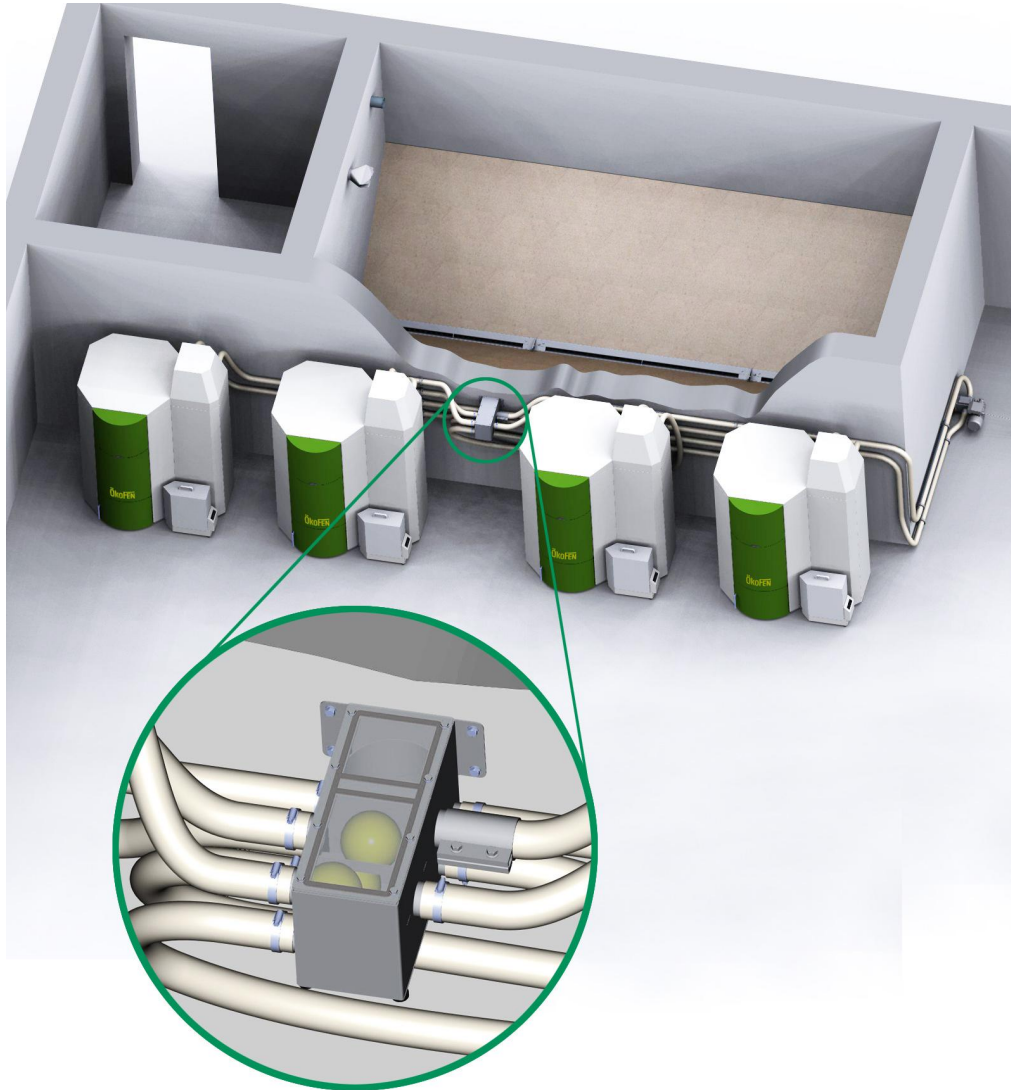


PE542 EN v2.1

Installation Manual

Pelletschwitch for Boiler in sequenced operation



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1. Product description

The pellet switch enables the distribution of the pellets from one storage to a cascade system with two to four boilers via a single pellet hose. The pellet distribution functions on the principle of a check valve without motors and sensors and is therefore virtually maintenance free. The control is carried out by the pneumatic vacuum suction system.

NOTICE

The Pelletswitch was designed for installations where it is not possible to install a single auger screw for each heating boiler.

NOTICE

If one boiler is switched off, or the common auger is blocked, none of the heating boiler in the system works!

Note

- The pellet switch only functions from the Pelletronic Plus software **V6.38!**
- The pellet switch only functions from the Pelletronic Touch software version **V2.00!**
- Switch off all the boilers in the cascade to use the Pelletswitch.

1.1 For the assembly it is required:

- 5-pole cable with earth wire for Drive motor (YMM-J 5x1²mm)
- 5-pole cable without earth wire for adapter cable (YMM-X 5x1²mm)
- Wire-end sleeve 1²mm

