

ENGINEERING TOMORROW

Minimise overheating and save energy in your apartment building

Application for staircase and bathroom risers





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With thermostatic radiator valves (TRV) building residents are able to control the temperature in each individual room to optimise indoor comfort and achieve energy savings. When these valves are not installed in staircases or other shared areas in an apartment building this can cause overheating. Similarly special type of bathroom risers like candle risers are not equipped with individual TRV's what causes the same phenomenon.

With our latest AB-QT innovation, we can prevent overheating and make sure that the heating system will be optimised by providing only the needed flow. This results in significant lower energy consumption and costs savings.

Your challenge

Staircases of apartment buildings are often difficult areas to control in terms of temperature. Most of the time there are no TRV's installed, doors open and close very often, and warmth will rise to the highest floor. A typical problem is a partial load situation. When TRV's in other areas in the building close, water flow in pipes is reduced and thus the available pressure increases. However, without TRV's on staircase- and bathroom radiators to react, there is nothing to prevent significant overflows and result is overheating of staircases and bathrooms. These risers effectively become a by-pass. This leads to a great deal of energy waste and high energy bills.

Our solution

With our self-acting thermostatic solution (AB-QT) you can dynamically optimise the balance of your entire heating system, based on return water temperature control, including the staircases and bathrooms. By installing automatic balancing and control valves (AB-QM) in staircase risers it will be easy to balance riser flows. Additionally, setting the needed flow on AB-QM is fast, easy and accurate. On top of the AB-QM a thermostatic actuator (QT) will be placed. It measures the return temperature in this riser and will automatically adapt the flow in the system. The flow reduction lowers the return flow temperature and makes the installation more energy efficient.



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