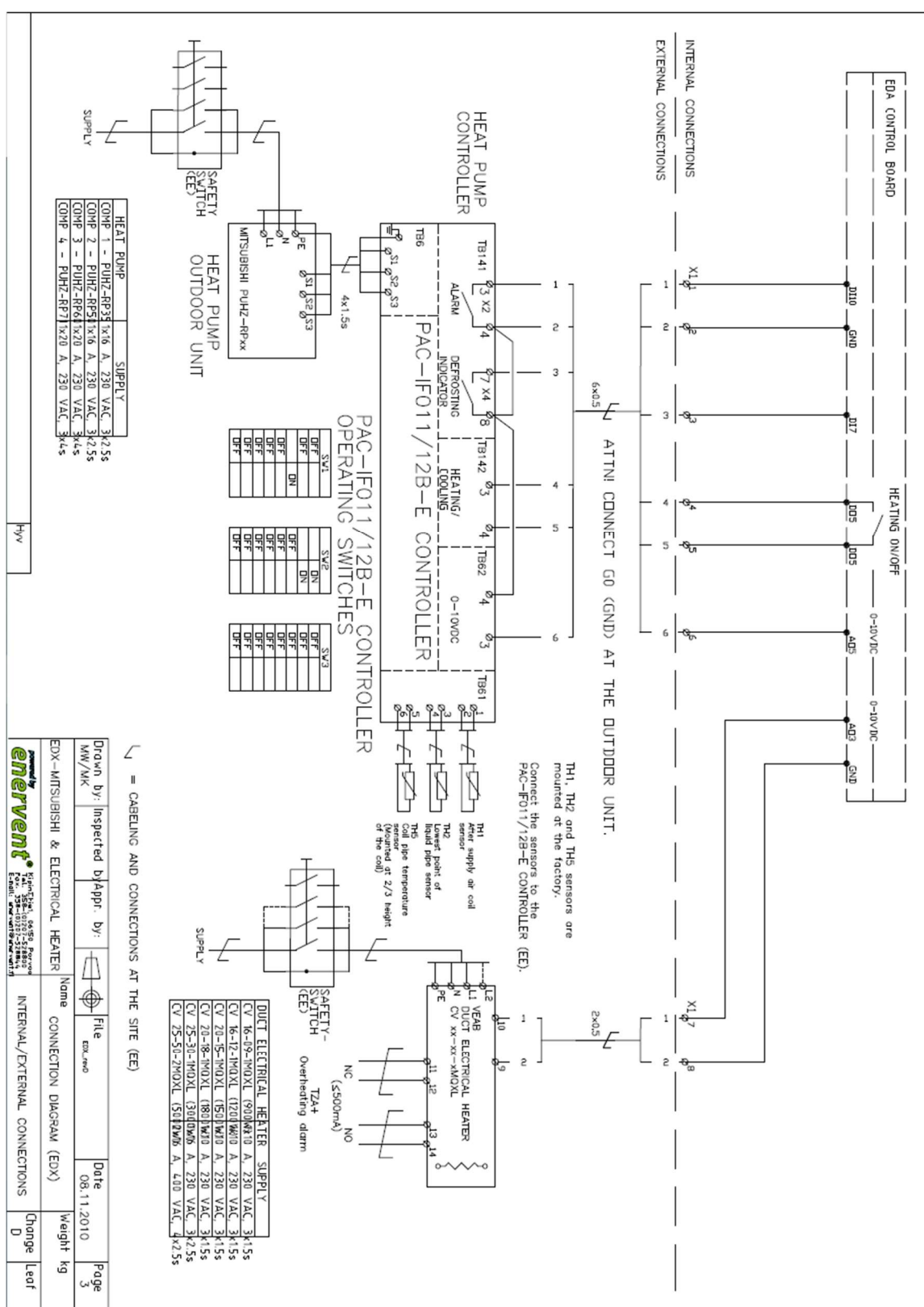
Make sure all the components are working properly.

