

Automation upgrade

Piccolo OFF eco EDA -> eWind

NOTE!

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

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!**

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

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Disconnect **the power supply (1)**.



Open the service door by releasing **five screws (2)**.

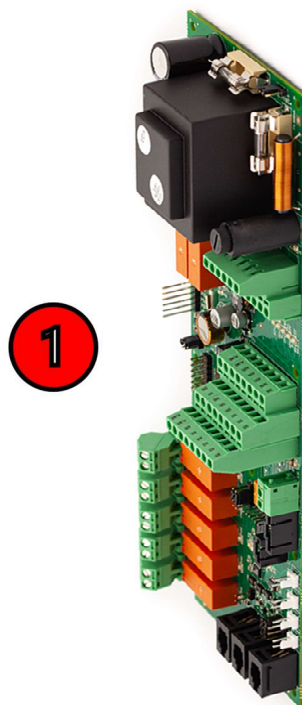
NOTE! Ensure that no voltage is occurring in the unit before proceeding!

Remove **the filters (3)** by pulling.

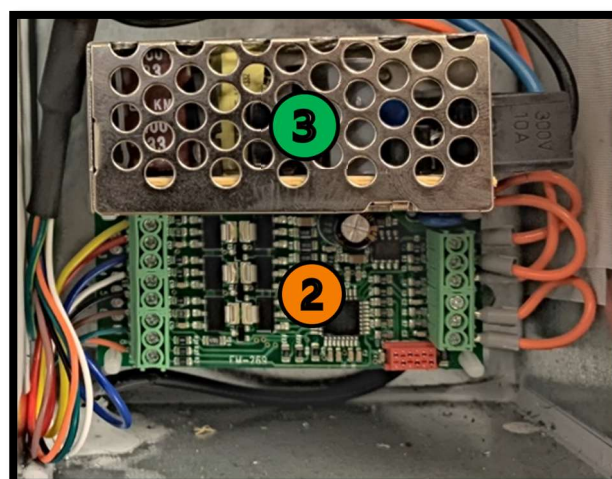
Pull out **the automation base (4)**.



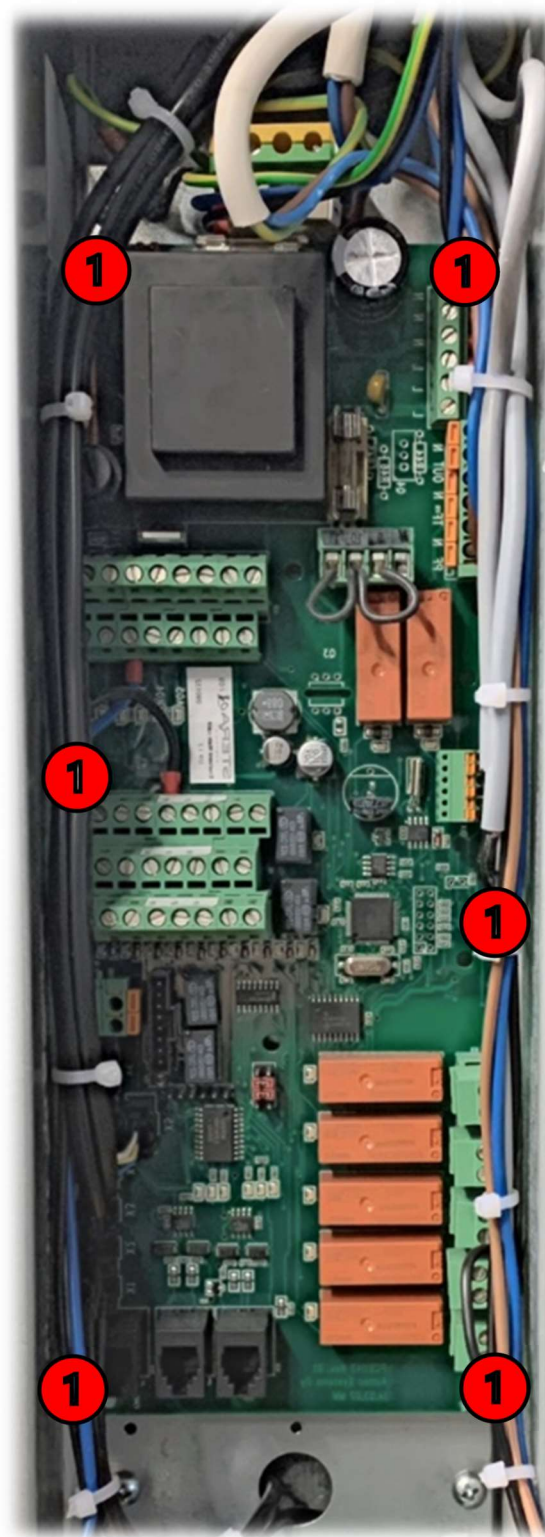
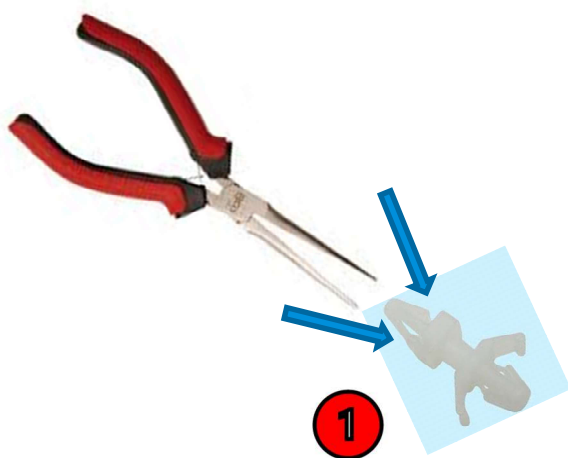
Mark all wires/sensors according to the marking on the main board and disconnect them from **the EDA main board (1)**.



Disconnect the wires (that were connected to the EDA main board) from **the HRW circuit board (2)** and **the transformer (3)**.

