

A complete range for different control tasks.

Versions of the Centair system are available for every control task in air-conditioning and heating plants:-

- Fixed-value controller and schedule/ fixed-value controller with PI characteristic
- Fixed-value controllers and schedule/ fixed-value controller with P characteristic
- Fixed-value controller and schedule/ fixed-value controller with P+PI characteristic (cascade)
- Control device for air dampers

As a replacement for controllers in existing plants

Centair is especially suitable when replacements are required in existing installations that are not being modernised with a system update.



Relays

Sauter offers a complete range of pneumatic relays. These also make it possible to perform demanding control tasks in a clear and simple way. Features: housing, 94 x 72 mm, for wall or panel mounting, front plate with function schematic.



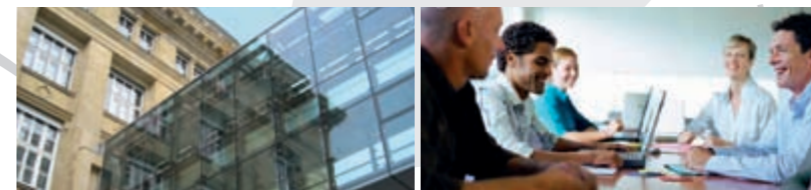
Accessories

The extensive range of accessories includes items such as manual switches, pressure adjusters, indicators, electropneumatic relays and a pressure-reducing set.



Regulating units

Modern regulating units from the Sauter range are the ideal complement to the Centair control system. Details on all valves and actuators can be found in the relevant Sauter catalogue.



Centair. The pneumatic universal controller system for air-conditioning and heating systems.

Simple structure and reliable function – even in complex plants.

Centair is a pneumatic control system that has proven its merits over many years of practical use. Its structure comprises just three basic elements, and it is used in combination with regulating units and transducers that can be chosen at will.

Operation of air-conditioning plants for rooms of all types

The Centair system ensures that air-conditioning plants reliably maintain the correct room conditions in offices, exhibition centres or industrial air-treatment plants – to name just a few examples. In the case of cascade control equipment, the room temperature and the humidity of the supply air form the indirectly controlled variables. Three key characteristics typify control equipment of this sort:-

- High static accuracy of the final controlled variable thanks to the small permitted P-range
- Perfect limitation of the temperature and humidity of the supply air

- Reaction to changes in the conditions of the supply air occur before they affect the room climate (e.g. changes in the water temperatures, outdoor temperature or steam pressure)

Schedule/fixed-value controllers in heating plants

In heating plants, the Centair system performs the function of a schedule/fixed-value controller to ensure the optimal flow temperatures for the various heating and ventilation groups.

Simple to operate and very reliable

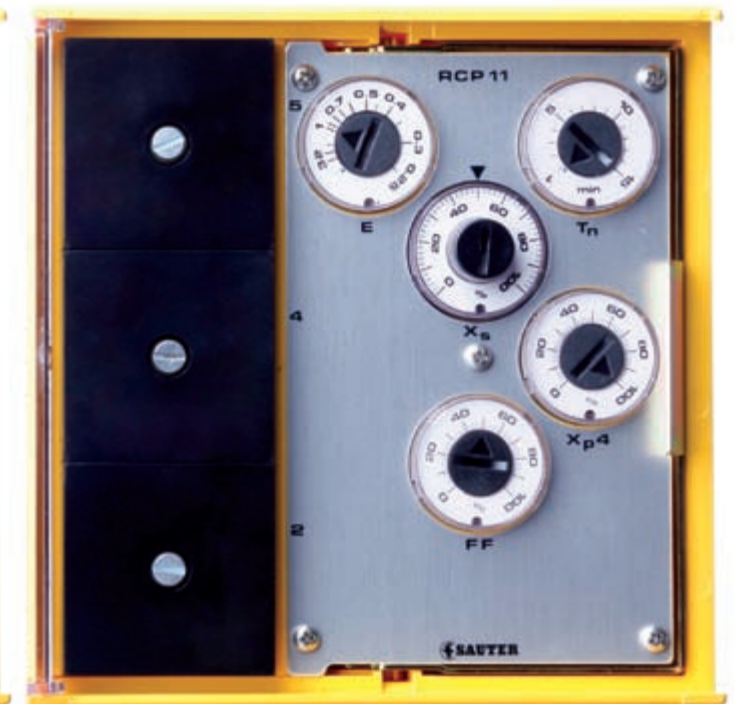
The Centair system is very simple to operate because all the settings are made at one location. Thanks to the ample range for the PI controller's reset time, Centair can also easily handle controlled networks with long dead times. No additional controller is required to manage the supply air and flow temperatures when they are dependent on the outdoor temperature. The valves close automatically if the compressed air supply fails.

»» Benefits in brief

- Low-cost solution for a varied range of control tasks
- Excellent operating reliability because controller types are structured according to control tasks
- Simple structure based on modular system with three basic elements
- Simple to install
- Up to eight control parameters can be set
- Operation in the standard pressure range (0.2...1.0 bar) ««



Cascade controller RCP 30



PI fixed value controller RCP 11

In a housing that measures 144 x 144 mm, this controller is suitable for mounting on walls, panels or front doors. Adjusting switches for up to eight control parameters can be integrated and up to three pressure gauges can be slotted in. The control action for the output signal and shift can be changed over using switches. The setpoint values can be viewed from the outside through the (sealable) plexiglass cover. Remote adjustment of setpoints is possible via a separate pressure adjuster.

Transducer for temperature, relative humidity, absolute humidity and pressure

The measuring element generates a force that changes in proportion to the measured value. A highly sensitive bleed-off force-balance system converts this force into a linear standard pressure signal which is forwarded to the controller.



P-controller
RPP 20



Differential pressure
controller/transducer
RUP 105



Humidity transducer
HTP 151



Room-temperature
transducer
TSUP 224



Stem-type
temperature
transducer
TUP 224