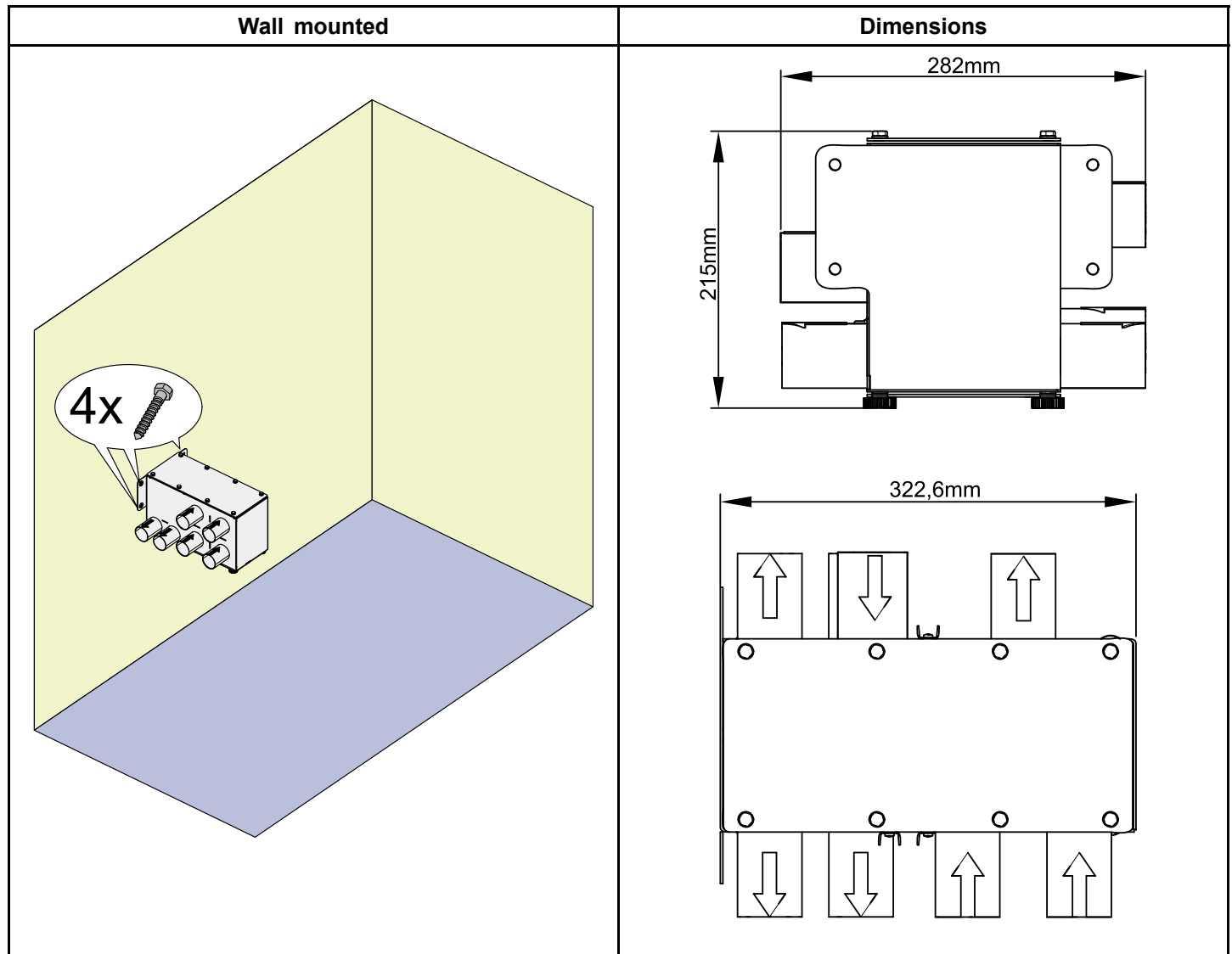
2. Installation process

2.1 Position

Fix the Position for the Pelletswitch and the Junction box. (ideally located near the boilers)

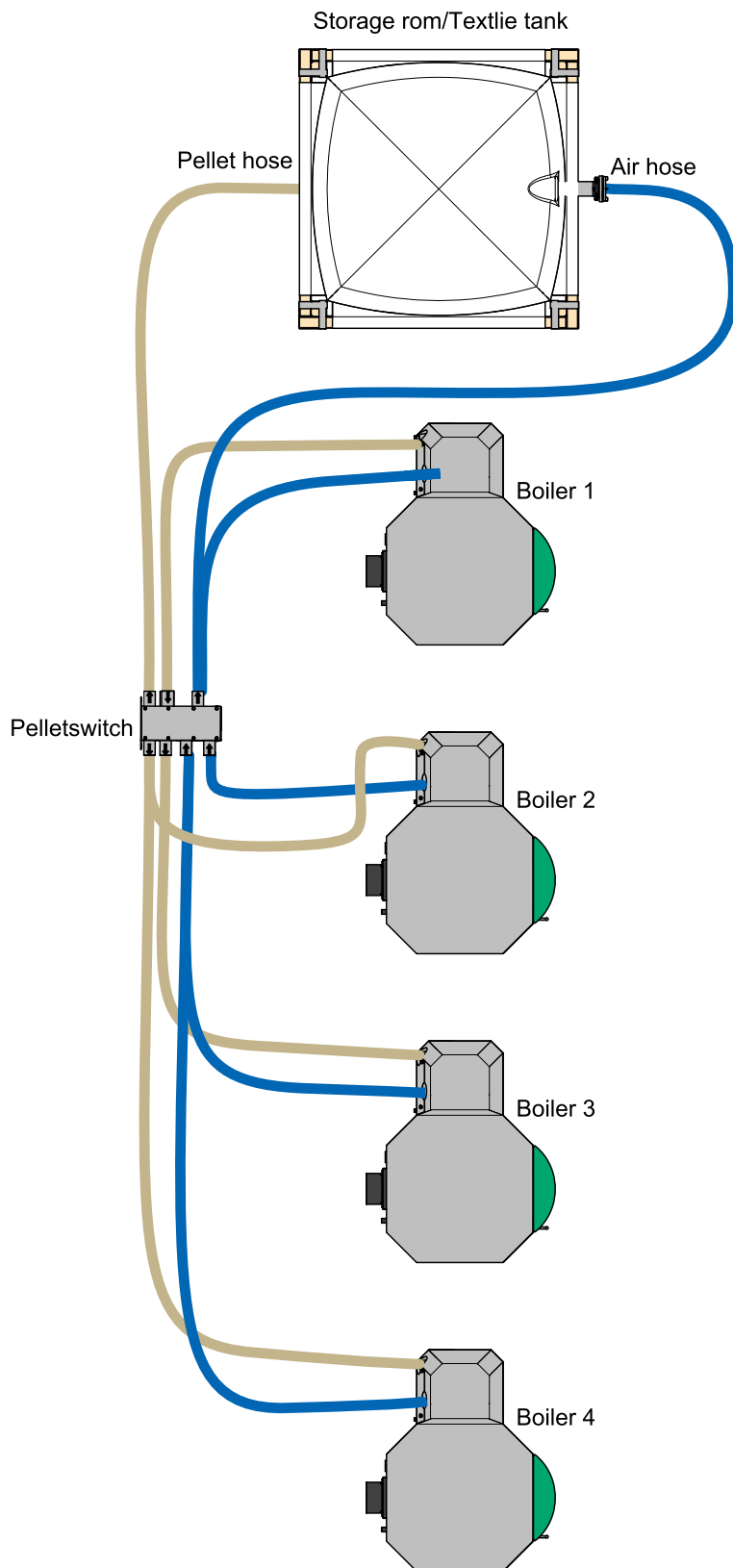
NOTICE

The Pelletswitch has to be fastened **horizontally** with the appropriate holes on the wall. It can stand on the bottom or not.