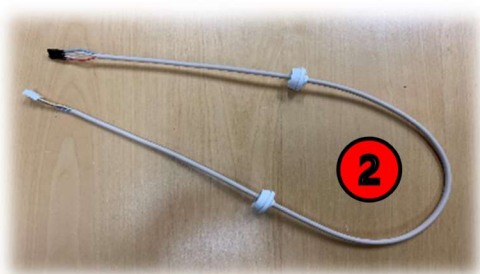


Remove the EDA main board, by pressing **the PCB supports (1)** with pliers, and by pulling.



If the unit has an electrical after heater installed; release the after heater by removing the screws and by pulling, along with the cables connected to **the after heater (1)**.

Remove the old triac control cable and install **the new triac control cable (2)** (40030313).
Ignore if no electrical after heater installed.



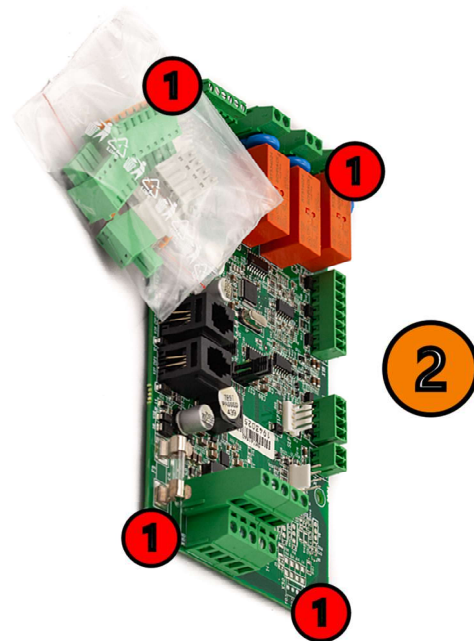
Re-install **the after heater (1)**.

Remove **the extract air sensor cable (3)**.

Install **the new extract air sensor (4)** (40029225) and attach it with cable ties (40030997) on top of the old sensor.
Install the extract air sensor cable into **the electrical box (5)**.



Drill new 4,5mm holes to the automation base for
the PCB supports (1) (40030936) for
the eWind main board (2) (40031094).



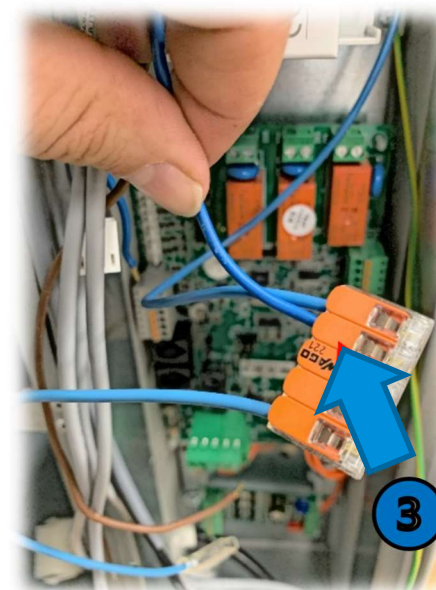
Install **the eWind main board (2)** (40031094) to the automation base in **the electrical box (3)**.
Install **the power supply (4)** (40029195) to the automation base in **the electrical box (3)**.



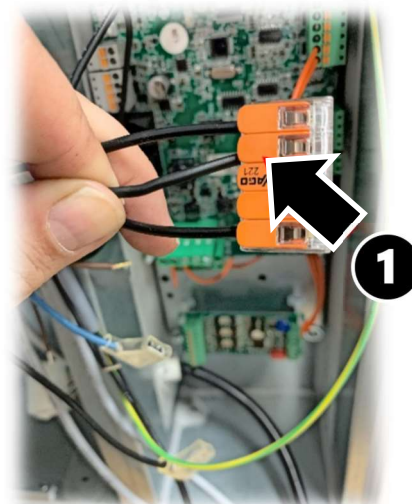
Connect the wires (40028774 & 40028779) to **the power supply (1)** (40029195) and to **the connection terminals (2)** (40029982).
One for "L" and one for "N".



Connect **the blue wire** from the electrical after heater to **the blue connection terminal (3)** (40029982).
Ignore if no electrical after heater installed.



Connect **the black wire** (40028774)
to **the black connection terminal (1)** (40029982).



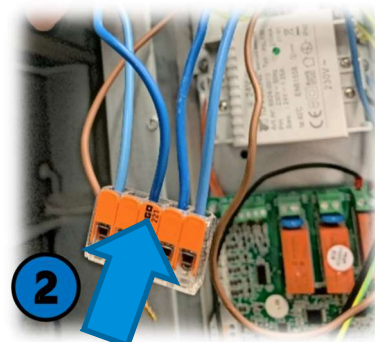
Connect **the same black wire** (40028774)
to **"DO2" (2)** on the main board.



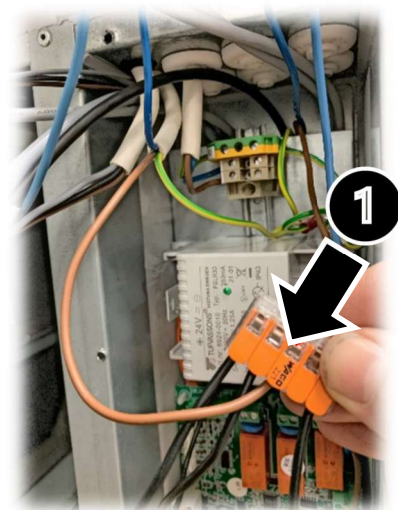
Connect **the brown wire** from the electrical after heater to **"DO2" (2)**.
*If there is a water coil after heater installed,
the circulation pump power wire (L) would be connected here.*



Connect **the blue wires / the wires marked "2"** in the fan power cables to **the blue "2" connection terminal (2)** (40029982).



Connect **the brown wires / the wires marked "1"** in the fan power cables to **the black connection terminal (1)** (40029982).

