

Register tables

RYMASKON® 1000 Interface

Interface for controlling temperature, fans, light and sun protection (2 zones)

Room control unit with colour TFT display and capacitive keys (touch keys),
with Modbus connection or (Wireless)



Information register

FUNCTION CODE 03 - READ HOLDING REGISTERS

Default Holding Address	Parameter description	Register Name	Access	Value	Range
Device information					
2000	Device Type	Device_Type_2000	r	0...4	0..2 = internally assigned 3 = RYMASKON 130x interface, no control outputs 4 = RYMASKON 140x interface, no control outputs
2001	Firmware	Firmware_2001	r	1011...9999	1011...9999
2002	Prod. Date (month/year) e.g. 1024 = October 24	ProdDate_2002	r	123...1260	123...1260
2003	Operation Days (in days)	OperationDays_2003	r	0...15000	0...15000 days
2004	Bus Address	BusAddress_2004	r	1...247	1...247 (default 1)
2005	Baudrate	Baudrate_2005	r	0...4	0 = 9600 Bd 1 = 19200 Bd (default) 2 = 38400 Bd 3 = 57600 Bd 4 = 115200 Bd
2006	Parity / Stop Bits	Parity_StopBits_2006	r	0...3	0 = None (none, 1 stop bit) 1 = EVEN (even, default) 2 = ODD (odd) 3 = None (none, 2 stop bits)
3749	Fan Control	Fan_Control_3749	r	0...1	0 = no fan control 1 = with fan control
4200	Sun Protect circuits	SP_NumOfCircuits_4200	r	0...2	0 = no sun protect adjustment 1 = 1 sun protect circuit 2 = 2 sun protect circuits
5300	Light Circuits	L_NumOfCircuits_5300	r	0...2	0 = no light adjustment 1 = 1 light circuit 2 = 2 light circuits
2025	Internal Error bit 0= external temperature sensor error (NTC10K) bit 1= I2C communication error	InternalError_2025_bitField InternalError_TempS2Ext_2025_bit0 InternalError_I2CCommun_2025_bit1	r	0...1	0 = no error (default) 1 = error

Data register

Data register parameters are stored in the volatile memory (RAM). The values are reset to their default after the unit is restarted. Some parameters can have values saved in the configuration register for restore after the unit is restarted (e.g. setpoint temperature)

FUNCTION CODE 03 - READ HOLDING REGISTERS

FUNCTION CODE 06 - WRITE SINGLE HOLDING REGISTER

FUNCTION CODE 16 - WRITE MULTIPLE HOLDING REGISTERS

Default Holding Address	Parameter description	Register Name	Access	Value	Range	Mapping	Default Input-Register	Default Coil-Register
Sensor data								
100	Temp Sensor 1 int. value	TempS1Int_Value_100	r	-200...1220	-20.0 to 122.0 °C/°F	Input	1	
101	Humidity Sensor 1 int. Value	HumS1Int_Value_101	r	0...1000	0 to 100.0 % RH	Input	2	
102	CO2 Sensor 1 int. value	CO2S1Int_Value_102	r	0...2000	0...2000 ppm	Input	3	
103	VOC Sensor 1 int. value ppb	VOCS1Int_ppb_Value_103	r	0...30000	0...30000 ppb	Input	4	
104	VOC Sensor 1 int.value %	VOCS1Int_%_Value_104	r	0...100	0...100 %	Input	5	
106	Temp Sensor 2 ext. value	TempS2Ext_Value_106	r	-200...1220	-20.0 to 122.0 °C/°F	Input	7	
120	Temp Sensor 3 bus value	TempS3Bus_Value_120	r/w	-200...1220	-20.0 to 122.0 °C/°F			
121	Humidity Sensor 2 bus value	HumS3Bus_Value_121	r/w	0...1000	0 to 100.0 % RH			
122	CO2 Sensor 2 bus value	CO2S2Bus_Value_122	r/w	0...5000	0...5000 ppm			
123	VOC Sensor 2 bus value	VOCS2Bus_Value_123	r/w	0...60000	0...60000 ppb			
124	PM Sensor 2 bus value	PMS2Bus_Value_124	r/w	0...1000	0...1000 µg/m³			
125	Pressure Sensor 2 bus value Unit is set via address 2816	PressureS2Bus_Value_125	r/w	mbar, hPa and Pa 0...10000 inWC 0...50000	mbar, hPa und Pa 0...10000 inWC 0...500			
126	D1 Input Status	D1Input_Status_126	r	0...1	0 = DI1 open (default) 1 = DI1 closed	Input	11	
127	D2 Input Status	D2Input_Status_127	r	0...1	0 = DI2 open (default) 1 = DI2 closed	Input	12	
300	CO2 Sensor 1 int. reset auto zero After ON, the unit switches back to OFF automatically	CO2S1Int_ResetAutozero_300	r/w	0...1	0 = OFF 1 = ON			
302	CO2 Sensor 1 int. auto calibration	CO2S1Int_AutoCalibr_302	r/w	0...1	0 = OFF 1 = ON (default)			

