

☰ hoxter ☰

HOS

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1. Introduction

We would like to thank you for purchasing electronic combustion system HOS.



- The installation of this product must be carried out by a specialist - stove maker - only.
- Before you start using the device we would like to invite you to read this manual and follow the instruction inside.
- The prerequisite for the proper functioning of HOS is the correct installation and proper functionality of all its subcomponents.

2. Package content

	HOS A no display	HOS A	HOS AW	HOS AWU	HOS AU	HOS U
control unit (power supply including)	✓	✓	✓	✓	✓	✓
wireless display	✗	✓	✓	✓	✓	✓
contactless door sensor	✓	✓	✓	✓	✓	✗
air inlet flap	✓	✓	✓	✓	✓	✗
high temperature sensor	✓	✓	✓	✓	✓	✓
3 x heat sensor PT1000	✗	✗	✓	✓	✗	✗
sump for heat sensor PT1000	✗	✗	✓	✓	✗	✗
socket switch for boiler pump	✗	✗	✓*	✓*	✗	✗
socket switch for ventilation device	✗	✗	✗	✓*	✓*	✓*
silicone hose	✗	✗	✗	✓	✓	✓
chimney clamp	✗	✗	✗	✓	✓	✓

* socket switch version supplied as standard, at the customer's request the DIN rail version available

3. Description of the device

Electronic combustion control HOS is a device containing some of the following modules or their combination:

- Module A – electronic combustion control - chapters related with this module are marked **A**
- Module W – primary water cycle control - chapters related with this module are marked **W**
- Module U – Underpressure watcher - chapters related with this module are marked **U**
- The chapters related to electronic combustion control without a display are marked **X**



This manual is common to all available versions. Please, consider your own version during the installation and set-up.

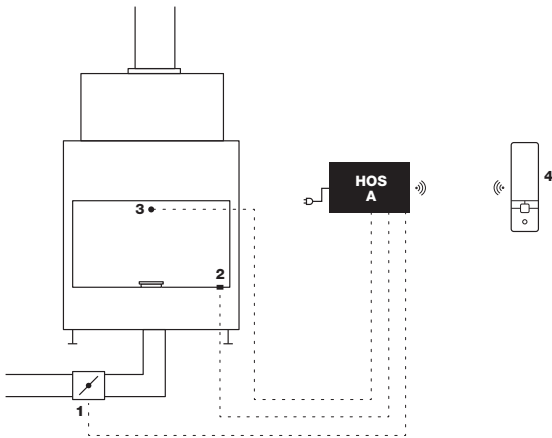
3.1 Description of the function of electronic combustion control – Module A



Module A controls the burning process by dosing the optimal amount of air for combustion. The contactless door sensor **(2)** transmits information about the status of the door to the control unit. When they are opened and then closed, the control unit initiates the combustion control process. The high temperature sensor **(3)** measures the current temperature in the fire chamber or flue gas path. Based on this value, the control unit sets the position of the flap **(1)** to ensure the supply of the optimal amount of air.

If you have a version with a wireless display **(4)**, the display shows the temperature measured by the high temperature sensor, the burning phase and the burning time.

Fig. 1 / HOS connection – Module A

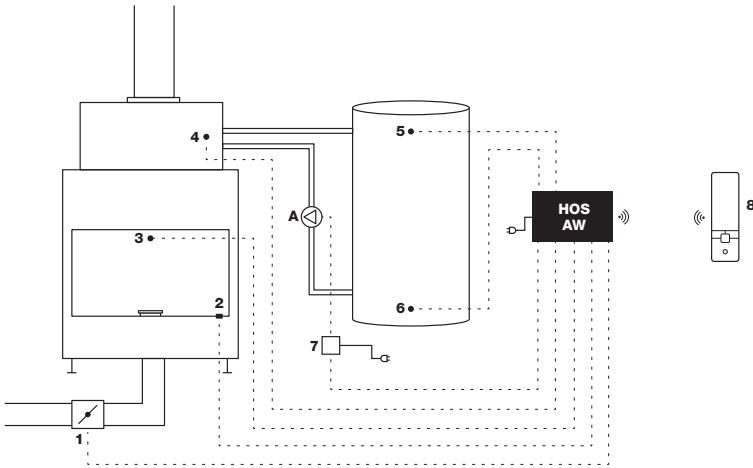


3.2 Description of the function of primary water cycle control – Module W



Module W regulates the circulation pump depending on the temperature values measured by the heat sensors. The switching of the circulation pump **(A)** by the switch **(7)** is controlled on the basis of ratio of values measured by heat sensors in the heat exchanger **(4)** and in the accumulation tank **(5)** and **(6)**. The wireless display **(8)** shows the value of the water temperature in the exchanger **(4)**, the percentage charge of the accumulation tank and the status of the circulation pump **(A)**. Module W can only be used in combination with module A.

Fig. 2 / HOS connection – Module AW

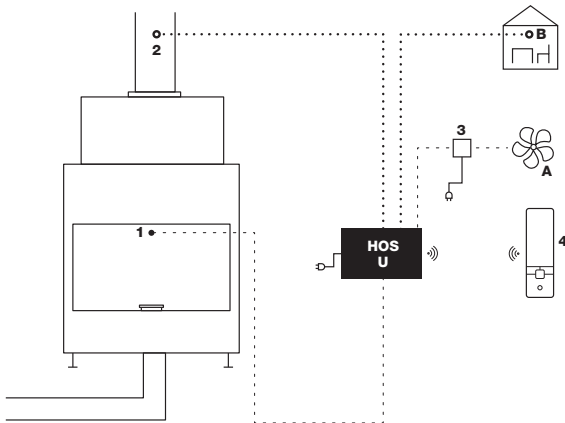


3.3 Description of the function of underpressure watcher – Module U



Module U allows, based on the difference between underpressure values in the flue gas path and pressure in the room, short-term disconnecting of the ventilation systems (kitchen hood, recuperation or other ventilation equipment in the house) from operation. High temperature sensor (1) activates the measurement of underpressure in the chimney (2) and room pressure (B). If the safe value of the difference between these pressures is not ensured, the switch (3) will temporarily disable the ventilation unit (A). Once the safety time limit has expired and the difference between the pressures is safe, the unit is put back into operation. Only two consecutive disconnections of the ventilation system are allowed. If the ventilation system is disconnected for the third time within 24 hours, it will not be put back into operation. The device can only be turned on again by manual restart. Within 24 hours, such restarts can be performed thrice through the wireless display, the fourth restart must be performed physically on the control unit of the device (4) shows the current difference between the room pressure (B), and the pressure in the flue gas path (2) as well as the status of the ventilation unit (A).