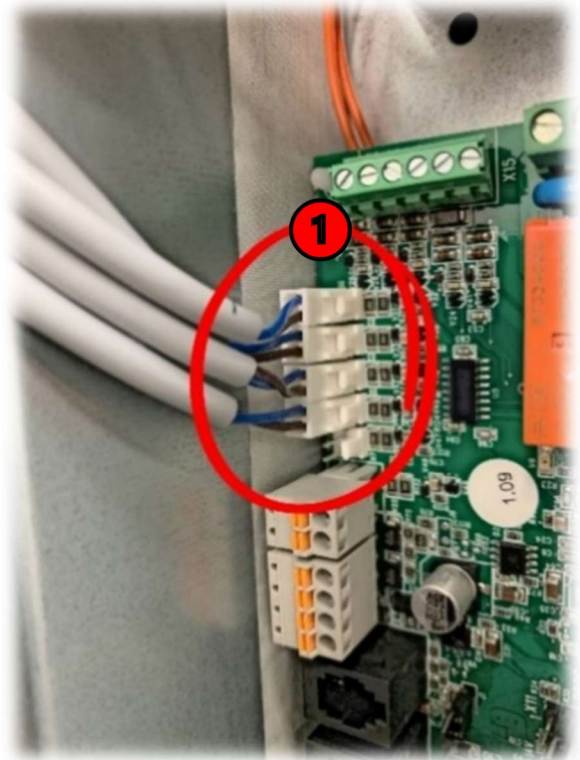


Connect **the extract air sensor (3)** (40029225) to the main board (X29).



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

TE01: Outside air
TE05: HRW supply air
TE10: Supply air
TE32: Waste air

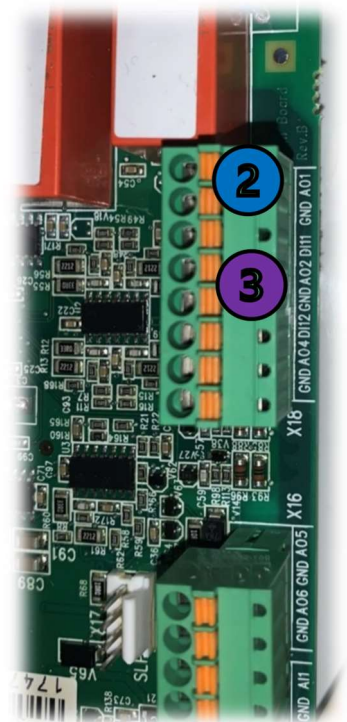


Connect **the wires from the supply air fan control cable (2)** to the main board.

AO1: 1
GND: 2

Connect **the wires from the extract air fan control cable (3)** to the main board.

AO2: 1
GND: 2



Install **the old DC HRW circuit board (1)** to the new automation base, and connect it to the main board according to the electrical diagram **(page 20)**.

The old transformer won't be used anymore!



Connect **the wires from the HRW cable to the HRW control board (2)**.

