



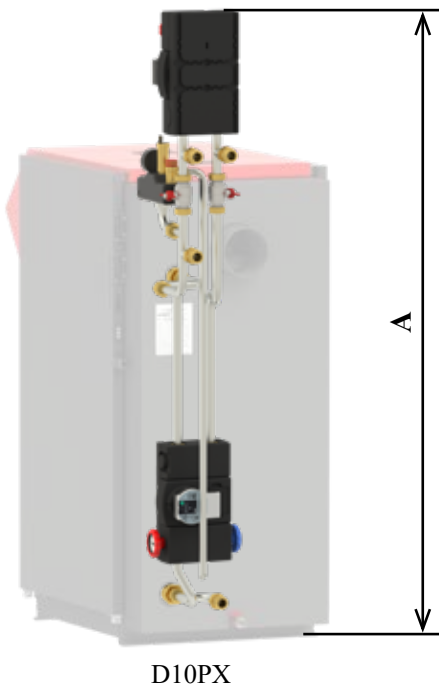
# ATMOS

## Connection for ATMOS DxxPX boilers automatic pellet boilers up to 25 kW

**Description:** Professional stainless steel connection based on  $22 \times 1.5$  mm diameter pipe, designed to maintain a minimum temperature of return water to the boiler and quickly connect the boiler using two 1" / 6/4" fittings with flat seal.

The connection includes all the necessary components required by the manufacturer (safety valve 2.5 bar, vent valve, manometer, two pumps, two shut-off valves, three-way valve).

**Info:** The connection is ready to connect the boiler directly to the heating system or to connect the boiler to accumulation tanks. In the case of a larger heating system, the connection can be extended to two or three heating circuits by purchasing a special distributor and the necessary pump group (with spacing 90 mm - 1"  $\updownarrow$  1").



### Connection

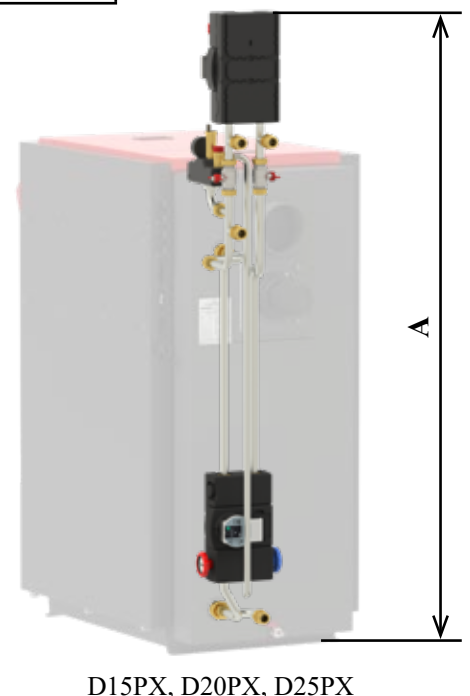
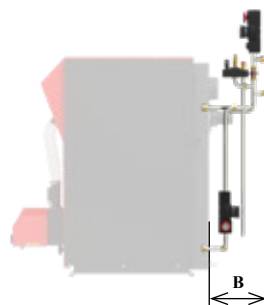
**ATMOS F15 ESBE-PX - code: P0615**  
for boilers (D10PX)