Fig. 3 / HOS connection – Module U



4. Components description



4.1 HOS Electronic combustion control unit

- Powered by 24 V adapter
- Heat resistance max. 50°C

4.2 Power supply adapter



- Input 110–230 V
- Output 24V DC
- Heat resistance: 40 °C
- Cable length: 3,3 m

4.3 Wireless display



- The wireless display shows information from the control unit
- Power supply: 1,5 V AAA (2 alkaline batteries)
- Heat resistance: 50 °C
- More about using the display in the chapter „Operating“

4.4 Contactless door sensor



- Sensor with connecting cable (length 4 m)
- Cable heat resistance: 180 °C
- Magnetic counterpart
- Metal holder (only compatible with Hoxter products)
- M4 x 6 screws to attach the door sensor holder and the magnetic counterpart

4.5 Air inlet flap



- Heat resistance of the stainless steel flap and its components: 50 °C
- Cable heat resistance: 180 °C
- Cable length: 5 m
- Available flap diameters: Ø125 mm, Ø150 mm, Ø180 mm
- The air flap motor is equipped with a return spring, which automatically opens the air flap in case of a power failure.

4.6 High temperature sensor with ceramic housing



- Range 0–1200 °C
- Temperature sensor and the ceramic housing heat resistance max 1200 °C
- Cable heat resistance 400 °C
- Cable length 4 m
- Assembly length of the sensor is 155 mm

4.7 3x Heat sensor PT1000



- Range 0–150 °C
- Heat temperature resistance: 180 °C
- Cable heat resistance: 105 °C
- Cable length 8 m
- Optimal depth of the sensor in the sump: 60 mm

4.8 Sump for heat sensor PT1000



- Heat resistance: 450 °C
- Fitting G 1/2" (M20 x 1,5)
- Sump length including fitting: 60 mm
- Sump diameter: 8 mm

4.9 Socket switch for circulation pump ¹



- Heat resistance: 50 °C
- Power supply: 24 V DC
- Connection cable length 8 m (Type LIYY 2 x 0,34 mm²)

4.10 DIN rail relay for circulation pump ¹



- Heat resistance: 50 °C
- Power supply: 24 V DC
- Connection cable length 8 m (Type LIYY 2 x 0,34 mm²)

4.11 Socket switch for ventilation device ¹



- Heat resistance: 50 °C
- Power supply: 24 V DC
- Connection cable length 8 m (Type LIYY 2 x 0,34 mm²)

4.12 DIN rail relay for ventilation device ¹



- Heat resistance: 50 °C
- Power supply: 24 V DC
- Connection cable length 8 m (Type LIYY 2 x 0,34 mm²)

4.13 Chimney clamp



- Flue diameter: 150–250 mm
- Inlets for high temperature sensor and pressure measurement hose

4.14 Silicone hose



- Heat resistance: 200 °C
- Length: 8 m (can be shortened as needed)
- The hose is intended for measuring the pressure in the room and in the flue gas path

¹ socket switch version supplied as standard, at the customer's request the DIN rail version available

5.2 Installation of high temperature sensor

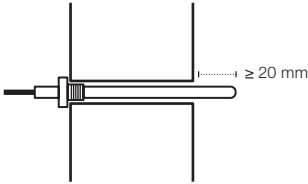


Place the high temperature sensor in the specified input in the product and tighten it (in the case of Hoxter products). If the appliance does not have such an input or it is not possible to install the high temperature sensor in it, put it in the flue gas path.



Install the high temperature sensor at least 20 mm deep into the hot zone. For proper functionality, always install high temperature sensor before the attached accumulation mass (if available).

Fig. 6 / Position of the high temperature sensor



To ensure correct measurement the high temperature sensor must be calibrated every 2 years.



Firm connection between the connector of the control unit and the connector of the high temperature sensor must be secured. Otherwise the correct function of the high temperature sensor cannot be guaranteed.

5.3 Air inlet flap installation



1. Connect the air inlet flap by aluminium flexible pipe (not included) with the fireplace insert or stove doors. The connection between the air inlet flap and the product must be air-tight.
2. When installing into closed-in build, the air inlet flap must be placed outside the environment with high temperature. The heat resistance of the air inlet flap is max 50 °C.



For the proper function of the electronic combustion control, it is always necessary to open the manual air control to the maximum.

If you want to control the fireplace using electronic combustion control only and if you want to disassemble manual air control, follow these instructions:

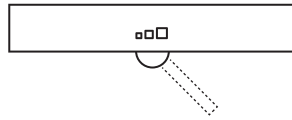
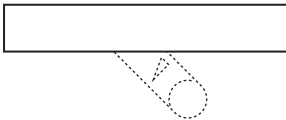
Option A (flat air control lever)

1. Set the air control to opened position (maximum air).
2. Remove the air control lever (dotted).
3. As an accessory, it is possible to order a hole cover, which can be mounted instead of the lever.

Option B (round air control lever)

1. Set the lever to opened position (maximum air).
2. Remove the air control lever (dotted).
3. Turn the hole in the cap not to be visible from the front.

Fig. 7 / Disassembly of the manual air control lever on the fireplace insert



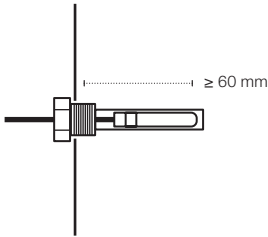
5.4 Installation of heat sensors PT1000 and sensor sump



1. Module W contains 3 pieces of heat sensors PT1000 with different coloured connectors and 1 piece of sump for heat sensor.
2. Install the heat sensor sump in the heat exchanger of Hoxter water heating fireplace insert (follow the instructions attached to the product).
3. Mount the heat sensor PT1000 marked yellow in the sump in the heat exchanger of the fireplace insert. Put the sensor at least 60 mm deep.

4. Mount the heat sensor PT1000 marked red in the top of the accumulation tank. Put the sensor at least 60 mm deep.
5. Mount the heat sensor PT1000 marked white in the bottom of the accumulation tank. Put the sensor at least 60 mm deep.

Fig. 8 / Position of heat sensor PT1000



5.5 Installation of the circulation pump socket switch

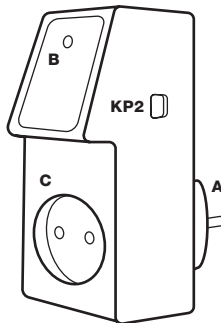


1. Plug the socket switch **(A)** of the circulation pump into the 230 V power supply.
2. Connect the pump socket switch and control unit with the cable (socket **KP2**).
3. Plug the circulation pump power cord (230 V) into the socket switch socket **(C)**.
4. Diode **(B)** indicates the status of circulation pump: diode on – circulation pump is not powered / diode off – pump is powered.



The total length of cables for switches is max. 30 meters.

Fig. 9 / Connection of the circulation pump socket switch



5.6 Installation of the circulation pump DIN rail relay

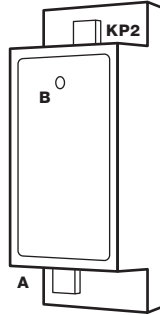


1. Let the DIN rail relay to be installed by authorized company to your electrical switchboard.
2. Connect the pump DIN rail relay and control unit with the cable (socket **KP2**).
3. The authorised company connects the phase of the power cord of the circulation pump (230 V) to the inlet **(A)** of DIN rail relay.
4. Diode **(B)** indicates the status of circulation pump: diode on – circulation pump is not powered / diode off – pump is powered.



