



# SAUTER EY-modulo 3

Room automation: easy, individual.

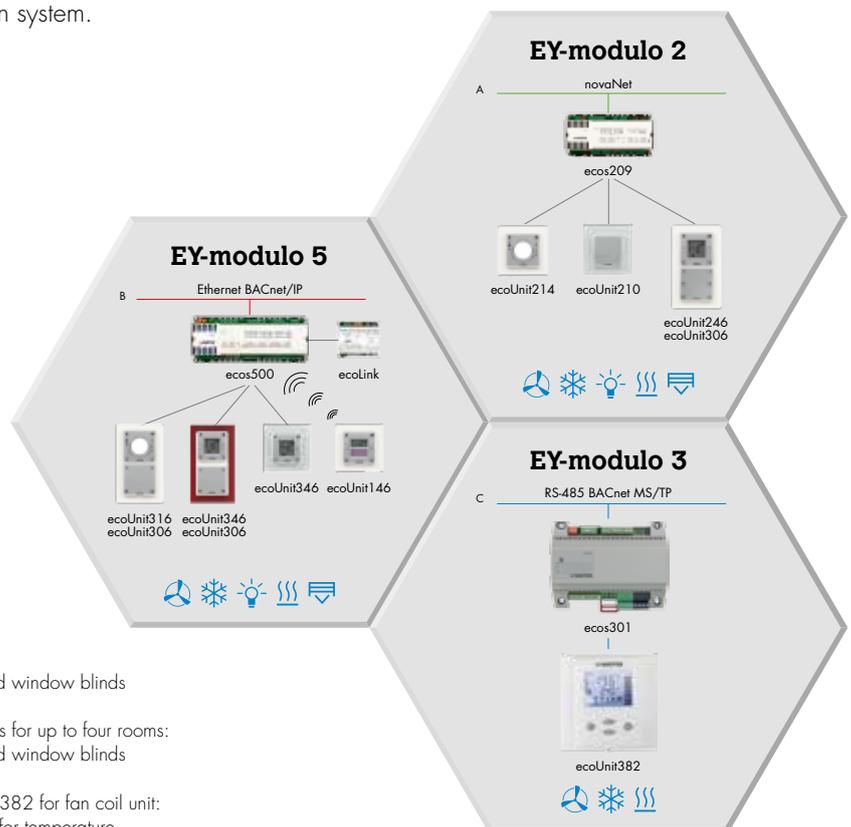


**Uncomplicated and open.**

SAUTER room automation with EY-modulo 3 means open communication using BACnet MS/TP. This allows it to interact easily with both the primary energy installation and building management systems.

The room operating unit features a sleek design and a clear LCD. Control buttons let you select functions and information easily. The room automation solution with EY-modulo 3 from SAUTER guarantees planning and operational security.

SAUTER EY-modulo 3 is the obvious choice for simple room automation projects. The BACnet room controller offers excellent reliability and can be integrated without difficulty in an overall building automation system.



- A ecos209:  
Temperature, lights and window blinds
- B ecos500 with ecoUnits for up to four rooms:  
Temperature, lights and window blinds
- C ecos301 with ecoUnit382 for fan coil unit:  
Single-room controller for temperature

# SAUTER EY-modulo 3, the room automation specialist. **Easy**, for versatile climate control.

## **SAUTER EY-modulo 3 is the right solution for easy room automation.**

The easy and intelligent EY-modulo 3 room automation solution from SAUTER is ideal for:

- **Fan coil units**
  - 2-/4-pipe for heating/cooling
  - Continuous or 1-/3-speed fan
  - Changeover using contacts or bus
  - Automatic off/reduced mode with window contacts
- **Heated/chilled ceilings**
- **Chilled beams**
- **Radiators**
- **Ventilation in the room**



Devices used for each hotel room / standard room:

- |   |  |
|---|--|
| ① SAUTER ecoUnit382 room operating unit       | ⑤ Card switch (presence/comfort)                   |
| ② SAUTER ecos302 room controller              | ⑥ SAUTER unit valve and actuator (AXS/AXT)         |
| ③ Fan coil unit (heating/cooling, changeover) | ⑦ Radiator in bathroom/toilet (additional heating) |
| ④ Window contacts (reduced)                   |  |

## SAUTER ecos 3 **is flexible and adaptable** to many applications.

### **With adjustable parameters and excellent communications.**

The SAUTER ecos 3 room controller can be freely configured and used for numerous applications. It has all the required interfaces, e.g. for fan coil units, heating panels, radiators and chilled ceilings. The controller uses BACnet MS/TP to communicate via routers with the BACnet/IP building network. This means BACnet can also be used to incorporate other applications without difficulty, such as lighting and window blinds.

The necessary applications can be configured and parametrised with the operating unit. Access to the parameters is of course protected with a code. In addition, the controller parameters can be loaded easily using the "EasySet" PC tool.

The ecos 3 room controller isn't just easy to use, but easy to install too. Application parameters can be copied quickly with a memory card, from one controller to the next. When the device is being commissioned and optimised, the parameters can also be adapted via BACnet.



Easy

Versatile

Individual

### SAUTER ecos 3 – Technical details of the controller

General features:

- Versions for different supply voltages and quantities of inputs/outputs
- Universal, passive inputs for contacts, NTC10k sensor, resistor (potentiometer)
- Active inputs and outputs (0...10 V<sub>=</sub>, 2...10 V<sub>=</sub>)
- Digital outputs with 2 A and 10 A relays and 24 V~ Triacs
- Supply voltage output for actuator (24 V~)

Function modules:

- One control loop with PI algorithm for heating and cooling
- One digital control sequence for ventilation and additional functions
- Parameters on all function modules set individually
- Alarms and interlock for special functions
- Time/date and weekly calendar
- Additional functions
  - Automatic On/Off
  - Comfort/Reduced or Presence/Absence
  - Changeover
  - Summer/winter compensation
  - Economiser (free external cooling)

Communication, integration:

- RS-485 interface for ecoUnit382 room operating unit
  - As a master or slave controller for parallel operation of multiple systems
- RS-485 interface (electrically isolated) for BACnet MS/TP up to 115 kbit/s
- BACnet profile B-ASC, BTL-compliant
- Standard BACnet objects (DEV, AI, AV, BV, MV)

### SAUTER ecos 3 – Overview of types

ecos 3 room controllers	ecos301	ecos302
Type	EY-RC301F005	EY-RC302F001
Power supply	24 V~ / 24 V <sub>=</sub>	230 V~
Number of inputs/outputs	13	16
Passive inputs	3	4
Active inputs	3	2
Analogue outputs	3	3
Digital relay outputs	4 (2 A) / –	4 (2 A) / 1 (10 A)
Digital Triac outputs	–	2
Power supply output	–	24 V~ / 6 VA

For easy control of **individual** room comfort.

Buttons	Symbols
Operating mode (⏻)	🏠 Occupied
Fan speed (▶)	❄️ Cooling*
Changing setpoint (▲/▼)	☀️ Heating
Indicators	🕒 Time programme
Room temperature (19.6 °C)	👤 Manual override
Temperature setpoint (24.0 °C)	🚨 Alarm
Heating valve (90%)	🌀 Fan

\* Not shown on the display.

A white, rectangular room operating unit with a blue LCD display. The display shows a room temperature of 19.6 °C and a setpoint of 24.0 °C. Below the display are four buttons: a power button, a fan speed button, a setpoint adjustment button, and a manual override button. The SAUTER logo is visible at the top of the device.

### Easy and intuitive operation.

The elegant and easy-to-use SAUTER ecoUnit382 room operating unit has four buttons with multiple functions, enabling individual settings to be made. Presence and absence can be selected, as well as other room functions such as the required temperature or fan speed. The device also uses a built-in temperature sensor to measure the current room temperature and displays it on a blue, illuminated LCD which switches off after a certain time to save energy.





## **SAUTER ecoUnit382 – Technical details of the room operating unit**

General features:

- Digital communication interface to the controller (RS-485/VCPP)
- Direct power supply from the controller
- Large illuminated LCD for displaying three values and the operating statuses
- Four control buttons for selecting the occupancy status, temperature setpoint and fan speed in the room
- Operation of master and slave controllers
- Universal device for parameter-setting, commissioning and bus configuration on ecos 3 controllers
- Integrated temperature sensor (NTC 10k)

### **For a variety of applications.**

Because it is open and uncomplicated, the SAUTER EY-modulo 3 is the ideal solution for:

- Hotel rooms
- Offices
- Hospital wards
- Classrooms
- Ship cabins



## SAUTER ecos 3 at a glance.

### Its advantages.

### How you benefit.

	Member of the SAUTER EY-modulo system family		Guaranteed quality and integration options
	Communication via BACnet		Interoperability between devices from different manufacturers, high security of investment
	Universally configurable controller, specific to BACnet applications (B-ASC)		Different types of installation can be covered with just two device types
	Integrated into the building automation system		Efficient management of energy supply systems
	Open communication via routers		Can be integrated into the hotel management system
	Direct connection of the room operating unit		Exact room temperature control, adjustment to individual room climate
	BACnet-compliant (BTL)		Quality and security
	Multiple analogue outputs		State-of-the-art fan control with EC motors and valve actuators with a continuous input signal
	Additional functions such as schedules, changeover, set-back mode, summer compensation, free external cooling		Demand-led, optimised room temperature control for energy-efficient room management
	Alarm/interlock function, e.g. for frost protection, enabling controllers, detecting occupancy, additional heating		Room automation easily adapted to individual requirements