

Automation upgrade

Pelican eco EDA HP -> eAir HP

NOTE!

Fan rotation guards must be disabled in the new eAir 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!

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



Disconnect **the power cable (2)**
(+ other possible power supplies if available).



Open the service door by turning **the handle (3)**.



Remove **the cover to the electrical box (1)** by removing the screws.

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

Remove **the POP rivets** from **the cable rail (2)** by drilling and remove the cover.

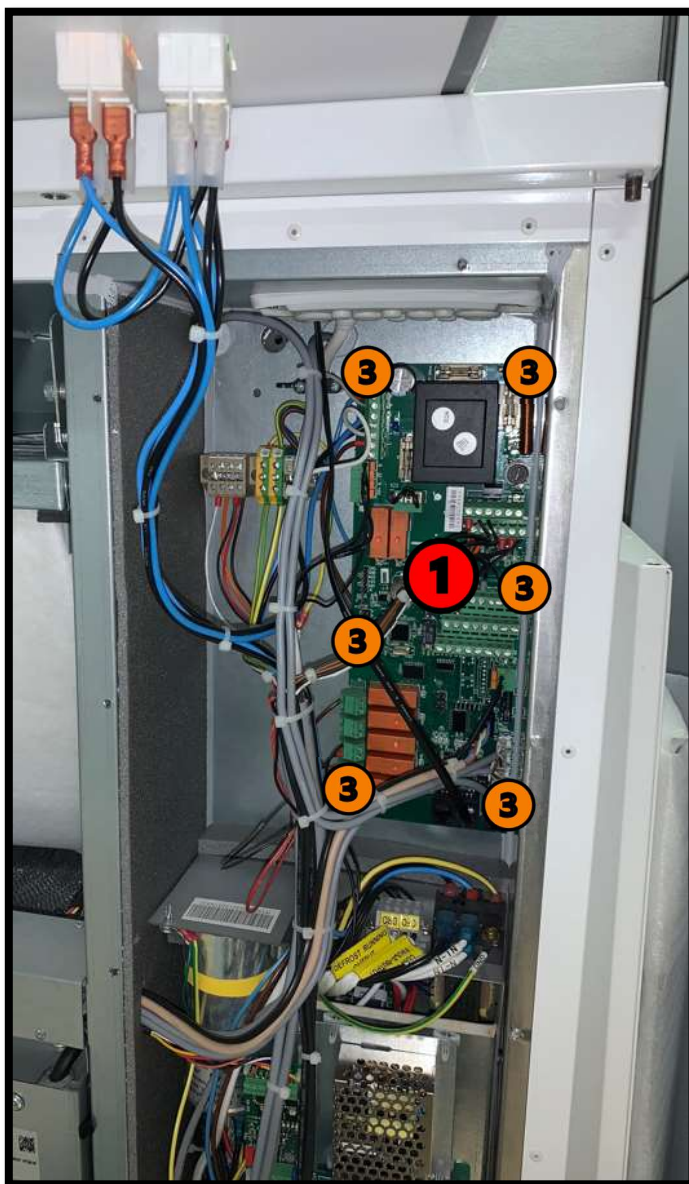
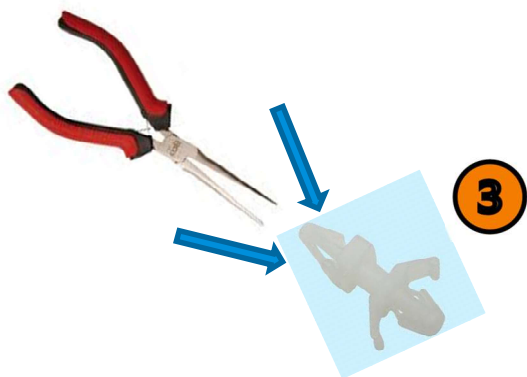
Release the locks and remove **the filters (3)** by pulling.



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

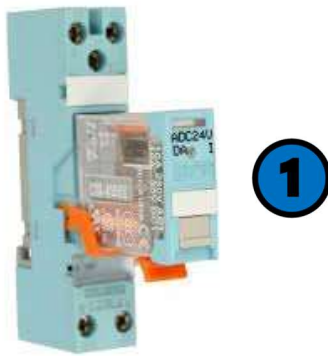


Remove **the EDA main board (1)**,
by pressing **the PCB supports (3)**
with pliers and by pulling.

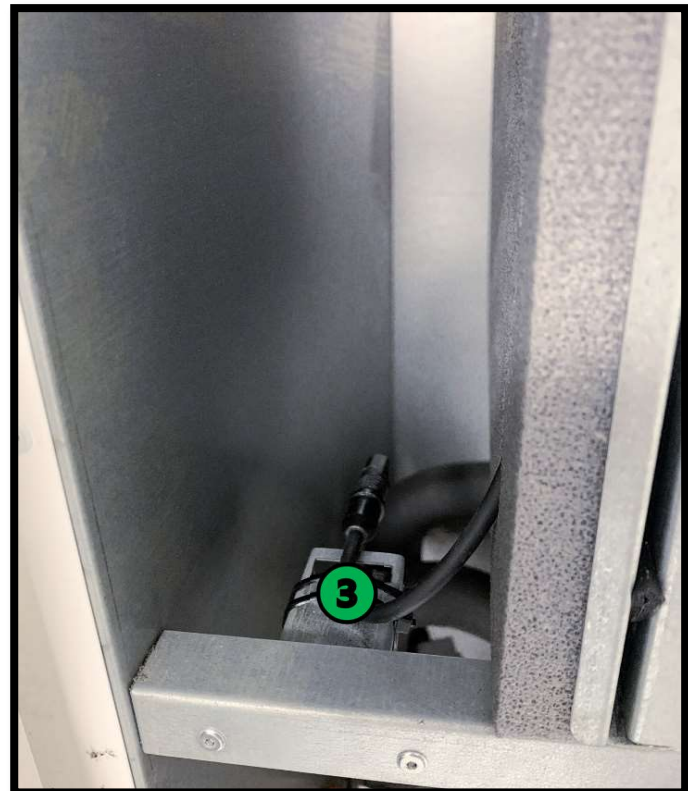


If there is a **blue relay (1)** installed in the electrical box; remove the relay along with the wires.

Remove **the extract air sensor cable (2)**.



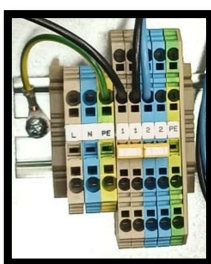
Install **the new extract air sensor (3)** (40029225) and attach it with cable ties (40030997) on top of the old sensor. The old sensor won't be used anymore.