**Contact an authorized company with the appropriate certification for electric installations.
The total length of cables for switches is max. 30 meters.**

Fig. 10 / Connection of the switch to the DIN bar for the boiler circuit pump



5.7 Installation of the ventilation device socket switch



1. Plug the socket switch (**A**) of the ventilation device into the 230 V power supply.
2. Connect the ventilation device socket switch and control unit with the cable (socket **LA2**).
3. Plug the ventilation device power cord (230 V) into the socket switch socket (**C**).
4. Diode (**B**) indicates the status of ventilation device: diode on – ventilation device is powered / diode off – ventilation is not powered.

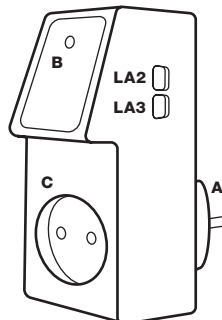


It is possible to control up to 5 ventilation devices together. To control more than one, use the LA3 connector on socket switch.



The total length of cables for switches is max. 30 meters.

Fig. 11 / Connection of the socket switch of the ventilation device



5.8 Installation of the ventilation device DIN rail relay



1. Let the DIN rail relay to be installed by authorized company to your electrical switchboard.
2. Connect the ventilation DIN rail relay and control unit with the cable (socket **LA2**).
3. The authorised company connects the phase of the power cord of the ventilation device (230 V) to the inlet (**A**) of DIN rail relay.
4. Diode (**B**) indicates the status of ventilation device: diode on – ventilation device is powered / diode off – ventilation is not powered.

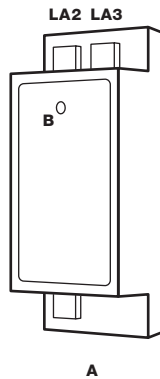


**Contact an authorized company with the appropriate certification for electric installations.
The total length of cables for switches is max. 30 meters.**



It is possible to control up to 5 ventilation devices together. To control more than one, use the LA3 connector on DIN rail relay.

Fig. 12 / Connection of the switch to the DIN bar for air-conditioning equipment



5.9 Installation of the chimney clamp ø150-250 mm with holder of silicone hose and temperature sensor



1. Remove the pressure measuring tube (**A**) from the buckle.
2. Place the clamp in the desired position on the chimney.
3. Mark the entry point for the pressure measuring tube or for the temperature sensor (when installed).
4. Take off the clamp.
5. Drill a hole with a diameter of 6 mm for the pressure measuring tube.
6. When installing high temperature sensor, drill also 8 mm diameter hole.
7. Reattach the clamp and secure it with a tensioner (**B**).
8. Place the pressure measuring tube (**A**) in such a way, that the output is facing upwards.
9. Cut the hose in a length needed to connect the output with the control unit.
10. Push the hose upwards (**D**) through the spring (**C**) and place it on the input on the clamp in such a way, that it faces at least the first 10 cm vertically upwards (this will prevent the condensate from getting into the electronics). At the same time, ensure the hose not to be squeezed or break.
11. Put the second end of the silicone hose in the control unit (input marked as **DK**).
12. If you are also installing a high temperature sensor, mount it into the inlet (**E**).



When installing, make sure the silicone hose is not deformed in any way. Otherwise, the correct function of the device will not be ensured!

Fig. 13 / Installation of the buckle on the vertical flue

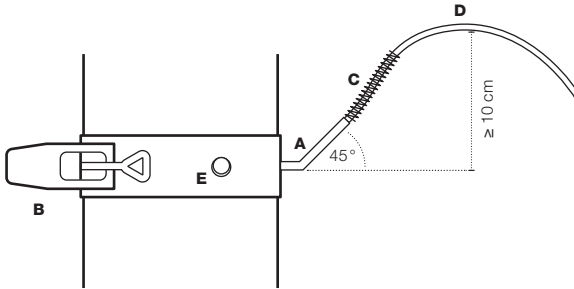
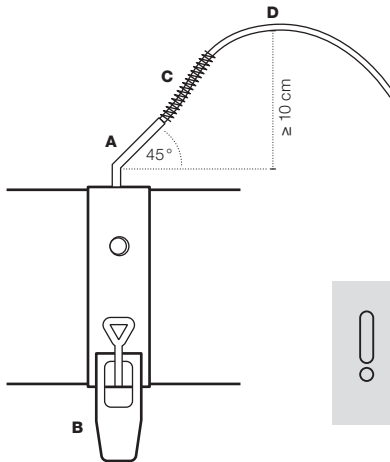


Fig. 14 / Installation of the buckle on the horizontal flue



Never blow to the openings for the silicone hose on the control unit or to the silicone hose connected to the control unit. The membrane measuring the pressure might get damaged.

5.10 Installation of silicone hose for room pressure measurement



1. Cut the appropriate length of the hose needed to measure the pressure. This must be long enough to reach from the control unit to the room when the appliance is installed.
2. Plug the end of the hose to the control unit input (marked **DR**).
3. Install the end of the hose freely in the area where the is installed (for example, make a hole in the enclosure and place the end of the hose in there).



When installing, make sure the silicone hose is not deformed in any way. Otherwise, the correct function of the device will not be ensured!

5.11 Description of the connectors and the control unit



1. Connect all installed components with the control unit (see Fig. 15).
2. Components can be plugged in in any order.
3. Connect the control unit (with the provided power adapter) into the 230 V power supply (see Fig. 16).
4. HOS electronic control has now been installed and you can move to the **SET-UP** phase.
5. The prerequisite for the proper functioning of HOS is the correct connection and proper operation of all connected components.