**ATMOS F16 ESBE-PX - code: P0616**  
for boilers (D15PX, D20PX, D25PX)

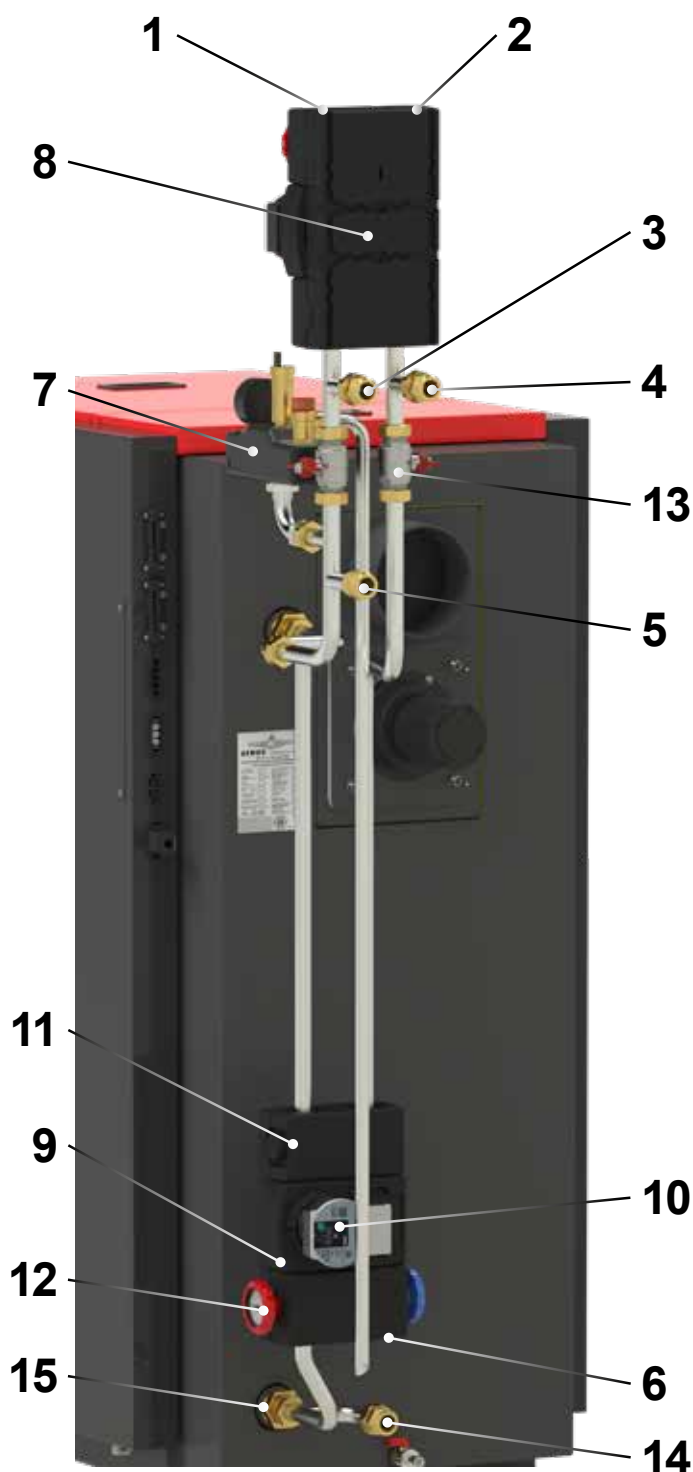
Connection type	A height	B connection depth behind the boiler
ATMOS F15 ESBE-PX	1645	461
ATMOS F16 ESBE-PX	1845	461

- dimension in mm

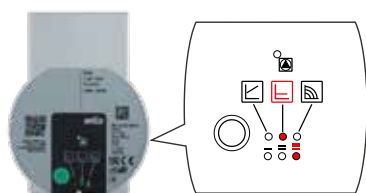
\* manifold height 124 mm



# ATMOS F15 ESBE-PX / ATMOS F16 ESBE-PX



- 1 - outlet (of hot water) to the heating system
- 2 - return from the heating system
- 3 - (hot water) inlet from the accumulation tank to the pump group of the heating circuit  
(when connecting without accumulation tank, it is necessary to block it off)
- 4 - return to the accumulation tank from the pump group of the heating circuit  
(when connecting without accumulation tank, it is necessary to block it off)
- 5 - hot water outlet from the boiler to the accumulation tank  
(when connecting without accumulation tank, it is necessary to block it off)
- 6 - return from the accumulation tank to the boiler  
(when connecting without accumulation tank, it is necessary to block it off)
- 7 - safety set (safety valve 2,5 bar, vent valve and pressure gauge)
- 8 - ESBE GRA311 circulation unit (pump group) with manually operated three-way valve for one heating circuit
- 9 - ESBE GFA321 circulation unit (pump group) with thermoregulatory valve (70 °C)
- 10 - pump in the boiler circuit  
(part of the ESBE GFA321 circulation unit)
- 11 - three-way thermoregulatory valve (70 °C)  
(part of the ESBE GFA321 circulation unit)
- 12 - ball valve with thermometer  
(part of the ESBE GFA321 circulation unit)
- 13 - ball valves for switching when connection with and without the accumulation tank  
(for flow adjustment)
- 14 - expansion tank output (1")
- 15 - nipple 1" / 6/4"



Prescribed pump setting in the boiler circuit  
**- to maximum and constant displacement height**  
 We recommend not to change it