Cut a gap in the insulation and install the extract air sensor cable into **the gap (1)** and through the cable rail into the electrical box.



2



4



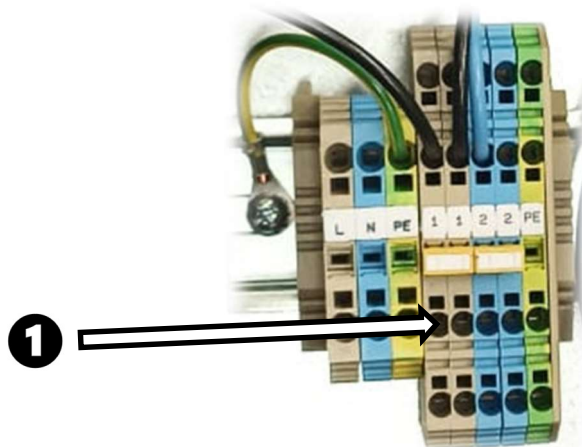
Install **the new transformer (2)** in the electrical box (40029195).

Install **the eAir mainboard (4)** in the electrical box (40031093) (new holes for the PCB supports needs to be drilled).

Install **the terminal package (4)** in the electrical box (40029344).

Connect the transformer, main board and terminal package according to the electrical diagrams (pages 18-20).

Connect **a wire** (40028774) from **the connection terminal (1)** to eAir main board "DO1" (1).

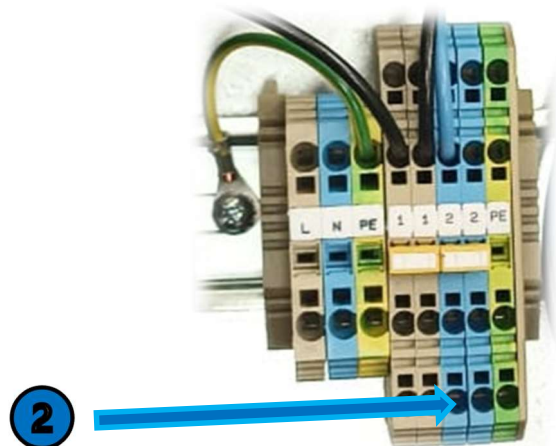


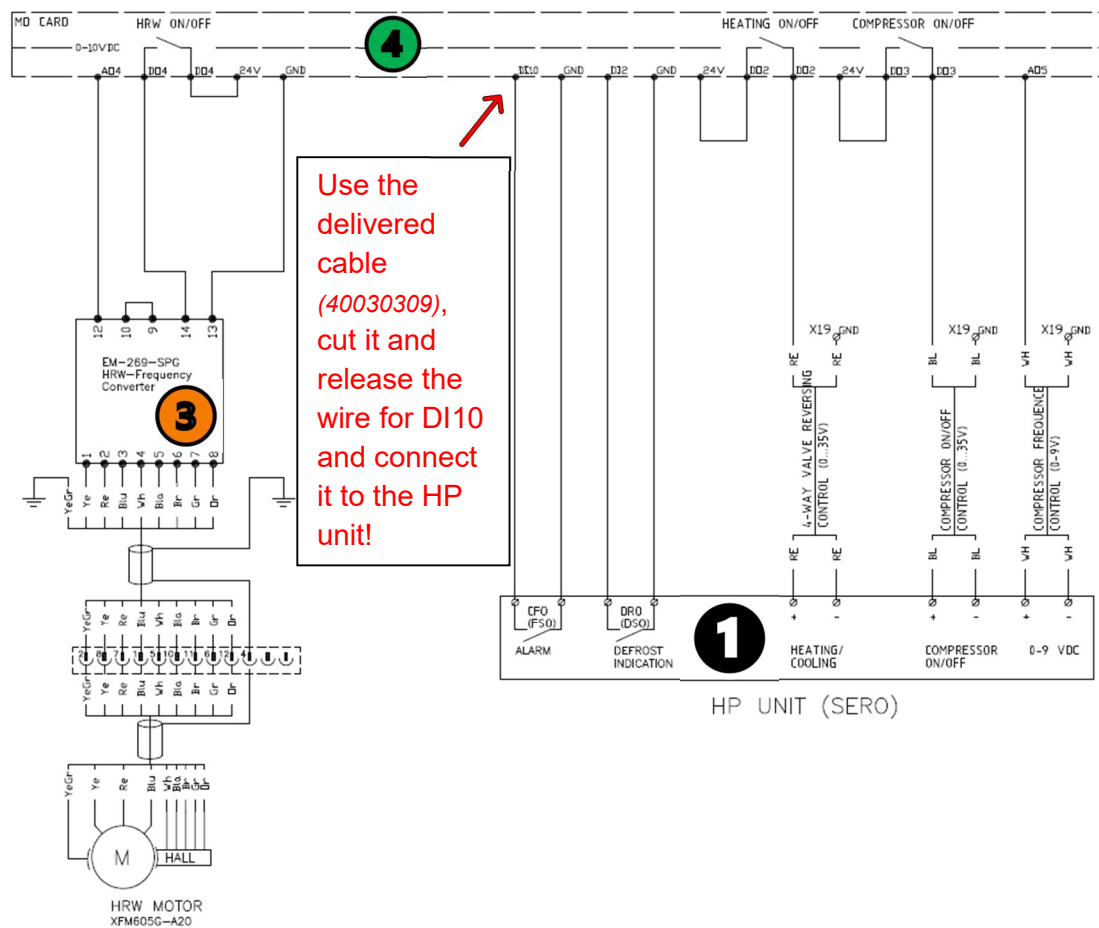
Connect **wires** (40028774) from **the 24VDC connector** on the eAir main board to eAir main board "DO2" (2) and to "DO3" (3) (page 9).



Connect **the wires marked "1"** in the fan power cables to "DO1" (1).

