Injection regulation
Air-heater exchanger

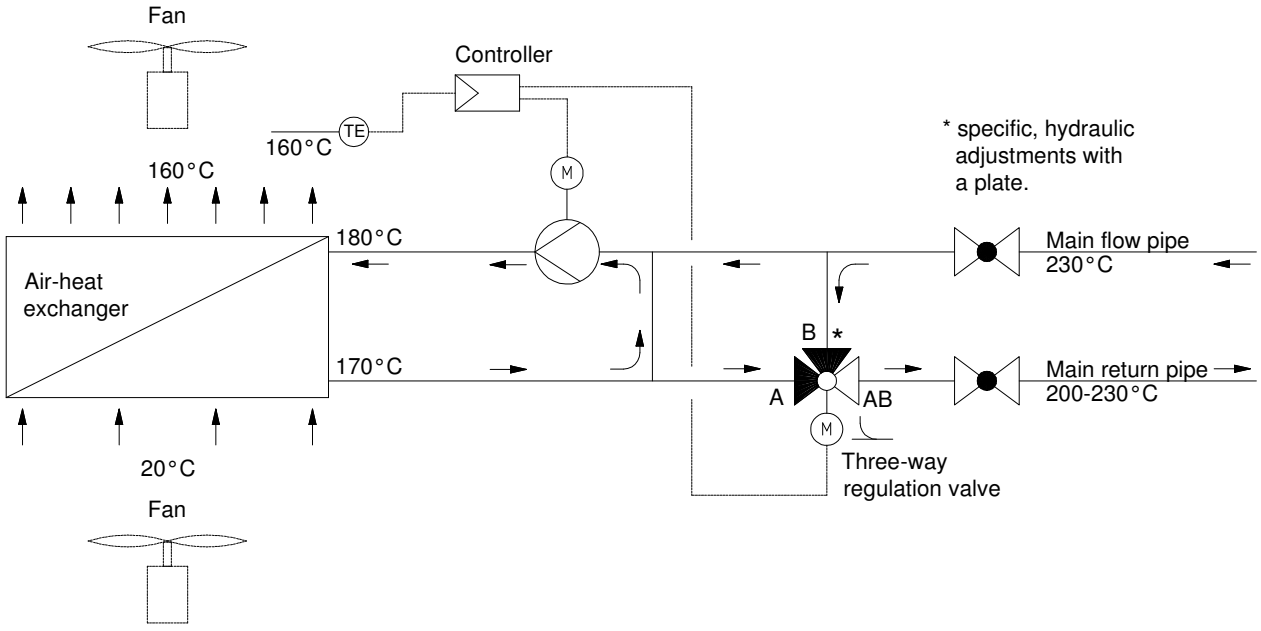
Regiomat®
Advance in heat transfer technology

When the three-way valve is closed (A-AB) the secondary pump delivers the thermooil through the secondary flow pipe, through the air-heat exchanger, the secondary return pipe and through the secondary bypass. When the three-way valve opens a little bit (A-AB), some thermooil will inject from the primary main flow pipe to the secondary flow pipe. Simultaneously, the same quantity of thermooil leaves the secondary circuit over the three-way valve back to the primary main return circuit. The secondary circuit is always self-contained and so we do have two circuits with two different quantities of thermooil and now we are able to work with two different temperatures. For example we do have 230°C/ 200°C (ΔT 30) in the primary main circuit and 180°C/ 170°C (ΔT 10) in the secondary circuit.

- **Constant transporting capacity with exact air temperature**
  - ⇒ The thermooil temperature will be adjusted continuously to the necessary air temperature. An exactly temperature controlling is given.
  - ⇒ There are no big temperature differences in the recuperative air-heater which could create tensions and leakages.

- **Cost-effective construction**
  - ⇒ Less and smaller primary pipelines
  - ⇒ Less and smaller insulation
  - ⇒ Shorter and easier mounting

- **Conclusions**
  - ⇒ The machine, equipped with a secondary pump, will be more expensive, but the profit by quality is excessively high.
  - ⇒ The thermooil plant, build by the customer, will be cheaper several times.



If the fan is placed in front of the recuperative air-heater you should choose the injection regulation.