1: Yellow

2: Red

3: Blue

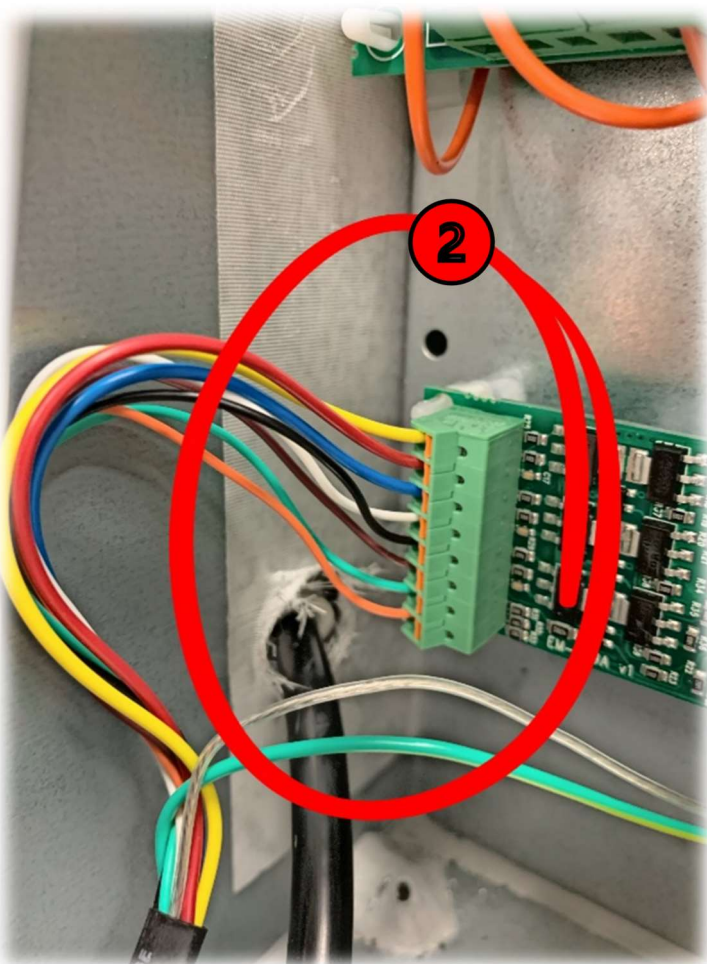
4: White

5: Black

6: Brown

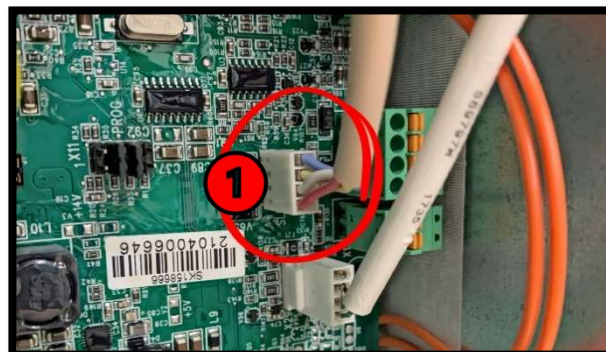
7: Green

8: Orange



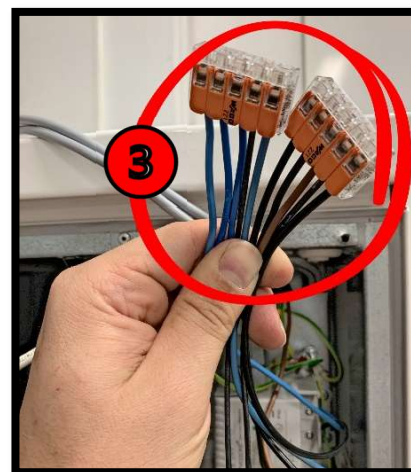
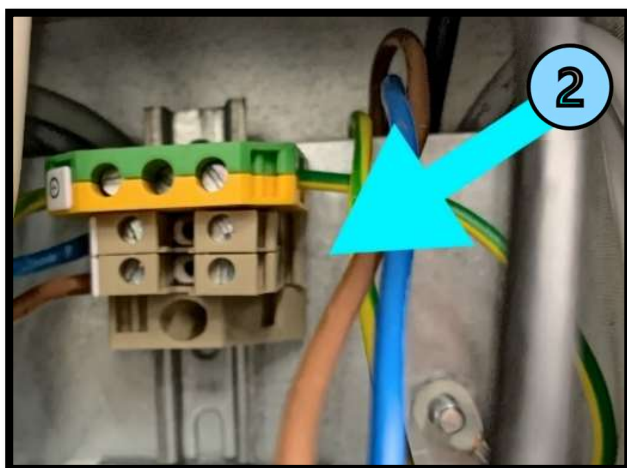
Connect **the after heater control cable (1)** to the main board (X17).
Ignore if the unit has a water coil after heater installed.

Connect other components (for example actuator for cooling coil or water coil after heater) according to the electrical diagrams (pages 19-22).



Connect the wires (40028774 & 40028779) to **the terminals (2)** and to the **black & blue connection terminals (3)** (40029982).

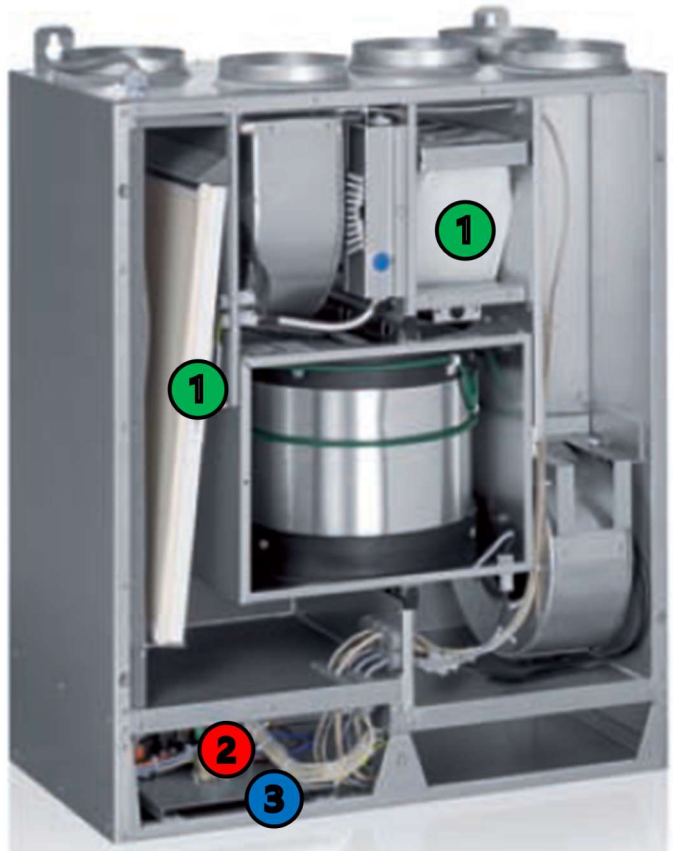
Attach all cables and wires together with cable ties (40030997).



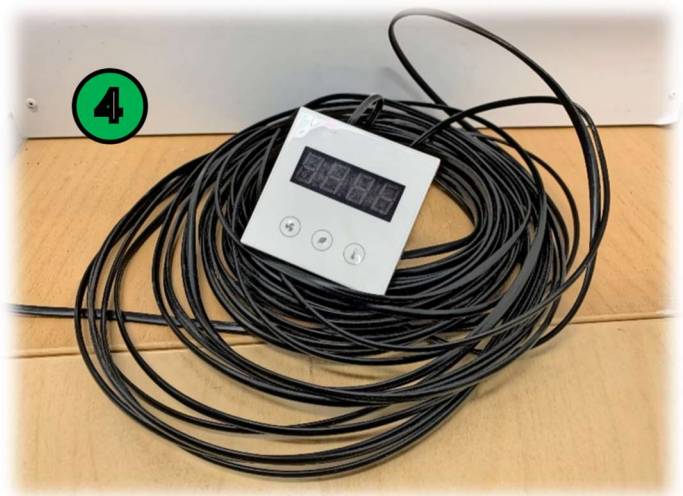
Install **the filters (1)**.

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

Insert **the automation base (3)** carefully.



Disconnect and remove the old display.
Install **the new display (40031115)**.



Perform insulation and ground continuity test according to regulations.