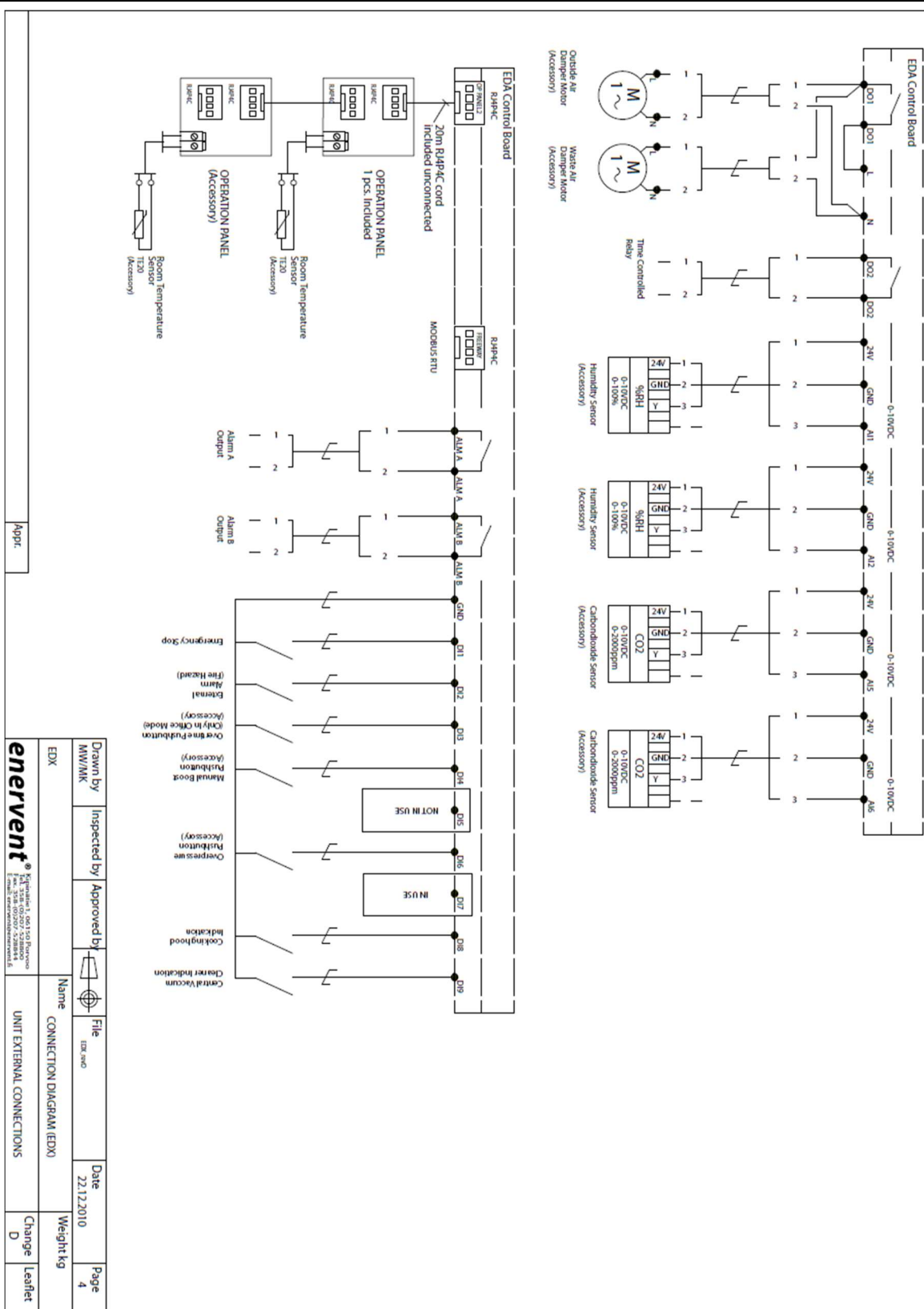


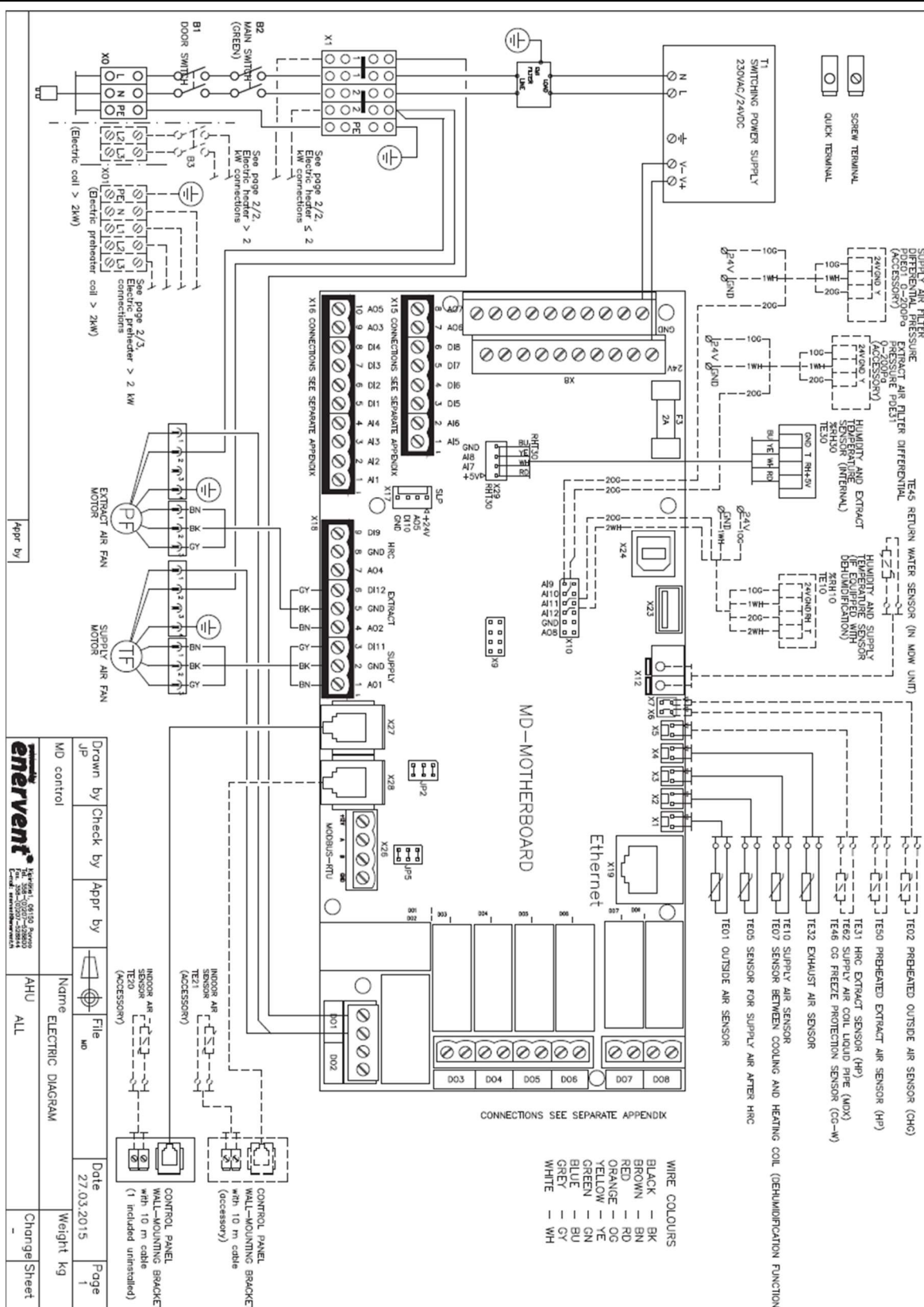


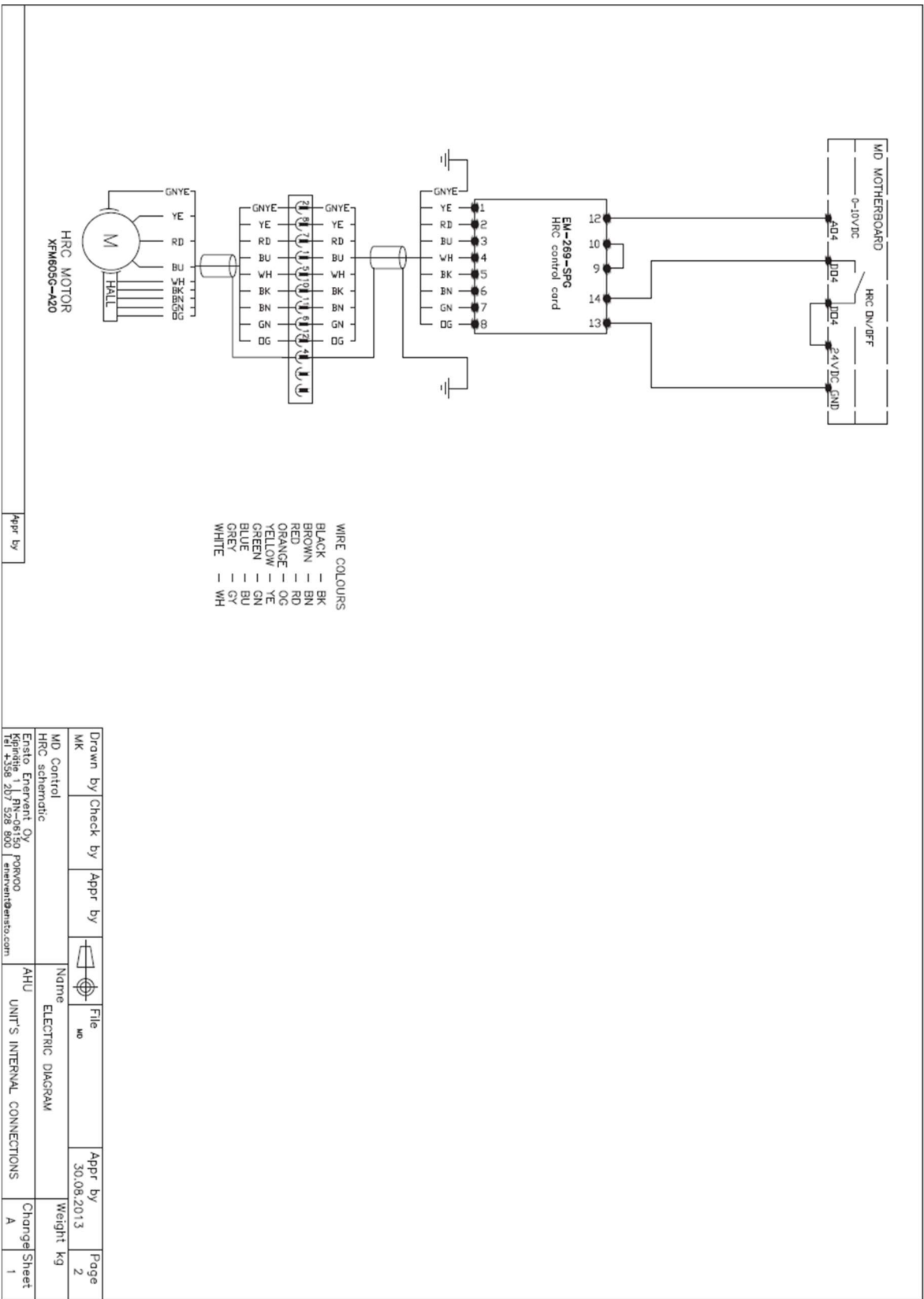


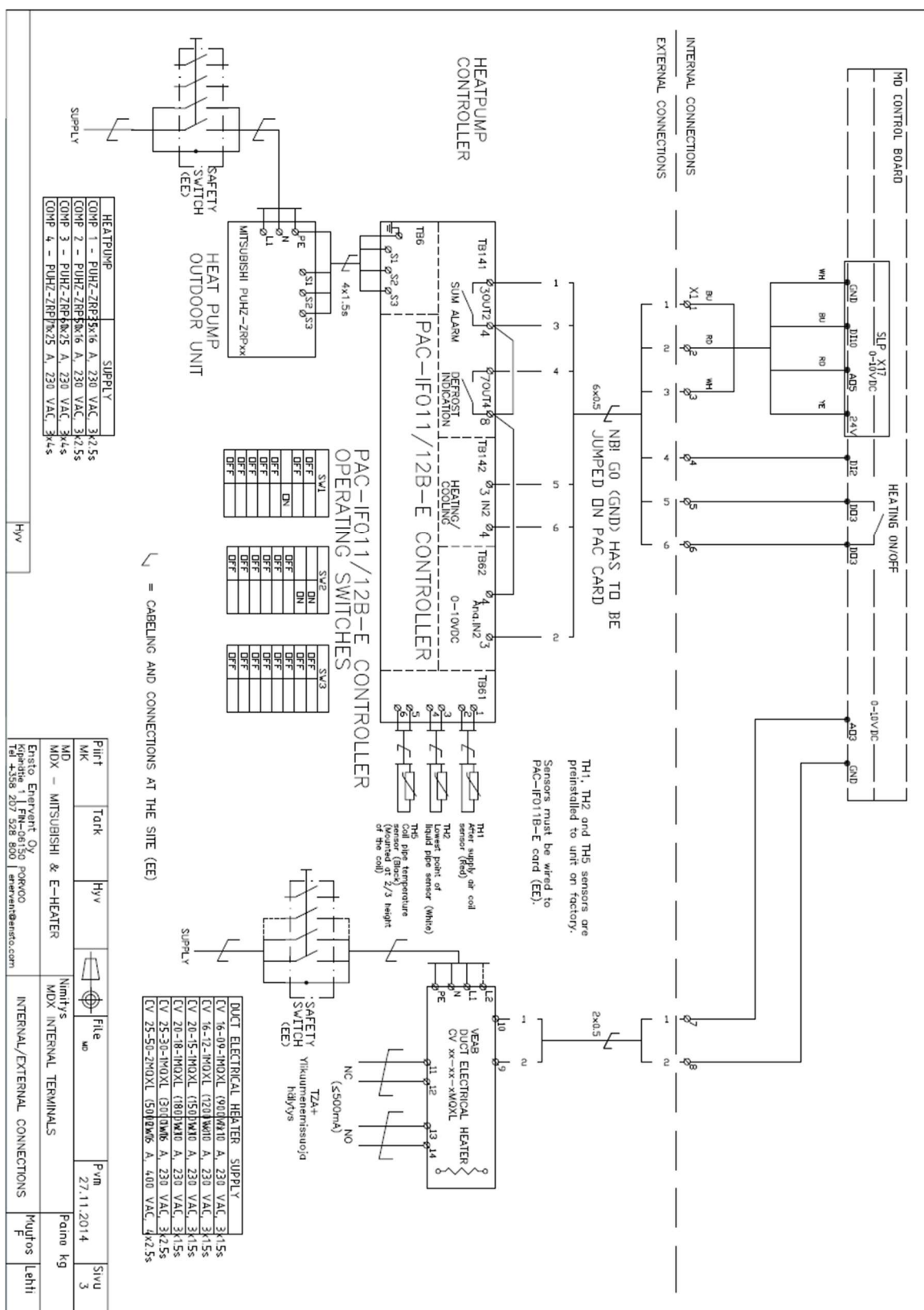


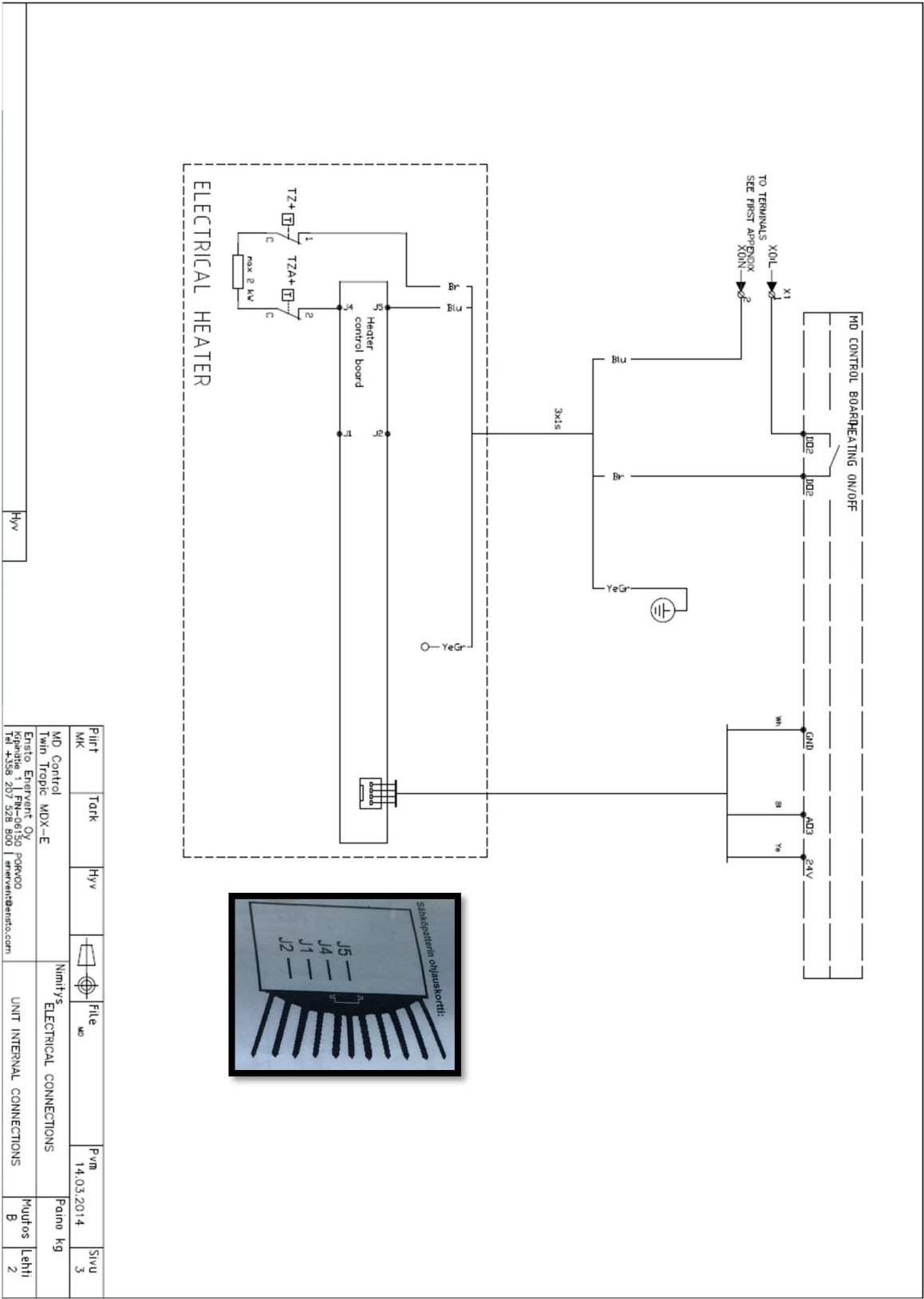