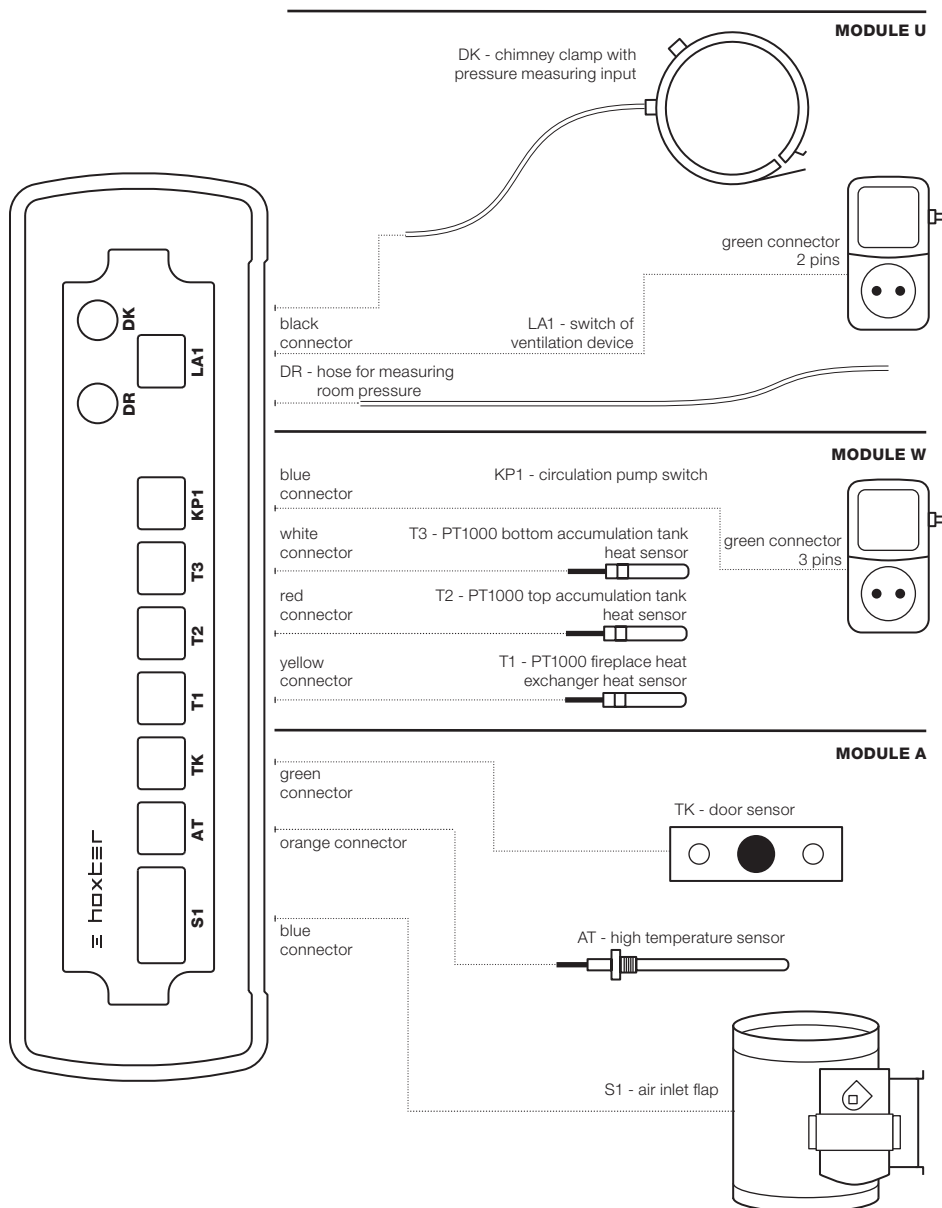
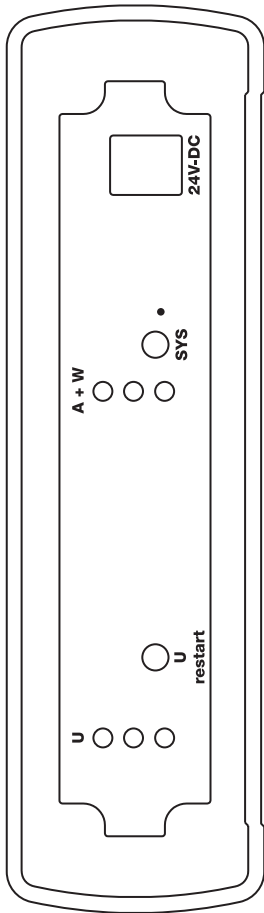


Fig. 15 / Face 1 of HOS regulation and connection diagram of components



MODULE A (+ W)

Power adaptor of control unit (24V)

Sensor for pairing with wireless display

Button for pairing with wireless display and for restart (modules A and W)

Green
indicates: normal function of modules A and W

Orange
indicates: door opened

Red
indicates: malfunction of module A or W (error number on the display), air supply flap is opened, circulation pump is on

MODULE U

Button for module U restart

Green
indicates: normal function of module U

Orange
indicates: ventilation device temporarily switched off

Red
indicates: ventilation device permanently switched off / module U malfunction (error number on the display)

Abb. 16 / Face 2 of HOS regulation and connection diagram, description of HOS signalling

6. Set-up

6.1 Wireless display and control unit pairing

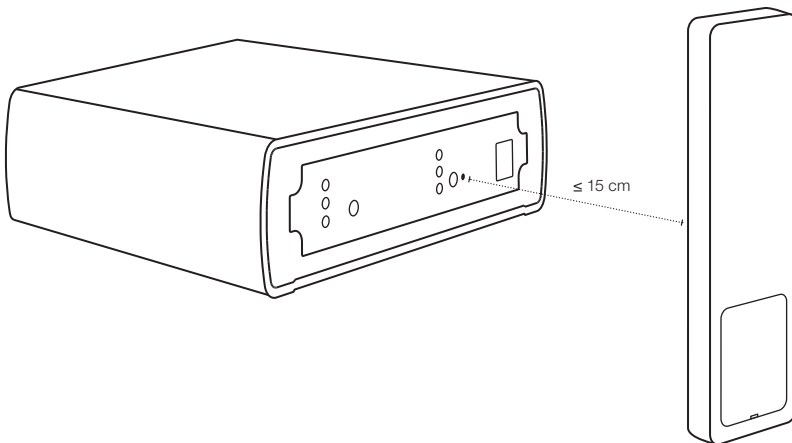
A W U

1. Make sure all the components are properly connected to the control unit and that the diodes on its back does not indicate any error.
In case of any error message, solve the error first.
2. Open the battery cover on the back of the wireless display, insert two AAA-sized alkaline batteries (included) and close the battery cover.
3. The pairing symbol appears on the wireless display.



4. Bring the wireless display closer to the pairing sensor on the back of the control unit (max. 15 cm).
5. Press the **sys** button on the back of the control unit.
6. The start of the pairing process is accompanied by a slight vibration of the wireless display.
7. Successful pairing is confirmed by a short beep.
8. The controller has now been paired with the control unit.

Fig. 17 / Pairing the wireless display with the control unit



6.2 Settings of the control unit parameters – menu SETTINGS

A W U

- Wake up the wireless display from stand-by mode by moving it (take it in your hand).
- Enter the **SETTINGS** menu by long pressing (2 s) of the **OK** button .

MODULE A
MODULE W
MODULE U
TEST
RESET

- Use the arrow keys in the menu to confirm the choice by short pressing **OK**.
 - MODULE A** – setting the values of the „electronic combustion control module“
 - MODULE W** – setting the values of „primary water cycle control“
 - MODULE U** – setting the values of „underpressure watcher“
 - TEST** – test the basic functions of each connected device
 - RESET** – factory settings of all modules



Only purchased modules are available in the main menu. The TEST module is displayed only when the fireplace insert is out of order (not burning).

6.3 Settings of the combustion control parameters (MODULE A)

A

- Choose **MODULE A** in the HOS main menu to open the combustion control settings

MODULE A
T-START
EP
←

- After entering the **MODULE A**, use the arrows to select:
 - T-START** temperature setting after which the combustion control process starts
 - EP** setting the burn-out phase, when the air flap is fully closed
- T-START** is set to 180 °C by default. Use the arrows to edit the temperature in a range 80–250 °C. Press **OK** to confirm. Choose the temperature depending on the position of the high temperature sensor. If the temperature **T-START** is not reached, the control process will not start!
- EP** is set to 0 by default. Use the arrows to edit the EP in a range of -6 to +6. Changing these values affects the start of the phase when the combustion control completely closes the air supply flap (switches to phase **Po5**, see Fig.18).