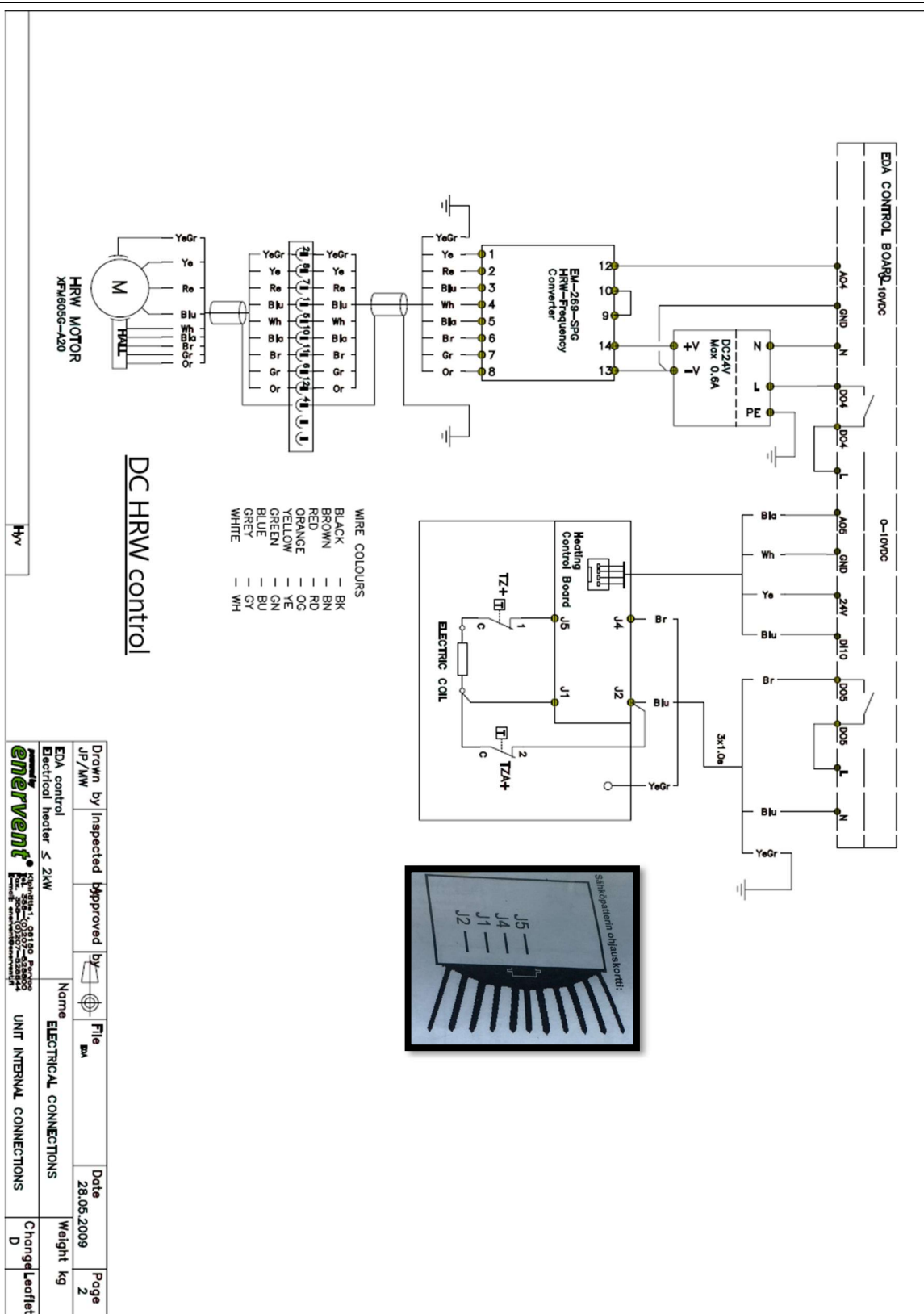


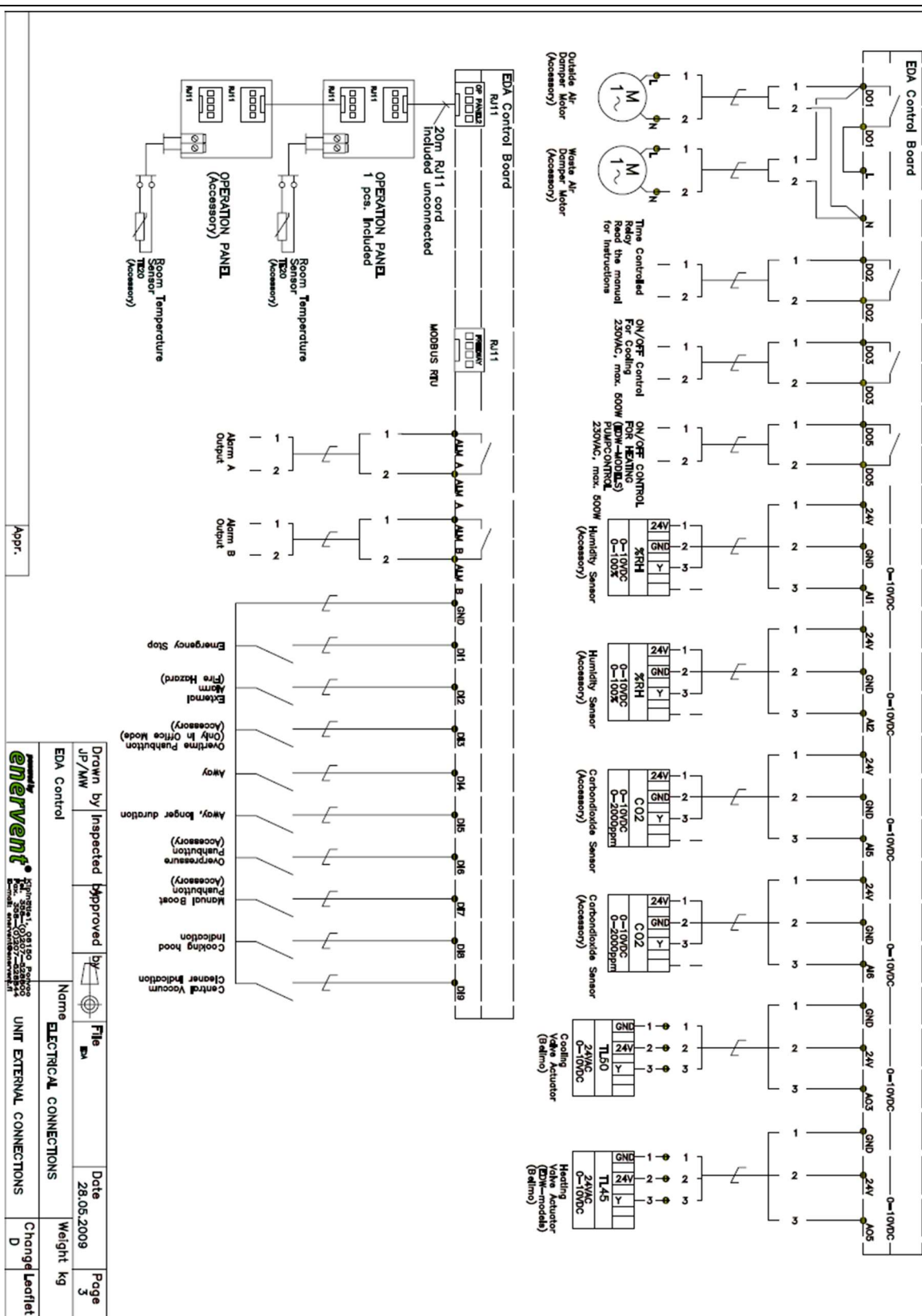
Attach the service door to the unit with **five screws (1)**.