2.2 Diversion

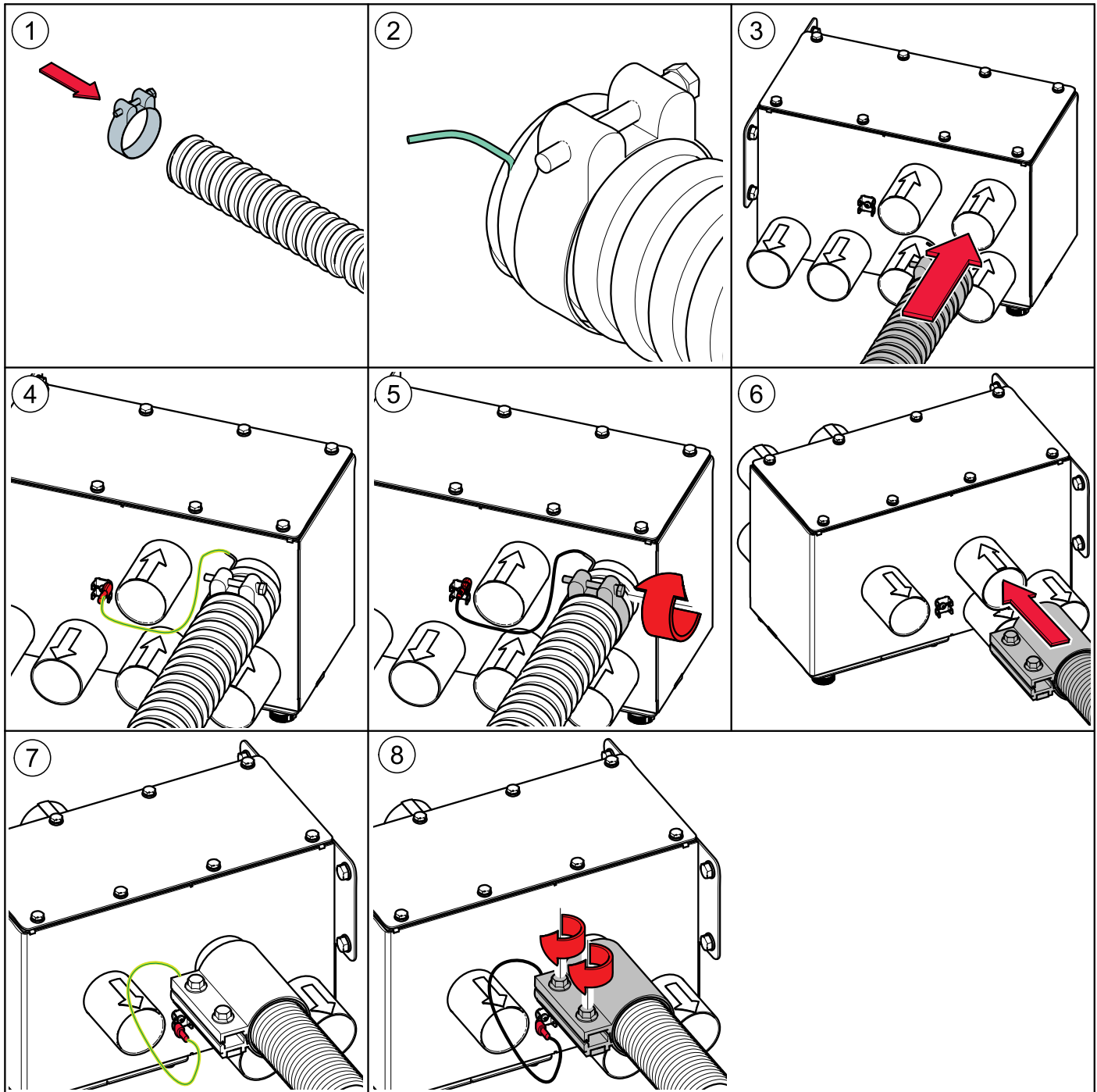
2.2.1 Route the suction tubes under aid of the scheme.



NOTICE

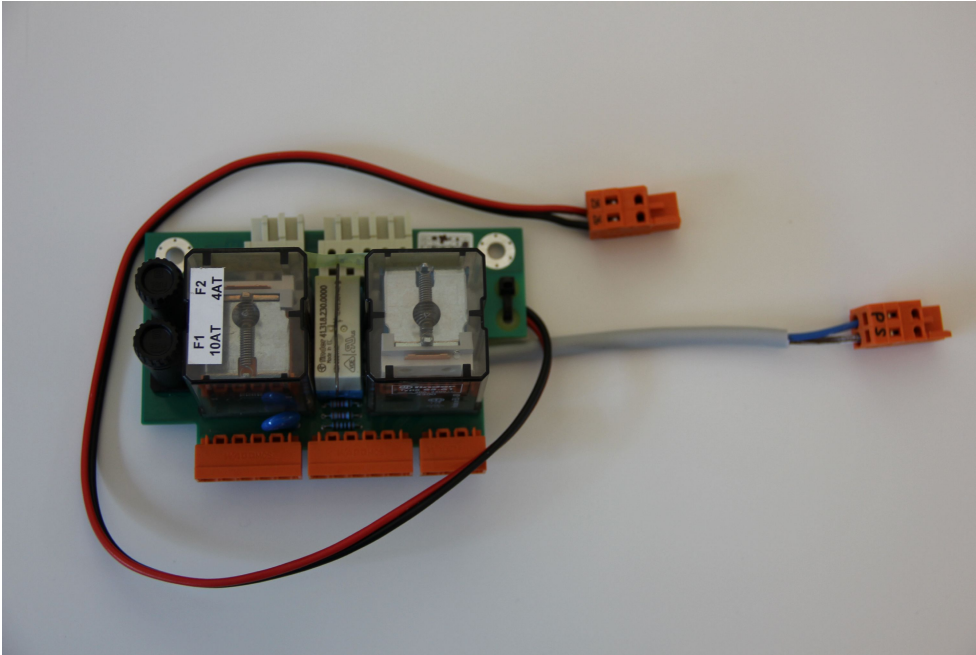
By use of 2 or 3 boilers, the the **open ports** at the Pelletswitch must be closed!

