3.11 Examples of installations

Example of installation 1:
HV unit with combi buffer tank up to 1000 l, underfloor heating, solar thermal system and fireplace.

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
      - Interrupt HP release via external relay circuit in the case of fireplace operation
      - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
      - Do NOT interrupt HP release via external relay circuit
      - Switch on HP circulating pump as described in 1.

Shut-off valve
Shut-off valve with check valve
Shut-off valve with draining
Circulating pump
2-way valve with actuator
3-way switch valve with actuator
3-way mixer with motor
Domestic water mixer with thermostat (if solar/fireplace)
Expansion tank with safety valve
Safety valve

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers. No claim is made that the diagram is complete.

Subject to errors and changes without notice. All data are approximate values!

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Example of installation 2:
HV unit with combi buffer tank from 1000 l, underfloor heating, solar thermal system and fireplace.

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
      - Interrupt HP release via external relay circuit in the case of fireplace operation
      - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
      - Do NOT interrupt HP release via external relay circuit
      - Switch on HP circulating pump as described in 1.

- Shut-off valve
- Shut-off valve with check valve
- Shut-off valve with draining
- Circulating pump
- 2-way valve with actuator
- 3-way switch valve with actuator
- 3-way mixer with motor
- Domestic water mixer with thermostat (if solar/fireplace)
- Expansion tank with safety valve
- Safety valve

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers. No claim is made that the diagram is complete.

Subject to errors and changes without notice. All data are approximate values!
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Example of installation 3:
HV unit mit buffer tank, domestic hot water tank, underfloor heating, solar thermal system and fireplace.

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
       - Interrupt HP release via external relay circuit in the case of fireplace operation
       - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
       - Do NOT interrupt HP release via external relay circuit
       - Switch on HP circulating pump as described in 1.

Shut-off valve
Shut-off valve with check valve
Shut-off valve with draining
Circulating pump
2-way valve with actuator
3-way switch valve with actuator
3-way mixer with motor
Domestic water mixer with thermostat (if solar/fireplace)
Expansion tank with safety valve
Safety valve

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers. No claim is made that the diagram is complete.

Subject to errors and changes without notice. All data are approximate values!

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Example of installation 4:
HV unit with pressureless combi buffer tank, underfloor heating, solar thermal system and fireplace.

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
   - Interrupt HP release via external relay circuit in the case of fireplace operation
   - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
   - Do NOT interrupt HP release via external relay circuit
   - Switch on HP circulating pump as described in 1.

Shut-off valve
Shut-off valve with check valve
Shut-off valve with draining
Circulating pump
2-way valve with actuator
3-way switch valve with actuator
3-way mixer with motor
Domestic water mixer with thermostat (if solar/fireplace)
Expansion tank with safety valve
Safety valve

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers.
No claim is made that the diagram is complete.
4.10 Examples of installations

Example of installation 5:
Air-to-water heat pump with combi buffer tank up to 1000 l, underfloor heating, solar thermal system and fireplace

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
      - Interrupt HP release via external relay circuit in the case of fireplace operation
      - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
      - Do NOT interrupt HP release via external relay circuit
      - Switch on HP circulating pump as described in 1.

Shut-off valve
Shut-off valve with check valve
Shut-off valve with draining
Circulating pump
2-way valve with actuator
3-way switch valve with actuator
3-way mixer with motor
Domestic water mixer with thermostat (if solar/fireplace)
Expansion tank with safety valve
Safety valve

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers. No claim is made that the diagram is complete.
Example of installation 6:
Air-to-water heat pump with combi buffer tank from 1000 l, underfloor heating, solar thermal system and fireplace

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
      - Interrupt HP release via external relay circuit in the case of fireplace operation
      - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
      - Do NOT interrupt HP release via external relay circuit
      - Switch on HP circulating pump as described in 1.

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers. No claim is made that the diagram is complete.
Example of installation 7:
Air-to-water heat pump with buffer tank, domestic hot water tank, underfloor heating and solar thermal system
and fireplace

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
       - Interrupt HP release via external relay circuit in the case of fireplace operation
       - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
       - Do NOT interrupt HP release via external relay circuit
       - Switch on HP circulating pump as described in 1.

Shut-off valve
Shut-off valve with check valve
Shut-off valve with draining
Circulating pump
2-way valve with actuator
3-way switch valve with actuator
3-way mixer with motor
Domestic water mixer with thermostat (if solar/fireplace)
Expansion tank with safety valve
Safety valve

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers. No claim is made that the diagram is complete.

Subject to errors and changes without notice. All data are approximate values!
Example of installation 8:
Air-to-water heat pump with pressureless combi buffer tank, underfloor heating, solar thermal system and fireplace

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers.

No claim is made that the diagram is complete.

NOTES fireplace:
1. Combustion air supply independent of room air.
2. Note on approval of heat pump and control system of the circulating pump - heat pump:
   2.1 If the heating capacity of the fireplace is sufficient:
       - Interrupt HP release via external relay circuit in the case of fireplace operation
       - Provide HP circulating pump(s) with external voltage supply and switch on via external relay circuit. At the relay circuit the release by the fireplace and parallel to this the release by the heat pump is to be performed with the HP circulating pump output of the control system.
   2.2 If the heating capacity of the fireplace is NOT sufficient:
       - Do NOT interrupt HP release via external relay circuit
       - Switch on HP circulating pump as described in 1.

Shut-off valve
Shut-off valve with check valve
Shut-off valve with draining
Circulating pump
2-way valve with actuator
3-way switch valve with actuator
3-way mixer with motor
Domestic water mixer with thermostat (if solar/fireplace)
Expansion tank with safety valve
Safety valve

Design and safety devices corresponding to technical rules and the installation instructions of the manufacturers.
No claim is made that the diagram is complete.

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We will be happy to advise you.