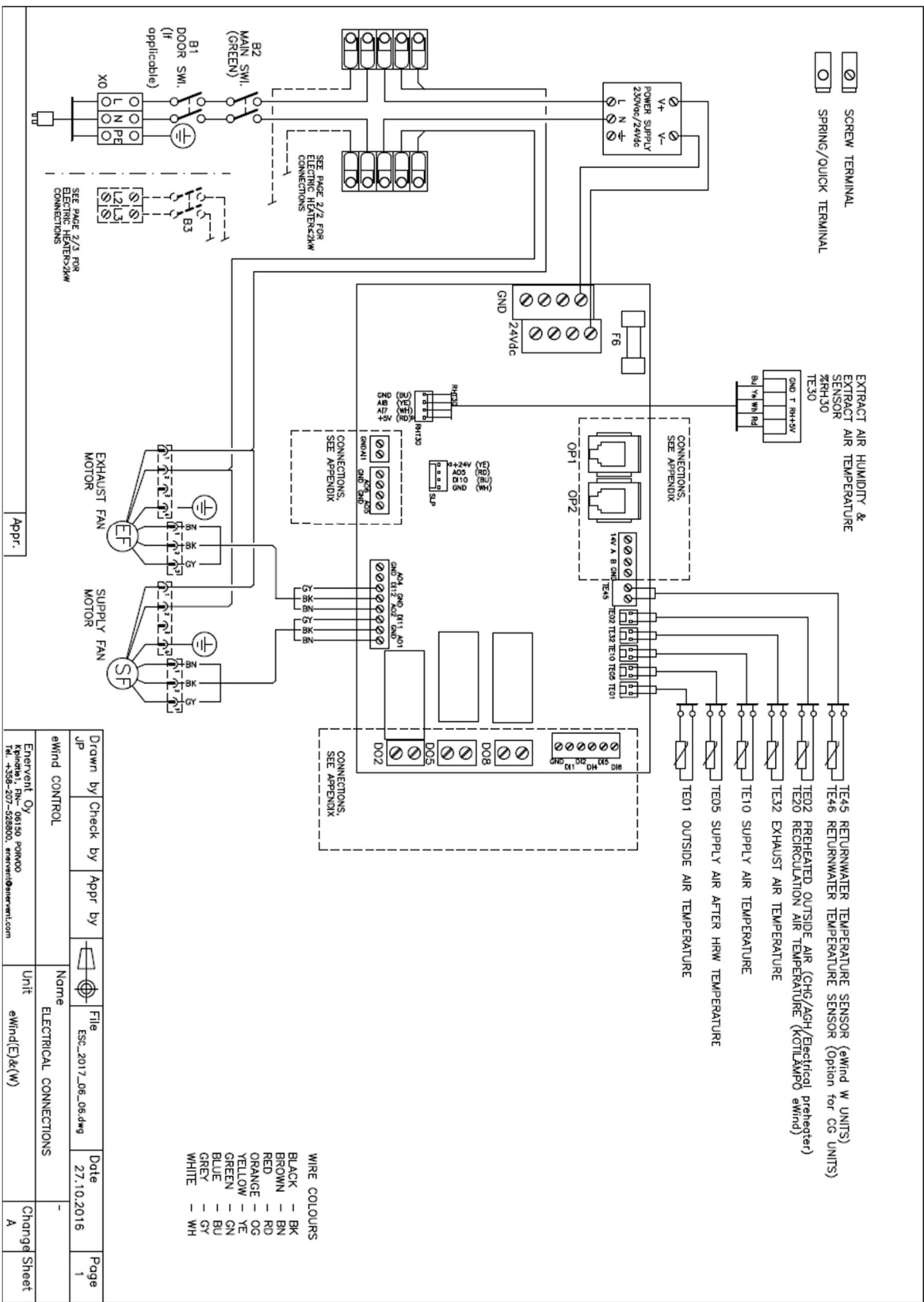
Install **the new type plate sticker (2)**.

