

**Thermostat for controlling and regulating temperature, light, air conditioning and the sun protection (1 zone), room control unit with colour touch display, with Modbus or BACnet connection**

The **RYMASKON® 500 / 600 / 700** series of room control units are designed for controlling the climatic zone in residential, hotel and office rooms and individually regulate the heating/cooling steps of the internal rooms. A colour touch display with modern icons is used for the visual display and operation at the location. The product range is characterised by the variety of combination options of the individual components.

The **RYMASKON® 500 Thermostat** series regulates a **heating or cooling valve** directly through a relay. The **sun protection** (blinds, shutters) can be controlled in one zone via the bus. Through the appropriate symbols, it is possible to control the light and air conditioning instead of the sun protection. In addition to the integrated temperature sensor, two external temperature sensors (NTC10K) can also be connected. A measuring element for relative humidity is also available. The devices are used in room climate technology and heating/cooling systems, such as cooling ceilings and floor heating. Wall mounting is performed on standard in-wall flush boxes. The devices are optionally available with a Modbus or BACnet communication interface (optionally without communication) and in various type versions (see number key).

The basic model **RYMASKON® 510 Thermostat** with colour touch display (3.5"), in a white housing, possesses an integrated temperature and humidity sensor, 2 resistance inputs (for external NTC10K temperature sensors), 1 digital input, 1 relay output (7A) and optionally with a Modbus or BACnet connection. The room control units are used for controlling heating/cooling directly through the relay (2-point regulation) light, air conditioning and the sun protection (1 zone) via the bus.

**TECHNICAL DATA (Basic model)**

|                    |  |
|--------------------|--|
| Device type:       | room control unit with 2-point regulation  |
| Functions:         | temperature, light, air conditioning and sun protection (1 zone)   |
| Communication:     | <b>Modbus RTU Slave</b><br>address range can be configured between 1...247 or<br><b>BACnet MS/TP</b><br>device ID 65100 (default) and MAC address can be configured between 1...127<br>RS 485 interface, max. 63 devices,<br>9600 / 19200 / 38400 / 57500 / 76800 Baud,<br>none / even / odd parity, 1 / 2 stop bits |
| Power supply:      | 24 V AC/DC (± 15%)   |
| Power consumption: | max. 1.92 W  |
| Inputs:            | 2 resistance inputs (NTC10K)<br>for external temperature sensors<br>1 digital input (potential-free, impedance <1 kOhm)  |
| Outputs:           | 1 relay output (2-point regulation)<br>7 A (resistive load);<br>1.3 A (inductive load)   |
| Operating mode:    | Comfort, ECO, OFF, Boost, Holiday, Frost Protection  |
| Control element:   | <b>3.5" touch display</b> with background lighting,<br>cut-out approx. 50 x 75 mm, resolution 320 x 480 pixels, 255,000 colours  |

**TEMPERATURE**

|                  |                               |
|------------------|-------------------------------|
| Sensor:          | integrated temperature sensor |
| Measuring range: | -40...+125°C                  |
| Accuracy:        | typically ±0.5°C at +25°C     |

**HUMIDITY**

|                        |   |
|------------------------|---|
| Sensor:                | integrated humidity sensor              |
| Measuring range:       | 0...100% RH                             |
| Accuracy:              | typically ±2% RH (20...80% RH) at +25°C |
| Electrical connection: | 0.14 - 1.5 mm², via screw terminals     |

Housing: plastic, polycarbonate material, self-extinguishing, white colour (optionally black or chrome), weight approx. 220 g

Housing dimensions: approx. 88 x 112 x 14.5 mm (on-wall)  
approx. 52 x 53 x 28.5 mm (in-wall)

Mounting: wall mounting on in-wall flush box, Ø 55 mm

Ambient temperature: 0...+50°C (operation); -30...+70°C (storage)

Permitted humidity: 0...95% RH, (non-precipitating air)

Protection type: **IP 20** (according to EN 60 529)

Standards: CE conformity, according to EMC directive 2004/108/EU, Low-Voltage directive 2006/95/EU, according to EN 61000-6-1/3, EN 60730-1, EN 6100-4-2/4/5/11

**ACCESSORIES** see table

**RYMASKON® 500**  
Sensors



Room temperature [°C]



External temperature [°C]



Relative humidity [%RH]

**RYMASKON® 500**  
Functions



Sun protection (1 zone)



Light (1 zone)



Air Conditioning (1 zone)

