

## Register tables

# RYMASKON<sup>®</sup> 600-Modbus

Room control unit with colour touch screen,  
with BACnet or Modbus connection

Controller for controlling and regulating  
temperature, fan, light (1 zone) and  
blind (2 zones)



## Modbus Registers

The RYMASKON 600 controller supports the Modbus registers and function codes listed below. The following are factory defaults:

Baud rate:	9,600	(register 201)
Data bits:	8	
Parity:	none	(register 202)
Stop bits:	1	(register 203)
Modbus slave address:	1	(register 200)

The parity of the unit can be switched between Odd, None and Even. The adjustable baud rates are 9,600, 19,200, 38,400, 57,600 and 76,800 bps. The table shows the register offsets starting at 0 (0 Base). For example, the temperature recorded with the internal sensor is read from Modbus register 100 with function code 04. Some Modbus masters need their register value increased by 1 (e.g., 1 Base). In this case, enter function code 04 and register 101.

### FUNCTION CODE 01 – READ COILS

### FUNCTION CODE 05 – WRITE SINGLE COIL

### FUNCTION CODE 15 – WRITE MULTIPLE COILS

Register	Parameter description	Data Type	Raw Data	Range
100	OFF mode override		0...1	OFF–ON
101	ECO mode override		0...1	OFF–ON
102	Changeover function (switching between heating/cooling)		0...1	0 = Heating 1 = Cooling

### FUNCTION CODE 02 – READ DISCRETE INPUTS (Add 10,000 for Modicon Addressing)

Register	Parameter description	Data Type	Raw Data	Range
100	Digital input status (DI 1)		0...1	OFF–ON
101	Boost status		0...1	OFF–ON
102	Display locking status		0...1	OFF–ON
103	Digital output 1 status (only RYMASKON 640/660)		0...1	OFF–ON
104	Digital output 2 status (only RYMASKON 640/660)		0...1	OFF–ON
105	Digital input 2 status (RI1 in DI mode)		0...1	OFF–ON
106	Digital input 3 status (RI2 in DI mode)		0...1	OFF–ON

### FUNCTION CODE 04 – READ INPUT REGISTERS (Add 30,000 for Modicon Addressing)

Register	Parameter description	Data Type	Raw Data	Range
100	Temperature recording via integrated sensor	Signed 16 Bit	-400...3020	-40.0 to 150.0°C (-40.0...302.0°F)
101	RI1 (NTC10K) Temperature recording via external NTC10K sensor on RI1 input	Signed 16 Bit	-400...3020	-40.0 to 150.0°C (-40.0...302.0°F)
102	RI2 (NTC10K) Temperature recording via external NTC10K sensor on RI2 input	Signed 16 Bit	-400...3020	-40.0 to 150.0°C (-40.0...302.0°F)
103	Currently calculated target temperature (temperature control circuit)	Signed 16 Bit	-400...3020	-40.0 to 150.0°C (-40.0...302.0°F)
104	Current operating status of the unit	Unsigned 16 Bit	0...3	0 = Comfort (standard mode) 1 = ECO 2 = OFF 3 = Boost

**FUNCTION CODE 04 – READ INPUT REGISTERS (Add 30,000 for Modicon Addressing)**

Register	Parameter description	Data Type	Raw Data	Range
105	Recording of relative humidity (for units with RH option)	Unsigned 16 Bit	0...1000	0...100.0% RH
106	CO2 measurement (for units with CO2 option)	Unsigned 16 Bit	0...5000	0...5000ppm
107	Y1 control circuit output capacity (analogue output)	Unsigned 16 Bit	0...1000	0...100.0%
108	Y2 control circuit output capacity (analogue output)	Unsigned 16 Bit	0...1000	0...100.0%
109	Y3 control circuit output capacity (analogue output)	Unsigned 16 Bit	0...1000	0...100.0%
110	Alarm 1 status	Unsigned 16 Bit	0...3	0 = Standard (no alarm) 1 = Amber alarm 2 = Red alarm
111	Alarm 2 status	Unsigned 16 Bit	0...3	0 = Standard (no alarm) 1 = Amber alarm 2 = Red alarm
113	Light intensity	Unsigned 16 Bit	0...1.000	0...100.0%
114	Analogue input 1 (for units with AI option, instead of RI1. 0...10V = 0...100%)	Unsigned 16 Bit	0...1000	0...100.0%
115	Analogue input 2 (for units with AI option, instead of RI2. 0...10V = 0...100%)	Unsigned 16 Bit	0...1000	0...100.0%
116	Fan speed consumption (only RYMASKON 620)	Unsigned 16 Bit	0...1000	0...100.0%
117	Thermic 1 consumption (output capacity for DO1, only RYMASKON 640/660)	Unsigned 16 Bit	0...1000	0...100.0%
118	Thermic 2 consumption (output capacity for DO2, only RYMASKON 640/660)	Unsigned 16 Bit	0...1000	0...100.0%
200	Firmware version	Unsigned 16 Bit	N/A	N/A

