

# SAUTER flexotron800

Configurable, powerful and communicative.

Universal heating, ventilation and air-conditioning controller for small and medium-sized installations.





# The perfect solution for

# small and medium-sized installations.

# Extensive experience and excellent expertise in energy efficiency and comfort.

SAUTER has been active in the field of measuring and control technology for over 100 years and is now a leading provider of building automation systems for complex installations. Our solutions provide outstanding energy efficiency and investment protection. This expertise in heating, ventilation and air-conditioning technology has now been implemented in the SAUTER flexotron800 for small and medium-sized installations and more complex applications.

#### Compact and flexible.

The SAUTER flexotron800 meets the highest demands for a stand-alone controller. Its wide range of functions and easy configurability mean that it can be used flexibly in many different applications. It can be used on its own or as part of a network. With the communication options via Modbus or BACnet, as well as configurable functionalities such as ventilation and heating, the controller can be adjusted to fulfil the current requirements.





# Easily configurable and with a wide range of functions.

### Wide range of functions and applications.

Planners and ventilation engineers value the configurability of the SAUTER flexotron800 because it enables flexibility without any programming work. The flexotron800 provides the full range of functions for ventilation and heating applications. The SAUTER flexotron800 excels in the following applications:

- Controlling the supply-air temperature in workshops, storerooms etc.
- Cascade controlling the return air (room) and supply air in restaurants, kitchens, offices etc.
- Temperature control of multiple heating circuits in smaller buildings
- Smaller overall systems with heat generation, heat storage, domestic hot water preparation, heating circuits etc.

#### Integration into the application.

Depending on the requirements, the flexotron800 provides a range of communication options (Modbus RTU, BACnet/IP, web server). The flexotron800 is used as a controlling device in smaller and medium-sized installations – standalone or in combination with multiple devices. Monitoring via remote access is possible.

The universal CASE flexotron tool makes configuration, commissioning and troubleshooting uncomplicated and easy.

Accessories, such as the setpoint transmitter, mounting kit for the cabinet door and remote operating unit, enable optimum installation and user-friendliness.

#### Optimum user-friendliness.

The large, illuminated, easy-to-read display with more than 20 languages makes operation easy and intuitive.





# Applications for **ventilation** and **heating**.



#### Ventilation

Fast, easy configuration with SAUTER CASE flexotron ventilation.

### Ventilation application:

- Supply-air control and outside temperature-led supply-air control
- Cascade control of room supply air and return air-supply air
- Outside temperature-led cascade control of room supply air and return air-supply air

# Temperature control:

- Water heater, heat exchanger and water cooler
- Back-up mode for heating/cooling, free external cooling, cooling recovery, enthalpy control and external setpoint

#### Air control:

 Optimum fan control via 1- and 2-speed fans and frequency converters for the temperature-compensated pressure and volume control

#### Additional functions:

- Humidity control
- Demand-controlled ventilation for high CO<sub>2</sub> concentration
- Calculation of heat recovery efficiency
- Fire damper control with operational check
- Adaptable alarm texts
- Display of last 40 alarms and events



#### Heating and boilers

Fast, easy configuration with SAUTER CASE flexotron heating.

# Heating application (1 to 3 control loops):

- Access to target parameters of each heating circuit and automatic setpoint adjustment based on room temperature
- 3-point or continuous valve control
- Energy saving via pump control with pump stop
- Frost protection
- Wind compensation
- Consideration of building inertia
- Night set-back mode
- Power limitation

#### Domestic hot water and cooling:

 Heating function for domestic hot water (1 to 2 control loops) and cooling function (1 control loop)

#### Additional functions:

- Control of storage tank pump
- Differential temperature control for loading a storage unit with solar modules.
- Pressure control of variable-speed pump for maintaining constant pressure in the system
- Pulse inputs for measuring warm water, cold water and energy consumption
- Additional temperature sensors

# One concept for all requirements.

#### Parameterisation: fast and convenient.

The SAUTER flexotron800 can be fitted in no time: just mount it on a DIN rail or in a cabinet using the front mounting kit. The controller can be parameterised quickly with the pre-configured applications. The settings can be made in an instant using the navigation buttons and the clear display.

Adjustments can be made even more conveniently and quickly using the SAUTER CASE flexotron software on your computer. This provides:

- Access to all the control functions and current values of the inputs and outputs
- Operation, servicing and troubleshooting menus
- Engineering and configuration offline and without the device
- Option to copy settings from other controllers
- Option to add your own alarm descriptions



The tool functions are clearly structured and provide fast, easy access to the configuration.

# The display: simple and informative.

The display (or the graphical interface of the SAUTER CASE flexotron tool) can be used to:

- Change setpoints and settings
- Process alarms
- Read actual values

The settings and adjustment options are controlled by means of access rights.

All the information is easy to read on the integrated or removable display, even in dark rooms due to the illumination. The SAUTER flexotron800 has over 20 languages: so it is easy to operate and make adjustments in the local language.