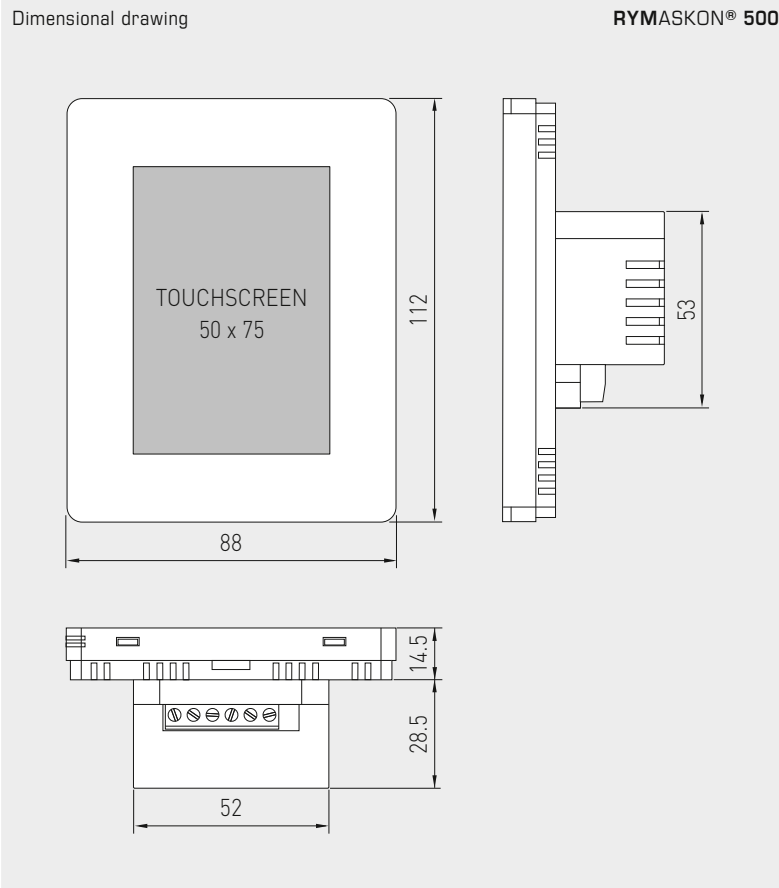


**NEW**

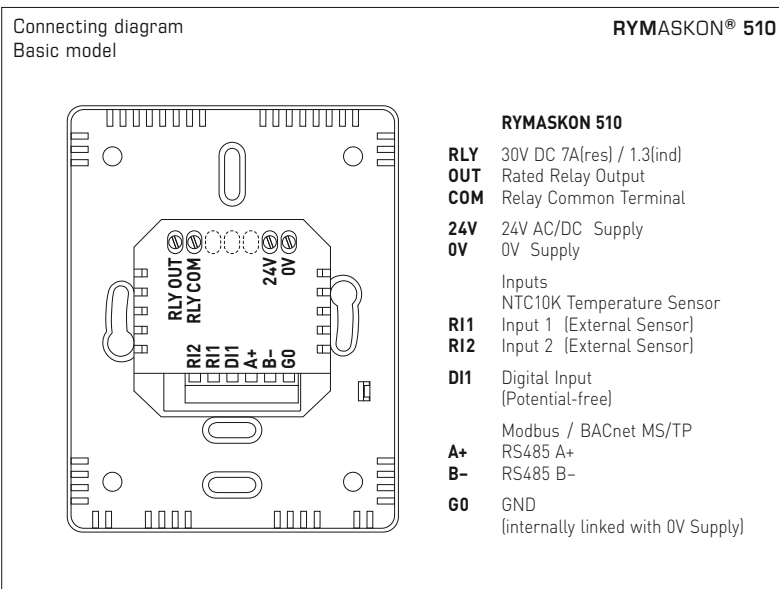
S+S REGELTECHNIK

**RYMASKON® 500** Thermostat

Thermostat for controlling and regulating temperature, light, air conditioning and the sun protection (1 zone), room control unit with colour touch display, with Modbus or BACnet connection



**RYMASKON® 500**  
On-wall 14.5 mm



Thermostat for controlling and regulating temperature, light, air conditioning and the sun protection (1 zone), room control unit with colour touch display, with Modbus or BACnet connection

**RYMASKON® 500** Thermostat (series)  
Number key for type versions

**RYM5-10Txx0x-000**

|                 |   |             |
|-----------------|---|-------------|
| <b>Pos. 1-4</b> | <b>Type name</b><br>RYMASKON 500  | RYM5        |
| <b>Pos. 5</b>   | <b>Channel configuration</b><br>Type 510 <b>2RI, 1DI, 1RO 7A</b>        | 1           |
| <b>Pos. 7</b>   | <b>Device type</b><br>Thermostat  | T           |
| <b>Pos. 8</b>   | <b>Communication</b><br>without<br>Modbus<br>BACnet                     | A<br>M<br>B |
| <b>Pos. 9</b>   | <b>Voltage supply</b><br>12 V DC<br>24 V AC/DC<br>90-250 V AC           | 1<br>2<br>M |
| <b>Pos. 10</b>  | <b>Additional measuring elements</b><br>without *<br>RH (rel. humidity) | 0<br>1      |
| <b>Pos. 11</b>  | <b>Extra options</b><br>without   | 0           |
| <b>Pos. 12</b>  | <b>Housing colour</b><br>black<br>white<br>chrome                       | 1<br>2<br>3 |

|               |  |   |
|---------------|--|---|
| <b>Pos. 5</b> | <b>RI</b> Resistance input (NTC10K) for external temperature sensors<br><b>DI</b> Digital input (potential-free)<br><b>RO</b> Relay output (7 A), (2-point regulation) | <b>Pos. 10 *</b> The <b>temperature sensor</b> forms part of the basic equipment and is included in the option "without" additional measuring elements. |
|---------------|--|---|

