

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 interfe 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:	Modbus RTU Slave address range can be configured between 1...247 or BACnet MS/TP device ID 65100 (default) and MAC address can be configured between 1...127 RS 485 interface, max. 63 devices, 9600 / 19200 / 38400 / 57500 / 76800 Baud, 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) for external temperature sensors 1 digital input (potential-free, impedance <1 kOhm)
Outputs:	1 relay output (2-point regulation) 7 A (resistive load); 1.3 A (inductive load)
Operating mode:	Comfort, ECO, OFF, Boost, Holiday, Frost Protection
Control element:	3.5" touch display with background lighting, 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 60529)
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)

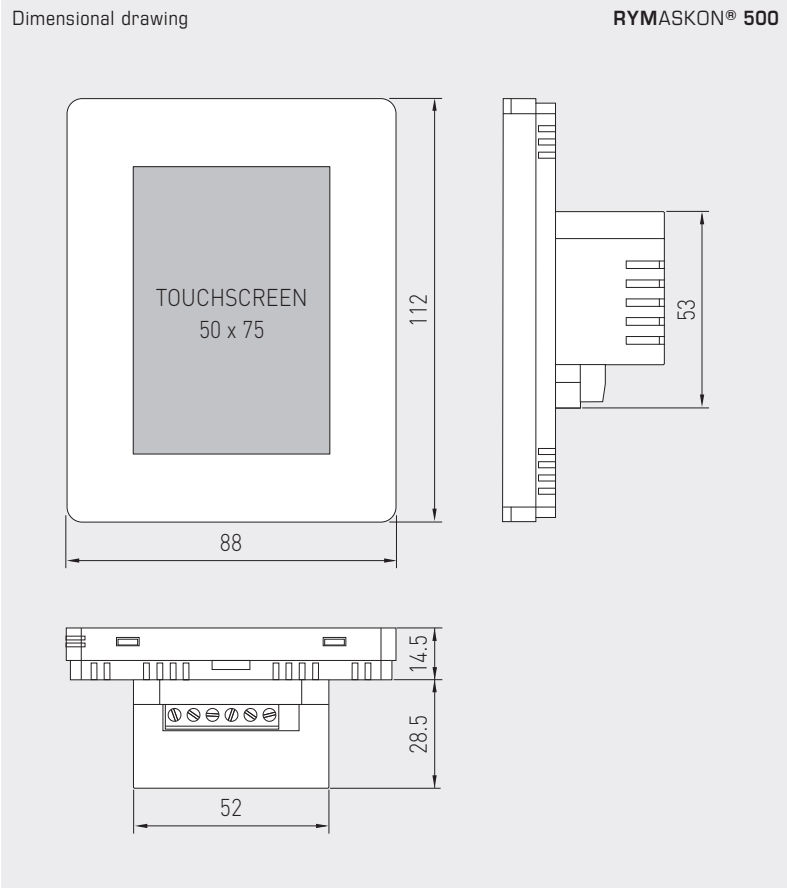


NEW

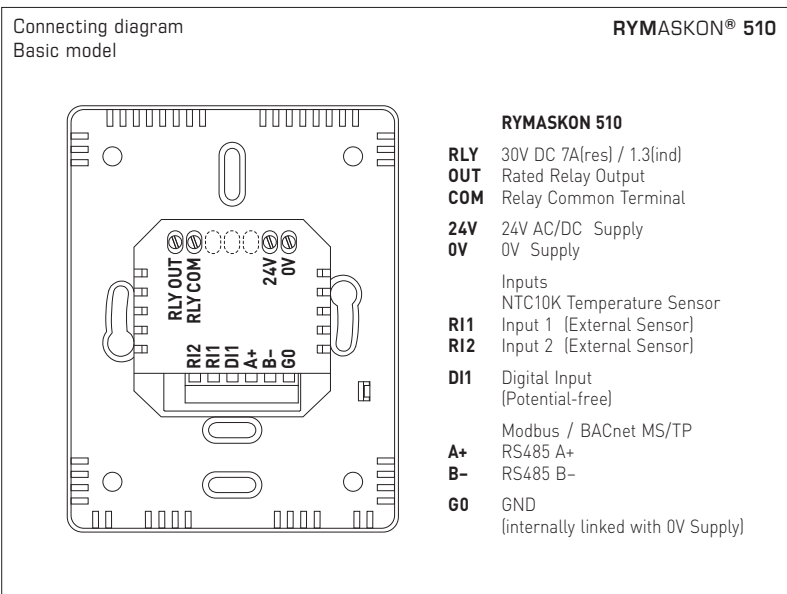
S+S REGELTECHNIK

RYMASKON® 500 Thermostat

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RYMASKON® 500
On-wall 14.5 mm