2.3 Connection of the pellet and air hose to the Pelletswitch

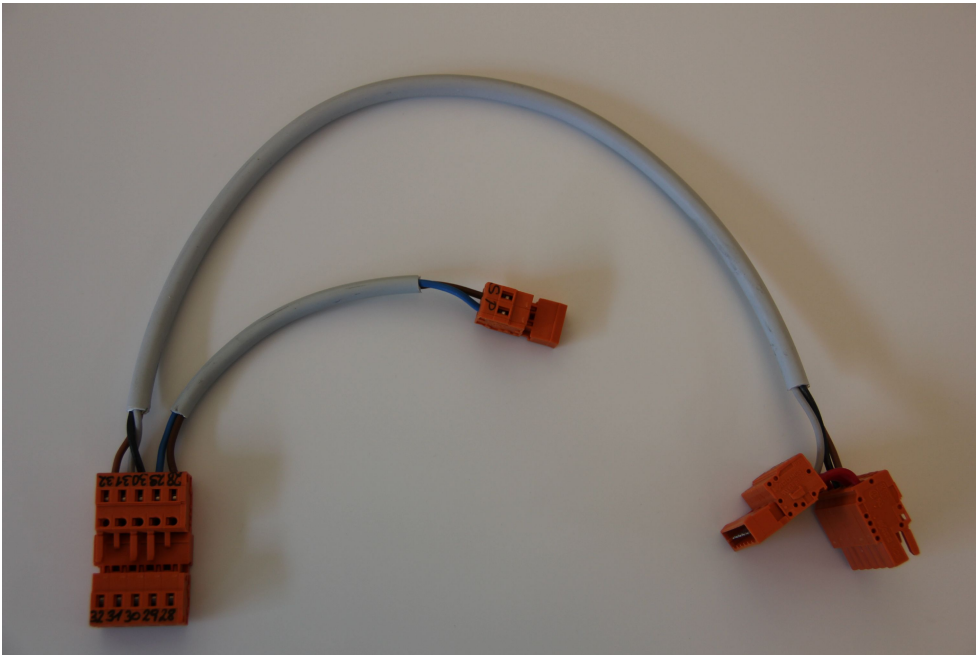


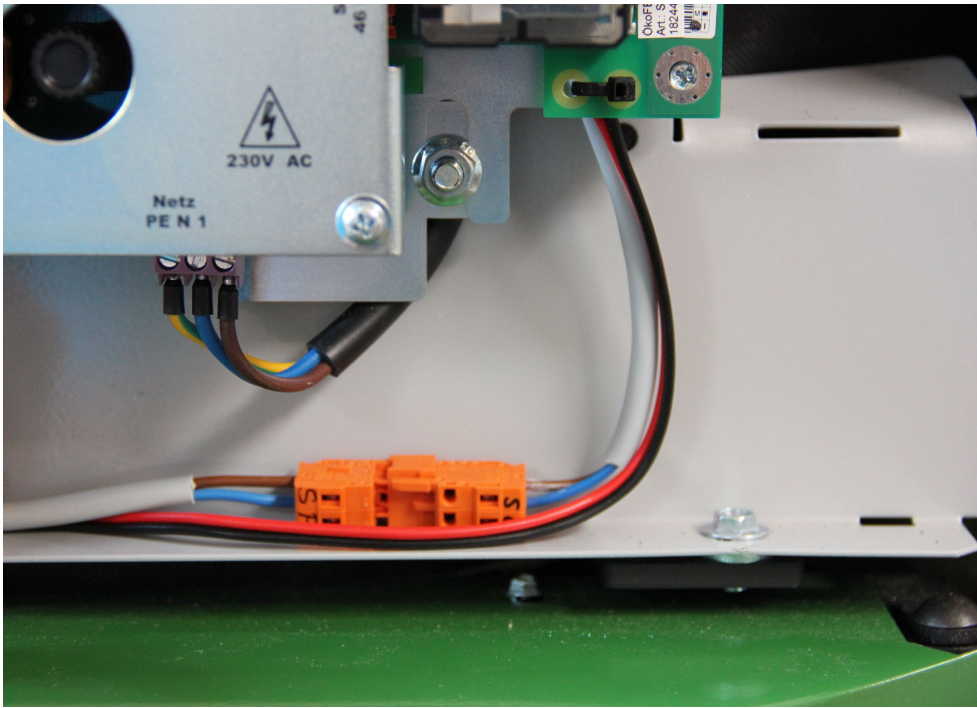
2.4 Cabling

2.4.1 Now exchange the suction circuit boards at the CMP's by the in delivery included suction circuit boards with cable.