Default Holding Address	Parameter description	Register Name	Access	Value	Range	Mapping	Default Input-Register	Default Coil-Register
Room climate data								
400	Temp Setpoint (Default changes automatically when temperature unit is set to °F)	Setpoint_Temp_400	r/w	0...1220	0...122.0 °C/°F (default 21°C / 70°F)			
401	Temp Setpoint Offset	Setpoint_Temp_Offset_401	r/w	-180...180	-18.0...18.0 °C/°F (default 0 °C/°F)			
402	Temp Setpoint Absolute (Temp Setpoint + Temp Setpoint Offset)	Setpoint_Temp_Absolut_402	r	-180...1400	-18...140.0 °C/°F	Input	8	
403	Temp Setpoint Offset Min-Max (Default changes automatically when temperature unit is set to °F) Set value applies both in positive and negative direction	Setpoint_Temp_Offset_MinMax_403	r/w	0...180	0...18.0 °C/°F (default 3°C / 6°F)			
404	OpMode Status Feedback from the BMS for display The icon turns blue when cooling The icon turns red when heating The icon turns grey when off	OpMode_Status_404	r/w	0...2	0 = Off (default) 1 = Cooling 2 = Heating	Input		9
405	Presence Status	Presence_Status_405	r	0...1	0 = unoccupied 1 = occupied (default)	Coil		1
406	Fan Auto Mode <u>Manual/Auto activation through:</u> a) touch keys on unit (Manual = off or 1-5 , Auto = A) b) BMS	Fan_AutoMode_406	r/w	0...1	0 = Manual 1 = Auto (default)	Coil		196
407	Fan Level The value must be specified by the BMS in Auto mode (address 406 = 1)	Setpoint_Fan_Level_407	r/w	0...5	0 = Off 1 = Level 1 (Default) 2 = Level 2 3 = Level 3 4 = Level 4 5 = Level 5	Input	10	
408	Header Icon/Status	HeaderIconStatus_408_bitField						
	bit 0 = frost protection	HeaderIconStatus_FrostProtection_408_bit0	r	0/1	0 = inactive (default) 1 = active	Coil		2
	bit 1 = window contact	HeaderIconStatus_WindowContact_408_bit1	r	0/1	0 = inactive (default) 1 = active	Coil		3
	bit 2 = dew point (condensation)	HeaderIconStatus_DewPoint_408_bit2	r	0/1	0 = inactive (default) 1 = active	Coil		4
	bit 3 = ECO	HeaderIconStatus_ECO_408_bit3	r	0/1	0 = inactive (default) 1 = active	Coil		5
	bit 4 = Error	HeaderIconStatus_Error_408_bit4	r	0/1	0 = inactive (default) 1 = active	Coil		6
	bit 5 = Config Mode	HeaderIconStatus_ConfigMode_408_bit5	r	0/1	0 = inactive (default) 1 = active	Coil		7
409	Room Climate Controlled By BMS Through activation, the user cannot use the buttons to adjust the setpoint temperature, fan and presence.	RCBBMS_409_bitField						
	bit 0 = temp lock	RCBBMS_Temp_Lock_409_bit0	r/w	0/1	0 = inactive (default) 1 = active	Coil		12
	bit 1 = fan lock	RCBBMS_Fan_Lock_409_bit1	r/w	0/1	0 = inactive (default) 1 = active	Coil		13
	bit 2 = presence lock	RCBBMS_Presence_Lock_409_bit2	r/w	0/1	0 = inactive (default) 1 = active	Coil		14
410	Presence Modbus	Presence_Mod_410	r/w	0...2	0 = unoccupied 1 = occupied 2 = occupied via unit (default)			