Injection regulation
R/I Drawing air-heater exchanger

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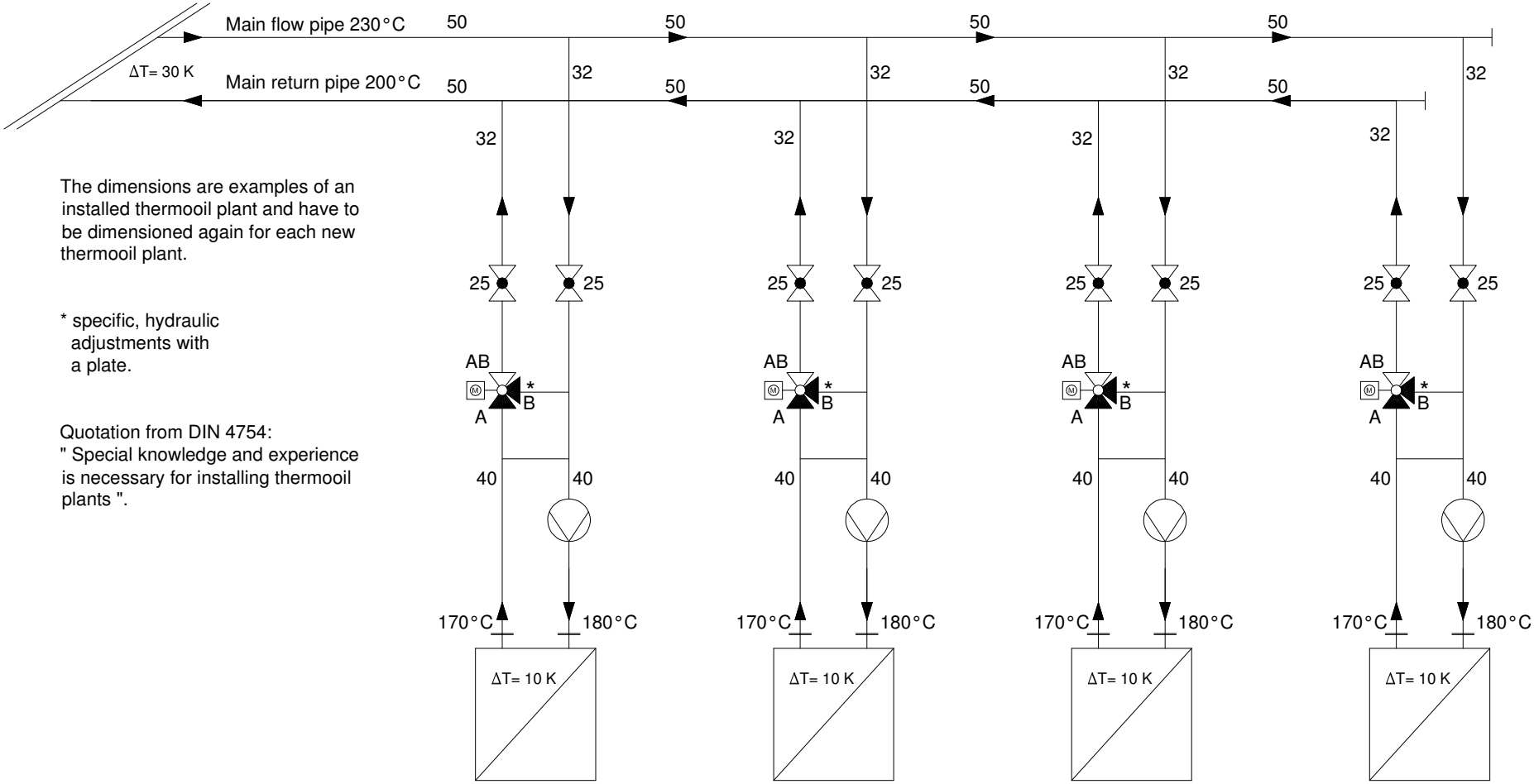
For the primary pipelines it is given to take an installation in a conventional split system.



The dimensions are examples of an installed thermooil plant and have to be dimensioned again for each new thermooil plant.

* specific, hydraulic adjustments with a plate.

Quotation from DIN 4754:
" Special knowledge and experience is necessary for installing thermooil plants ".