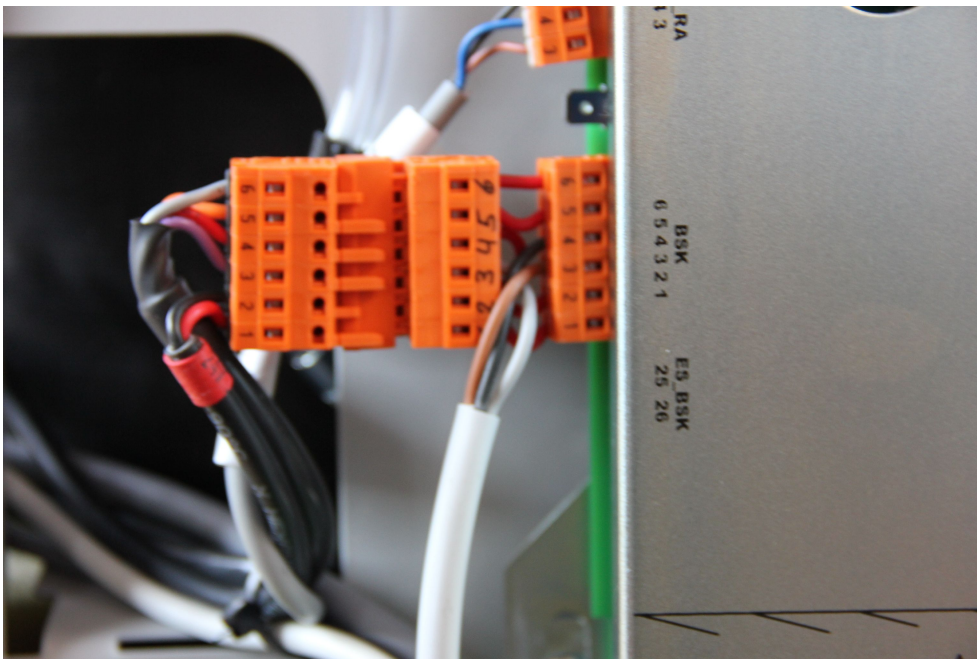


2.4.2 Connect the supplied adapter cable with the adapter cable of the suction circuit board.

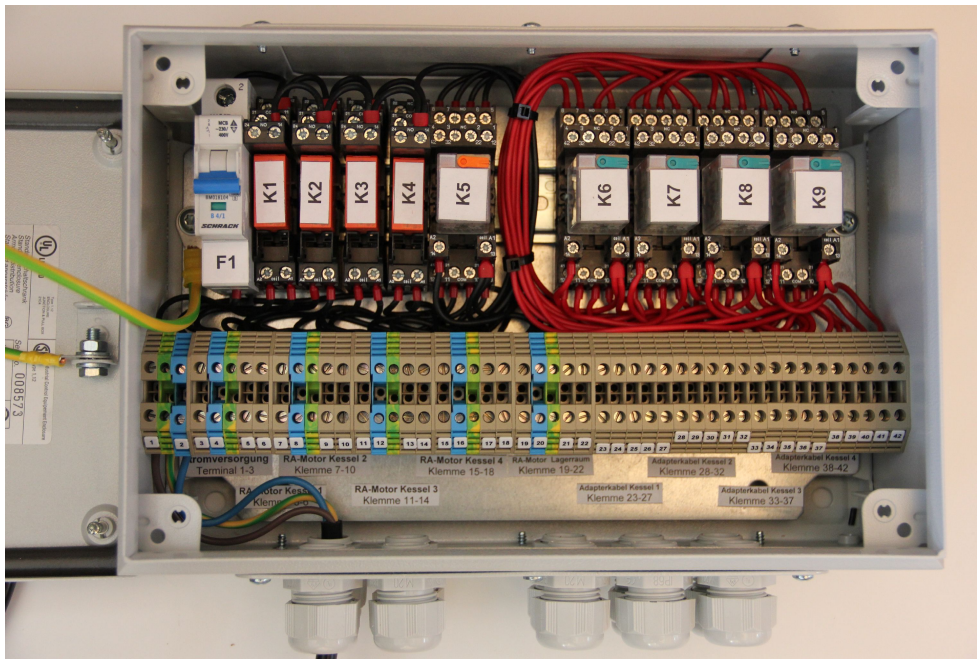




2.4.3 Plug the adapter cable on the slot **BSK** from the CMP.



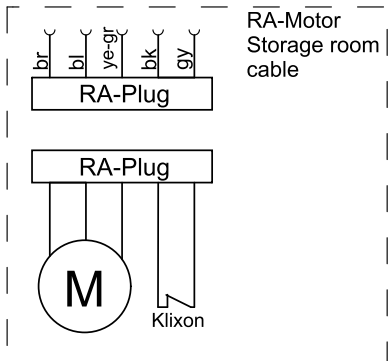
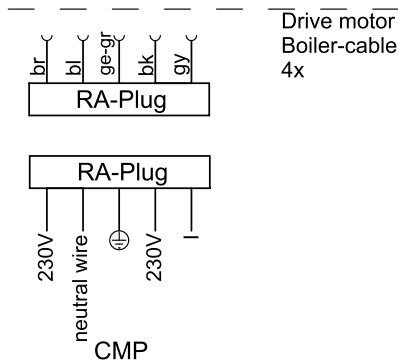
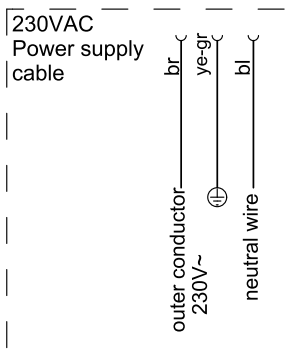
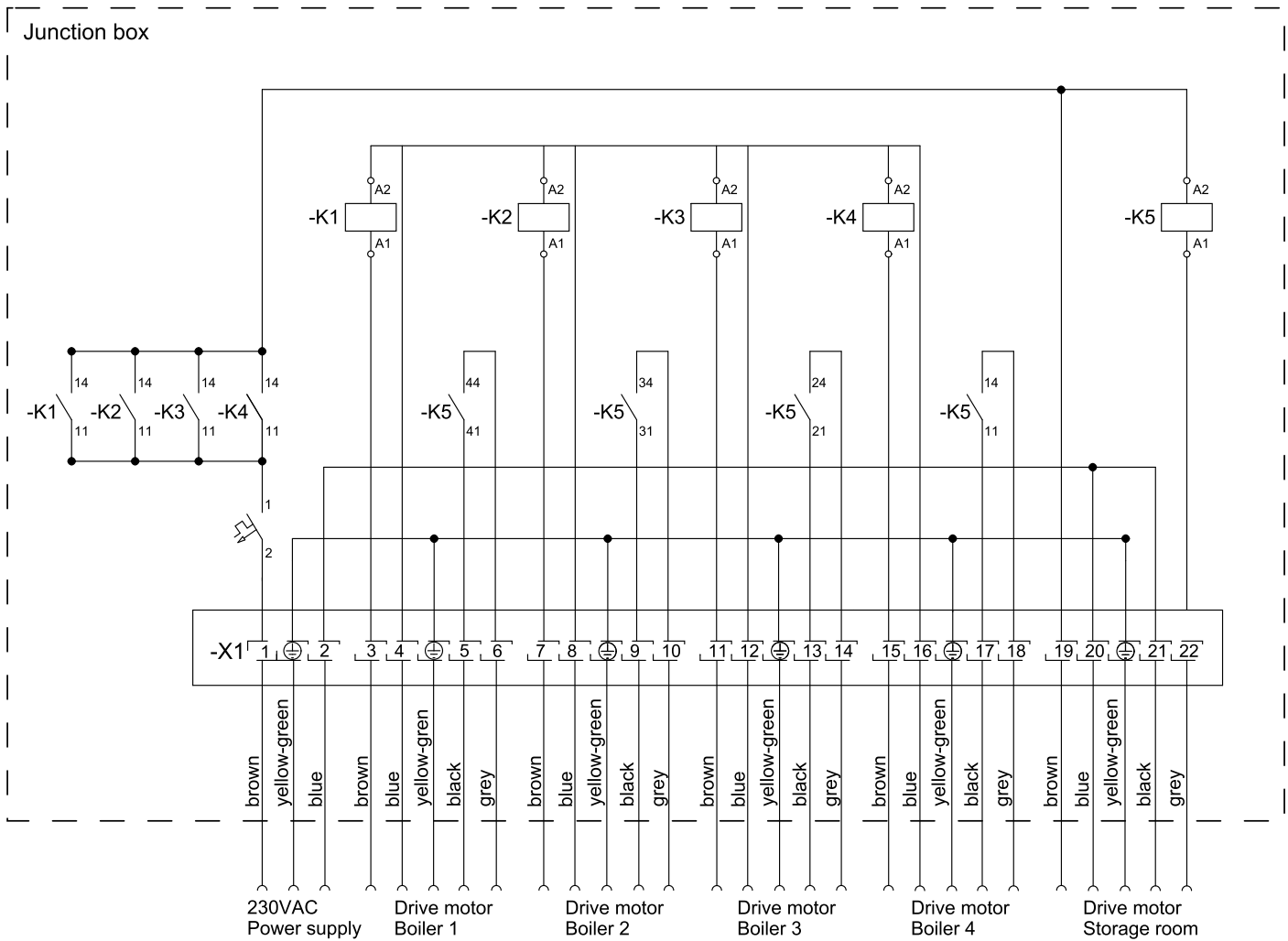
2.4.4 Route the 5-pole cable for the Drive motor of the boilers to the Junction box. Clamp the cables to the 5-pole plugs intended for it on the CMP.



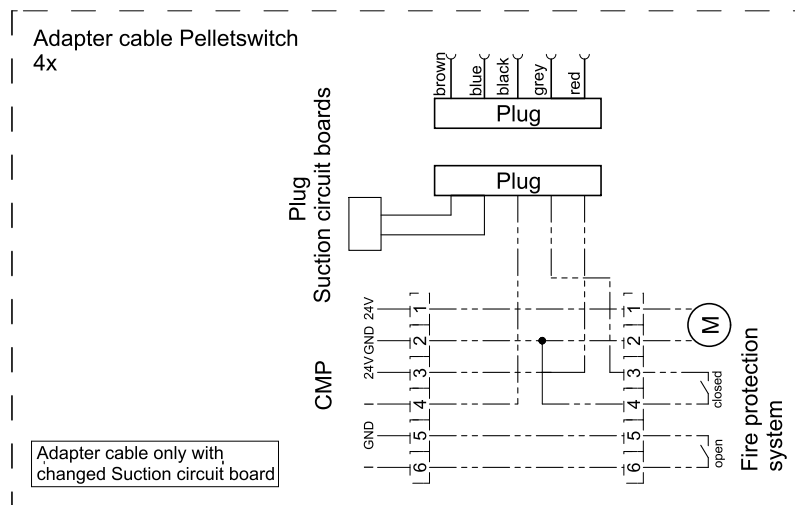
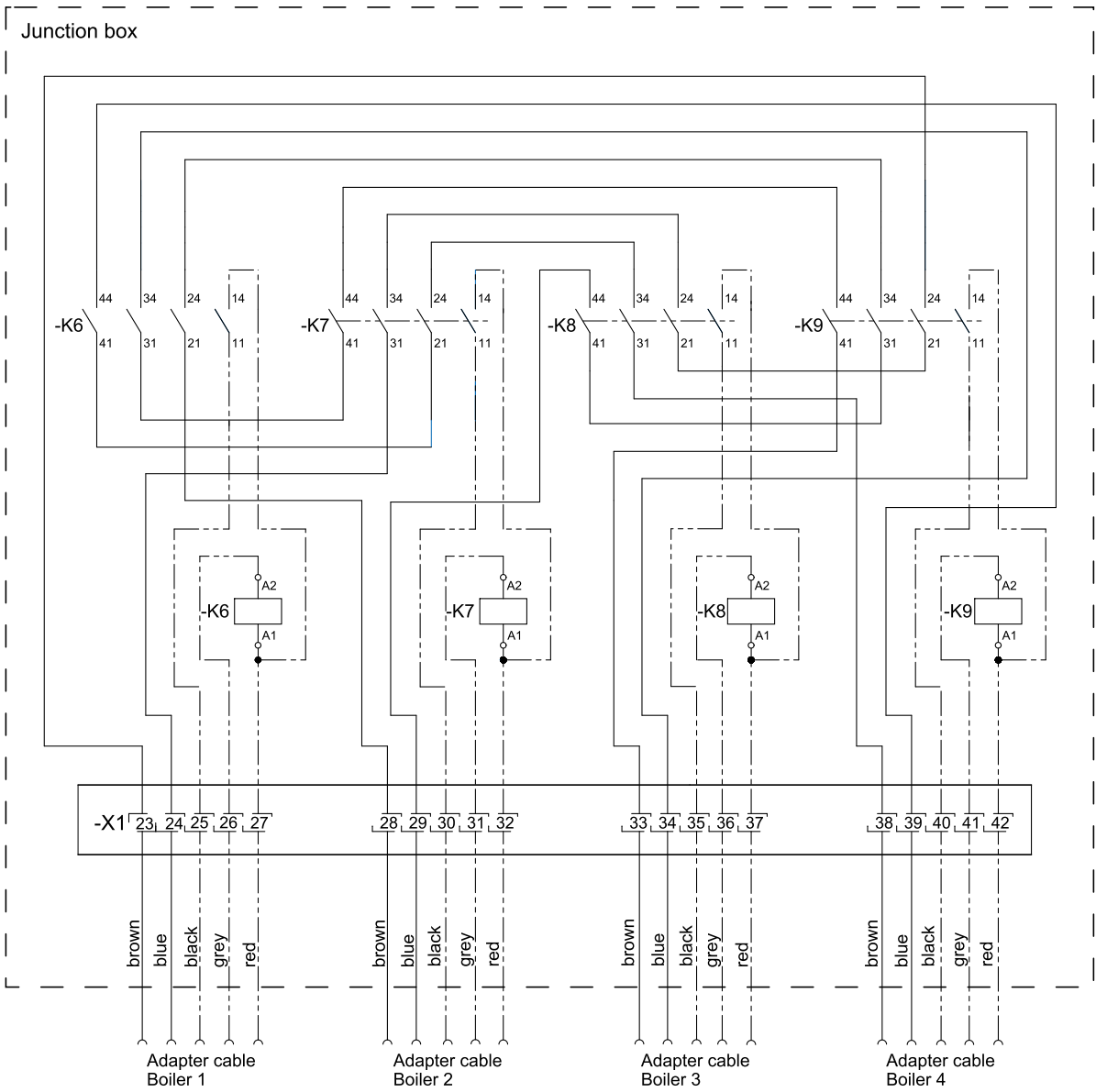
NOTICE

The Junction box is a **security system**, so that the boiler can activate the vacuum system only when the fire protection system of all boilers are **closed**.

2.4.5 Wire the Junction box based on the wiring diagrams

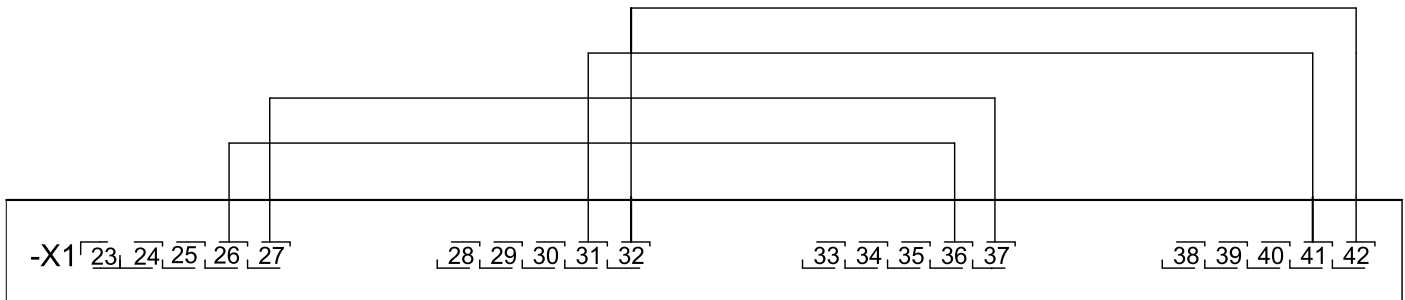


----- 230VAC
 ———— 24VDC

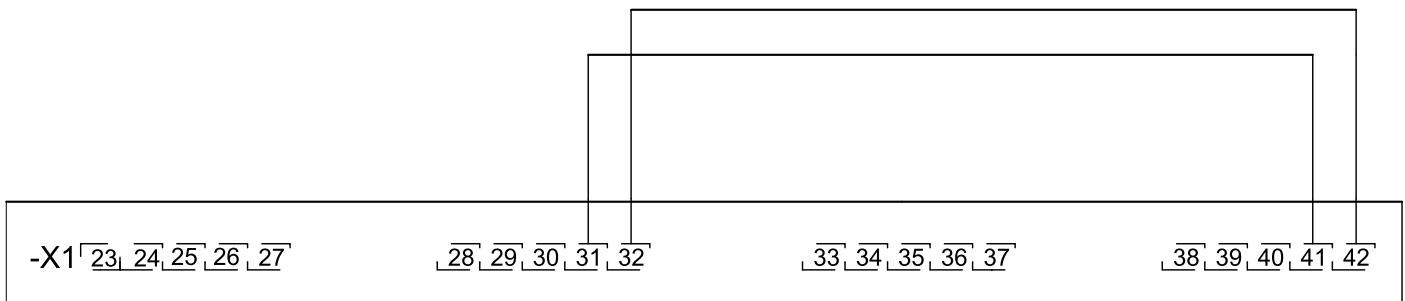


2.4.6 Additional wiring by use of less than 4 boilers:

2 boilers



3 boilers



2.5 Settings:

2.5.1 Settings in the Pelletronic PLUS:

Activate the function pellets switch in parameter P291.

Because the RA motor is cyclic, it is necessary to reduce the suction pause time. It is also important that the hopper is filled completely after one suction run time.

Only used with a Pelletronic heating controller and a cascade function possible. Every time starting the suction function the boiler waits until it receives a release from the Pelletronic heating controller. Only one boiler gets the release at the same time. e.g. That means that in the case of a power lost all the boilers run in sequence, not simultaneously. **Suction stop** is shown on the display. (Wait until the suction release appears) As security level it is necessary to have a mechanical locking of the suction fans and fire dampers.