## Accessories in the package

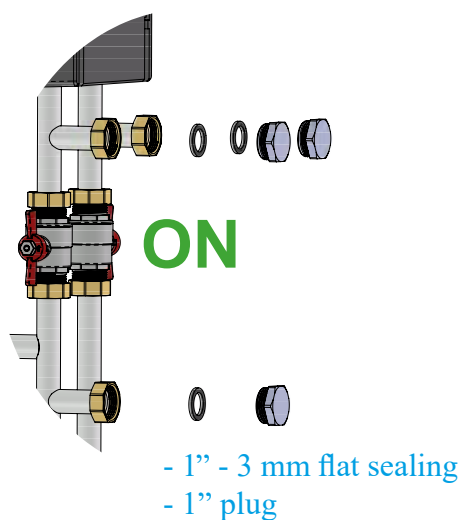
- flat sealing 1"	9 pcs
- flat sealing 3/4"	2 pcs
- plug 1"	4 pcs
- brass nut 1"	1 pc
- stainless steel sealing washer	1 pc
- insulation - Kaiflex ST19x22 - 2 m	2 pcs

# Example of connection without buffer (accumulation) tank (one heating circuit - production version)

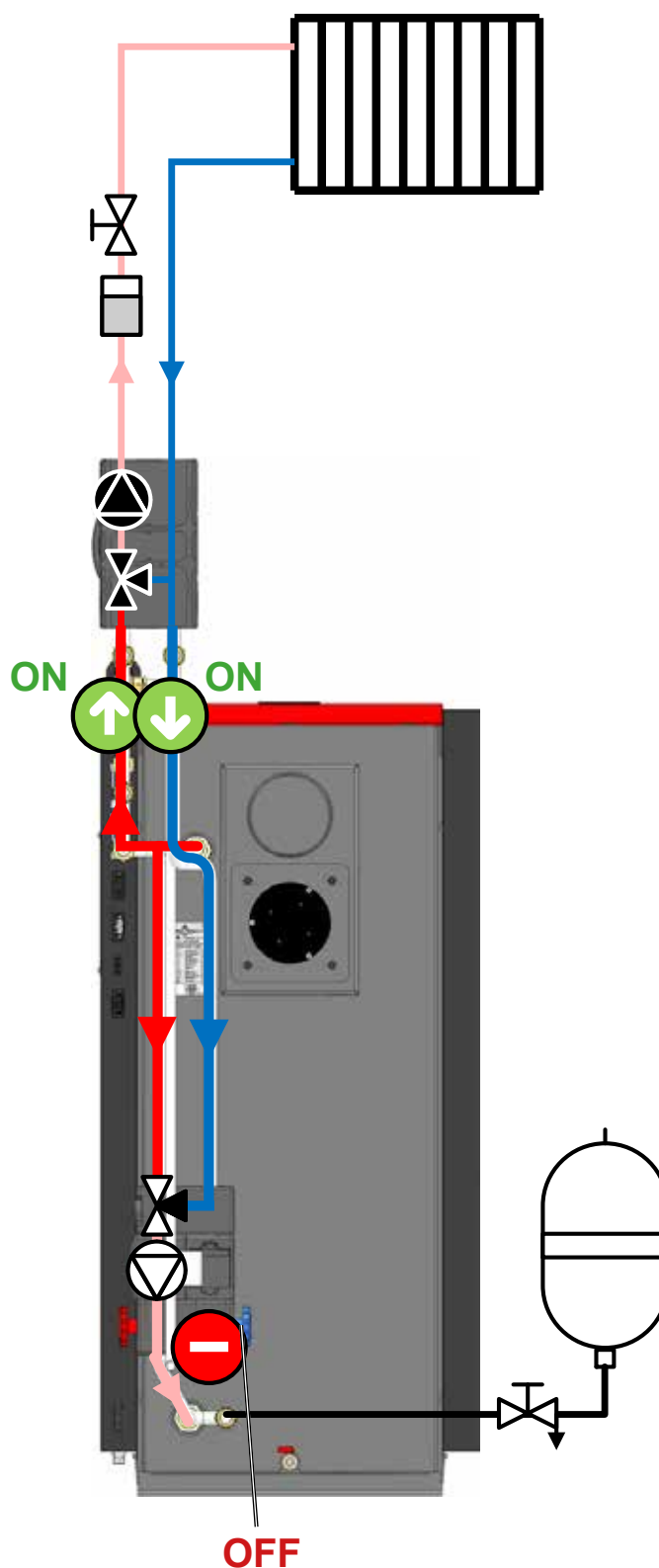
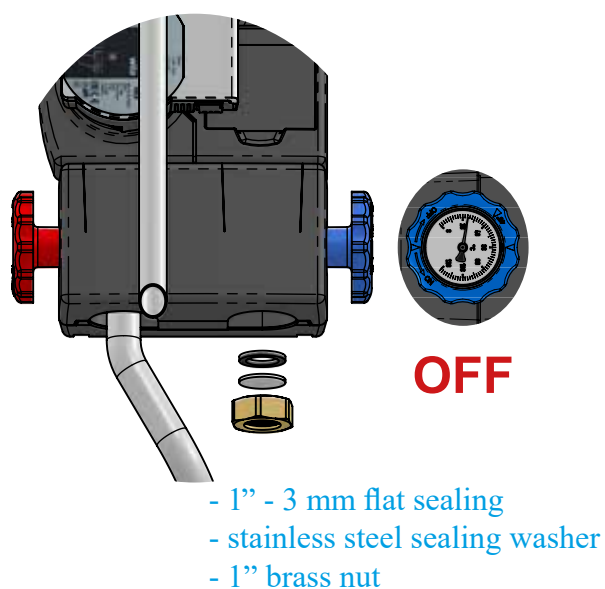
- ESBE GRA311 pump group with manually operated three-way valve - code: P0533

ATMOS F15 ESBE-PX / ATMOS F16 ESBE-PX connection - production version

Example of open ball valves  
in connection  
without buffer tank  
+  
example of blocking off outlets  
with connection  
without buffer tank



Stoppered inlet from  
the buffer tank  
+  
close valve (blue)  
on the boiler fitting



# Example of connection without buffer (accumulation) tank (one heating circuit + DHW heating circuit)

## ATMOS F15 /F16 ESBE-PX connection

- production version

### Boiler circuit

**GFA321 (code: P0509)**

(thermoregulatory 70 °C)

### Heating circuit

**GRA311 (code: P0533)**

(mixing – three-way valve without servo actuator)

Connection extended by:

**Manifold for two circuits**

**GMA321 (code: P0506)**

(spacing 90 mm, 1" ↑↓ 1")

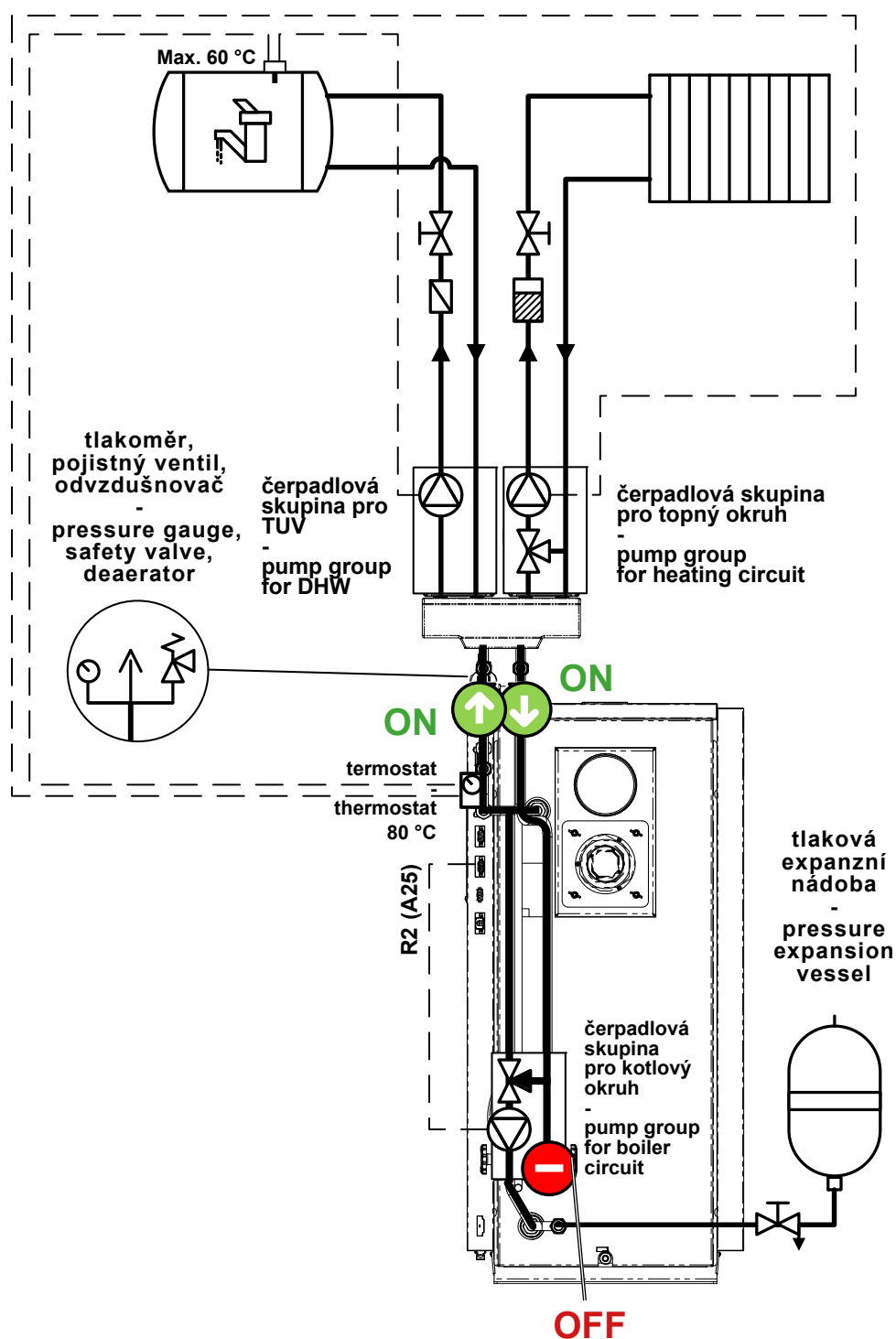
+

**Circulation unit**

- direct (for DHW)

**GDA311 (code: P0503)**

(spacing 90 mm, 1" ↑↓ 1")



# Example of connection with buffer (accumulation) tank (one heating circuit + DHW heating circuit)

ATMOS F15 ESBE-PX / ATMOS F16 ESBE-PX connection - production version

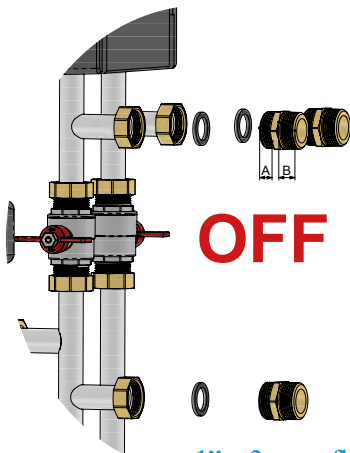
- ESBE GRA311 pump group with manually operated three-way valve - code: P0533

connection extended by:

- ATMOS ESBE GMA321 manifold (two-circuit) - code: P0506

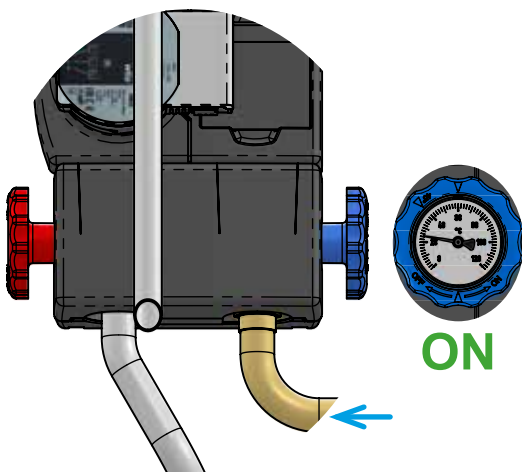
- circuit for DHW heating – ATMOS ESBE GDA311 pump group – direct - code: P0503

Example of close ball valves  
in connection  
without buffer tank  
+  
example of the outlets  
to and from the buffer tank

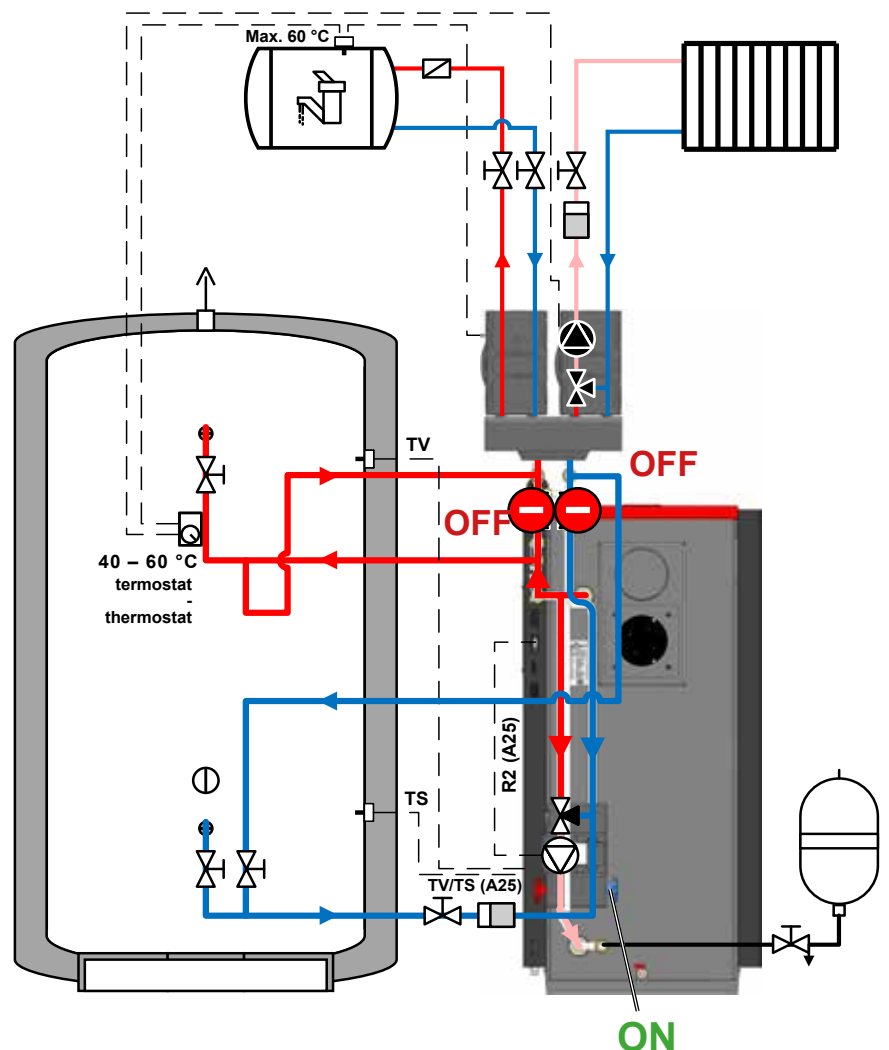


- 1" - 3 mm flat sealing  
- 1" brass nipple  
(factory fitted)

Connected inlet from  
the buffer tank  
+  
open valve (blue)  
on the boiler fitting



**Attention** – the shorter part of the thread of the nipple is intended for screwing into the swivelnut.



# Example of connection with buffer (accumulation) tank and ATMOS ACD 03 controller (two heating circuits + DHW heating circuit)

## ATMOS F15 /F16 ESBE-PX connection

- production version

### Boiler circuit

**GFA321 (code: P0509)**

(thermoregulatory 70 °C)

### Heating circuit

**GRA311 (code: P0533)**

(mixing – three-way valve without servo actuator)

## Boiler supplemented by:

**ATMOS ACD 03 controller  
with accessories (code: S0103)**

## Connection extended by:

### Manifold for three circuits

**GMA331 (code: P0507)**

(spacing 90 mm, 1" ↑↓ 1")

+

### Circulation unit

- controlled - actuator 120 s

**GRA311 (code: P0505)**

(spacing 90 mm, 1" ↑↓ 1")

+

### Circulation unit

- direct (for DHW)

**GDA311 (code: P0503)**

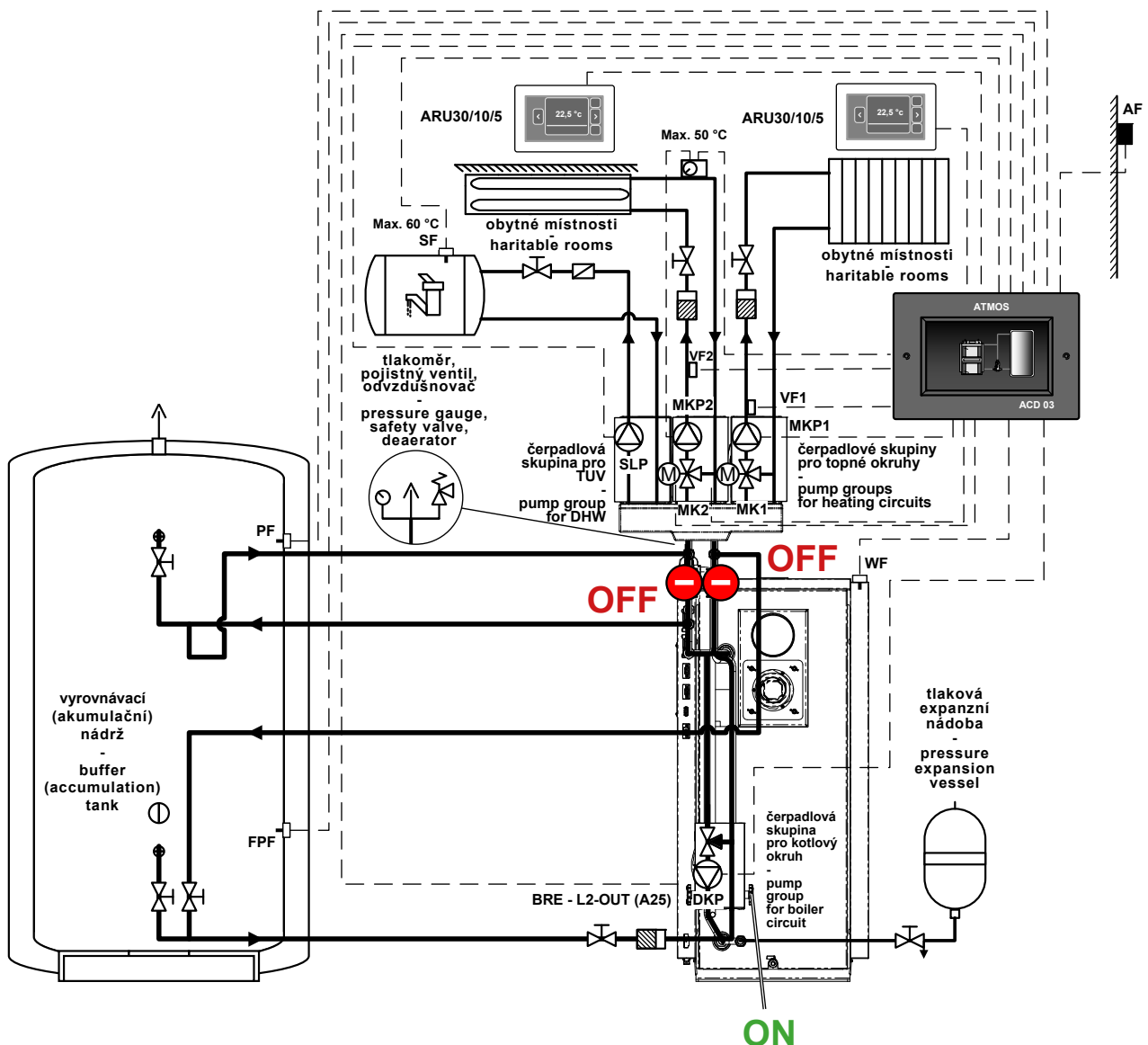
(spacing 90 mm, 1" ↑↓ 1")

+

### Servo actuator (for GRA311)

230 V - 120 s - 6 Nm

**ESBE ARA 661 (code: P0415)**



The operation of the boiler fan is controlled from the ATMOS A25 pellet burner.

# Example of connection with buffer (accumulation) tank (one heating circuit + DHW heating)

## ATMOS F15 /F16 ESBE-PX connection

- production version

### Boiler circuit

**GFA321 (code: P0509)**

(thermoregulatory 70 °C)