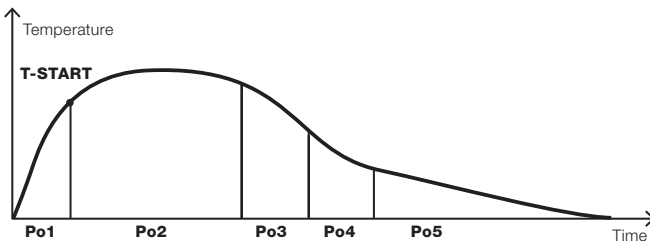


Fig. 18 // Burn curve with a picture of the individual combustion phases

If the flap closes too early, select positive values to extend the glowing phase.

If the flap closes too late, select negative values to shorten the glowing phase

5. Confirm the selected value by pressing **OK** button.
6. Select **←** and confirm with the **OK** button to return to the main menu.

6.4 Settings of the circulation pump parameters (MODULE W)



1. Choose **MODULE W** in the HOS main menu to open the circulation pump settings.

MODULE W
KP-START
KP-STOP
WT-DIFF
FT
ALARM
KPA
←

2. In the **MODULE W** menu, select:
 - **KP-START** temperature setting (fireplace heat exchanger) of the start of the circulation pump.
 - **KP-STOP** temperature setting (fireplace heat exchanger) of the stop of the circulation pump.
 - **WT-DIFF** the difference between the water temperature in the heat exchanger and the average water temperature in the accumulation tank. The circulation pump starts when the temperature in the heat exchanger is higher (of set difference) than the average temperature in the accumulation tank.
 - **FT** setting of the limit temperature in the fire chamber to start/stop the circulation pump.
 - **ALARM** setting of the percentage value (accumulation tank charge). When value reached, sound notification starts.
 - **KPA** regular start of the circulation pump function (off-season).
3. **KP-START** default set to 65 °C. Use the arrows to edit the temperature in a range 60–75 °C. Press **OK** to confirm.
4. **KP-STOP** default set to 60 °C. Use the arrows to edit the temperature in a range 50–70 °C. Press **OK** to confirm. (The device does not allow setting the KP-STOP value higher than KP-START value).



The KP START temperature value must always be at least 5°C higher than the KP STOP value. If you set KP START or KP STOP out of this range, the second (not chosen) temperature will be updated automatically in order to meet this condition.

5. **WT-DIFF** default set to 5. Use the arrows to edit the value in a range 0–10. Press **OK** to confirm.
6. **FT** default set to 65 °C. Use the arrows to edit the temperature in a range 60–100 °C. Press **OK** to confirm.
7. **ALARM** default set to 80 %. Use the arrows to change it in the range of 75–90 %. Press **OK** to confirm.
8. **KPA** default set to **ON**. Use the arrows to turn it **OFF**. If this parameter is active, the circulation pump starts once every 14 days for 3 minutes. After each restart of the device, the pump starts for 3 minutes as well.
9. Select **←** and confirm with the **OK** button to return to the main menu.

6.5 Settings of the underpressure watcher parameters (MODULE U)



1. Choose **MODULE U** in the HOS main menu to open the circulation pump settings.
2. In the **MODULE U** menu, select:

MODULE U
DELTA p
LAV
←

- **DELTA p** setting the pressure difference between the pressure in the flue gas path and the pressure in the room. If the pressure lower than **DELTA p** is reached for the time period defined by parameter **LAV**, the air ventilation is temporarily disconnected. If the pressure higher than **DELTA p** is reached for the time period defined by parameter **LAV**, the air ventilation is put back into operation.
 - **LAV** setting the time delay to switch off and turn on the ventilation device if the condition **DELTA p** is met
3. **DELTA p** – default set to 4 Pa. Use the arrows to change it in the range of 4–20 Pa. Press **OK** to confirm.
 4. **LAV** default set to 40 s. Use the arrows to change it in the range of 10–180 s. Press **OK** to confirm.
 5. Select ← and confirm with the **OK** button to return to the main menu.

6.6 Functionality test



1. Choose **TEST** in the HOS main menu to open the test settings. The **TEST** menu is only available when no other module is activated and the temperature in the fireplace unit is lower than 35 °C.

TEST
KLAPPE
KP
LA
←

2. In the **TEST** menu, select:
 - **KLAPPE** air inlet flap testing.
 - **KP** testing of the circulation pump switch.
 - **LA** testing of the ventilation device switch.
3. **KLAPPE** by selecting this option, the air flap is tested by moving the damper.
4. **KP** by selecting ON/OFF the circulation pump is turned ON/OFF.
5. **LA** by selecting ON/OFF the ventilation device is turned ON/OFF.
6. Select ← and confirm with the OK button to return to the main menu.
7. After leaving the **TEST** menu, all parameters are returned to the original values set before entering the **TEST** menu.
8. If the remote control is in **TEST** mode, it will never be put into the standby mode.

6.7 Factory settings



1. In the **RESET** menu, you can return all modules to factory settings.
2. Confirm the option with the **OK** button and your changes will be irreversibly deleted and you will be return to the main settings menu.
3. Select ← and confirm with the **OK** button to return to the main menu.



By returning to factory settings, your changes will be irreversibly deleted and you will return to the main settings menu.

7. Operating

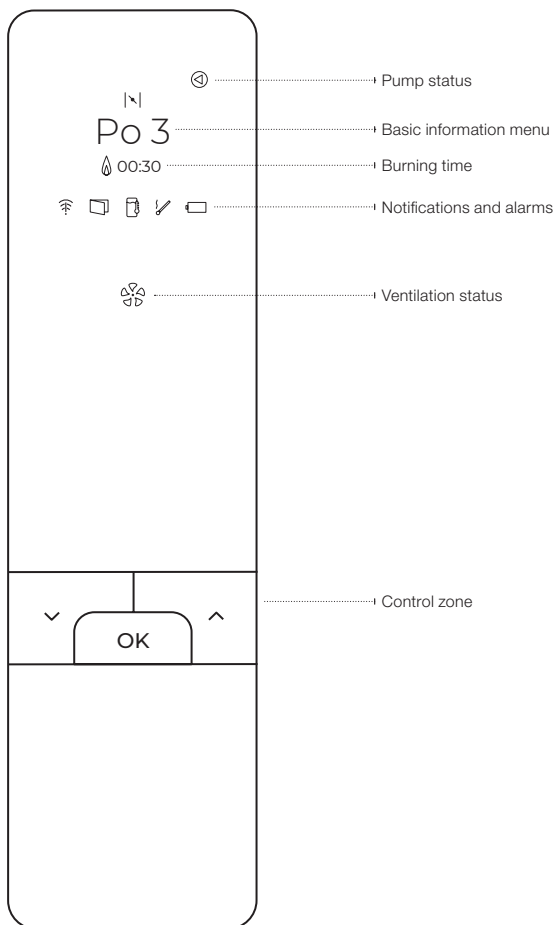
7.1 Wireless display



The wireless display consists of two parts, the upper (information) and the lower (control). Device status is displayed in the upper part of the display. The bottom of the display is touch-sensitive and is used to change the displayed information.

To turn the wireless display on, take it in your hands (motion control). When not used for 7 seconds, the display gets in the standby mode.

Fig. 19 / Wireless display



7.2 Displayed information

Circulation pump status



Pump status

If the symbol is on, the hot water circulation pump is in operation.




Basic information menu

During standard operation, the display shows the following information. Use the arrow keys to switch the information. \checkmark \wedge


150 °C

Temperature in the fire chamber

Value of the current temperature in the burning chamber measured by a high temperature sensor.

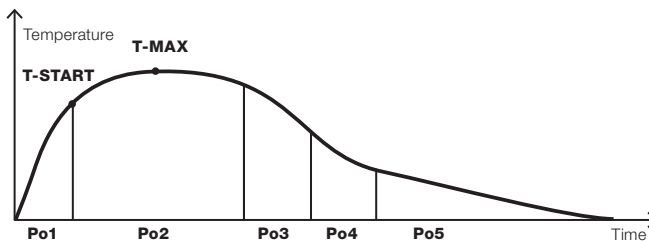

Po 3

Flap position

Shows the current position of the air inlet flap. The damper can be in any position between **Po1** (fully open air supply) and **Po5** (closed air supply). The burning curve is not fixed, but is dynamic and individually evaluated for each burning process based on the maximum achieved temperature (**T-MAX**) in phase **Po2**.



Fig. 20 / Burn curve with a picture of the individual combustion phases



- **Po1** – first position. This phase begins when the fire chamber door is opened and closed and ends when the starting temperature **T-START** is reached. The starting temperature depends on the program that is set-up.
- **Po2** – second position. The second phase begins when the starting temperature **T-START** is reached and lasts at least 15 minutes after closing the door. The maximum temperature **T-MAX** is reached in this phase.
- **Po3** – third position. This is the phase of active burning.
- **Po4** – fourth position. Phase of active burning where the air flap lets the smallest amount of air in the combustion chamber.
- **Po5** – fifth position. Phase of glowing coals without access of combustion air. The air flap is fully closed.
- **Po0** – position zero – inactive phase where the air flap is closed. The temperature in the combustion chamber is below 50°C.



The temperature in the burning chamber is monitored because of possibility of accidental combustion of the rest fuel. If accidental combustion occur, the device opens the air supply flap.



5 Pa

Pressure difference



Shows the current difference between room pressure and flue gas pressure. The purpose is to ensure sufficient supply of the appliance with combustion air and safe exhaust of combustion gas. If the minimum safe pressure difference value is not reached, the ventilation device (hood, other ventilation devices) is disconnected..



78 °C

Water temperature



Shows the current water temperature in a heat exchanger.



78 %

Water accumulation tank



Shows the current percentage charge of the accumulation tank. A tank in which the average water temperature reaches 90 °C is considered to be a 100 % charged tank.



The temperature and pressure values provided are for reference only!

Burning time

 00:30

Burning time



Shows the burning time of the appliance since the door was opened. If the appliance is in operation, this information is displayed continuously. The measurement starts when the door is closed (by connecting the door contact).

Notifications and alarms



User will be informed through following symbols in case of unexpected situation.



Signal loss

Symbol indicates a signal loss between the control unit and the display. Follow "troubleshooting" on the next page.



Opened door

Informs that the fire chamber door is open.



Overheating of the accumulation tank

The display informs about overheating of the accumulation tank. The percentage charge of the storage tank has reached the limit value and it is necessary to stop supplying additional fuel. This warning is accompanied by a wireless display beep.



Problem in making fire

If the temperature in the combustion chamber reaches 50 °C but doesn't reach the starting temperature **T-START** in 15 minutes, red symbol appears followed by an acoustic signal. The air flap remains open. If the temperature **T-START** is not reached in another 30 minutes and the temperature is below 50 °C, the air flap closes completely.



Low battery

Red symbol indicates low battery in the display unit. Please replace the batteries (2x AAA, alkaline).

Ventilation device status



Ventilation device status






The symbol lights up in white – normal status. The appliance is in operation (the combustion process is in progress) and the ventilation device is switched on. The value of the difference between the pressure in the flue gas path and the pressure in the room is at a safe level.

The symbol blinks white – the ventilation device is temporarily disconnected. The value of the difference between the pressure in the flue gas path and the pressure in the room is lower than the set values. As soon as the difference is returned to the safe value for the period specified by the **LAV**, the ventilation device will be put back into service. At this point, do not reset the device and wait until the pressure difference value returns to a safe value.

The symbol glows red – the ventilation device is permanently disconnected. The value of the pressure difference between the in the flue gas path and the pressure in the room was repeatedly (3 times in 24 hours) lower than the set values. To put the ventilation device back to the service, press the arrow keys **^** **v** and hold down the buttons together for 2 seconds. Within 24 hours, such restarts can be performed three times on the wireless display, the fourth restart must be performed physically on the control unit. On the back of the control unit, hold down the **U restart** button for three seconds. If the manual restart does not take place, the ventilation device will be automatically put into service in 24 hours.

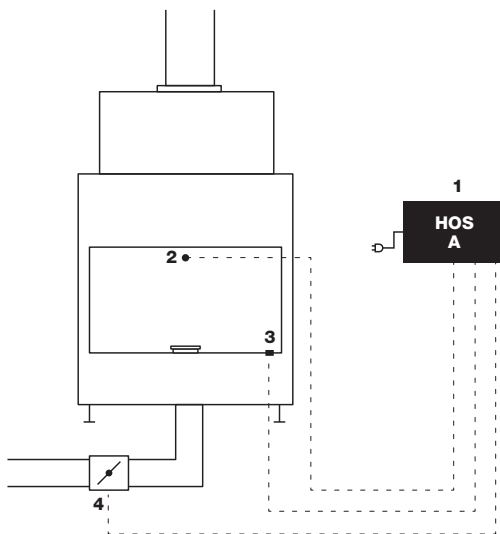
8. Troubleshooting

Affected module	Error code	Cause	Solution
A	E01 - 01	High temperature sensor error	Check the connection of the high temperature sensor. If the connection is correct, replace the sensor with a new one. Restart the control unit (press the SYS button for 3 seconds).
A	E01 - 02	Air flap initialization error	Check the connection of the air flap. If the connection is correct, replace the flap with a new one. Restart the control unit (press the SYS button for 3 seconds).
A	E01 - 03	Air flap adjustment error	Check the connection of the air inlet flap. If the connection is correct, replace the flap with a new one. Restart the control unit (press the SYS button for 3 seconds).
A	E01 - 04	EEPROM control summary error	Restart the control unit (press the SYS button for 3 seconds). If this does not work, disconnect the control unit from the power supply for 10 seconds. If that doesn't work, replace the control unit with a new one.
W	E02 - 01	Heat sensor error PT1000 - T1 / T2 / T3	Check the connection of PT1000 heat sensors. If the connection is correct and the sensors are not surely outside their measuring range (0-150 °C), replace the sensors with new ones.
W	E02 - 02	Heat sensor positioning error	Check the positions of the sensors on the accumulation tank.
W	E02 - 03	Circulation pump error	Check the connection of the circulation pump. The error is detected only when the pump is switched off. Restart the control unit (press the SYS button for 3 seconds).
W	E02 - 04	Circulation pump circuit error	Check the connection of the circulation pump. Restart of the control unit (3 seconds pressing the SYS button).
U	E03 - 01	High temperature sensor error	Check the connection of the high temperature sensor. If the connection is correct, replace the sensor with a new one. Restart the control unit of module U (3 seconds pressing the U restart button).
U	E03 - 02	Control unit MODULE U error	Restart the U module control unit (press the U restart button for 3 seconds). If this does not work, disconnect the control unit from the power supply for 10 seconds. If that doesn't work, replace the control unit with a new one.
U	E03 - 03	Ventilation device error	Check the connection of the air-conditioning switch. If the connection is correct, replace the switch with a new one. Restart the control unit of module U (3 seconds of pressing U restart button).
U	E03 - 04	MODULE U pressure sensor error	Restart the U module control unit (press the U restart button for 3 seconds). If this does not work, disconnect the control unit from the power supply for 10 seconds. If that doesn't work, replace the control unit with a new one.

Affected module	Error code	Cause	Solution
U	E03 - 05	MODULE U electronics overheating Error	Restart the U module control unit (press the U restart button for 3 seconds). If this does not work, disconnect the control unit from the power supply for 10 seconds. If that doesn't work, replace the control unit with a new one.
U	E03 - 06	EEPROM control summary error	Restart the U module control unit (press the U restart button for 3 seconds). If this does not work, disconnect the control unit from the power supply for 10 seconds. If that doesn't work, replace the control unit with a new one.
U	E03 - 07	Self-Test initialization Error	Restart the U module control unit (press the U restart button for 3 seconds). If this does not work, disconnect the control unit from the power supply for 10 seconds. If that doesn't work, replace the control unit with a new one.
U	E03 - 08	MODULE U internal communication error	Restart the U module control unit (press the U restart button for 3 seconds). If this does not work, disconnect the control unit from the power supply for 10 seconds. If that doesn't work, replace the control unit with a new one.
general error	E04-03	Unsupported product version	The control unit and wireless display are not compatible with each other. Replace one of the devices with a new one.
general error		Error - unpaired wireless display	Pair the display with the control unit (follow the chapter Pairing the display and control unit)
general error		Error - no signal	The display may be out of range of the control unit. Bring it closer to the control unit and the problem will be automatically eliminated. If not, long press the SYS button to restart the control unit.
general error		The wireless display battery is completely discharged and will be shut down soon	Replace the batteries in the display (2 x AAA alkaline)

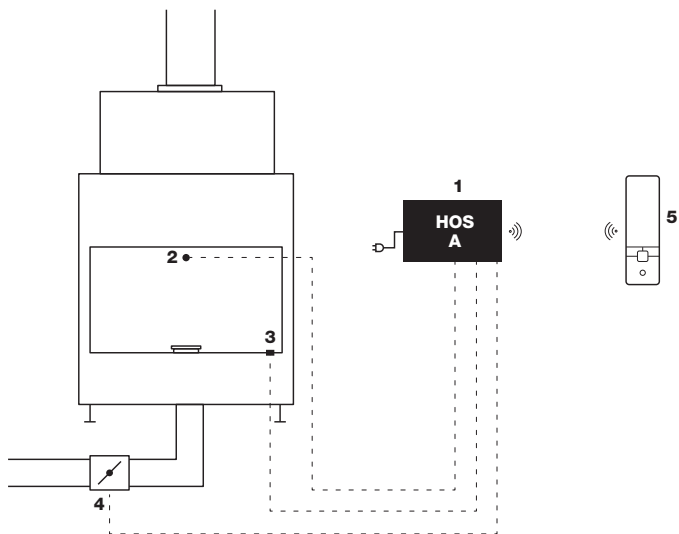
9. Wiring diagrams of HOS versions

9.1 HOS A (Electronic combustion control) without display



N.	Description
1	Control unit (incl. switch and cable 3,2 m)
2	Temperature sensor with ceramic casing (cable length 4 m)
3	Contactless door sensor (cable length 4 m)
4	Air flap according to set (cable length 5 m)

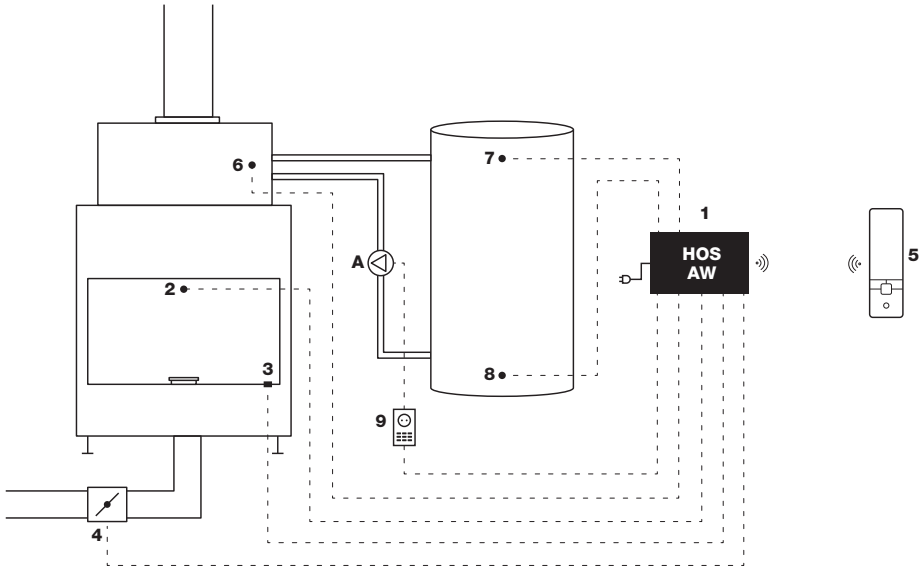
9.2 HOS A (Electronic combustion control)



N. Description

- | | |
|---|---|
| 1 | Control unit (incl. switch and cable 3,2 m) |
| 2 | Temperature sensor with ceramic casing (cable length 4 m) |
| 3 | Contactless door sensor (cable length 4 m) |
| 4 | Air flap according to set (cable length 5 m) |
| 5 | Wireless display |