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





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

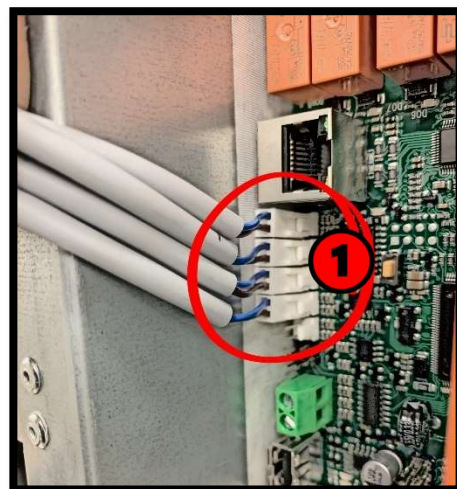
X1, TE01: Outside air

X2, TE05: HRW supply air

X3, TE10: Supply air

X4, TE32: Waste air

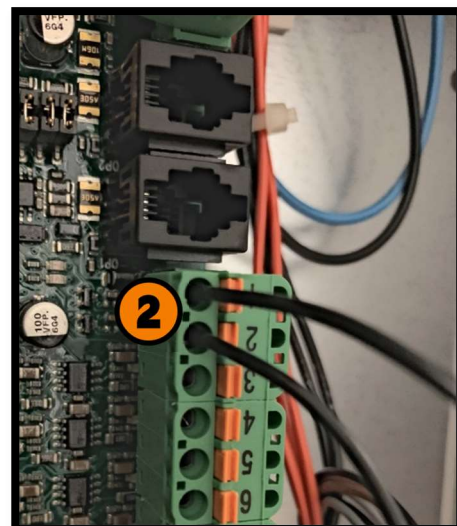
X5, TE31: HRW extract air (replace the old one with the new one)



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

1: 1

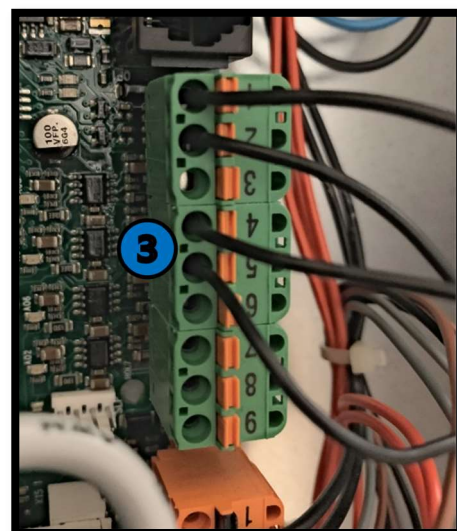
2: 2



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

4: 1

5: 2



Connect the display cable and possible other components to the eAir main board according to the electrical diagrams (pages 18-20).

Disconnect and remove the old display.
Install **the new display** (40031114).

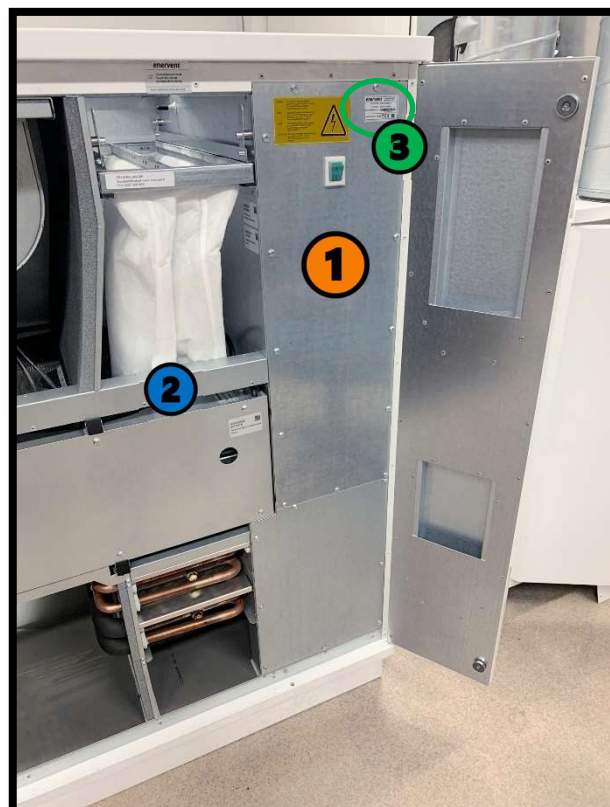


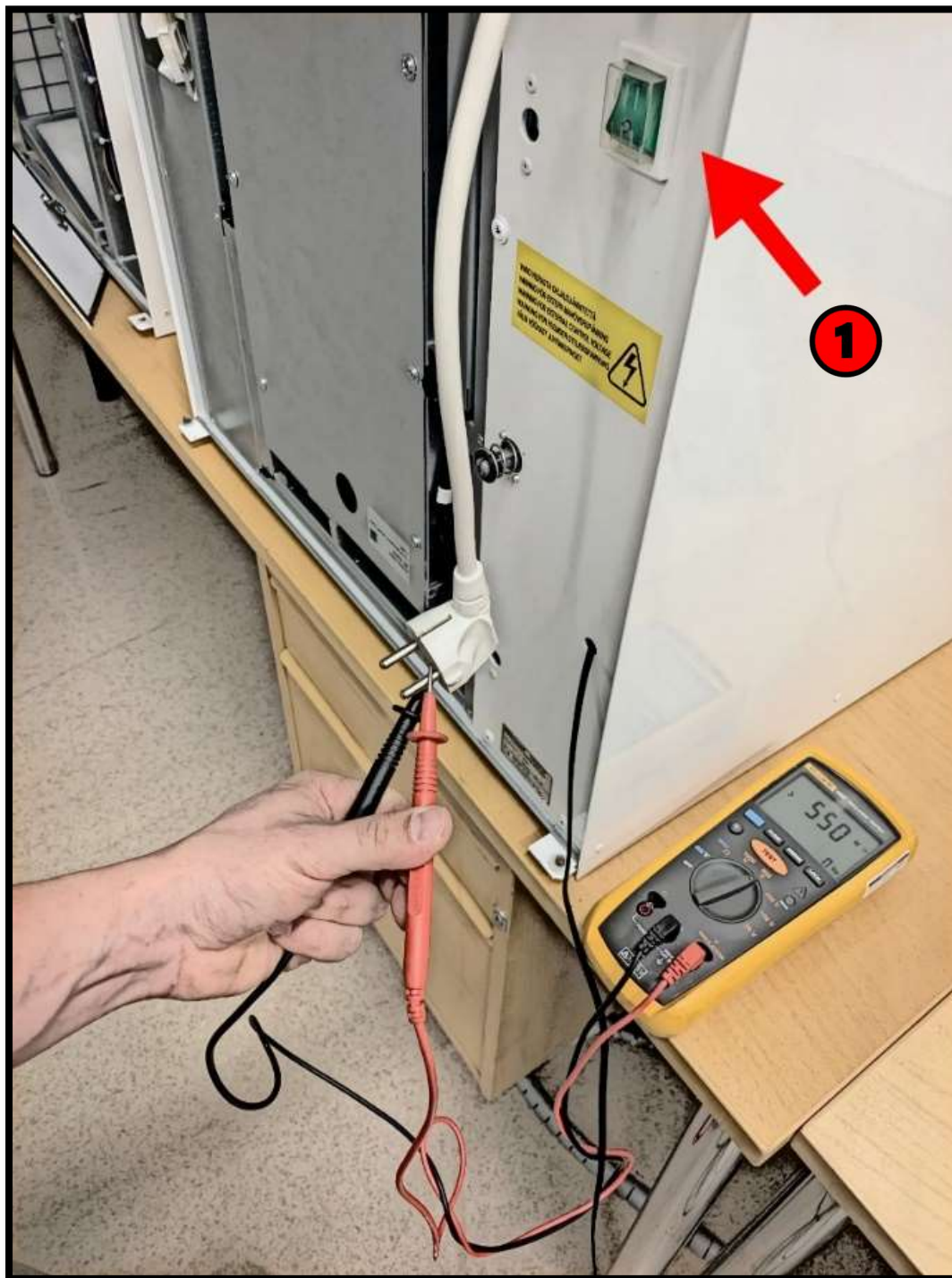
Attach the cover to **the electrical box (1)**.