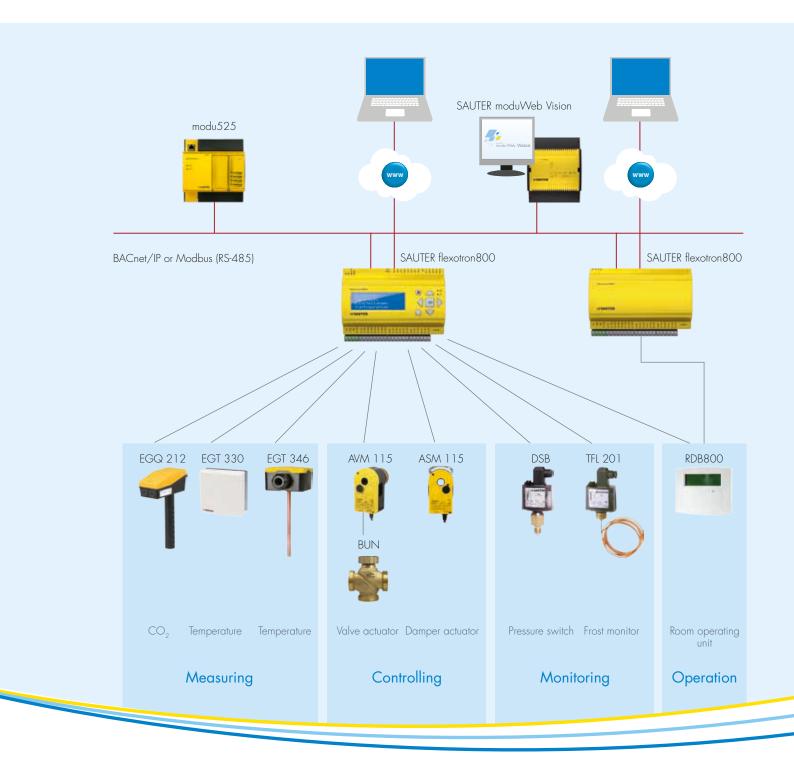
#### Communication that is open and integrated.

The SAUTER flexotron800 can be integrated into the building automation with Modbus via RS485 or with BACnet/IP. Remote monitoring and control is possible via the integrated web server. In addition, actual values as well as events and alarms can also be monitored via the web server or via BACnet and SAUTER moduWeb Vision.

To control heating, ventilation, and air conditioning in medium-sized installations, Modbus or BACnet can be used to combine multiple devices without any difficulty.



# The **centre** for numerous applications



# Make the most of our expertise and experience.

SAUTER has been an expert in measuring and control technology for over 100 years. We have made it our business to reduce installation and operating costs and optimise energy consumption. With its many functions, the SAUTER flexotron800 is flexible in its applications as well as being economical and energy-efficient.

# The advantages of the SAUTER flexotron800 at a glance: How you benefit:

+	Wide and versatile range of functions for ventilation, air-conditioning, heating and boilers	<b>&gt;</b>	Simplified, reduced support and fewer training requirements
+	Configurable devices can be easily adapted to the application	<b>&gt;</b>	Versatility without programming knowledge
+	Integrated communication with Modbus or BACnet/IP or web server		Integrated solutions for small and medium-sized installations, with investment protection
+	Access to parameters and settings via buttons and a large, illuminated display		Convenience for fast and safe operation
+	Display with more than 20 languages		Easy to operate and fewer operating errors
+	Configuration tool with wide range of functions on PC		Time-saving, convenient commissioning
+	Monitoring functions for frost, ventilation and motor protection		Safety during operation
+	Comprehensive alarm function with alarm grouping, own designations and individual responses	<b>&gt;</b>	Individual adjustments possible
+	Hardware version without integrated display, optionally with operation via external display	<b>&gt;</b>	Cost- and function-optimised solutions



# **Systems**

# Components

#### **Services**

# **Facility Management**

#### **Technical data**

Power supply	24 V~ ±15%, 5060 Hz or 2136 V=
Dissipated power	Ca. 7.5 VA, 3.4 W; TCP models: ca. 8 VA, 3.7 W
Ambient temperature	050 °C
Room humidity	Max. 95% rel. humidity
Type of protection	IP20 (when installed)
Memory backup	Integrated battery with long lifetime for long-term storage of all settings
Display	Illumination, LCD, 4 lines with 20 characters Display in more than 20 languages
Dimensions (W $\times$ H $\times$ D)	148×121×58 mm, 8.5 module
Fitting	DIN rail
Communication interfaces	RS485, TCP/IP
Communication protocols	Modbus RTU, BACnet/IP

# Inputs

Analogue inputs (AI)	For Ni 1000 sensor or 010 V
Digital inputs (DI)	Potential-free contacts

# Outputs

Analogue outputs (AO)	010 V, 2 mA, protected against short circuit
Digital outputs (DO)	Mosfet, 2 A each, max. 8 A total, 24 V~/=