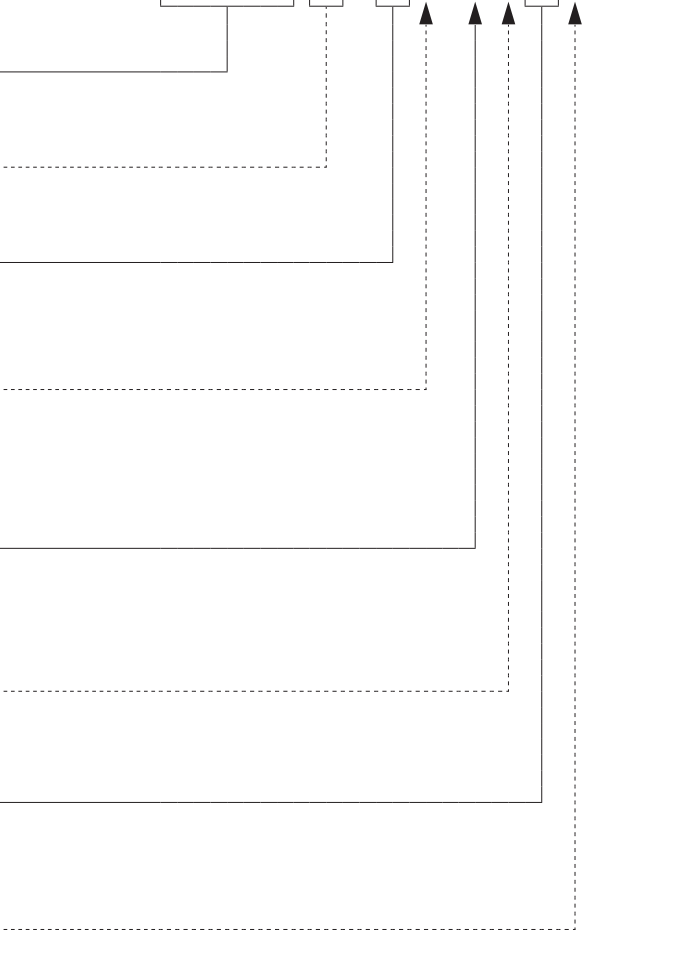


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RYMASKON® 500 Thermostat (series)
Number key for type versions

RYM5-10Txx0x-000

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



Pos. 5 **RI** Resistance input (NTC10K) for external temperature sensors
DI Digital input (potential-free)
RO Relay output (7 A), (2-point regulation)

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

○ = optional



NEW

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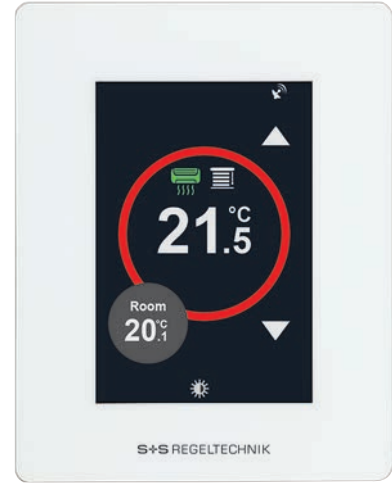
KEY FEATURES

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



RYMASKON® 510		Thermostat (basic model), room control unit with touch display					
Type / WG02	Communication	Measuring element	Control system	Colour	Display	Item No.	Price
RYMASKON® 510-Modbus							
Rymaskon 512-MOD-RH	Modbus	T RH	T S L K	white	■	RYM5-10TM-2102-000	290,35 €
RYMASKON® 510-BACnet							
Rymaskon 512-BAC-RH	BACnet	T RH	T S L K	white	■	RYM5-10TB-2102-000	290,35 €
Measuring element / control system:	T = Temperature sensor (basic equipment) RH = Humidity sensor		T = Temperature heating / cooling S = Sun protection L = Light K = Air Conditioning (AC)				
Channel configuration:	2RI 2 resistance inputs (NTC10K) for external temperature sensors 1DI 1 digital input (potential-free) 1RO 1 Relay output (7 A), (2-point regulation)						
Optional:	More type versions available upon request! For configuration options, see number key (left).						
ACCESSORIES							
RYMASKON® USB Configuration Tool							
RYMASKON USB_CT	For quick transfer of the device configuration from the PC to all devices in the building					1901-51Z3-0002-000	153,60 €