Attach **the cover to the cable rail (2)**
with the new POP rivets (40031559).

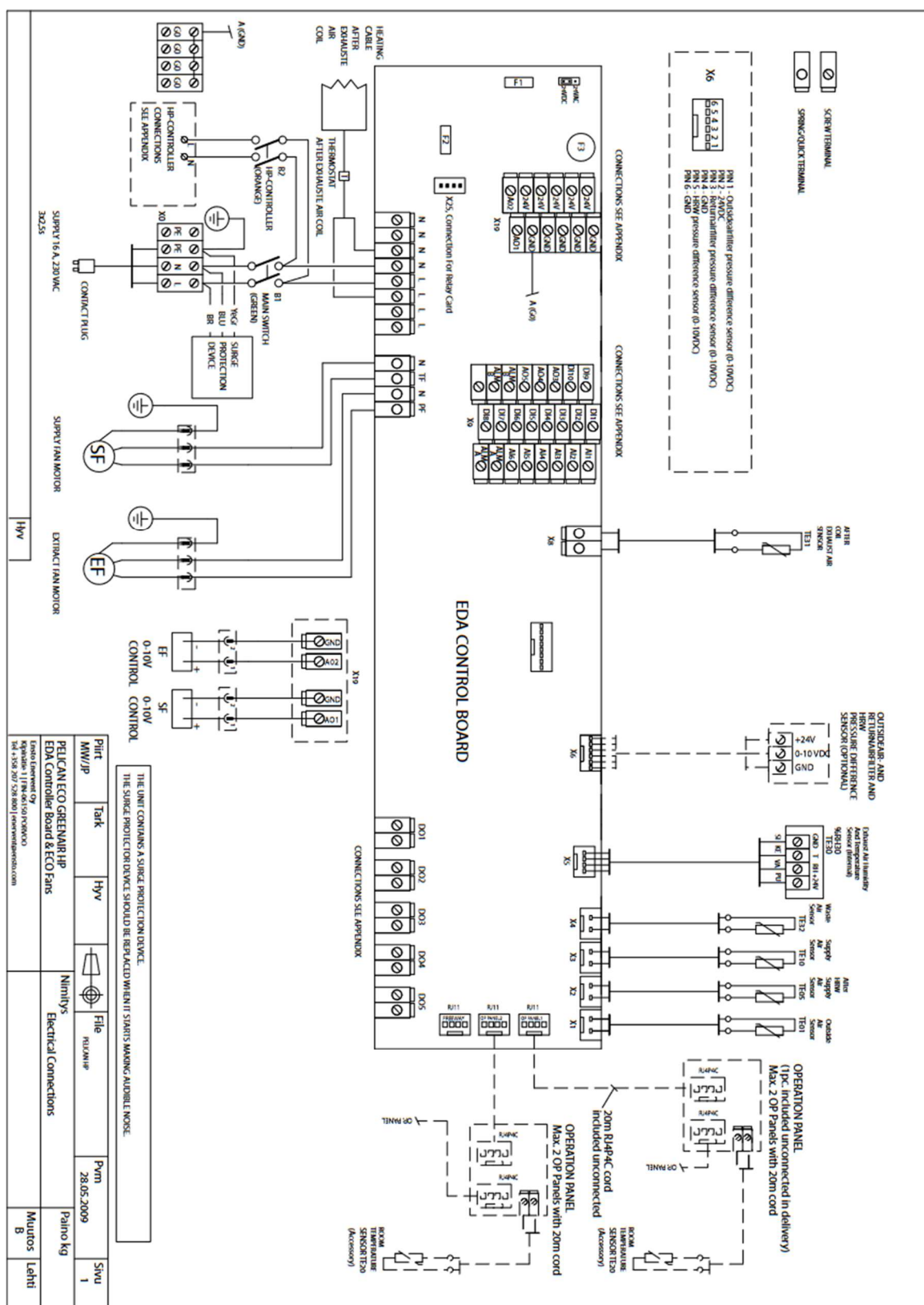
Install **the new type plate sticker (3)**.

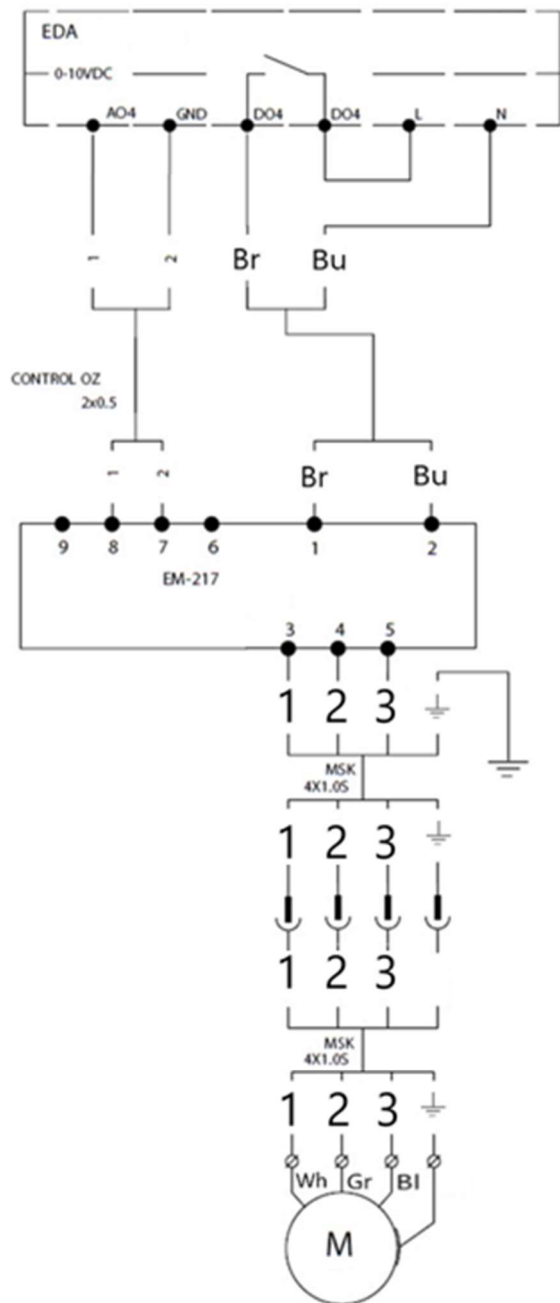
Close the service door.