**FUNCTION CODE 03 – READ HOLDING REGISTERS (For Modicon Addressing Add 40,000)****FUNCTION CODE 06 – WRITE SINGLE HOLDING REGISTER****FUNCTION CODE 16 – WRITE MULTIPLE HOLDING REGISTERS**

Register	Parameter description	Data Type	Raw Data	Range
100	Nominal target temperature <b>NOTE:</b> Use this register to change the target temperature via GLT. Using GLT to change the target temperature will set the user's manual adjustment to 0 (reset). Reset is done only if the new setpoint deviates from the original one. Writing the value may need to be done twice.	Unsigned 16 Bit	0...950	0.0...95.0°C/°F (Default 21°C)
101	Heating dead zone in comfort mode	Unsigned 16 Bit	0...250	0.0...25.0°C/°F (Default 0.5°C)
102	Cooling dead zone in comfort mode	Unsigned 16 Bit	0...250	0.0...25.0°C/°F (Default 0.5°C)
103	Heating dead zone in ECO mode	Unsigned 16 Bit	0...250	0.0...25.0°C/°F (Default 4.0°C)
104	Cooling dead zone in ECO mode	Unsigned 16 Bit	0...250	0.0...25.0°C/°F (Default 4.0°C)
105	Antifreeze target temperature	Unsigned 16 Bit	0...950	0.0...95.0°C/°F (Default 8°C)
106	Minimum setpoint (temperature)	Signed 16 Bit	-200...0	-20.0...0.0°C/°F (Default -3.0)

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Register	Parameter description	Data Type	Raw Data	Range
107	Maximum setpoint (temperature)	Signed 16 Bit	0...200	0.0...20.0°C/°F (Default 3.0)
108	PB Proportional band of the temperature control	Unsigned 16 Bit	10...500	1.0...50.0°C/°F (Default 4°C)
109	IA Integrated reset time of the temperature control	Unsigned 16 Bit	0...1200	0...1200s (default: 600s)
110	Number of heating stages	Unsigned 16 Bit	0...2	0 = None 1 = 1 stage (default) 2 = 2 stages
111	Direction of heating stage 1	Unsigned 16 Bit	0...1	0 = Reverse (100...0%, default) 1 = Direct (0...100%)
112	Direction of heating stage 2	Unsigned 16 Bit	0...1	0 = Reverse (100...0%, default) 1 = Direct (0...100%)
113	Number of cooling stages	Unsigned 16 Bit	0...2	0 = None 1 = 1 stage (default) 2 = 2 stages
114	Direction of cooling stage 1	Unsigned 16 Bit	0...1	0 = Reverse (100...0%) 1 = Direct (0...100%, default)
115	Direction of cooling stage 2	Unsigned 16 Bit	0...1	0 = Reverse (100...0%) 1 = Direct (0...100%, default)
116	Limit value standard mode Upper temperature limit (see chapter "Limit value control")	Unsigned 16 Bit	0...950	0...95°C/°F (default 35.0°C)
117	Limit value standard mode Lower temperature limit (see chapter "Limit value control")	Unsigned 16 Bit	0...950	0...95°C/°F (default 16.0°C)
118	Limit value standard mode limit ratio (see chapter "Limit value control")	Unsigned 16 Bit	0...50	0.0...5.0 (Default 0.0 = disabled)
119	CO2 setpoint for CO2 control circuit (see chapter "CO2 control circuit")	Unsigned 16 Bit	0...5000	0...5000ppm (Default 1000ppm)
120	CO2 proportional band for CO2 control circuit (see chapter "CO2 control circuit")	Unsigned 16 Bit	10...5000	10...5000ppm (Default = 300ppm)
121	CO2 integral reset time for CO2 control circuit (see Section "CO2 control circuit")	Unsigned 16 Bit	0...10000	0...10,000s (default 0)
122	CO2 direction for CO2 control circuit (see chapter "CO2 control circuit")	Unsigned 16 Bit	0...1	0 = Reverse (100...0%) 1 = Direct (0...100%, default)
123	Humidity setpoint for humidity control circuit (see chapter "Humidity control circuit")	Unsigned 16 Bit	0...1000	0.0...100.0% RH (Default 50%)
124	Humidity proportional band for humidity control circuit (see chapter "Humidity control circuit")	Unsigned 16 Bit	10...1000	1.0...100.0% RH (Default 20.0%)
125	Humidity integral resetting for humidity control circuit (see chapter "Humidity control circuit")	Unsigned 16 Bit	0...10000	0...10,000s (default 0)
126	Humidification direction for humidity control circuit (see chapter "Humidity control circuit")	Unsigned 16 Bit	0...1	0 = Reverse (100...0%) 1 = Direct (0...100%, default)
127	De-humidification direction for humidity control circuit (see chapter "Humidity control circuit")	Unsigned 16 Bit	0...1	0 = Reverse (100...0%) 1 = Direct (0...100%, default)

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Register	Parameter description	Data Type	Raw Data	Range
128	Fan speed display and release for manual adjustments (see chapter "Fan") <b>NOTE:</b> 2 to 5 will release the display on the main screen for manual adjustments.	Unsigned 16 Bit	0...5	0 = No display (default) 1 = Only display 2 = 0-1 + Auto (0%, 100%) 3 = 0-1-2 + Auto (0-50-100%) 4 = 0-1-2-3 + Auto (0-33-66-100%) 5 = 0-1-2-3-4-5-6 + Auto (0%-16%-32%-50%-66%-82%-100%)
129	Fan speed source Assignment of fan speed to the control circuit in AUTO Control. Fan speed depends on the selected control circuit. <b>NOTE:</b> Use the "Min Fan Level" parameter to configure the fan's minimum speed. Use the "Y Max" parameter to configure the fan's maximum speed.  (see chapter "Fan")	Unsigned 16 Bit	0...11	0 = Htg Stage 1 and Clg Stage 1 (default) 1 = Htg Stage 1 2 = Clg Stage 1 3 = Htg Stage 2 and Clg Stage 2 4 = Htg Stage 2 5 = Clg Stage 2 6 = CO2 7 = Humidification 8 = De-humidification 9 = Max. VAV (max. Temp/CO2) 10 = Max. Temp/Hum 11 = Aux. Loop
130	Min. Fan Level Minimum fan speed in the dead zone (heating/cooling capacity 0%) with active fan switch-off delay (see chapter "Fan")	Unsigned 16 Bit	0...100	0...100% (default 0%)

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Register	Parameter description	Data Type	Raw Data	Range
131	<p>Y1</p> <p>Assignment of output capacity from control circuits (0...100%) to the analogue output Y1 (0...10V).</p> <p>Default 5 = Modulating Fan see the following Sections:</p> <ul style="list-style-type: none"> <li>• Analogue output modes</li> <li>• Blower control relay outputs</li> <li>• Temperature control relay output OPEN/CLOSE</li> </ul> <p><b>NOTE:</b> The RYMASKON types 620, 630, 650 and 660 have relay outputs to control 3-speed blowers. To that end, leave Y1 at Modulating Fan (default).</p>	Unsigned 16 Bit	0...20	0 = Network 1 = Htg Stage 1 2 = Htg Stage 2 3 = Clg Stage 1 4 = Clg Stage 2 5 = Modulating Fan 6 = CO2 Control 7 = Max. VAV (Max. Clg/CO2) 8 = Max. Fan (Max. Fan/CO2) 9 = Humidification 10 = De-humidification 11 = Lights 12 = Blind 1 Level 13 = Blind 1 Tilt 14 = Blind 2 Level 15 = Blind 2 Tilt 16 = Amber/Red 17 = Red 18 = Htg Stage1 Stat 19 = Clg Stage1 Stat 20 = Fan Stat 21 = Aux. Loop 22 = 6-Port 23 = 6-Port Reverse
132	<p>Y2</p> <p>Assignment of output capacity from control circuits (0...100%) to the analogue output Y2 (0...10V).</p> <p>Default 1 = Htg Stage 1 (RYMASKON 650: Default 18 = Htg Stage 1 Stat)</p> <p>see the following Sections:</p> <ul style="list-style-type: none"> <li>• Analogue output modes</li> <li>• Blower control relay outputs</li> <li>• Temperature control relay output OPEN/CLOSE</li> </ul> <p><b>NOTE:</b> Not available for RYMASKON types 640 and 660. These types require the Thermic 1/2 Mode to be configured.</p>	Unsigned 16 Bit	0...20	
133	<p>Y3</p> <p>Assignment of output capacity from control circuits (0...100%) to the analogue output Y3 (0...10V).</p> <p>Default 3 = Clg Stage 1 (cooling stage 1)</p> <p>see the following Sections:</p> <ul style="list-style-type: none"> <li>• Analogue output modes</li> <li>• Blower control relay outputs</li> <li>• Temperature control relay output OPEN/CLOSE</li> </ul> <p><b>NOTE:</b> Y3 is not available for RYMASKON types 640 and 660. These types require the Thermic 1/2 Mode to be configured.</p>	Unsigned 16 Bit	0...20	
134	Override output capacity Y1	Unsigned 16 Bit	0...1000	0...100% (0...10.0V, default 0)
135	Override output capacity Y2	Unsigned 16 Bit	0...1000	0...100% (0...10.0V, default 0)
136	Override output capacity Y3	Unsigned 16 Bit	0...1000	0...100% (0...10.0V, default 0)
137	Minimum output capacity Y1	Unsigned 16 Bit	0...1000	0...100.0% (default 0.0%)
138	Maximum output capacity Y1	Unsigned 16 Bit	0...1000	0...100.0% (default 100.0%)
139	Minimum output capacity Y2	Unsigned 16 Bit	0...1000	0...100.0% (default 0.0%)
140	Maximum output capacity Y2	Unsigned 16 Bit	0...1000	0...100.0% (default 100.0%)
141	Minimum output capacity Y3	Unsigned 16 Bit	0...1000	0...100.0% (default 0.0%)
142	Maximum output capacity Y3	Unsigned 16 Bit	0...1000	0...100.0% (default 100.0%)

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Register	Parameter description	Data Type	Raw Data	Range
143	Anti-JAM (valve protection) If the heating/cooling valves are not activated during the configured time, the unit will activate them briefly to prevent jamming.	Unsigned 16 Bit	0...14	0...14 days (default 0 = disabled)
144	RI1 Mode (see chapter "Modes for inputs RI1 and RI2")	Unsigned 16 Bit	0...14	0 = Disabled (default) 1 = Room (NTC10K)
145	RI2 Mode (see chapter "Modes for inputs RI1 and RI2")	Unsigned 16 Bit	0...14	2 = Floor (NTC10K) 3 = Aux. Loop (NTC10K) 4 = Changeover (NTC10K, heating/cooling) 5 = Bus (NTC10K) 6 = Bus (AI option, 0...10V) 7 = CO2 (AI option, 0...10V) 8 = Main Loop (AI option, 0...10V) 9 = Close for ECO (DI mode) 10 = Open for ECO (DI mode) 11 = Close for OFF (DI mode) 12 = Open for OFF (DI mode) 13 = Condensation protection (DI mode) 14 = Bus DI
146	Aux. Loop Source Source of the temperature measurement for the auxiliary control circuit. (Display in the small action circle when recording a valid temperature value.)	Unsigned 16 Bit	0...1	0 = Connected NTC10K Sensor (default) 1 = Temperature via Bus
147	Write auxiliary temperature via the bus <b>NOTE:</b> If "Aux. Loop Source" is set to the bus and the bus transmits a valid value, the value is shown in the small action circle.	Signed 16 Bit	-580...1220	-58.0...122.0°C/°F (Default 0.0)
148	Digital Input Mode (DI Mode)	Unsigned 16 Bit	0...9	0 = Close for ECO (Default) 1 = Open for ECO 2 = Close for OFF 3 = Open for OFF 4 = Changeover (Heating/Cooling) 5 = Disable Cooling (Condensation Protection) 6 = Contact Alarm 7 = Bus 8 = Close for boost 9 = Open for boost
149	Digital Input Delay	Unsigned 16 Bit	0...28800	0...28800s (default 0s)
150	Calibration of integrated temperature sensor (Internal Sensor Cal.)	Signed 16 Bit	-100...+100	-10.0...+10.0°C/°F
151	Calibration RI1 (NTC10K)	Signed 16 Bit	-100...+100	-10.0...+10.0°C/°F
152	Calibration RI2 (NTC10K)	Signed 16 Bit	-100...+100	-10.0...+10.0°C/°F
153	Calibration of integrated CO2 sensor (Units with CO2 option)	Signed 16 Bit	-500...+500	-500...+500ppm
154	Calibration of integrated humidity sensor (Units with RH option)	Signed 16 Bit	-100...+100	-10.0...+10.0% RH
155	Lock Mode (see chapter "Lock Mode")	Unsigned 16 Bit	0...4	0 = Disabled (Default) 1 = ON/OFF Only 2 = Adjust Only 3 = No Input

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Register	Parameter description	Data Type	Raw Data	Range
156	PIN for display lock (Lock Mode) (0000 requires no PIN)	Unsigned 16 Bit	0...9999	0000...9999 (default 0000)
157	Boost Time Boost mode runtime NOTE: If configured for 0, then the boost will not switch off automatically.	Unsigned 16 Bit	0...480	1...480 min (default 0)
158	Boost Target Connects the boost to the control circuit and releases the control on the main screen.	Unsigned 16 Bit	0...8	0 = Disabled 1 = Htg Stage 1 (default) 2 = Htg Stages 1 & 2 3 = Clg Stage 1 4 = Clg Stages 1 & 2 5 = Humidification 6 = De-humidification 7 = CO2 8 = Fan 9 = Aux. Loop
159	Lights switch-off delay	Unsigned 16 Bit	0...1800	0...1.800s (default 30s)
160	Lights Mode Sets the light intensity increments when actuating the lights icon on the main screen. (1) 0-1: 0, 100% (2) 0-1-2: 0, 50, 100% (3) 0-1-2-3: 0, 33, 66, 100%	Unsigned 16 Bit	1...3	1 = 0-1 (default) 2 = 0-1-2 3 = 0-1-2-3
161	Lights Interlock Locks the lighting (1) Disabled Light intensity is maintained when toggling between Comfort (standard mode) and ECO/OFF (2) Comfort • ECO/OFF → Comfort (standard mode): Light intensity 100% • Comfort (standard mode) → ECO/OFF: Light intensity 0% • Priority switching by hand or via the bus; maintained in ECO/OFF mode (3) Comfort + ECO • ECO/OFF → Comfort (standard mode): Light intensity 100% • Comfort (standard mode) → OFF: Light intensity 0% • Comfort (standard mode) → ECO: Light intensity remains unchanged • Priority switching by hand or via the bus; maintained in ECO/OFF mode  (see chapter "Blind and light icons")	Unsigned 16 Bit	0...2	0 = Disabled (default) 1 = Comfort 2 = Comfort + ECO
163	Display lighting in standby	Unsigned 16 Bit	0...20	0...20 (default 5)
164	Humidity Display (for units with RH option)	Unsigned 16 Bit	0...1	0 = Disabled 1 = Released (default)
165	Displays the °C/°F icon to choose the temperature unit on the main screen	Unsigned 16 Bit	0...1	0 = Disabled (default) 1 = Released



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Register	Parameter description	Data Type	Raw Data	Range
166	<p>Room Sensor Text</p> <p>Designation of the temperature sensor in the main control circuit. Text and value are shown in the small action circle. If disabled, text and reading are hidden.</p> <p>(Default 1 = Room)</p> <p><b>NOTE:</b> The room sensor and the main control circuit are assigned to the integrated temperature sensor by default. As an alternative, use "RI1/RI2 Mode" to define RI1/RI2 or AI1/AI2 as a room sensor and configure them as a control variable of the main control circuit.</p>	Unsigned 16 Bit	0...16	0 = Disabled 1 = Room 2 = Floor 3 = Outside 4 = Zone 1 5 = Zone 2 6 = Zone 3 7 = Bathroom 8 = Sauna 9 = Bedroom 10 = Kitchen 11 = Cooler 12 = Flow 13 = Hot Water 14 = Boiler 15 = Pool 16 = Room
167	<p>Floor Sensor Text</p> <p>Designation of the temperature sensor in the <b>limit value control circuit</b>. The value is shown in the small action circle. If disabled, text and reading are hidden.</p> <p>Default: 2 = Floor</p> <p><b>NOTE:</b> Use "RI1/RI2 Mode" to assign RI1/RI2 to the floor sensor and the limit value control circuit and to configure it as the control variable of the limit value control circuit.</p>	Unsigned 16 Bit	0...16	
168	<p>Aux. Sensor text</p> <p>Designation of the temperature sensor in the <b>auxiliary control circuit</b>. The value is shown in the small action circle. If disabled, text and reading are hidden.</p> <p>Default: 3 = Outside</p> <p><b>NOTE:</b> Use "RI1/RI2 Mode" to assign the AUX sensor and the auxiliary control circuit to RI1/RI2 and configure it as the control variable of the auxiliary control circuit.</p>	Unsigned 16 Bit	0...16	
169	Alarm 1 source	Unsigned 16 Bit	0...3	0 = CO2 1 = Room (temperature) 2 = Humidity 3 = None (default)
170	Amber alarm 1 switching point	Unsigned 16 Bit	0...5000	0...5000 (default 0)
171	Red alarm 1 switching point	Unsigned 16 Bit	0...5000	0...5000 (default 0)
172	Alarm 1 hysteresis	Unsigned 16 Bit	0...5000	0...5000 (default 0)
173	Alarm 2 Source	Unsigned 16 Bit	0...3	0 = CO2 1 = Room (temperature) 2 = Humidity 3 = None (default)
174	Amber alarm 2 switching point	Unsigned 16 Bit	0...5000	0...5000 (default 0)
175	Red alarm 2 switching point	Unsigned 16 Bit	0...5000	0...5000 (default 0)
176	Alarm 2 Hysteresis	Unsigned 16 Bit	0...5000	0...5000 (default 0)

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177	Light priority switching <b>NOTE:</b> Following priority switching, the parameter is reset to 0. The light object inherits the latest setting (made by the bus or the user). <b>NOTE:</b> Override Level 1 is the next level after 0% and, depending on the configuration, 100% for ON/OFF, 50% for 3 switching speeds, 50% for 4 switching speeds, etc.	Unsigned 16 Bit	0...4	0 = None (default) 1 = Override Level (0%) 2 = Override Level 1 (100% = ON/OFF, 50% = 3 switching speeds, 33% = 4 switching speeds) 3 = Override Level 2 (100% = 3 switching speeds, 66% = 4 switching speeds) 4 = Override Level 3 (100% = 4 switching speeds)
179	Override lock mode <b>NOTE:</b> Following priority switching ON or OFF, the parameter is reset to 0.	Unsigned 16 Bit	0...2	0 = None (default) 1 = Enable 2 = Disable
180	PIN for setting mode (0000 requires no PIN)	Unsigned 16 Bit	0...9999	0000...9999 (default 6666)
181	PIN for secondary screen (0000 requires no PIN)	Unsigned 16 Bit	0...9999	0000...9999 (default 0000)
182	PWM1 duration for digital output DO1 to activate the heating and cooling valves <b>Only for RYMASKON 640/660 types</b> (see chapter "PWM control/digital outputs")	Unsigned 16 Bit	0...120	0...120s (default 30s) 0 = ON/OFF
183	Digital output 1 bus override directly from DO1, locally (only RYMASKON 640/660)	Unsigned 16 Bit	0...2	0 = No Override (default) 1 = Output ON Override 2 = Output OFF Override
184	Digital output 2 bus override directly from DO2, locally (only RYMASKON 640/660)	Unsigned 16 Bit	0...2	0 = No Override (default) 1 = Output ON Override 2 = Output OFF Override
185	Changeover, lower limit, where the unit in changeover mode automatically switches into cooling mode; cold water supply (see chapter "Changeover")	Unsigned 16 Bit	0...950	0.0...95.0°C/°F (Default 20°C)
186	Changeover, upper limit, where the unit in changeover mode automatically switches into heating mode; cold water supply (see chapter "Changeover")	Unsigned 16 Bit	0...950	0.0...95.0°C/°F (Default 25°C)
187	Fan speed override	Unsigned 16 Bit	0...7	0 = Auto 1 = Manual OFF 2 = Manual Level 1 3 = Manual Level 2 4 = Manual Level 3 5 = Manual Level 4 6 = Manual Level 5 7 = Manual Level 6
188	Fan switch-off delay, if the consumption of the assigned control circuit is smaller than the minimum fan speed (see chapter "Fan") <b>NOTE:</b> Only active if the minimum fan speed is configured to be greater than 0%.	Unsigned 16 Bit	0...28800	0...28800s (default 0s)
189	AUX target temperature for auxiliary control circuit (see chapter "AUX control circuit")	Unsigned 16 Bit	0...950	0.0...95.0°C/°F (Default 21°C)
190	AUX proportional band for auxiliary control circuit (see chapter "AUX control circuit")	Unsigned 16 Bit	10...500	1.0...50.0°C/°F (Default 4°C)
191	AUX integral reset time for auxiliary control circuit (see chapter "AUX control circuit")	Unsigned 16 Bit	0...1200	0...1.200s (default 600s)

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192	AUX direction for auxiliary control circuit (see chapter "AUX control circuit")	Unsigned 16 Bit	0...1	0 = Reverse (100...0%) 1 = Direct (0...100%, default)
193	PWM2 duration for digital output DO2 to activate the heating and cooling valves <b>Only for RYMASKON 640/660 types</b> (see chapter "PWM control/digital outputs")	Unsigned 16 Bit	0...120	0...120s (default 30s) 0 = ON/OFF
194	Thermic 1 Mode <b>Only for RYMASKON 640/660 types</b> Assignment of digital output DO1 to the control circuit; Default 1 = Htg Stage 1 (see chapter "PWM control/digital outputs")	Unsigned 16 Bit	0...8	0 = Bus Value (Thermic 1/2 Override) 1 = Htg Stage 1 2 = Htg Stage 2 3 = Clg Stage 1
195	Thermic 2 Mode <b>Only for RYMASKON 640/660 types</b> Assignment of digital outputs DO2 to the control circuit; Default 3 = Clg Stage 1 (see chapter "PWM control/digital outputs")	Unsigned 16 Bit	0...8	4 = Clg Stage 2 5 = CO2 Control 6 = Humidification 7 = De-humidification 8 = Aux Control Demand
196	Thermic 1 Override value (only RYMASKON 640/660)	Unsigned 16 Bit	0...1000	0...100% (default 0)
197	Thermic 1 Override value (only RYMASKON 640/660)	Unsigned 16 Bit	0...1000	0...100% (default 0)
198	CO2 display (for units with CO2 option)	Unsigned 16 Bit	0...1	0 = Disabled 1 = Released (default)
<b>200</b>	Modbus address	Unsigned 16 Bit	0...247	0...247 (default 1)
201	Modbus baud rate	Unsigned 16 Bit	0...4	0 = 9600 (default) 1 = 19200 2 = 38400 3 = 57600 4 = 76800
202	Modbus parity	Unsigned 16 Bit	0...2	0 = None (default) 1 = Odd 2 = Even
203	Stop bits	Unsigned 16 Bit	0...1	0 = 1 Stop Bit (default) 1 = 2 Stop Bits
<b>300</b>	Reset	Unsigned 16 Bit	0...1	0 = Standard 1 = Enforced Reset
301	Save in non-volatile memory	Unsigned 16 Bit	0...1	0 = Standard 1 = Update
303	Enforce factory defaults	Unsigned 16 Bit	0...1	0 = Standard 1 = Enforce Defaults
304	Display refresh rate	Unsigned 16 Bit	0...2	0 = Fast (default) 1 = Medium 2 = Slow
306	User interface language	Unsigned 16 Bit	0...4	0 = DE (default) 1 = EN 2 = FR 3 = ES 4 = IT
307	Screen Cycle Speed Toggle the readings shown in the small circle on the display Fast = 4.3s / medium = 7.8s / slow = 10.8s	Unsigned 16 Bit	0...2	0 = Medium (default) 1 = Fast 2 = Slow
308	Toggle icon for language selection	Unsigned 16 Bit	0...1	0 = Disabled (default) 1 = Released

**FUNCTION CODE 03 – READ HOLDING REGISTERS (For Modicon Addressing Add 40,000)**  
**FUNCTION CODE 06 – WRITE SINGLE HOLDING REGISTER**  
**FUNCTION CODE 16 – WRITE MULTIPLE HOLDING REGISTERS**

Register	Parameter description	Data Type	Raw Data	Range
400	<p>Enable Function 1 Releases the icon for blind 1.</p> <p><b>NOTE:</b> If blind 1 is released, pay attention to registers 410 and 411.</p>	Unsigned 16 Bit	0...1	0 = Disabled (default) 1 = Blind 1
401	<p>Enable Function 2 Releases the icon for light or blind 2.</p> <p><b>NOTE:</b> If lights is released, pay attention to registers 159–161. If blind 2 is released, pay attention to registers 416 and 417.</p>	Unsigned 16 Bit	0...2	0 = Disabled (default) 1 = Lights 2 = Blind 2
410	<p>Blind 1 Mode (see chapter "Blind control")</p> <p>Sets the blind 1 increments when actuating the arrow keys on the screen.</p> <p>(1) On/Off: 0, 100% (2) 4 steps: 0, 25, 50, 75, 100% (3) 10 steps: 0, 10, 20, ..., 100% (4) infinite: 0, 1, 2, 3, ..., 100%</p> <p>Parameter 4 enables an automatic function automatically modifying the value if the key is pressed for a long time.</p> <p><b>NOTE:</b> Pay attention to register 400.</p>	Unsigned 16 Bit	1...4	1 = 2 Positions (on/off) 2 = 5 Positions (25% increments) 3 = 11 Positions (10% increments) 4 = Smoothly (1% increments)
411	<p>Blind 1 Configuration (see chapter "Blind control")</p> <p>Releases the graphical display of the movement type of blind 2 and the relevant variables for manual control.</p> <p>(0) Level: translatory movement, UP/DOWN (1) Tilt: rotating movement, rotation (2) Level + tilt</p> <p><b>NOTE:</b> Pay attention to register 400.</p>	Unsigned 16 Bit	0...2	0 = Level (up/down) 1 = Tilt (rotation) 2 = Level + Tilt
412	Blind 1 Level value	Unsigned 16 Bit	0...1000	0...100%
413	Blind 1 Tilt value	Unsigned 16 Bit	0...1000	0...100%
414	Blind 2 Level value	Unsigned 16 Bit	0...1000	0...100%
415	Blind 2 Tilt value	Unsigned 16 Bit	0...1000	0...100%
416	<p>Blind 2 Mode (see chapter "Blind control")</p> <p>Sets the blind 2 increments when actuating the arrow keys on the screen.</p> <p>(1) On/Off: 0, 100% (2) 4 steps: 0, 25, 50, 75, 100% (3) 10 steps: 0, 10, 20, ..., 100% (4) infinite: 0, 1, 2, 3, ..., 100%</p> <p>Parameter 4 enables an automatic function automatically modifying the value if the key is pressed for a long time.</p> <p><b>NOTE:</b> Pay attention to register 401.</p>	Unsigned 16 Bit	1...4	1 = 2 Positions (on/off) 2 = 5 positions (25% increments) 3 = 11 positions (10% increments) 4 = Smoothly (1% increments)

**FUNCTION CODE 03 – READ HOLDING REGISTERS (For Modicon Addressing Add 40,000)**  
**FUNCTION CODE 06 – WRITE SINGLE HOLDING REGISTER**  
**FUNCTION CODE 16 – WRITE MULTIPLE HOLDING REGISTERS**

Register	Parameter description	Data Type	Raw Data	Range
417	Blind 2 Configuration (see chapter "Blind control")  Releases the graphical display of the movement type of blind 2 and the relevant variables for manual control. (0) Level: translatory movement, UP/DOWN (1) Tilt: rotating movement, rotation (2) Level + tilt  <b>NOTE:</b> Pay attention to register 401.	Unsigned 16 Bit	0...2	0 = Level (up/down) 1 = Tilt (rotation) 2 = Level + Tilt



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