Default Holding Address	Parameter description	Register Name	Access	Value	Range	Mapping	Default Input-Register	Default Coil-Register
411	Header Icon Modbus	HeaderIconModbus_411_bitField						
	bit 0 = frost protection	HeaderIconModbus_FrostProtection_411_bit0	r/w	0/1	0 = inactive (default) 1 = active	Coil		200
	bit 1 = window contact	HeaderIconModbus_WindowContact_411_bit1	r/w	0/1	0 = inactive (default) 1 = active	Coil		201
	bit 2 = dew point (condensation)	HeaderIconModbus_DewPoint_411_bit2	r/w	0/1	0 = inactive (default) 1 = active	Coil		202
	bit 3 = ECO	HeaderIconModbus_ECO_411_bit3	r/w	0/1	0 = inactive (default) 1 = active	Coil		203
	bit 4 = Error	HeaderIconModbus_Error_411_bit4	r/w	0/1	0 = inactive (default) 1 = active	Coil		204
	bit 5 = Config Mode	HeaderIconModbus_ConfigMode_411_bit5	r/w	0/1	0 = inactive (default) 1 = active	Coil		205
412	Enable Presence DI (Default is set via 3801)	Enable_PresenceDI_412	r/w	0...1	0 = disable 1 = enable (default)	Coil		199
413	Enable Icons DI (Default is set via 3802)	Enable_IconDI_413_bitField						
	bit 0 = frost protection	Enable_FrostProtectionDI_413_bit0	r/w	0/1	0 = disable 1 = enable (default)	Coil		210
	bit 1 = window contact	Enable_WindowContactDI_413_bit1	r/w	0/1	0 = disable 1 = enable (default)	Coil		211
	bit 2 = dew point (condensation)	Enable_DewPointDI_413_bit2	r/w	0/1	0 = disable 1 = enable (default)	Coil		212
	bit 3 = ECO	Enable_ECODI_413_bit3	r/w	0/1	0 = disable 1 = enable (default)	Coil		213
	bit 4 = Error	Enable_ErrorDI_413_bit4	r/w	0/1	0 = disable 1 = enable (default)	Coil		214
Sun protection data								
700	Sun protect auto mode	SP_AutoMode_700_bitField						
	Auto mode: Keys/buttons are deactivated. Sun protection is exclusively adjusted via the BMS							
	bit 0 = Sun protect 1	SP1_AutoMode_700_bit0	r/w	0/1	0 = Auto mode inactive (default) 1 = Auto mode active	Coil		96
	bit 2 = Sun protect 2	SP2_AutoMode_700_bit1	r/w	0/1	0 = Auto mode inactive (default) 1 = Auto mode active	Coil		97
720	Sun protect 1 key status	SP1_KeyStatus_720	r/w	0...6	0 = no key pressed (default) 1 = down short press 2 = down long press 3 = up short press 4 = up long press 5 = down pressed (held) 6 = up pressed (held)	Input	13	
721	Sun protect 1 position value	SP1_Position_Value_721	r/w	0...1000	0.0...100.0 % (default 0%)	Input	14	
722	Sun protect 1 angle value	SP1_Angle_Value_722	r/w	-180...180	-180°...180° (default 0°)	Input	15	
730	Sun protect 2 key status	SP2_KeyStatus_730	r/w	0...6	0 = no key pressed (default) 1 = down short press 2 = down long press 3 = up short press 4 = up long press 5 = down pressed (held) 6 = up pressed (held)	Input	16	
731	Sun protect 2 position value	SP2_Position_Value_731	r/w	0...1000	0.0...100.0 % (default 0%)	Input	17	
732	Sun protect 2 angle value	SP2_Angle_Value_732	r/w	-180...180	-180°...180° (default 0°)	Input	18	

Default Holding Address	Parameter description	Register Name	Access	Value	Range	Mapping	Default Input-Register	Default Coil-Register
Light data								
1100	Light auto mode Auto mode: Keys/buttons are deactivated, buttons are greyed out. Light is exclusively adjusted via the BMS	L_AutoMode_1100_bitField						
	bit 0 = Light 1	L1_AutoMode_1100_bit0	r/w	0/1	0 = Auto mode inactive (default) 1 = Auto mode active	Coil		116
	bit 1 = Light 2	L2_AutoMode_1100_bit1	r/w	0/1	0 = Auto mode inactive (default) 1 = Auto mode active	Coil		117
1102	Light status	L_LightStatus_1102_bitField						
	bit 0 = Light 1	L1_LightStatus_1102_bit0	r/w	0/1	0 = Light off (default) 1 = Light on	Coil		136
	bit 1 = Light 2	L2_LightStatus_1102_bit1	r/w	0/1	0 = Light off (default) 1 = Light on	Coil		137
1120	Light 1 key status	L1_KeyStatus_1120	r/w	0...6	0 = no key pressed (default) 1 = down short press 2 = down long press 3 = up short press 4 = up long press 5 = down pressed (held) 6 = up pressed (held)	Input	73	
1121	Light 1 dimm value	L1_Dimm_Value_1121	r/w	0...100	0...100 % (default 0%)	Input	74	
1130	Light 2 key status	L2_KeyStatus_1130	r/w	0...6	0 = no key pressed (default) 1 = down short press 2 = down long press 3 = up short press 4 = up long press 5 = down pressed (held) 6 = up pressed (held)	Input	79	
1131	Light 2 dimm value	L2_Dimm_Value_1131	r/w	0...100	0...100 % (default 0%)	Input	80	
Date / time data								
2018	Time Hour (winter time)	Date_Time_2018-2023	r/w	00...23	default 12			
2019	Time Minute (winter time)		r/w	00...59	default 00			
2020	Time Seconds (winter time)		r/w	00...59	default 00			
2021	Date Day		r/w	01...31	default 01			
2022	Date Month		r/w	01...12	default 01			
2023	Date Year		r/w	23...99	default 23			

Data register

Parameters of the configuration register are stored in the non-volatile memory (EEPROM). These parameters may only be changed while the device is being configured and not during operation. These values are retained after the unit is restarted.

FUNCTION CODE 03 - READ HOLDING REGISTERS

FUNCTION CODE 06 - WRITE SINGLE HOLDING REGISTER

FUNCTION CODE 16 - WRITE MULTIPLE HOLDING REGISTERS

Default Holding Address	Parameter description	Register Name	Access	Value	Range
General configuration					
2008	PIN for the display menu (with 0000, no PIN is necessary)	PIN_2008	r/W	0000...9999	0000...9999 (default 1111)
2009	Language	Language_2009	r/w	0...5	0 = German 1 = English (default) 2 = Spanish 3 = French 4 = Italian 5 = Russian
2010	Temp Unit When switching to °F, please note/check/change the following addresses: 2314, 2315, 2914, 2915, 3014, 3015, 3600, 3603, 3604	Temp_Unit_2010	r/w	0...1	0 = °F 1 = °C (default)
2011	Display Brightness (when active)	Display_Brightness_2011	r/w	0...100	0 = auto (default) 1...100 %
2012	Screen Saver Timeout Time after which the screen saver is activated (If deactivated, the service life of the display is shortened)	ScreenSaver_Timeout_2012	r/w	0...60	0 = deactivated 1...60 = 1...60s (default 20s)
2013	Save To NVRAM (EEPROM) Must be carried out after configuration is complete. Unit performs a restart.	SaveToEEPROM_2013	r/w	0...1	0 = normal (default) 1 = save
2015	Time Format	Time_Format_2015	r/w	0...2	0 = 12h (am/pm) 1 = 24h (default) 2 = nothing displayed
2016	Date Format	Date_Format_2016	r/w	0...2	0 = week day DD.MM. (default) 1 = week day MM.DD 2 = nothing displayed

Default Holding Address	Parameter description	Register Name	Access	Value	Range
2017	Summer Time Region (Summer / Winter) Information: In Europe, 1 hour ahead on the last Sunday in March and 1 hour back on the last Sunday in October, both at 2:00 a.m. In the USA, 1 hour ahead on the second Sunday in March and 1 hour back on the first Sunday in November, both at 2:00 a.m. Winter time is the leading variable	Time_SetSummerWinter_2017	r/w	0...2	0 = Europe 1 = USA 2 = no time change (default, winter time)
2024	Darkmode	Display_Darkmode_2024	r/w	0...1	0 = Light display mode (default) 0 = Dark display mode (darkmode)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
Sensor configuration					
2300 - 2311	Temp Sensor 1 int. Label	TempS1Int_Label_2300-2311	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Raum English: Room Spanish: Habitación French: Locaux Italian: Camera Russian: комната	
2312	Temp Sensor 1 int. Offset	TempS1Int_Offset_2312	r/w	-200...200	-20°...+20° (default 0)
2313	Temp Sensor 1 int. Averaging Time	TempS1Int_AveragingTime_2313	r/w	0...3	0 = 4s (default) 1 = 8s 2 = 16s 3 = 32s
2314	Temp Sensor 1 int. Colour Scale Start (if the temperature unit is set to °F, you must adjust the limit here, recommendation: 61°)	TempS1Int_ColourScale_Start_2314	r/w	0...1220	0...122.0 °C/°F (default 16°C)
2315	Temp Sensor 1 int. Colour Scale End (if the temperature unit is set to °F, you must adjust the limit here, recommendation: 82°)	TempS1Int_ColourScale_End_2315	r/w	0...1220	0...122.0 °C/°F (default 24°C)
2317	Temp Sensor 1 int. Enable in Sensor Menu	TempS1Int_EnableInSensorMenu_2317	r/w	0...1	0 = disable (default) 1 = enable
2318	Temp Sensor 1 int. Show Colour Scale	TempS1Int_EnableColourScale_2318	r/w	0...1	0 = disable 1 = enable (default)
2400 - 2411	Humidity Sensor 1 int. Label	HumS1Int_Label_2400-2411	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Raum English: Room Spanish: Habitación French: Locaux Italian: Camera Russian: комната	
2412	Humidity Sensor 1 int. Offset	HumS1Int_Offset_2412	r/w	-200...200	-20...+20 % (default 0)
2413	Humidity Sensor 1 int. Averaging Time	HumS1Int_AveragingTime_2413	r/w	0...3	0 = 4s (default) 1 = 8s 2 = 16s 3 = 32s
2414	Humidity Sensor 1 int. Colour Scale Start	HumS1Int_ColourScale_Start_2414	r/w	0...1000	0...100.0 % RH (default 0)
2415	Humidity Sensor 1 int. Colour Scale End	HumS1Int_ColourScale_End_2415	r/w	0...1000	0...100.0 % RH (default 100)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
2417	Humidity Sensor 1 int. Enable in Sensor Menu	HumS1Int_EnableInSensorMenu_2417	r/w	0...1	0 = disable 1 = enable (default)
2418	Humidity Sensor 1 int. Show Colour Scale	HumS1Int_EnableColourScale_2418	r/w	0...1	0 = disable 1 = enable (default)
2500 - 2511	CO2 Sensor 1 int. Label	CO2S1Int_Label_2500-2511	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Raum English: Room Spanish: Habitación French: Locaux Italian: Camera Russian: комната	
2512	CO2 Sensor 1 int. Offset	CO2S1Int_Offset_2512	r/w	-500...500	-500...+500 ppm (default 0)
2513	CO2 Sensor 1 int. Averaging Time	CO2S1Int_AveragingTime_2513	r/w	0...3	0 = 4s (default) 1 = 8s 2 = 16s 3 = 32s
2514	CO2 Sensor 1 int. Colour Scale Start	CO2S1Int_ColourScale_Start_2514	r/w	0...2000	0...2000 ppm (default 0)
