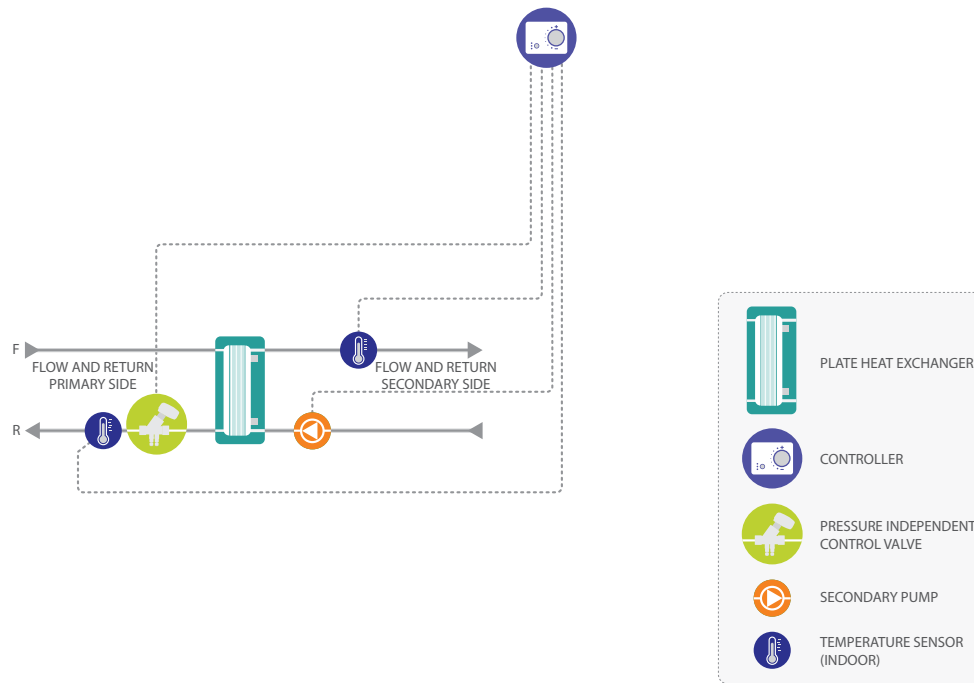


Plate Heat Exchanger with PICV control



Function

The primary function of the PICV is to control the water inlet temperature on the secondary side.

To secure the water outlet temperature on the primary side a sensor is placed here.

The balance and the full modulating control on the primary side is made by the PICV with a modulating actuator.

When the controller calls for higher or lower temperature on the water inlet on the secondary side, the PICV valve opens or closes to allow heating or cooling water from the primary side to enter the plate heat exchanger. The temperature on the secondary side then changes to the desired temperature.

Benefits

- The PICV ensures balancing of the primary flow and eliminates the use of both static balancing valves and differential pressure control valves.
- Full modulation with an authority of 1 for the plate heat exchanger control.
- Return temperature on the primary side is secured.
- Secondary pump is switched off when no demand.

Considerations

- Minimum differential pressure required for the PICV must be available at design flow.