Setting of the suction time: (P285)

Power	Standard	Setting Pelletswitch
20kW	175min	120min
32kW	250min	180min
56kW	90min	70min

NOTICE

Obligation filling

Apportion the times for the Obligation filling of each hopper in hourly increments.

(e.g.: Boiler 1 = 18:00h, Boiler 2 = 19:00h, Boiler 3 = 20:00, Boiler 4 = 21:00h)

2.5.1 Settings in the Pelletronic TOUCH:

The function for the Pelletswitch is activated in the menu **Learn Peripherie**.

Because the RA motor is cyclic, it is necessary to reduce the suction pause time. It is also important that the hopper is filled completely after one suction run time.

Only used with a Pelletronic heating controller and a cascade function possible. Every time starting the suction function the boiler waits until it receives a release from the Pelletronic heating controller. Only one boiler gets the release at the same time. e.g. That means that in the case of a power lost all the boilers run in sequence, not simultaneously. **Suction stop** is shown on the display. (Wait until the suction release appears) As security level it is necessary to have a mechanical locking of the suction fans and fire dampers.

Setting of the suction time:

Power	Standard	Setting Pelletswitch
20kW	175min	120min
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NOTICE

Obligation filling

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(e.g.: Boiler 1 = 18:00h, Boiler 2 = 19:00h, Boiler 3 = 20:00, Boiler 4 = 21:00h)

2.6 Before activating

- First disconnect all the **capacitive sensors from the hoppers** to the boiler controllers. (for the prevention of suction processes)

NOTICE

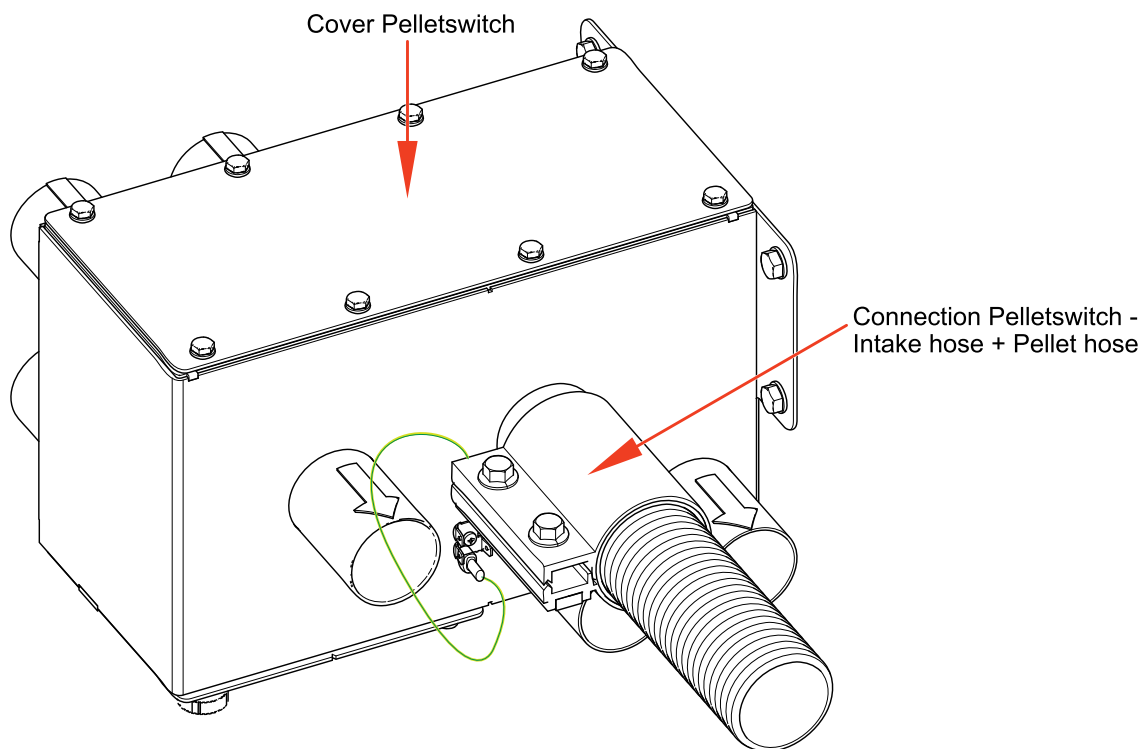
Tightness

Check the following components before starting up for tightness and tighten them if necessary:

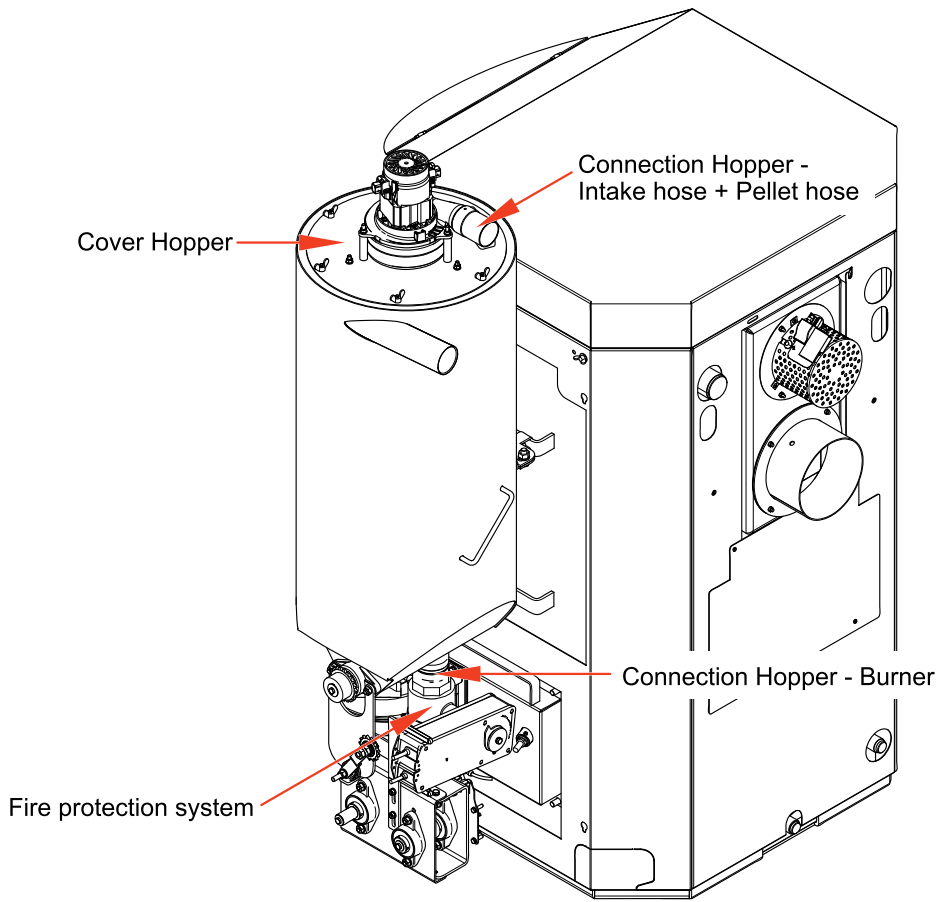
- Cover Pelletswitch
- Collars on the hoppers
- Clamps of the Intake hose + Pellet hose

2.6.1 Examples of possible leakages

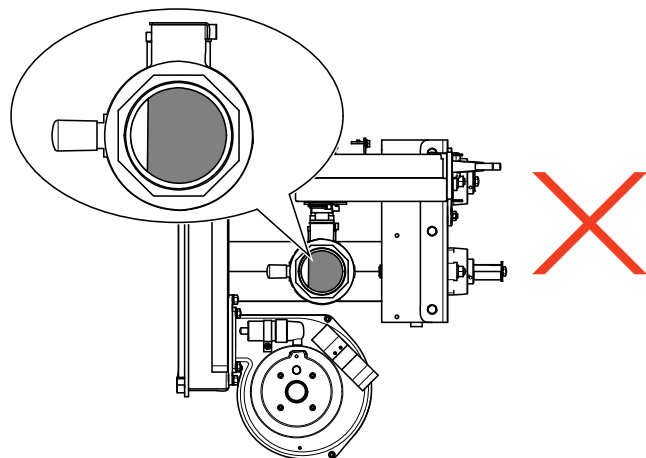
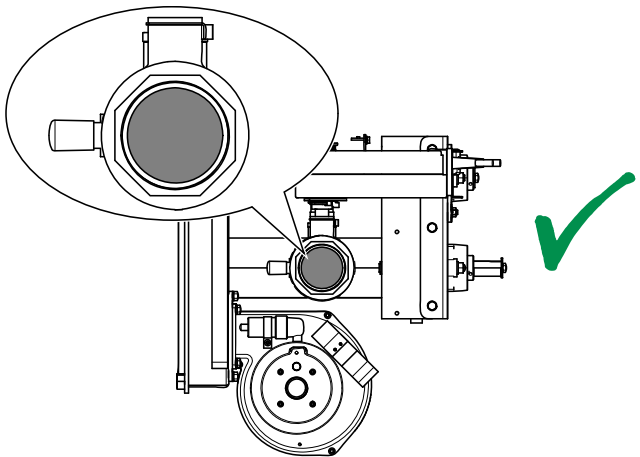
- **Pelletswitch:**



- **Hopper:**

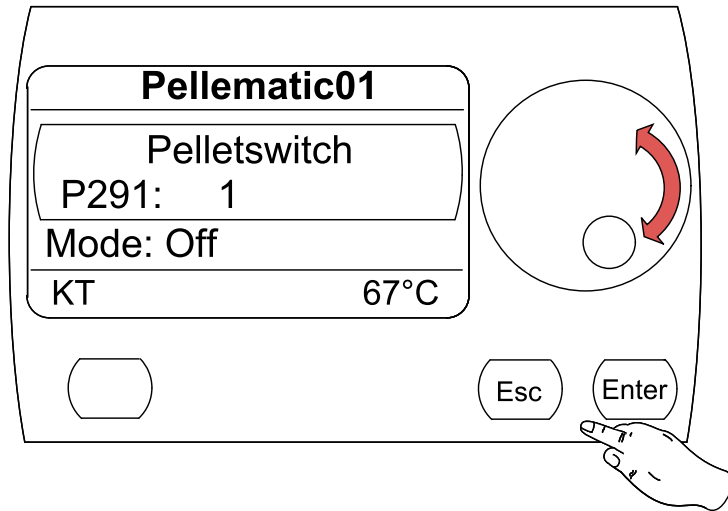


- **Fire protection system - Burner:**



3. Activating

3.1 Activating at Pelletronic PLUS:

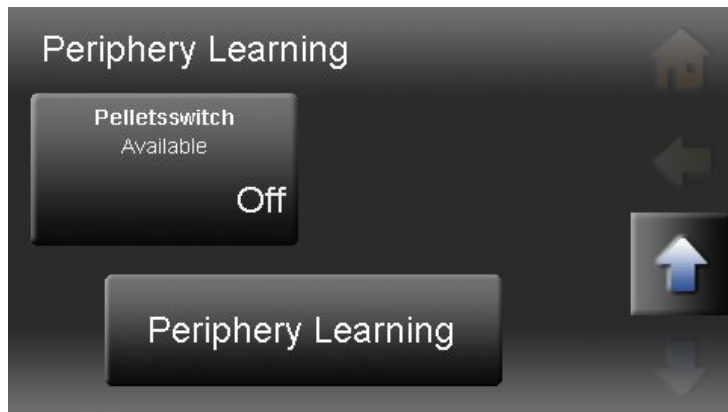


Activate now the parameter **P291** Pelletswitch of the CMP, in by selecting the mode **1**.

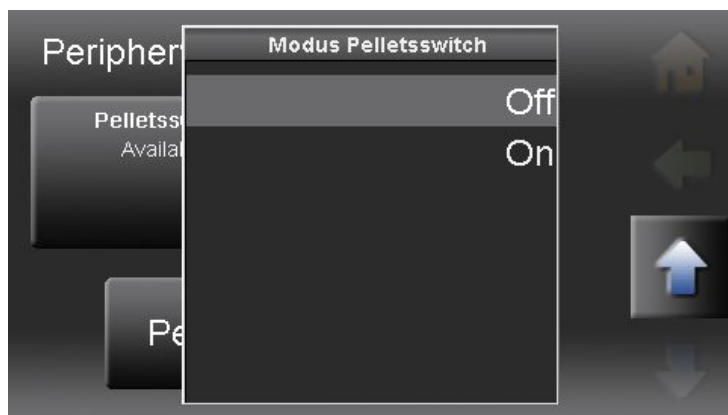
NOTICE

It is recommended to adjust a **Pulsing** by the Drive motor.(e.g.: P188 Pause storage room = 3s, P187 Freq. storage room = 5s)

3.2 Activating at Pelletronic TOUCH:



Activate the Pelletswitch with **Lern Peripherie** in the Main menu.



- Select the mode ON.
- Choose Learn Peripherie

NOTICE

It is recommended to adjust a **Pulsing** by the Drive motor.(e.g.: Pause storage room = 3s, Freq. storage room = 5s)

3.3 Plug the **capacitive sensors** from each hopper back into the slots KAP_ZW of the boiler controllers.

4. Checklist for maintenance

- Check the following points at every maintenance:

CHECKLIST		OK
Tightness	Cover Hopper	
	Collars on the hoppers	
	Cover Pelletswitch	
	Clamp of the Intake hose + Pellet hose	
	Collar between burner an hopper	
	Inspection opening at the hopper	
Ball valve burner	Complete closure of the ball valve	
Suction system	Adjusting the suction times according to the boiler performance	
	Apportion the times for the Obligation filling of each hopper in hourly increments	