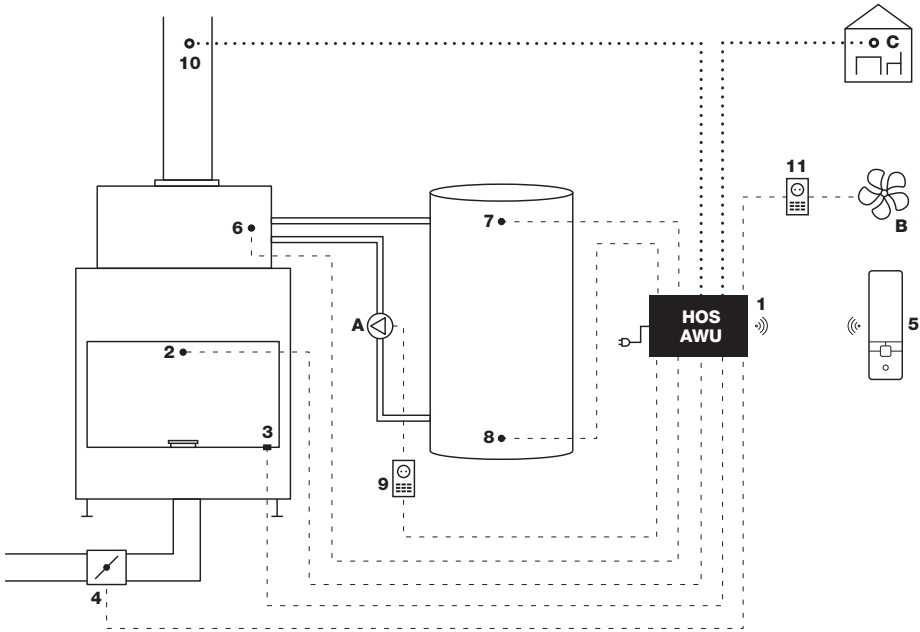
9.3 HOS AW (Electronic combustion control, Electronic primary water cycle control)



N. Description

- | | |
|---|---|
| 1 | Control unit (incl. switch and cable 3,2 m) |
| 2 | Temperature sensor with ceramic casing (cable length 4 m) |
| 3 | Contactless door sensor (cable length 4 m) |
| 4 | Air flap according to set (cable length 5 m) |
| 5 | Wireless display |
| 6 | Heat sensor PT 1000 (cable length 8 m) temperature in the exchanger |
| 7 | Heat sensor PT 1000 (cable length 8 m) accumulation tank top |
| 8 | Heat sensor PT 1000 (cable length 8 m) accumulation tank bottom |
| 9 | Socket switch for ventilation device (cable length 8 m) |
| A | Circulation pump |

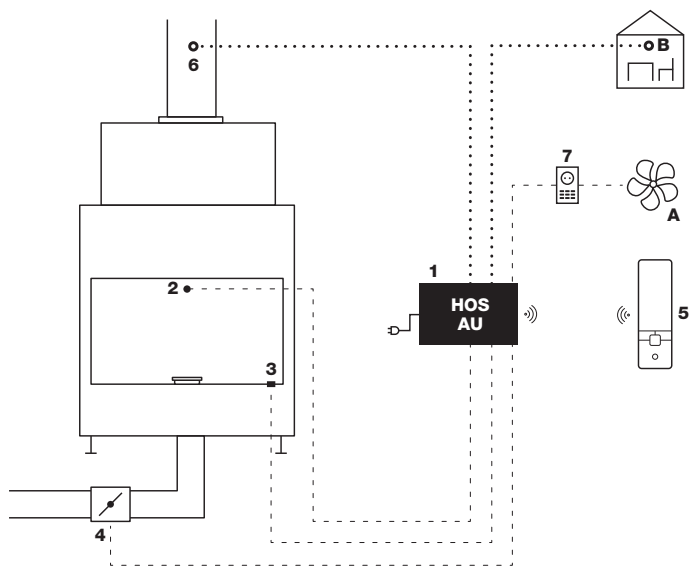
9.4 HOS AWU (Electronic combustion control, Electronic primary water cycle control, Underpressure watcher)



N. Description

1	Control unit (incl. switch and cable 3,2 m)
2	Temperature sensor with ceramic casing (cable length 4 m)
3	Contactless door sensor (cable length 4 m)
4	Air flap according to set (cable length 5 m)
5	Wireless display
6	Heat sensor PT 1000 (cable length 8 m) temperature in the exchanger
7	Heat sensor PT 1000 (cable length 8 m) accumulation tank top
8	Heat sensor PT 1000 (cable length 8 m) accumulation tank bottom
9	Socket switch for ventilation device (cable length 8 m)
10	Chimney clamp \varnothing 150-250 mm including holders for silicone tube (hose length 8 m)
11	Socket switch for ventilation device (cable length 8 m)
A	Circulation pump
B	Ventilation device
C	Room air pressure

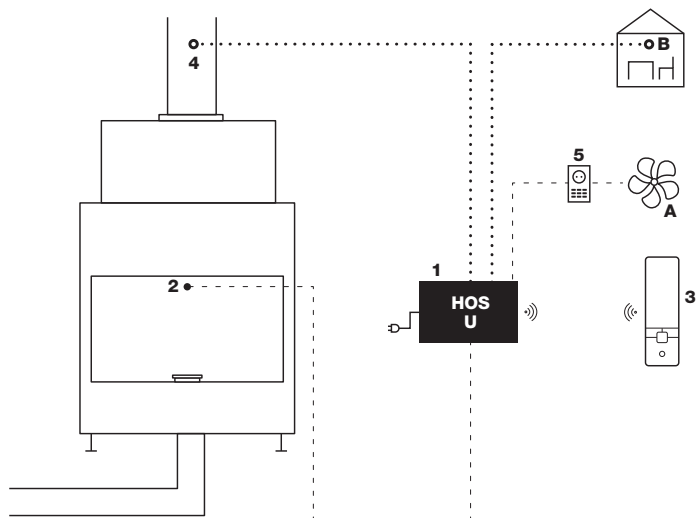
9.5 HOS AU (Electronic combustion control, Underpressure watcher)



N. Description

1	Control unit (incl. switch and cable 3,2 m)
2	Temperature sensor with ceramic casing (cable length 4 m)
3	Contactless door sensor (cable length 4 m)
4	Air flap according to set (cable length 5 m)
5	Wireless display
6	Chimney clamp $\varnothing 150\text{-}250$ mm including holders for silicone tube (hose length 8 m)
7	Socket switch for ventilation device (cable length 8 m)
A	Ventilation device
B	Room air pressure

9.6 HOS U (Underpressure watcher)



N. Description

- | | |
|---|--|
| 1 | Control unit (incl. switch and cable 3,2 m) |
| 2 | Temperature sensor with ceramic casing (cable length 4 m) |
| 3 | Wireless display |
| 4 | Chimney clamp $\varnothing 150-250$ mm including holders for silicone tube (hose length 8 m) |
| 5 | Socket switch for ventilation device (cable length 8 m) |
| A | Ventilation device |
| B | Room air pressure |

10. Warranty

The warranty period for electronic regulation HOS and its components is 24 months from the date of installation of the device. The warranty does not cover mechanical damage, damage due to exposure of components to temperatures higher than their defined maximum values and damage caused by improper handling in violation of the instructions. The installation of electronic regulation HOS must be carried out by a trained professional company. For warranty and post-warranty service, please contact the company that installed the device.

Date of installation of the device:

Company/Stove maker:

Address:

Telephone:



Company Hoxter is not responsible for damages of devices connected to HOS regulation. The prerequisite for the proper functioning of HOS is the correct functioning of all connected subcomponents.

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Stand 12/2020

M1000300

Änderungen und Irrtümer vorbehalten.