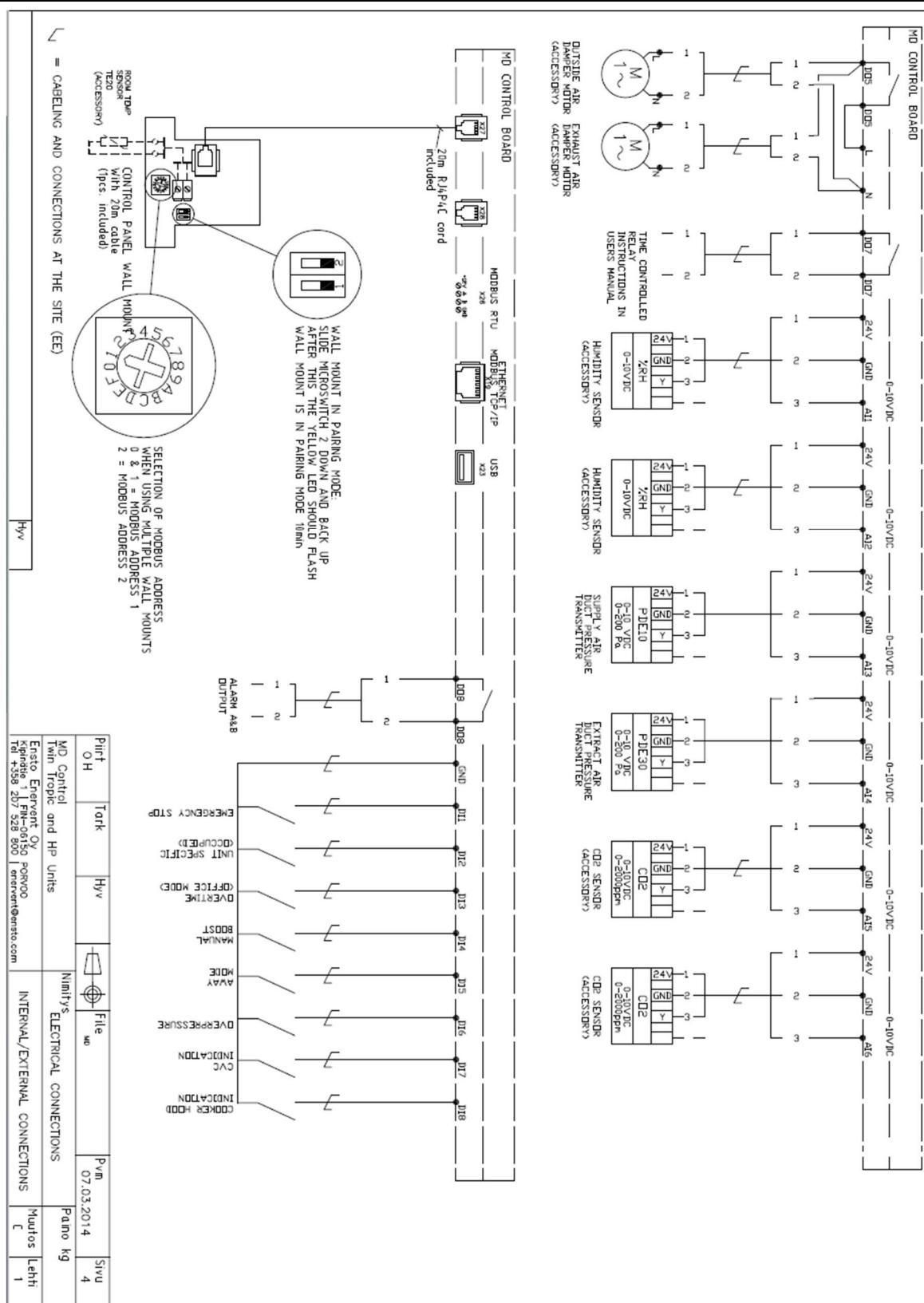












MANDATORY PARTS

10025632	CTRL UPDT KIT PANDION ECO EDX → MDX	1
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<u>Code</u>	<u>Description</u>	<u>Pcs.</u>
10025632	CTRL UPDT KIT PANDION ECO EDX → MDX	1

Automation

40030936	PCB support KGLS-6S	5
40030937	PCB support LCBSM-6-01	4
40031695	Screw DIN 7981 ZN 3,9x9,5	4
40031631	Screw DIN 7985 ZN M4x20	1
40031537	Washer 6798-A ZN M4x8	3
40031489	Nut DIN 934/8 ZN M4	1
40028772	Wire 65mm orange 0,75mm ²	1
40028773	Wire 340mm orange 0,75mm ²	6
40028774	Wire 255mm 1mm ² black	3
40028779	Wire 255mm 1mm ² blue	1
40031093	eAir main board	1
40029985	eAir main board connectors	1
40029195	Power supply Tufvassons PSLR24	1
40028788	Ground wire 100mm	1
40029647	Automation base	1
40029344	Terminal package	1

Components

40029225	Humidity/temperature sensor Amphenol 1800mm	1
40030997	Cable tie 2,5x200mm	10
40031114	eAir panel package	1
40030313	SLP cable	1
40034288	WiFi module package	1

Manuals etc. (depends on model)

eAir installation manual	1
eAir user manual	1
eAir electrical diagrams	1

Notes: