

# Heat Exchanger - Variable flow with Pressure Independent Control (PICV)



## **System Functionality:**

A heat exchanger is a device that transfers heat from one fluid to another without mixing the two. The main function of a heat exchanger is to increase the energy efficiency of a heating or cooling system by transferring heat and thereby reducing energy costs. Proper balancing and flow control can assist in exactly this and by installing a Pressure Independent Control Valve (PICV) on each heat exchanger, correct flow rate at any time of operation is maintained resulting in significantly reduced energy consumption.

### **Requirements:**

The PICV will react to system pressure changes and regulated the flow of hot or chilled water to required flow by adjusting the actuator position. This helps the Heat Exchanger to maintain correct flow providing proper system control at all times.

### Solutions:

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

- FlowCon Green.3
- FlowCon SM.

#### **Benefits:**

- Assures correct flow for each unit automatically also at partial loads
- Flexible solution with minimum 41 different max. flow settings
- Electrical actuators with selectable control mode, linear or equal%
- Energy efficient due to optimized control
- Cost savings due to reduced commissioning time
- True PICVs 100% authority and pressure independency at all flow rates with accurate actuator control.

