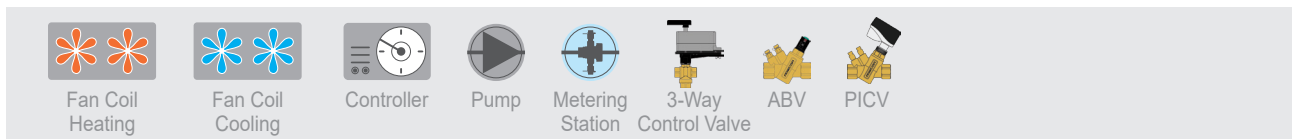
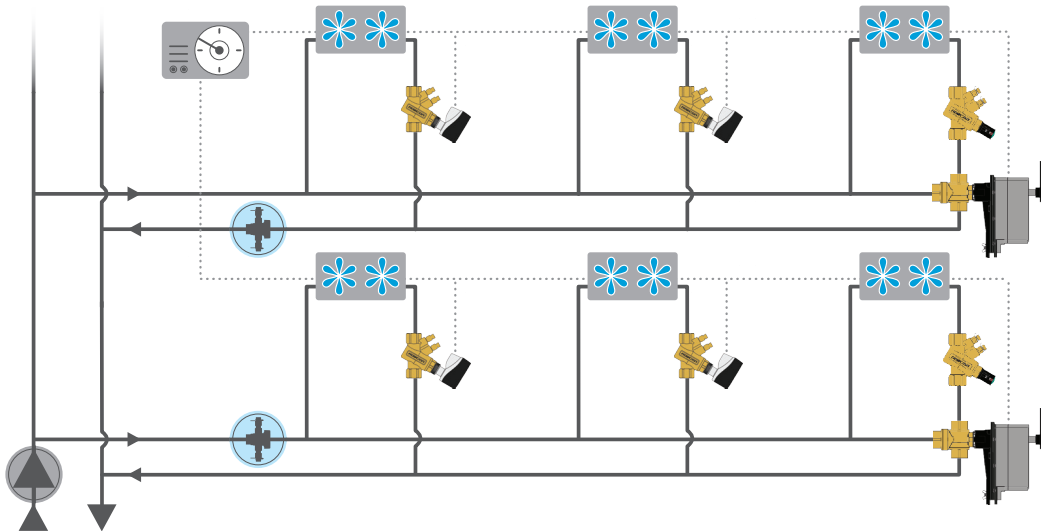


# System By-Pass - System End

## with Automatic Balancing



### System Functionality:

System end by-pass incl. a 3-way control valve and an Automatic Balancing Valve (ABV) at each end of line. During full load, the 3-way valves by-pass will be fully closed allowing all water through the last terminal unit on the branch. Once the load reduces at the last terminal unit, the control valve will divert flow from the thermal unit into the by-pass line ensuring flow in the branch, even at reduced loads. This will ultimately protect the pump and prevent local pressure build up. With flow through the terminals, Pressure Independent Control Valves (PICVs) will balance and control all terminals except the end of line terminal, which will be installed with an ABV securing against overflow at full load and the 3-way valve guaranteeing constant min. circulation.

### Requirements:

An ABV will react to system pressure changes and limit the flow to required max. flow helping the system to be accurately controlled even with pressure changes.

### Solutions:

The solution is to mount a 3-way control valve together with an ABV at each system end to allow system by-pass and FlowCon offers:

- FlowCon E-JUST (adjustable insert)
- FlowCon Composite (adjustable insert)
- FlowCon Unimizer®.

### Benefits:

- Assures no overflow in the system
- An easy-to-use solution
- Adjustable insert solution providing high flexibility and easy maintenance
- Energy efficiency with regulation starting at only 15 kPaD
- Range of parabolic flow inserts available for each Unimizer® size - True equal% flow characteristics
- Allows high close-off pressure
- A proven technology - long life expectancy.