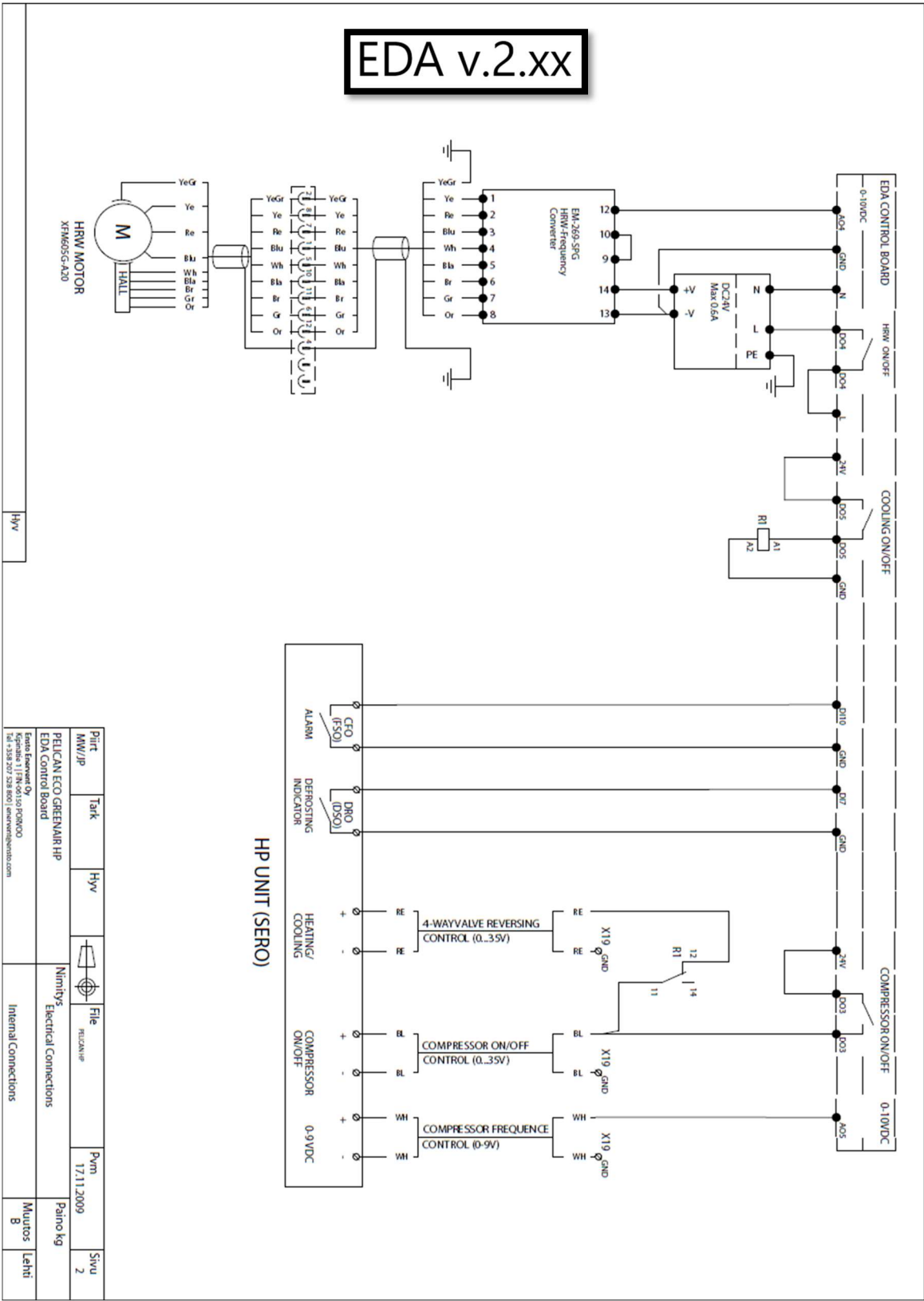
Turn on **the main switch (1)** and perform insulation and ground continuity test according to regulations.