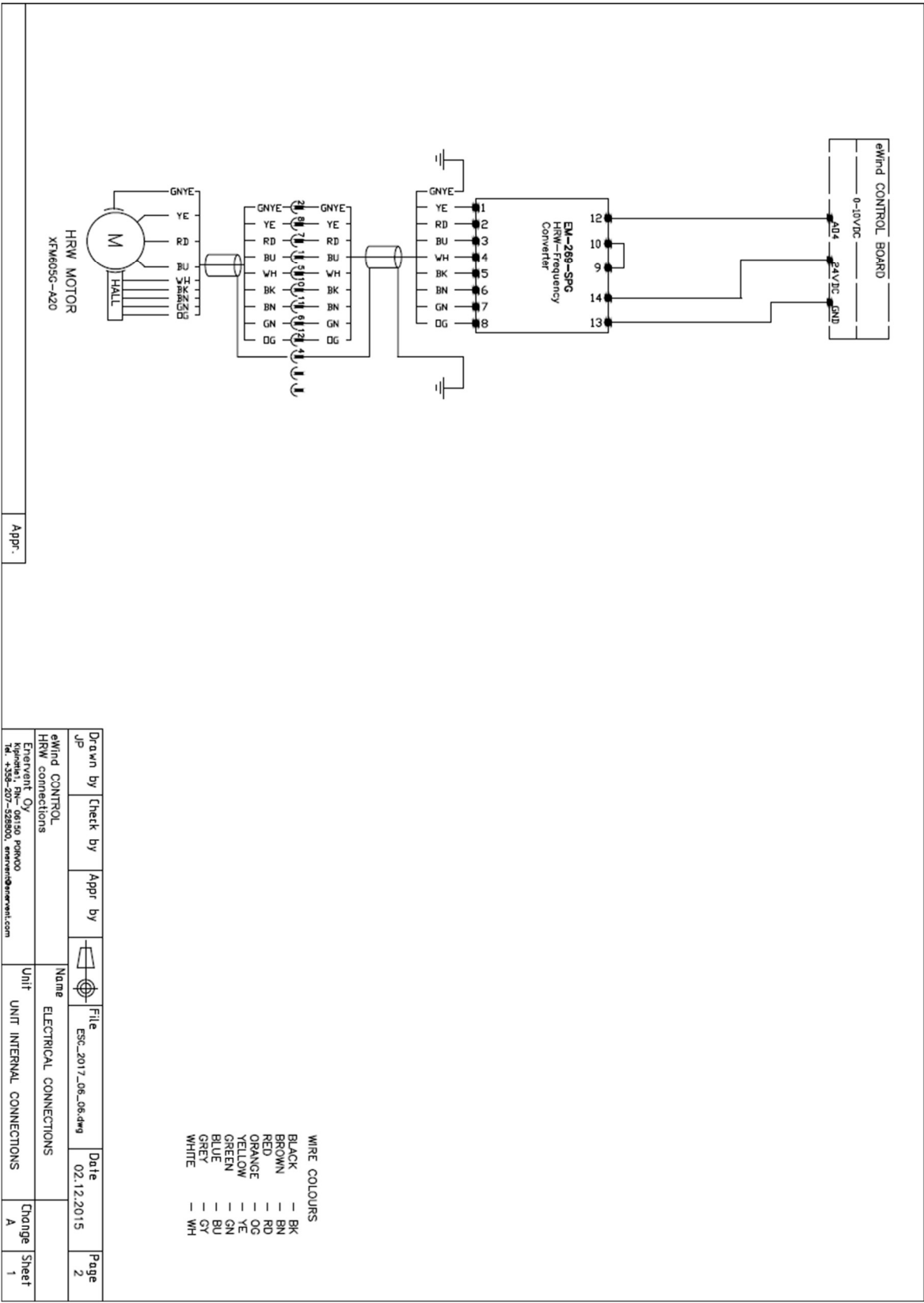


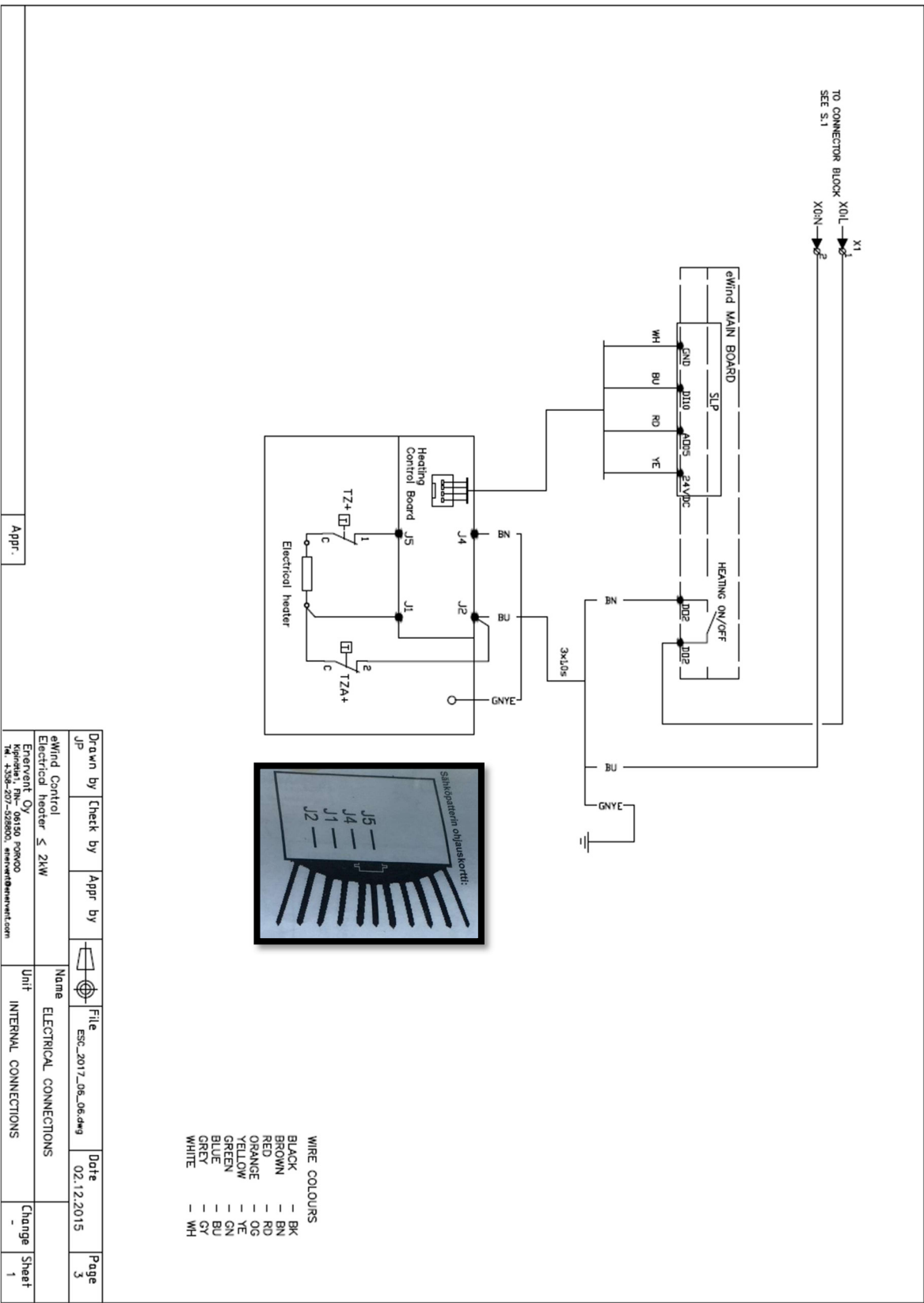


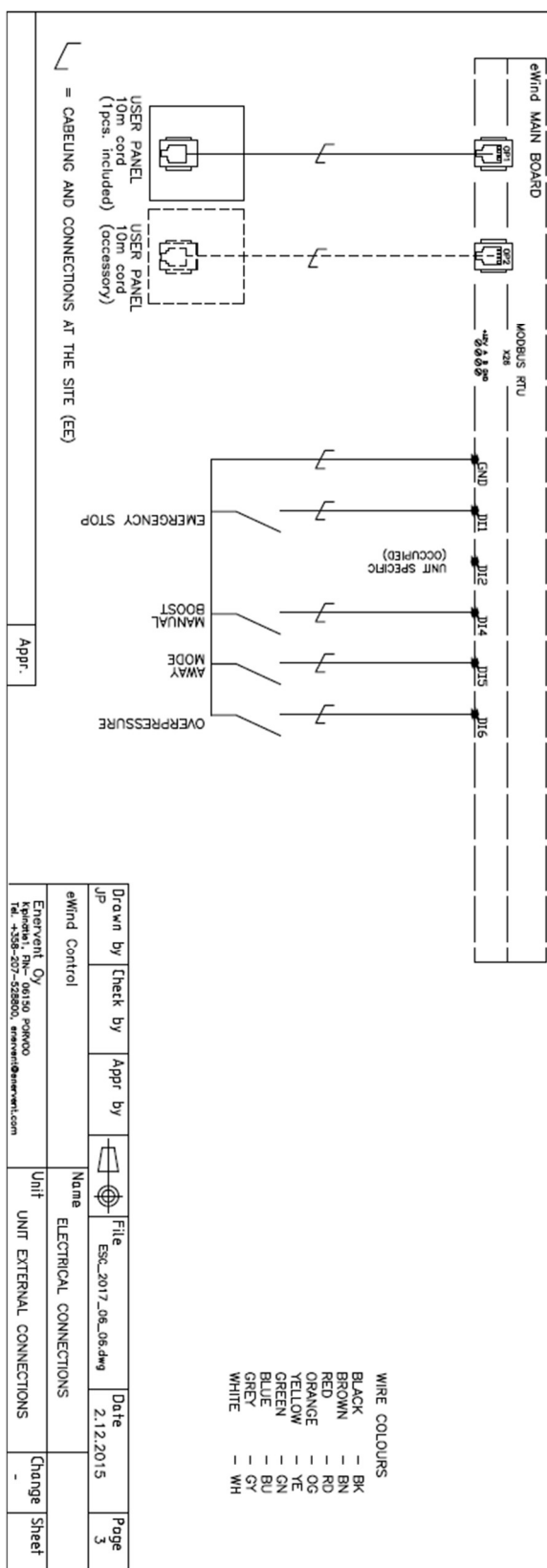
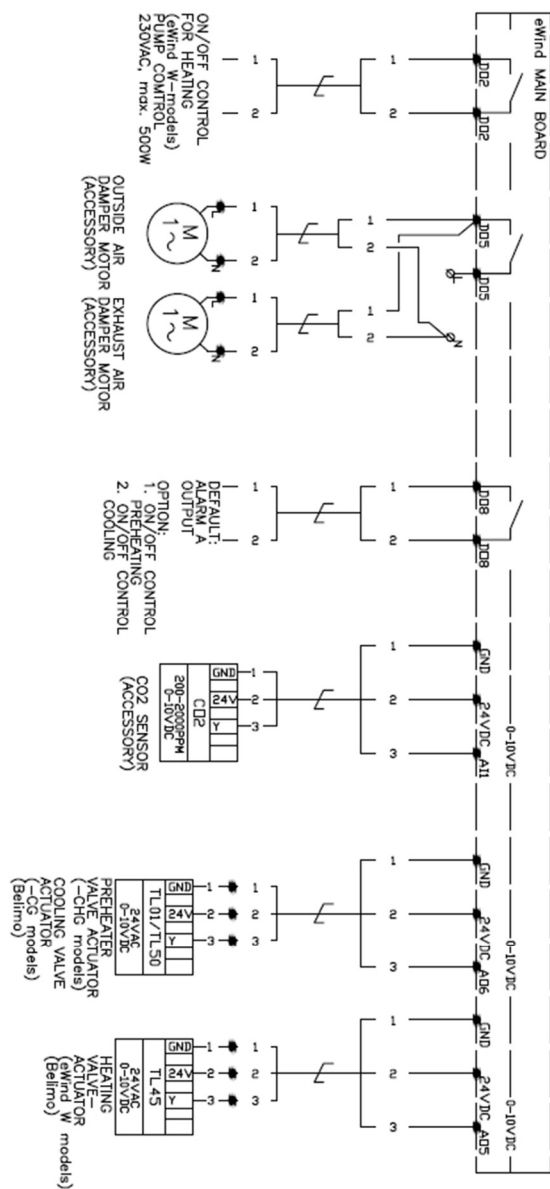












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JJP				Esc_2017_06.06.dwg	2.12.2015	3
ewind Control			Name			
			ELECTRICAL CONNECTIONS			
Enervent Oy Kivimäki, PL- 06150 PORNVO Tel: +358-20-7525800, enervent@enervent.com			Unit		Sheet	
			UNIT EXTERNAL CONNECTIONS		-	

WIRE COLOURS	
BLACK	BK
BROWN	BN
RED	RD
ORANGE	OG
YELLOW	YE
GREEN	GN
BLUE	BU
GREY	GY
WHITE	WH

MANDATORY PARTS

10025905	CTRL UPDT KIT PICCOLO OFF ECO EDA -> EWIND	1
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<u>Code</u>	<u>Description</u>	<u>Pcs.</u>
10025905	CTRL UPDT KIT PICCOLO OFF ECO EDA -> EWIND	1

Automation

40030936	PCB support KGLS-6S	4
40030937	PCB support LCBSM-6-01	4
40028772	Wire 65mm orange 0,75mm2	1
40028773	Wire 340mm orange 0,75mm2	5
40031094	eWind main board	1
40029195	Tufvassons power supply PSLR24	1
40029225	Humidity/temperature sensor Amphenol 1800mm	1
40029982	WaGo 221-415	2
40031530	Screw ZN 4,2x25	4
40028774	Wire 255mm 1mm2 black	4
40028779	Wire 255mm 1mm2 blue	3
40030997	Cable tie 2,5x200mm	10
40031115	eWind panel package	1
40030313	Triac cable 1000mm 4-pole	1
40034288	WiFi module package	1

Manuals etc. (depends on model)

eWind installation manual	1
eWind user manual	1
eWind electrical diagrams	1

Notes: