



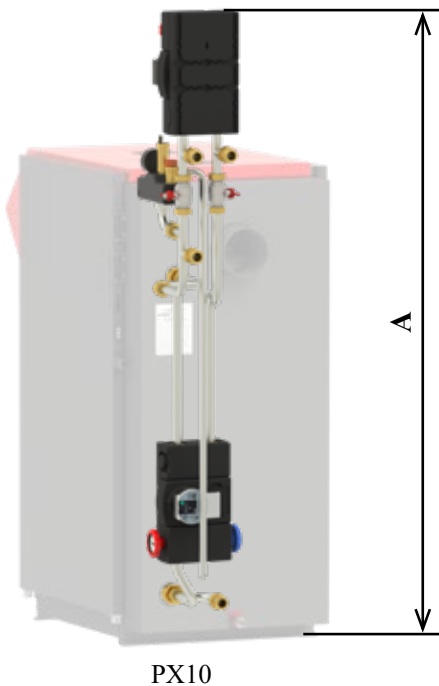
ATMOS

Connection for ATMOS PXxx boilers automatic pellet boilers up to 25 kW

Description: Professional stainless steel connection based on 22×1.5 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

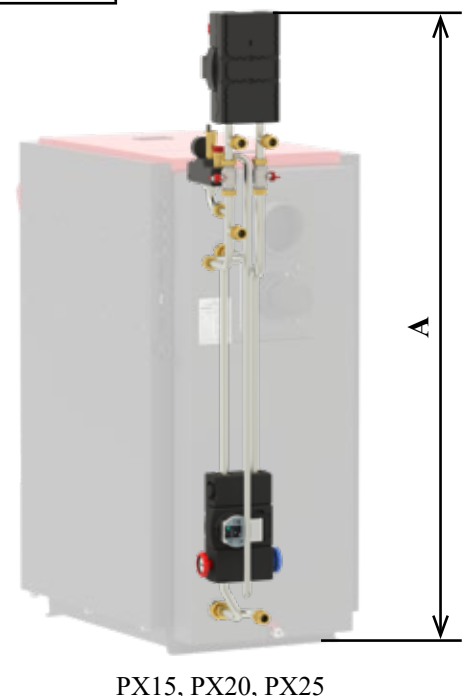
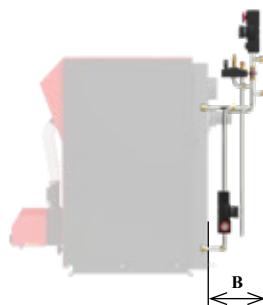
ATMOS F17 ESBE-PX - code: P0617
for boilers (PX10)

ATMOS F18 ESBE-PX - code: P0618
for boilers (PX15, PX20, PX25)

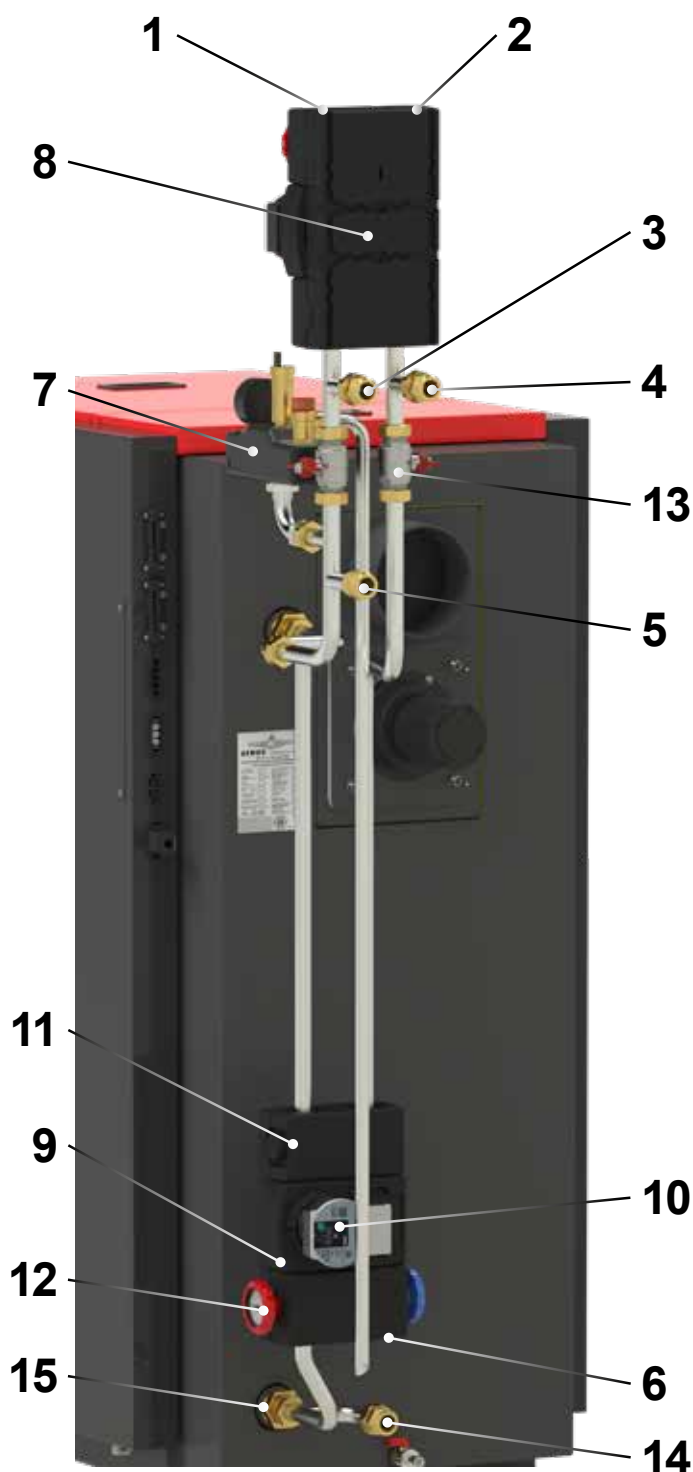
Connection type	A height	B connection depth behind the boiler
ATMOS F17 ESBE-PX	1645	461
ATMOS F18 ESBE-PX	1845	461

- dimension in mm

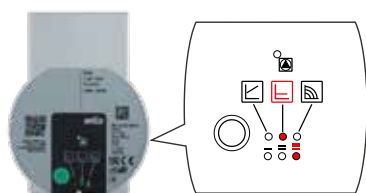
* manifold height 124 mm



ATMOS F17 ESBE-PX / ATMOS F18 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

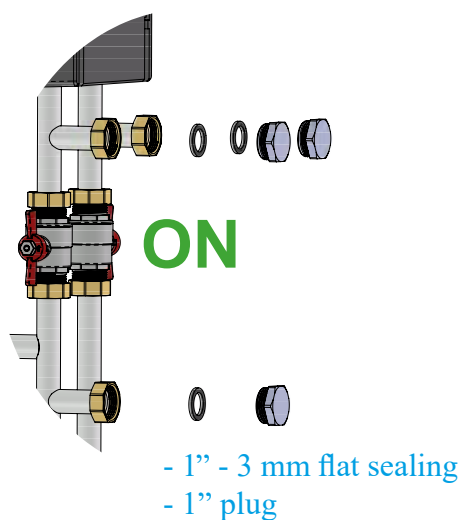
- flat sealing 1"	9 pcs
- flat sealing 3/4"	2 pcs
- plug 1"	4 pcs
- brass nut 1"	1 pc
- stainless steel sealing washer	1 pc
- insulation - Kaiflex ST19x22 - 2 m	2 pcs

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

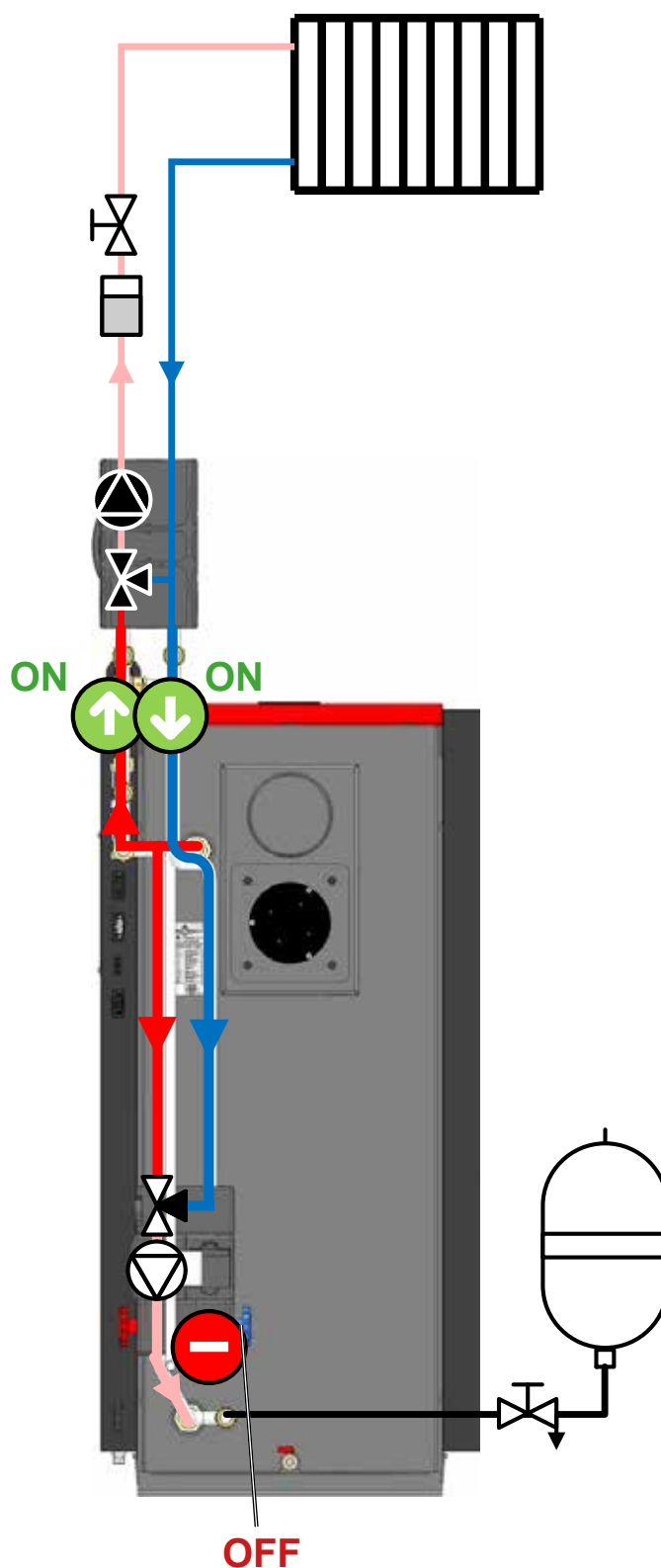
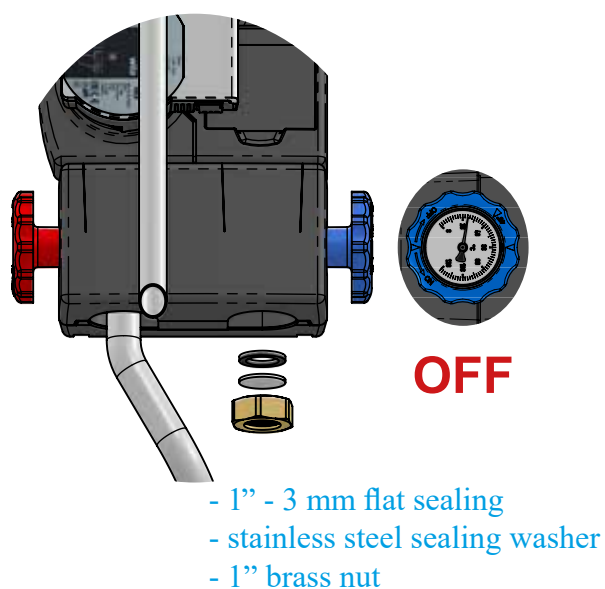
- ESBE GRA311 pump group with manually operated three-way valve - code: P0533

ATMOS F17 ESBE-PX / ATMOS F18 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 F17 /F18 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")

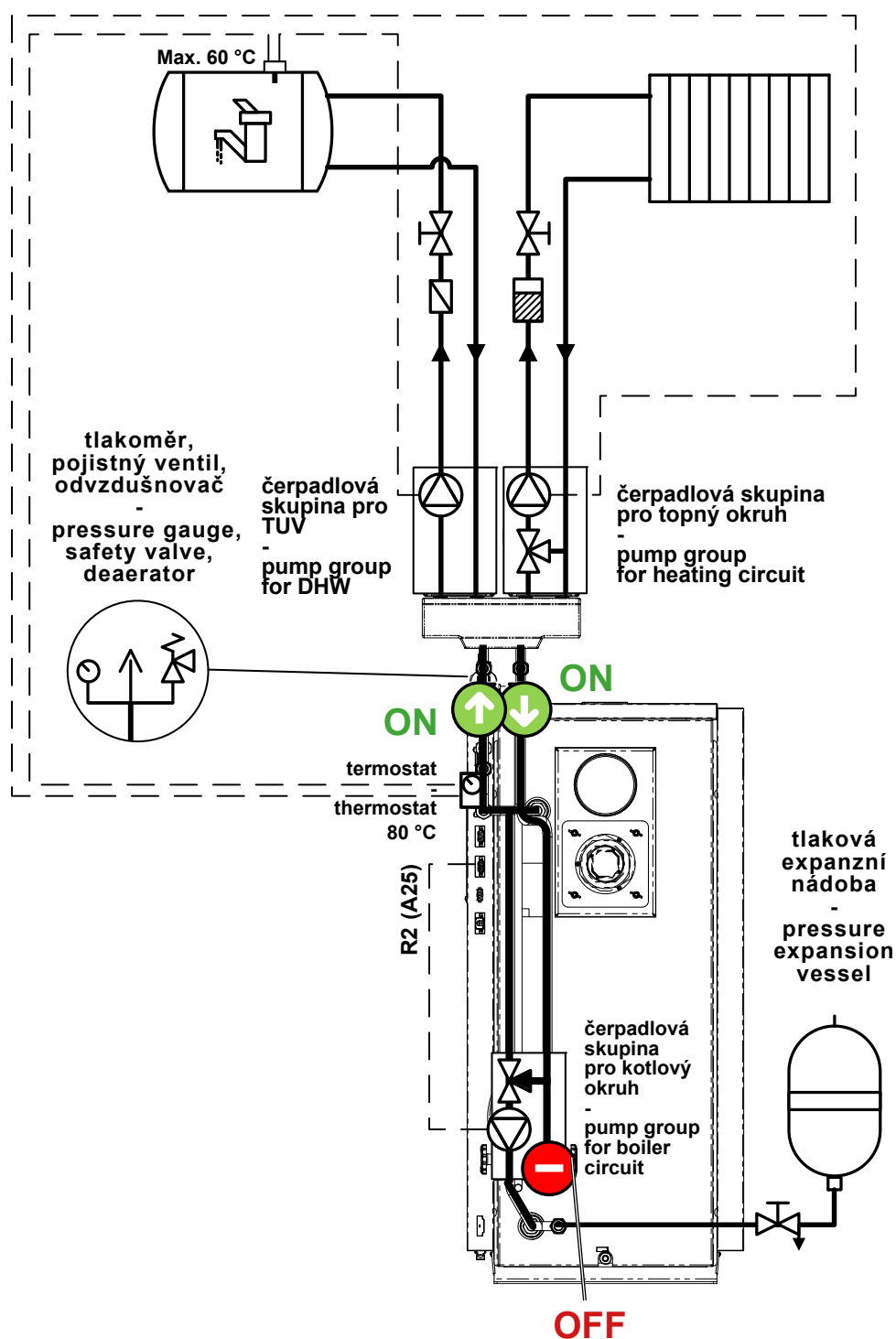
+

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 F17 ESBE-PX / ATMOS F18 ESBE-PX connection - production version

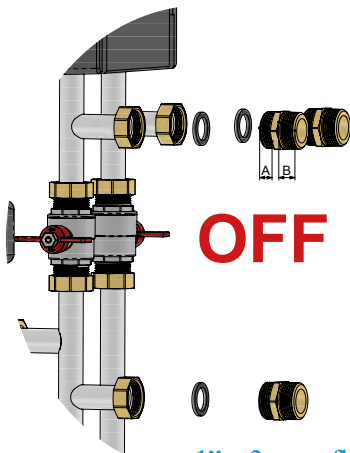
- ESBE GRA311 pump group with manually operated three-way valve - code: P0533

connection extended by:

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

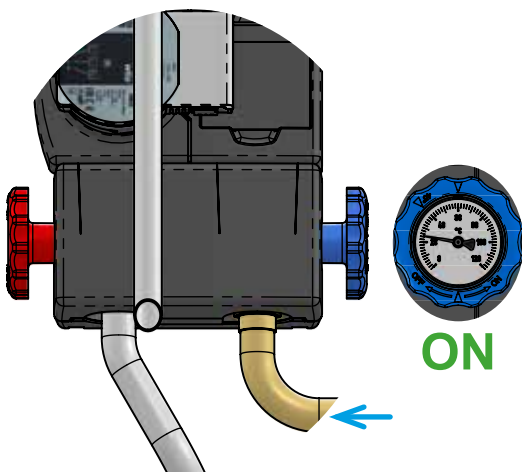
- circuit for DHW heating – ATMOS ESBE GDA311 pump group – direct - code: P0503

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

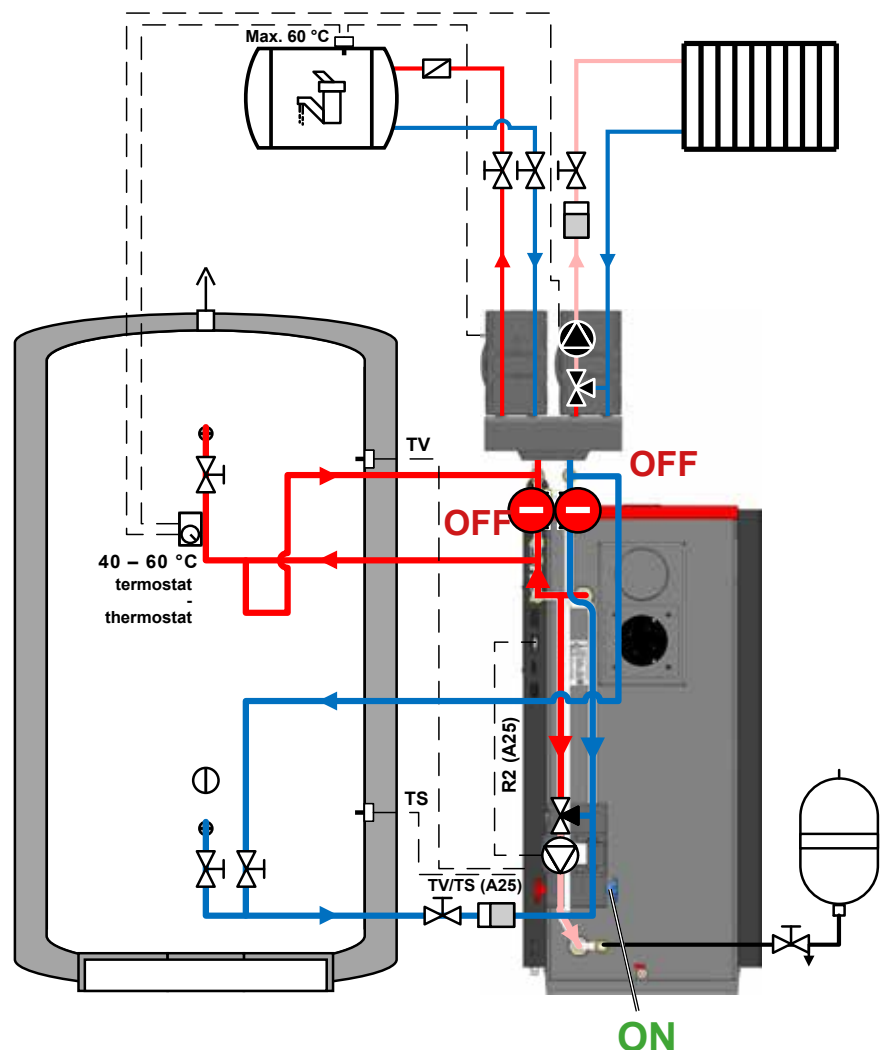


- 1" - 3 mm flat sealing
- 1" brass nipple
(factory fitted)

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 F17 /F18 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)

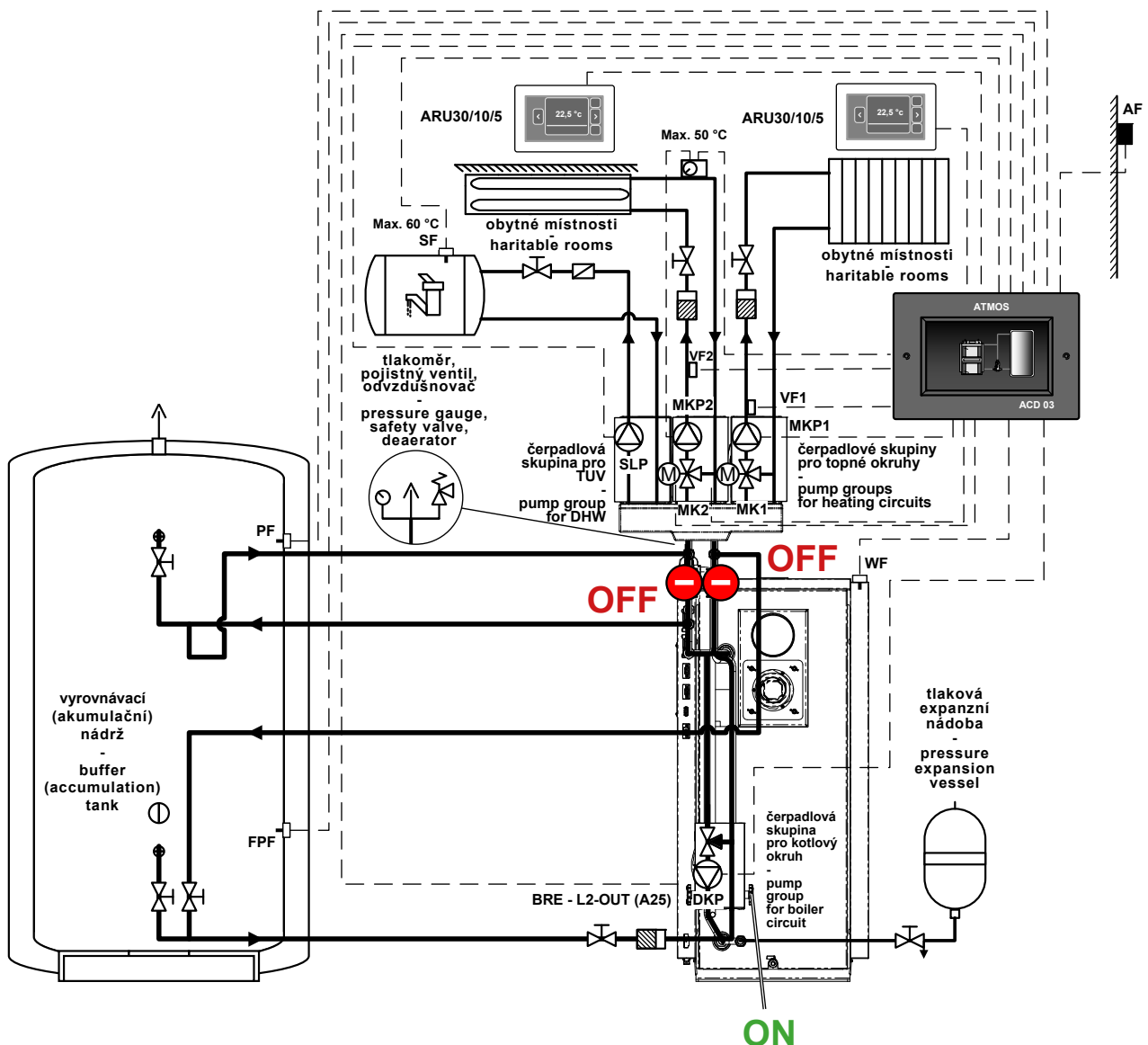
(spacing 90 mm, 1" ↑↓ 1")

+

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 F17 /F18 ESBE-PX connection

- production version

Boiler circuit

GFA321 (code: P0509)

(thermoregulatory 70 °C)

Heating circuit

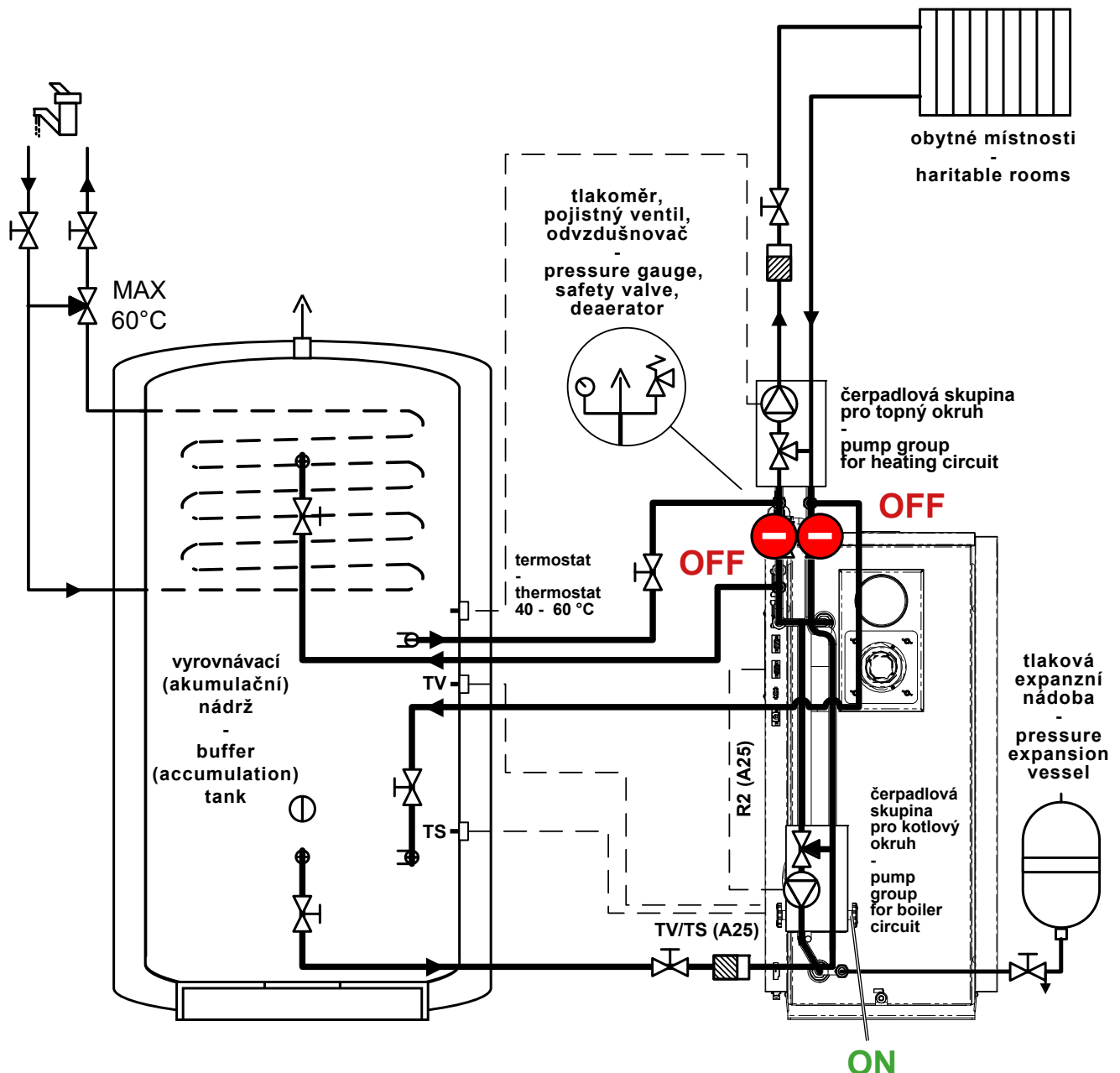
GRA311 (code: P0533)

(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)