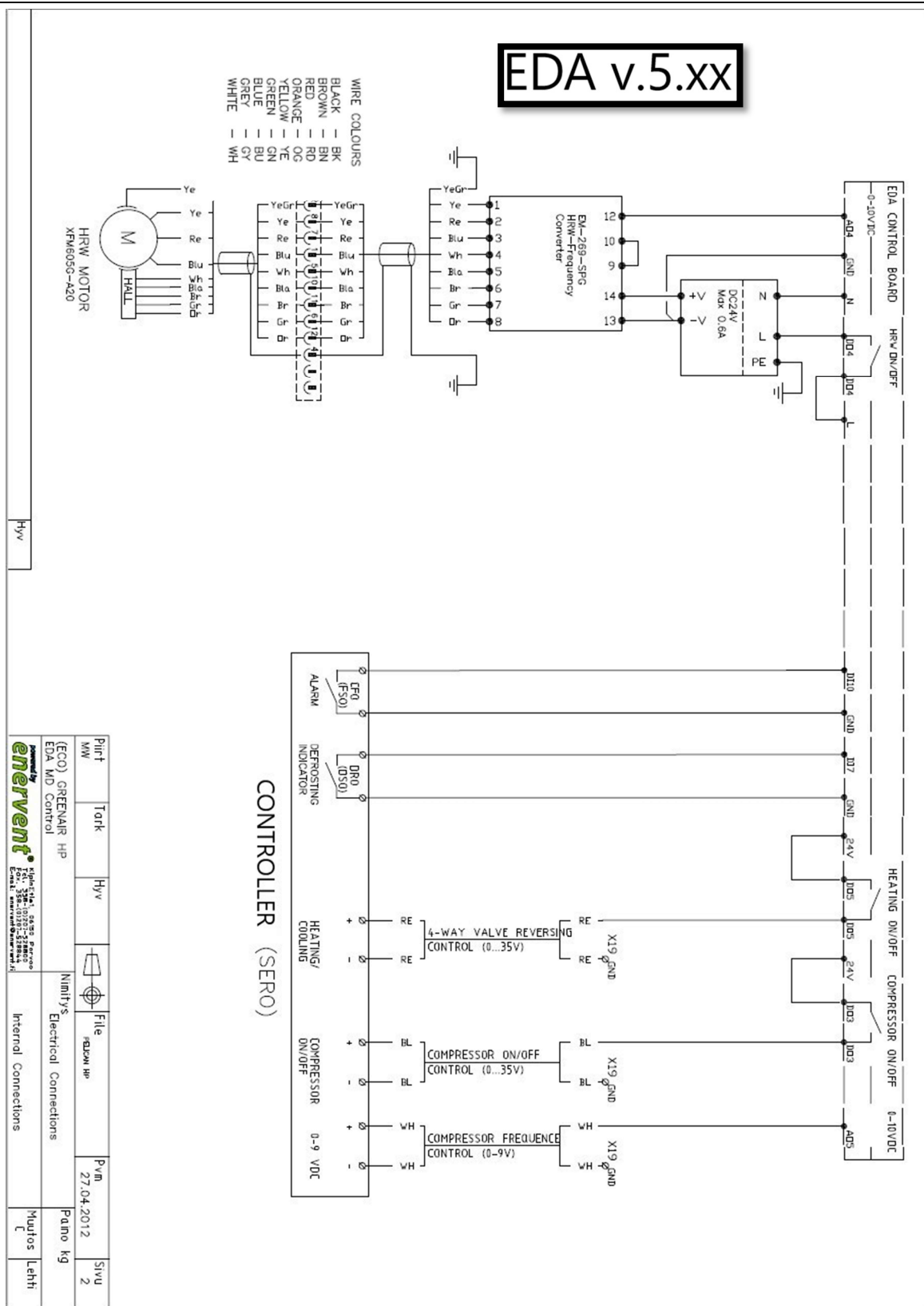


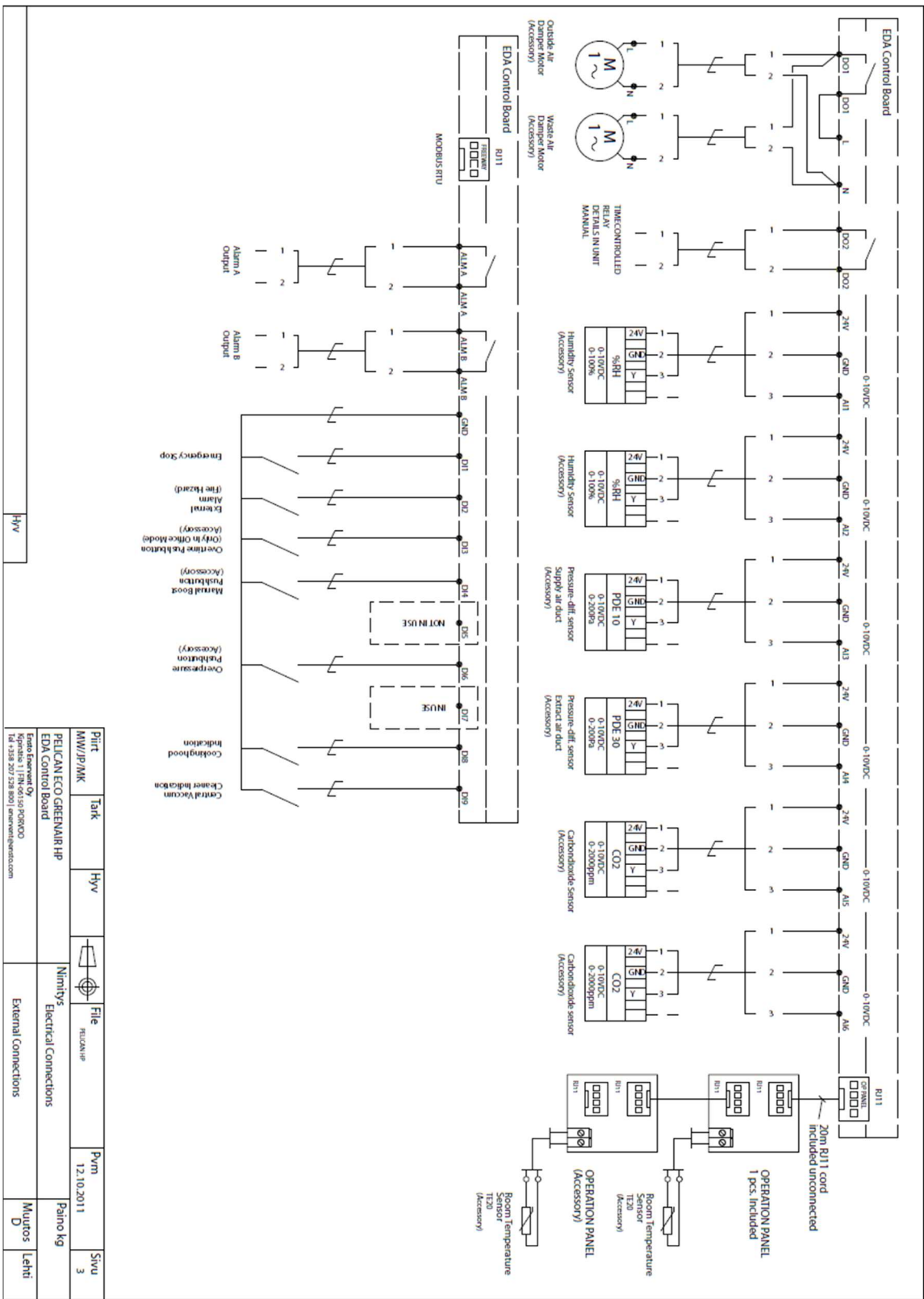


Bl: Black
Bu: Blue
Br: Brown
Wh: White
Gr: Gray

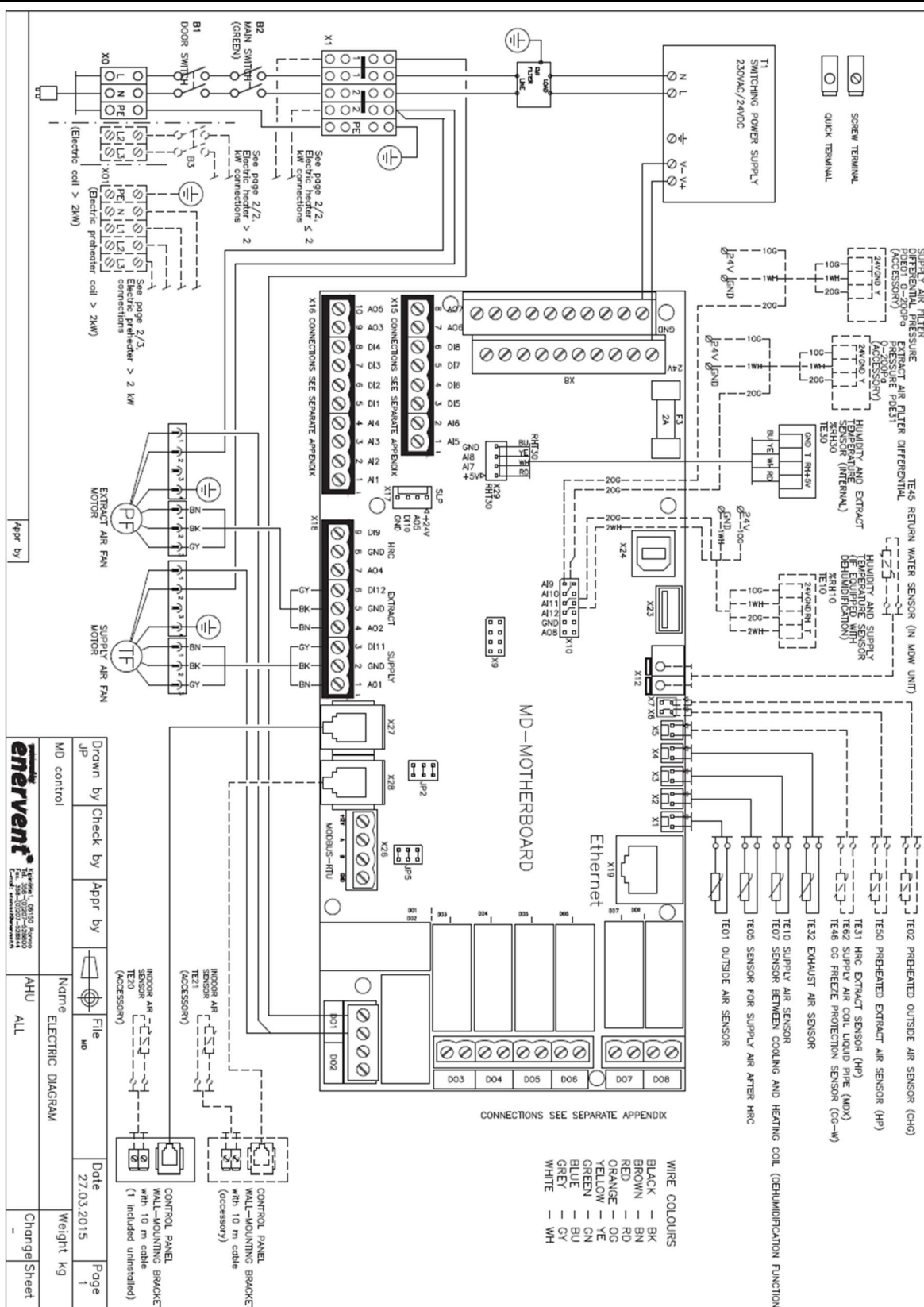
HRW MOTOR

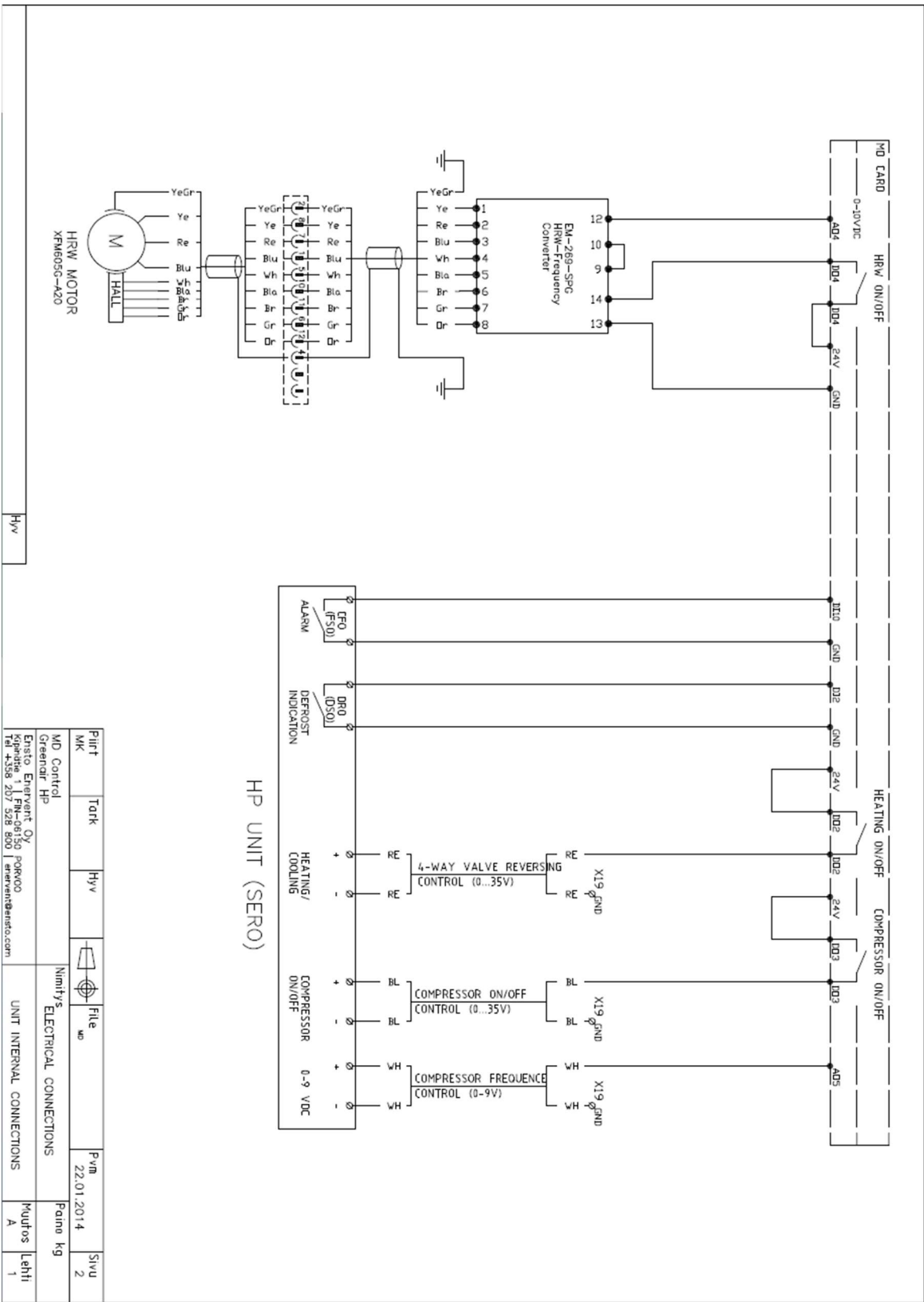


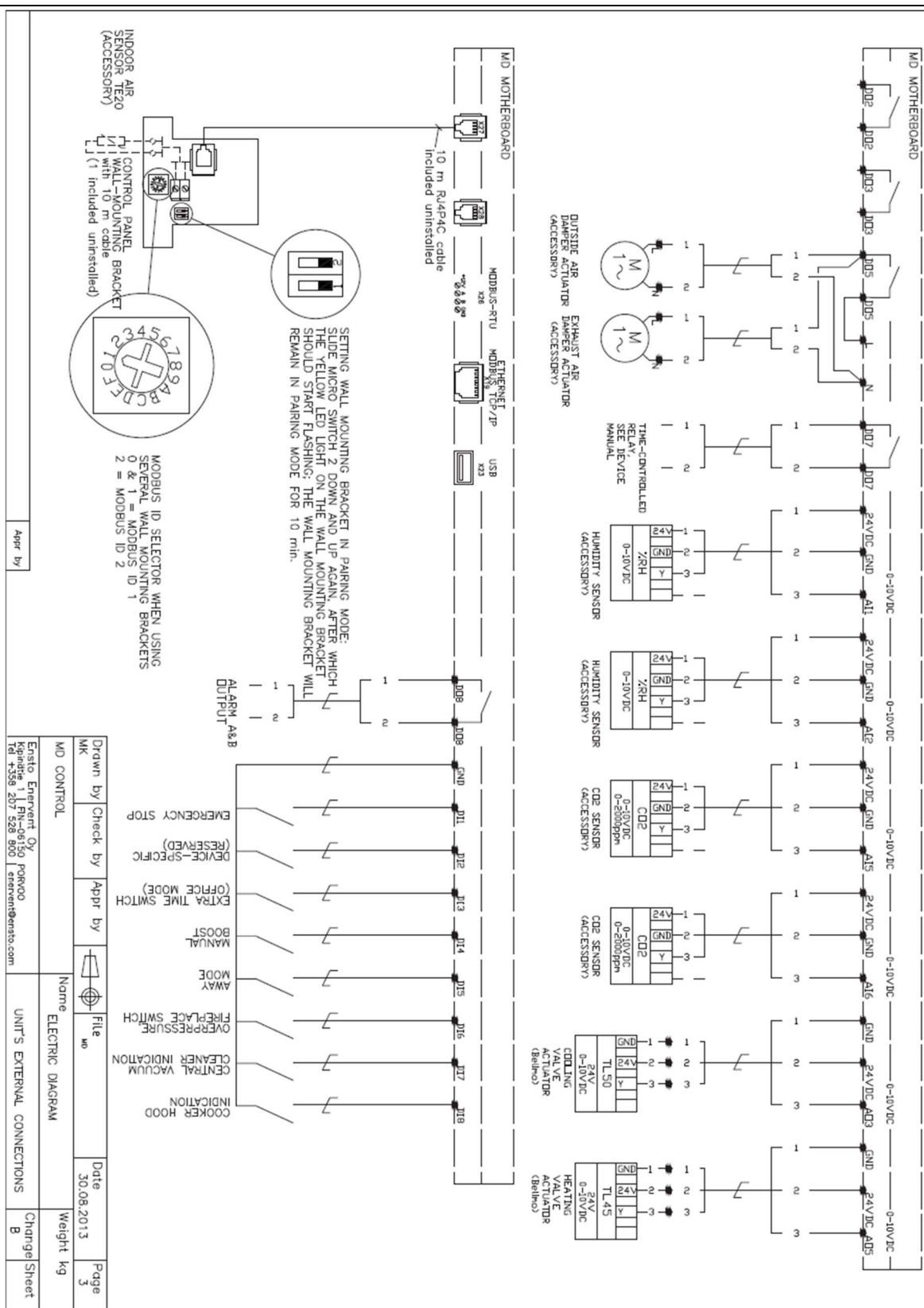




Pilt	Tark	Hyv	File	Pvm	Sivu
MMV/PAK			PELUCAN HP	12.10.2011	3
PELUCAN ECO GREENAIR HP					
EDA Control Board					
Enervent Zehnder Oy			Nimitys		
Käsitteä 1 FIN 00010 PORVOO			Electrical Connections		
Tel. +358 207 528 880 enervent@zoh.com			External Connections		
			Muutos		
			Lehti		







MANDATORY PARTS

10024004 **CONTROL UPDATE KIT PELICAN eco EDA HP → EAIR HP** **1**

<u>Code</u>	<u>Description</u>	<u>Pcs.</u>
10024004	CONTROL UPDATE KIT PELICAN eco EDA HP → EAIR HP	

Automation

40030936	PCB support KGLS-6S	5
40028773	Wire 340mm orange 0,75mm ²	6
40028774	Wire 255mm 1mm ² black	3
40028779	Wire 255mm 1mm ² blue	3
40031093	eAir main board	1
40029985	eAir main board connectors	1
40029195	Power supply Tufvassons PSLR24	1
40029344	Terminal package	1
40029225	Humidity/temperature sensor Amphenol 1800mm	1
40029170	EDA temperature sensor 2400mm	1
40030309	MD RHT cable	1
40030997	Cable tie 2,5x200mm	10
40031559	POP-rivet Multigrip 3,2x9	12
40031114	eAir panel package	1
40034288	WiFi module package	1

Manuals etc. (depends on model)

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

Notes: