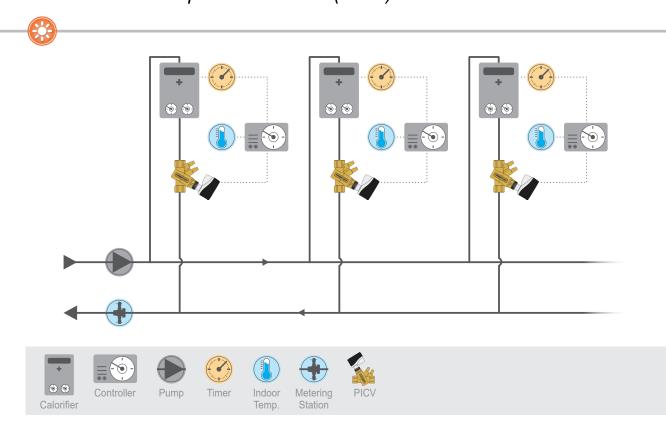


Calorifiers with Pressure Independent Control (PICV)



System Functionality:

A calorifier is basically a heating fan with a built-in coil. In this simple construction, air is heated indirectly by blowing over the heating coil and heat is thermally transferred. The heated air will heat the room and can be adjusted in temperature, blow direction and air velocity. Without proper balance and control, flow rates will fluctuate as pressure fluctuates with the result of increased energy consumption. This can be prevented by installing a PICV on every calorifier. PICVs will help maintain correct flow rate at any time of operation and significantly reduce energy consumption.

Requirements:

The PICV will react to system pressure changes and regulated the flow of hot water to required flow by adjusting the actuator position. This helps the calorifier to be accurately controlled even with pressure changes and at reduced loads.

Solutions:

The solution is to mount a PICV on every single unit and FlowCon offers:

- FlowCon Green / GreEQ (adjustable insert)
- FlowCon UniQ[®] (built-in regulation unit).

Benefits:

- Assures correct flow for each unit automatically also at partial loads securing optimal comfort
- Serviceable insert-design solution (Green / GreEQ)
- Energy efficiency with regulation starting at only 10 $k\text{PaD}~(\text{Uni}\text{Q}^{\circledast})$
- Flexible solution with min. 41 different max. flow settings
- Electrical actuators with selectable control mode, linear or equal% or alternatively thermal ON/OFF actuators
- Cost savings due to reduced commissioning time
- True PICVs 100% authority and pressure independency at all flow rates with accurate actuator control.

