

Convectors

with Pressure Independent Control (PICV)



System Functionality:

Convectors generate heat by drawing cold air in at the bottom and letting it pass the inner hot pipe with fins in order to heat up the air before it leaves from the top. Without proper balance, convectors will either experience overflow or underflow and consequently not deliver the right temperature resulting in human discomfort. Balance can be achieved by installing a Pressure Independent Control Valve (PICV) on each convector. PICVs will help maintain correct flow rate, eliminating noise 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 at all times to secure a steady flow and consequently better indoor temperature control.

Solutions:

The solution is to mount a PICV on every convector 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 stepless setting to minimum 41 defined max. flows
- 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.