### Heating circuit

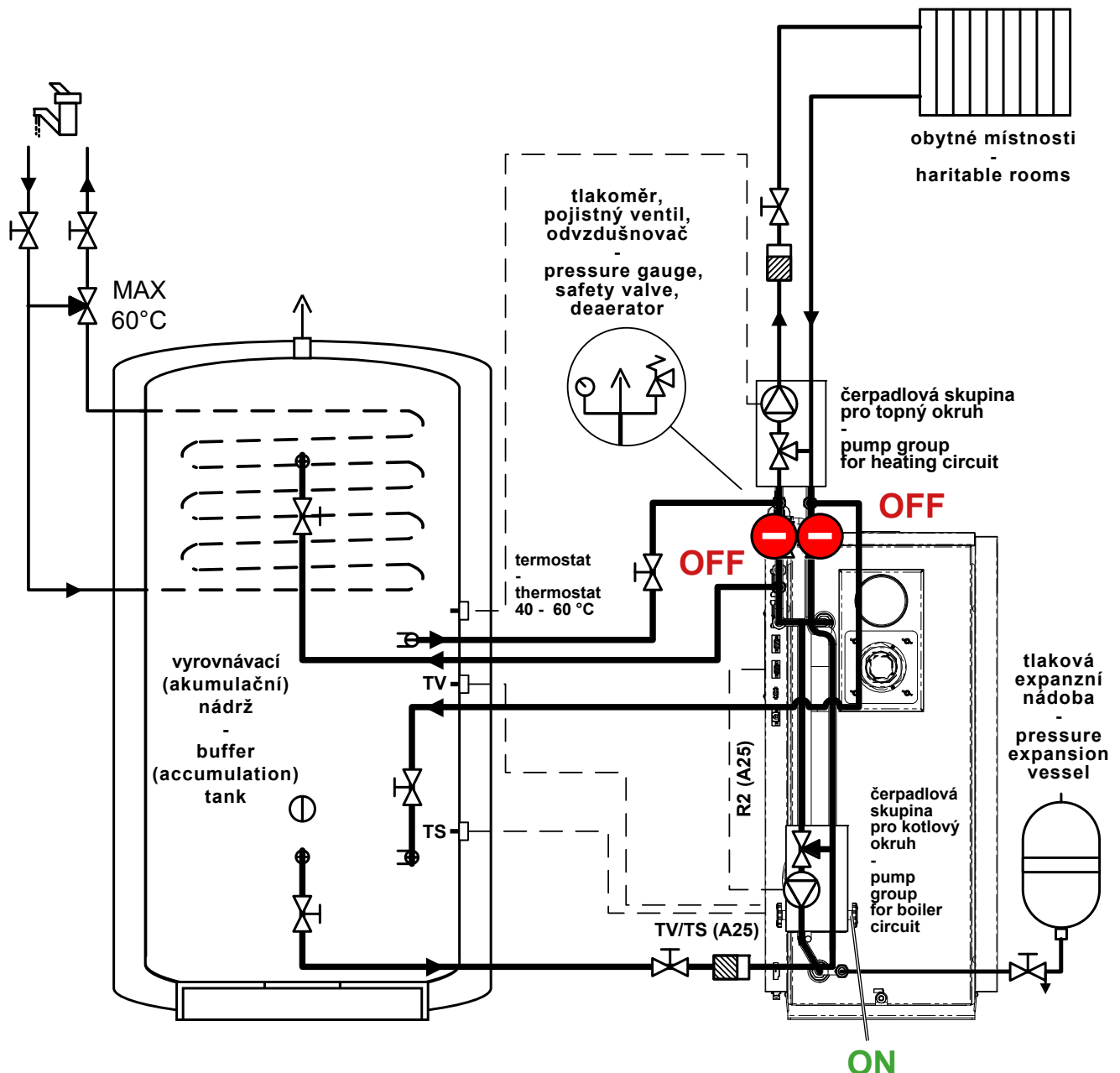
**GRA311 (code: P0533)**

(mixing – three-way valve without servo actuator)

**ATTENTION** – Connection of the accumulation tank as a hydraulic bypass (2x inlet, 2x outlet).

**ATTENTION** – DHW heating is provided by a flow exchanger (floating boiler) in the accumulation tank.

The outlet from the accumulation tank to the heating system is connected in such a way that it does not discharge the upper part of the accumulation tank for DHW heating.





# Accessories for extension of the basic connection

**Circulation unit**  
**ATMOS ESBE GRA311**  
 Controlled - actuator 120 s  
 Spacing 90 mm - 1" ↑↓ 1"  
 Recommended  
 for **radiators/underfloor heating**  
 (order code: P0505)

**Circulation unit**  
**ATMOS ESBE GFA311**  
 Thermostatic 20 - 55 °C  
 Spacing 90 mm - 1" ↑↓ 1"  
 Recommended  
 for **underfloor heating**  
 (order code: P0504)

**Circulation unit**  
**ATMOS ESBE GDA311**  
 Direct  
 Spacing 90 mm - 1" ↑↓ 1"  
 Recommended  
 for **domestic hot water**  
 (order code: P0503)



**Manifold for three  
 circulation units  
 (three circuits)**  
**ATMOS ESBE GMA331**  
 Spacing 90 mm - 1" ↑↓ 1"  
 (order code: P0507)

**Circulation unit**  
**ATMOS ESBE GRA311**  
 Mixing  
 Spacing 90 mm - 1" ↑↓ 1"  
 Recommended  
 for **radiators**  
 (order code: P0533)

**Circulation unit**  
**ATMOS ESBE GFA311**  
 Thermostatic 20 - 55 °C  
 Spacing 90 mm - 1" ↑↓ 1"  
 Recommended  
 for **underfloor heating**  
 (order code: P0504)



**Manifold for two  
 circulation units  
 (two circuits)**  
**ATMOS ESBE GMA321**  
 Spacing 90 mm - 1" ↑↓ 1"  
 (order code: P0506)

**Servo actuator**  
**ESBE ARA 661**  
 230 V - 120 s - 6 Nm  
 (order code: P0415)

