

Interface for controlling temperature,  
fan, light, air conditioning (1 zone) and sun protection (2 zones),  
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® 700 Interface series controls via the bus heating or cooling valves, fan speed and the sun protection (blinds, shutters) in two zones. 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. Measuring elements for relative humidity and CO<sub>2</sub> are also available. The devices are used in room climate technology, including convector fans, cooling ceilings and heating/cooling systems. Wall mounting is performed on standard in-wall flush boxes. The devices are optionally available with a Modbus or BACnet communication interface and in various type versions (see number key).

The basic model RYMASKON® 710 Interface with colour touch display (3.5"), in a white housing, possesses an integrated temperature and humidity sensor (CO<sub>2</sub> sensor optional), 2 resistance inputs (NTC10K) for external sensors, 1 digital input, 1 relay output (7 A / 0.5 A with CO<sub>2</sub>) and optionally with Modbus or BACnet connection. The room control units are used for controlling temperature, fans and sun protection (2 zones) via the bus.

#### TECHNICAL DATA (Basic model)

Device type:	room control unit
Functions:	temperature, fan, light, air conditioning (1 zone), and sun protection (2 zones)
Communication:	<b>Modbus RTU Slave</b> address range can be configured between 1...247 or <b>BACnet MS/TP</b> device ID 65100 (default) and MAC address can be configured between 1...127 RS485 interface, max. 63 devices, 9600 / 19200 / 38400 / 57500 / 76800 Baud, none / even / odd parity, 1 / 2 stop bits
Voltage 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) without CO <sub>2</sub> : 7 A (resistive load); 1.3 A (inductive load) with CO <sub>2</sub> : 0.5 A (resistive/inductive load)
Operating mode:	Comfort, ECO, OFF, Boost
Control element:	<b>3.5" touch display</b> with backlighting, 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

#### CARBON DIOXIDE (CO<sub>2</sub>)

Sensor:	optical NDIR sensor (non-dispersive infrared technology), with automatic calibration
Measuring range:	0...5000 ppm
Accuracy:	typically ±50 ppm ±3% of the measured value at +25 °C
Electrical connection:	0.14 - 1.5 mm <sup>2</sup> , 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. 88 x 112 x 20.5 mm (on-wall with CO <sub>2</sub> sensor) approx. 52 x 53 x 28.5 mm (in-wall)
Mounting:	wall-mounting on in-wall flush box, Ø55 mm
Ambient temperature:	0...+50 °C (operation); -30...+70 °C (storage)
Permitted humidity:	0...95 % RH, (non-precipitating air)
Protection type:	<b>IP 20</b> (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 61004-2/4/5/11

#### ACCESSORIES

see table

#### RYMASKON® 700

Sensors



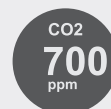
Room temperature  
[°C / °F]



External temperature  
[°C / °F]



Relative humidity  
[%RH]



CO<sub>2</sub> content  
[ppm]  
optional

#### RYMASKON® 700

Functions



Fan  
(blower speeds,  
Automatic/Manual)



Sun protection  
(max. 2 zones)



Light  
(1 zone)



Air Conditioning  
(1 zone)

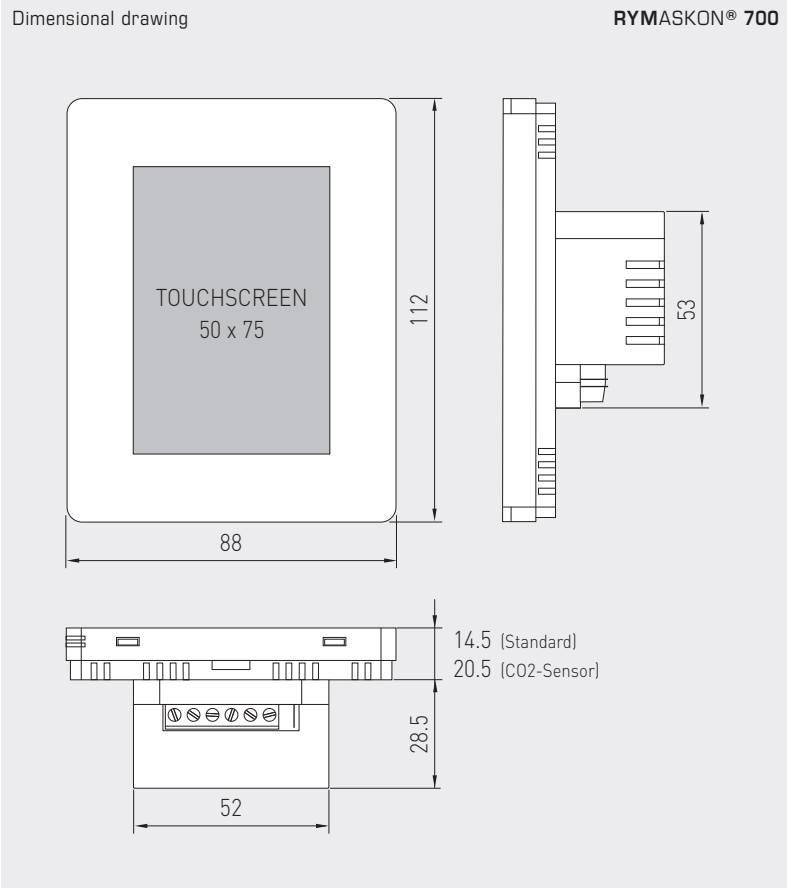


**NEW**

S+S REGELTECHNIK

**RYMASKON® 700** Interface

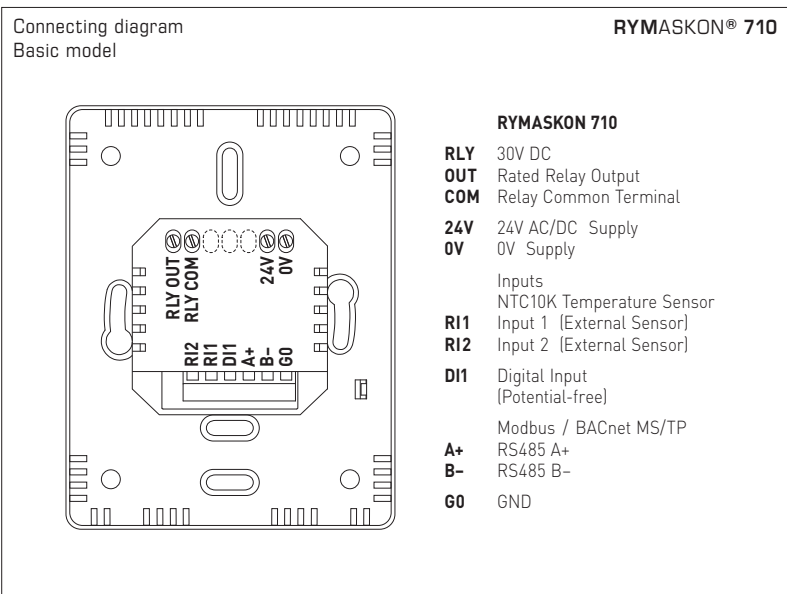
Interface for controlling temperature, fan, light, air conditioning (1 zone) and sun protection (2 zones), room control unit with colour touch display, with Modbus or BACnet connection



**RYMASKON® 700**  
On-wall 14.5 mm



**RYMASKON® 700**  
with CO2 sensor  
On-wall 20.5 mm



Interface for controlling temperature, fan, light, air conditioning (1 zone) and sun protection (2 zones), room control unit with colour touch display, with Modbus or BACnet connection

**RYMASKON® 700** Interface (series)  
Number key for type versions

**R Y M 7 - 1 0 I x - x x 0 x - 0 0 0**

- Pos. 1-4 Type name**  
RYMASKON 700
- Pos. 5 Channel configuration**  
Type 710 **2RI, 1DI, 1RO** 7 A / 0.5 A with CO2
- Pos. 7 Device type**  
Interface
- Pos. 8 Communication**  
Modbus  
BACnet
- Pos. 9 Voltage supply**  
12 V DC  
24 V AC/DC
- Pos. 10 Additional measuring elements**  
without \*  
**RH** (rel. humidity)  
**CO2** (carbon dioxide)  
**RH + CO2**
- Pos. 11 Extra options**  
without
- Pos. 12 Housing colour**  
black  
white  
chrome

RYM7 }

1 }

I }

M }

B }

1 }

2 }

0 }

1 }

2 }

3 }

0 }

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 710 **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
<b>Outputs</b>	Relay output for heating / cooling	<b>1</b>	–	Bus
	Analogue output (0–10 V) 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

**RYMASKON® 700** Interface

Interface for controlling temperature, fan, light, air conditioning (1 zone) and sun protection (2 zones), room control unit with colour touch display, with Modbus or BACnet connection

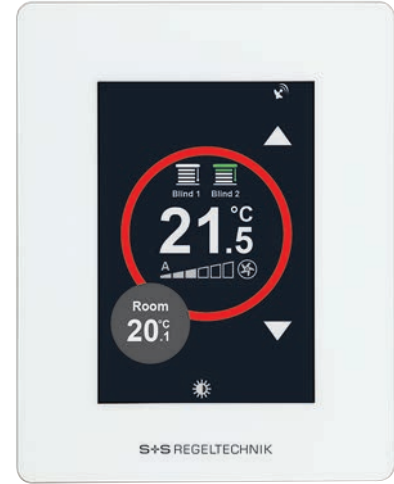
**KEY FEATURES**

Basic model type 710

**RYMASKON® 700**

Home Screen

- 24 V AC/DC voltage supply
- 3.5 inch touch display with backlighting
- Modbus or BACnet
- Wall mounting on standard in-wall flush boxes
- Integrated temperature sensor (basic equipment)
- Integrated humidity sensor
- Integrated CO2 sensor (optional)
- Regulation of heating, cooling, fans via the bus
- Operation of temperature, fan, light, air conditioning (1 zone) and sun protection (2 zones) via touch display
- 2 resistance inputs (NTC10K) for external temperature sensors
- 1 relay output (7A / 0.5A with CO2) as 2-point regulator (potential-free) controllable via bus
- 1 digital input (potential-free)
- Operating modes Comfort (Normal), OFF, Party (Boost), ECO, Frost Protection



**RYMASKON® 710** Interface (basic model), room control unit with touch display

Type / WG02	Communication	Measuring element	Control system	Colour	Display	Item No.	Price
<b>RYMASKON® 710-Modbus</b>							
Rymaskon 712-MOD-RH	Modbus	T   RH	T   V   2S   L   K	white	■	RYM7-10IM-2102-000	<b>355,99 €</b>
Rymaskon 712-MOD-RH-CO2	Modbus	T   RH   CO2	T   V   2S   L   K	white	■	RYM7-10IM-2302-000	<b>537,42 €</b>
<b>RYMASKON® 710-BACnet</b>							
Rymaskon 712-BAC-RH	BACnet	T   RH	T   V   2S   L   K	white	■	RYM7-10IB-2102-000	<b>355,99 €</b>
Rymaskon 712-BAC-RH-CO2	BACnet	T   RH   CO2	T   V   2S   L   K	white	■	RYM7-10IB-2302-000	<b>537,42 €</b>
Measuring element / control system:	T = Temperature sensor (basic equipment) RH = Humidity sensor CO2 = Carbon dioxide sensor	T = Temperature V = Fan S = Sun protection (2 zones) L = Light K = Air Conditioning (AC)					
Channel configuration:	<b>2RI</b> 2 Resistance inputs (NTC10K) for external temperature sensors <b>1DI</b> 1 digital input (potential-free) <b>1RO</b> 1 Relay output (7 A), (2-point regulation)						
Optional:	<b>More type versions available upon request!</b> 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	<b>153,60 €</b>
-----------------	---	--------------------	-----------------