Type 510 **Basic model** (see table on the right) available from stock –  
Freely configurable type versions available upon request!

| RYMASKON® (basic model)<br>Comparison table |  | Type 510<br>Thermostat | Type 610<br>Controller | Type 710<br>Interface |
|---|--|------------------------|------------------------|-----------------------|
| <b>Outputs</b>                              | Relay output for heating/cooling                               | <b>1</b>               | –                      | Bus                   |
|   | Analogue output (0-10 V)<br>Heating/cooling 6-way valves, fans | –                      | <b>3</b>               | Bus                   |
| <b>Function</b>                             | Sun protection (max. 2 zones)                                  | ●                      | ●●                     | ●●                    |
|   | Light / room lighting (1 zone)                                 | –                      | ●                      | ●                     |
|   | Air Conditioning (1 zone)                                      | ●                      | –                      | ●                     |
| <b>Sensors</b>                              | Temperature (°C)   | ●                      | ●                      | ●                     |
|   | Humidity (% RH)  | ●                      | ●                      | ●                     |
|   | CO2 (ppm)  | –                      | ○                      | ○                     |
| <b>Inputs</b>                               | Digital input  | <b>1</b>               | <b>1</b>               | <b>1</b>              |
|   | Analogue input (0-10 V)  | –                      | <b>2</b>               | –                     |
|   | Resistance input (NTC10K)                                      | <b>2</b>               | –                      | <b>2</b>              |

○ = optional



**NEW**

S+S REGELTECHNIK

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**KEY FEATURES**

Basic model type 510

**RYMASKON® 500**  
Home Screen

- 24 V AC/DC voltage supply
- 3.5 inch touch display with background lighting
- Modbus or BACnet
- Wall mounting on standard in-wall flush boxes
- Integrated temperature sensor (basic equipment)
- Integrated humidity sensor
- Regulation of heating or cooling via relay (2-point regulator)
- Operation of temperature, light, air conditioning and sun protection (1 zone) via touch display
- 2 resistance inputs (NTC10K) for external temperature sensors
- 1 digital input (potential-free)
- 1 relay output (7 A), (2-point regulation)
- Operating modes Comfort (Normal), OFF, Boost, ECO, Holiday, Frost Protection



| <b>RYMASKON® 510</b>                    |  | Thermostat (basic model), room control unit with touch display |   |        |         |                    |                 |
|---|--|--|---|--------|---------|--------------------|-----------------|
| Type / WG02                             | Communication  | Measuring element  | Control system  | Colour | Display | Item No.           | Price           |
| <b>RYMASKON® 510-Modbus</b>             |  |  |   |        |         |                    |                 |
| Rymaskon 512-MOD-RH                     | Modbus   | T   RH   | T   S   L   K   | white  | ■       | RYM5-10TM-2102-000 | <b>253,80 €</b> |
| <b>RYMASKON® 510-BACnet</b>             |  |  |   |        |         |                    |                 |
| Rymaskon 512-BAC-RH                     | BACnet   | T   RH   | T   S   L   K   | white  | ■       | RYM5-10TB-2102-000 | <b>253,80 €</b> |
| Measuring element / control system:     | <b>T</b> = Temperature sensor (basic equipment)<br><b>RH</b> = Humidity sensor   |  | <b>T</b> = Temperature heating / cooling<br><b>S</b> = Sun protection<br><b>L</b> = Light<br><b>K</b> = Air Conditioning (AC) |        |         |                    |                 |
| Channel configuration:                  | <b>2RI</b> 2 resistance inputs (NTC10K) for external temperature sensors<br><b>1DI</b> 1 digital input (potential-free)<br><b>1RO</b> 1 Relay output (7 A), (2-point regulation) |  |   |        |         |                    |                 |
| Optional:                               | <b>More type versions available upon request!</b><br>For configuration options, see number key (left).   |  |   |        |         |                    |                 |
| <b>ACCESSORIES</b>                      |  |  |   |        |         |                    |                 |
| <b>RYMASKON® USB Configuration Tool</b> |  |  |   |        |         |                    |                 |
| RYMASKON USB_CT                         | For quick transfer of the device configuration from the PC to all devices in the building  |  |   |        |         | 1901-51Z3-0002-000 | <b>139,32 €</b> |