2515	CO2 Sensor 1 int. Colour Scale End	CO2S1Int_ColourScale_End_2515	r/w	0...2000	0...2000 ppm (default 2000)
2517	CO2 Sensor 1 int. Enable in Sensor Menu	CO2S1Int_EnableInSensorMenu_2517	r/w	0...1	0 = disable 1 = enable (default)
2518	CO2 Sensor 1 int. Show Colour Scale	CO2S1Int_EnableColourScale_2518	r/w	0...1	0 = disable 1 = enable (default)
2600 - 2611	VOC Sensor 1 int. Label	VOCS1Int_Label_2600-2611	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Raum English: Room Spanish: Habitación French: Locaux Italian: Camera Russian: комната	
2613	VOC Sensor 1 int. Averaging Time	VOCS1Int_AveragingTime_2613	r/w	0...3	0 = 4s (default) 1 = 8s 2 = 16s 3 = 32s
2614	VOC Sensor 1 int. Colour Scale Start	VOCS1Int_ColourScale_Start_2614	r/w	0...30000	0...30000 ppb (default 0)
2615	VOC Sensor 1 int. Colour Scale End	VOCS1Int_ColourScale_End_2615	r/w	0...30000	0...30000 ppb (default 7000)
2617	VOC Sensor 1 int. Enable in Sensor Menu	VOCS1Int_EnableInSensorMenu_2617	r/w	0...1	0 = disable 1 = enable (default)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
2618	VOC Sensor 1 int. Show Colour Scale	VOCS1Int_EnableColourScale_2618	r/w	0...1	0 = disable 1 = enable (default)
2900-2911	Temp Sensor 2 ext. Label	TempS2Ext_Label_2900-2911	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Aussen English: Outdoor Spanish: Exterior French: extérieure Italian: esterna Russian: снаружи	
2912	Temp Sensor 2 ext. Offset	TempS2Ext_Offset_2912	r/w	-200...200	-20°...+20° (default 0)
2913	Temp Sensor 2 ext. Averaging Time	TempS2Ext_AveragingTime_2913	r/w	0...3	0 = 4s (default) 1 = 8s 2 = 16s 3 = 32s
2914	Temp Sensor 2 ext. Colour Scale Start (if the temperature unit is set to °F, you must adjust the limit here, recommendation: 61°)	TempS2Ext_ColourScale_Start_2914	r/w	0...1220	0...122.0 °C/°F (default 16°C)
2915	Temp Sensor 2 ext. Colour Scale End (if the temperature unit is set to °F, you must adjust the limit here, recommendation: 82°)	TempS2Ext_ColourScale_End_2915	r/w	0...1220	0...122.0 °C/°F (default 24°C)
2917	Temp Sensor 2 ext. Enable in Sensor Menu	TempS2Ext_EnableInSensorMenu_2917	r/w	0...1	0 = disable 1 = enable (default)
2918	Temp Sensor 2 ext. Show Colour Scale	TempS2Ext_EnableColourScale_2918	r/w	0...1	0 = disable 1 = enable (default)
3000-3011	Temp Sensor 3 bus Label	TempS3Bus_Label_3000-3011	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Aussen English: Outdoor Spanish: Exterior French: extérieure Italian: esterna Russian: снаружи	
3014	Temp Sensor 3 bus Colour Scale Start (if the temperature unit is set to °F, you must adjust the limit here, recommendation: 61°)	TempS3Bus_ColourScale_Start_3014	r/w	0...1220	0...122.0 °C/°F (default 16°C)
3015	Temp Sensor 3 bus Colour Scale End (if the temperature unit is set to °F, you must adjust the limit here, recommendation: 82°)	TempS3Bus_ColourScale_End_3015	r/w	0...1220	0...122.0 °C/°F (default 24°C)
3017	Temp Sensor 3 bus Enable in Sensor menu	TempS3Bus_EnableInSensorMenu_3017	r/w	0...1	0 = disable 1 = enable (default)
3018	Temp Sensor 3 bus Show Colour Scale	TempS3Bus_EnableColourScale_3018	r/w	0...1	0 = disable 1 = enable (default)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
3100-3111	Humidity Sensor 2 bus Label	HumS2Bus_Label_3100-3111	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Aussen English: Outdoor Spanish: Exterior French: extérieure Italian: esterna Russian: снаружи	
3114	Humidity Sensor 2 bus Colour Scale Start	HumS2Bus_ColourScale_Start_3114	r/w	0...1000	0...100.0 % RH (default 0)
3115	Humidity Sensor 2 bus Colour Scale End	HumS2Bus_ColourScale_End_3115	r/w	0...1000	0...100.0 % RH (default 100)
3117	Humidity Sensor 2 bus Enable in Sensor menu	HumS2Bus_EnableInSensorMenu_3117	r/w	0...1	0 = disable 1 = enable (default)
3118	Humidity Sensor 2 bus Show Colour Scale	HumS2Bus_EnableColourScale_3118	r/w	0...1	0 = disable 1 = enable (default)
3200-3211	CO2 Sensor 2 bus Label	CO2S2Bus_Label_3200-3211	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Aussen English: Outdoor Spanish: Exterior French: extérieure Italian: esterna Russian: снаружи	
3214	CO2 Sensor 2 bus Colour Scale Start	CO2S2Bus_ColourScale_Start_3214	r/w	0...5000	0...5000 ppm (default 0)
3215	CO2 Sensor 2 bus Colour Scale End	CO2S2Bus_ColourScale_End_3215	r/w	0...5000	0...5000 ppm (default 2000)
3217	CO2 Sensor 2 bus Enable in Sensor Menu	CO2S2Bus_EnableInSensorMenu_3217	r/w	0...1	0 = disable 1 = enable (default)
3218	CO2 Sensor 2 bus Enable in Sensor Menu	CO2S2Bus_EnableColourScale_3218	r/w	0...1	0 = disable 1 = enable (default)
3300-3311	VOC Sensor 2 bus Label	VOCS2Bus_Label_3300-3311	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Aussen English: Outdoor Spanish: Exterior French: extérieure Italian: esterna Russian: снаружи	
3314	VOC Sensor 2 bus Colour Scale Start	VOCS2Bus_ColourScale_Start_3314	r/w	0...60000	0...60000 (default 0)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
3315	VOC Sensor 2 bus Colour Scale End	VOCS2Bus_ColourScale_End_3315	r/w	0...60000	0...60000 (default 100)
3316	VOC Sensor 2 bus unit	VOCS2Bus_Unit_3316	r/w	0...1	0 = ppb 1 = % (default)
3317	VOC Sensor 2 bus Enable in Sensor Menu	VOCS2Bus_EnableInSensorMenu_3317	r/w	0...1	0 = disable 1 = enable (default)
3318	VOC Sensor 2 bus Show Colour Scale	VOCS2Bus_EnableColourScale_3318	r/w	0...1	0 = disable 1 = enable (default)
3400 - 3411	PM Sensor 2 bus Label	PMS2Bus_Label_3400-3411	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Aussen English: Outdoor Spanish: Exterior French: extérieure Italian: esterna Russian: снаружи	
3414	PM Sensor 2 bus Colour Scale Start	PMS2Bus_ColourScale_Start_3414	r/w	0...1000	0...1000 µg/m³ (default 0)
3415	PM Sensor 2 bus Colour Scale End	PMS2Bus_ColourScale_End_3415	r/w	0...1000	0...1000 µg/m³ (default 1000)
3417	PM Sensor 2 bus Enable in Sensor Menu	PMS2Bus_EnableInSensorMenu_3417	r/w	0...1	0 = disable 1 = enable (default)
3418	PM Sensor 2 bus Show Colour Scale	PMS2Bus_EnableColourScale_3418	r/w	0...1	0 = disable 1 = enable (default)
3500 - 3511	Pressure 2 bus Label	PressureS2Bus_Label_3500-3511	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Aussen English: Outdoor Spanish: Exterior French: extérieure Italian: esterna Russian: снаружи	
3514	Pressure 2 bus Colour Scale Start	PressureS2Bus_ColourScale_Start_3514	r/w	0...10000	0...10000 (default = 1000 hPa)
3515	Pressure 2 bus Colour Scale End	PressureS2Bus_ColourScale_End_3515	r/w	0...10000	0...10000 (default = 1050 hPa)
3516	Pressure 2 bus Unit	PressureS2Bus_Unit_3516	r/w	0...3	0 = Pa 1 = hPa (default) 2 = mbar 3 = inWC
3517	Pressure 2 bus Enable in Sensor Menu	PressureS2Bus_EnableInSensorMenu_3517	r/w	0...1	0 = disable 1 = enable (default)
3518	Pressure 2 bus Show Colour Scale	PressureS2Bus_EnableColourScale_3518	r/w	0...1	0 = disable 1 = enable (default)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
Room climate configuration					
3600	Temp Setpoint Offset Step Size (if the temperature unit is set to °F, it is recommended to set the increment to 1° here)	Setpoint_Temp_Offset_StepSize_3600	r/w	0...3	0 = 0.1° 1 = 0.2° 2 = 0.5° (default, at °C) 3 = 1°
3601	Display OpMode The operating mode (red, blue, grey) is specified by the BMS in the parameter OpMode Status (address 404). If the value in this parameter (3601) is set to 0, the heating/cooling icon is hidden.	OpMode_Display_3601	r/w	0...1	0 = no icons displayed 1 = display icon
3602	Display Temp Setpoint (default: Temp Setpoint Absolute = Temp Setpoint + Offset) If set to Alternative and the temperature value is adjusted by the user, the display switches to Temp Setpoint Absolute for a moment and then switches back to Alternative. With Alternative, even the red/blue/grey temperature ICON of the operating mode is hidden. It is displayed again when the setpoint temperature is adjusted.	Setpoint_Temp_Display_3602	r/w	0...14	0 = nothing displayed 1 = Temp Setpoint Absolute (default) 2 = Temp Setpoint Offset Alternative: 3 = Display Humidity Sensor 1 int 4 = Display CO2 Sensor 1 int 5 = Display VOC Sensor 1 int ppb 6 = Display VOC Sensor 1 int % 7 = reserved 8 = Display Temp Sensor 2 ext 9 = Display Temp Sensor 3 Bus 10 = Display Humidity Sensor 2 Bus 11 = Display CO2 Sensor 2 Bus 12 = Display VOC Sensor Bus ppb 13 = Display PM Sensor 2 Bus 14 = Display Pressure Sensor 2 Bus
3603	Temp Setpoint After Reboot (if the temperature unit is switched between °C/°F, the value must be adjusted here) The configuration selected here specifies the Temp Setpoint in address 400 after the unit is restarted .	Setpoint_Temp_AfterReboot_3603	r/w	0...1220	0...122.0 °C/°F (default 21°C)
3604	Temp Setpoint Offset Min-Max After Reboot (if the temperature unit is switched between °C/°F, the value must be adjusted here) Set value applies in both positive and negative directions The configuration selected here specifies the Temp Setpoint in address 403 after the unit is restarted .	Setpoint_Temp_Offset_MinMax_AfterReboot_3604	r/w	0...180	0...18.0 °C/°F° (default 3°C)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
3650	Current Temp Mapping	CurrentTemp_Mapping_3650	r/w	0...2	0 = internal temperature sensor (default) 1 = external temperature sensor (input must be configured accordingly) 2 = Bus
3651	Display Current Temp	CurrentTemp_Display_3651	r/w	0...13	0 = nothing displayed 1 = Display Current Temp (default) 2 = Display HumiditySensor1Int 3 = Display CO2Sensor1Int 4 = reserved 5 = Display VOCSensor1Int_% 6 = reserved 7 = reserved 8 = reserved 9 = Display HumiditySensor2Bus 10 = Display CO2Sensor2Bus 11 = Display VOCSensorrBusppb 12 = Display PMSensor2Bus 13 = Display PressureSensor2Bus
3750-3761	Fan Label	Fan_Label_3750-3761	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Raum English: Room Spanish: Habitación French: Locaux Italian: Camera Russian: комната	
3762	Number of Fan Steps	Fan_NumberOfSteps_3762	r/w	1...5	1 = 1 2 = 1 - 2 3 = 1 - 2 - 3 4 = 1 - 2 - 3 - 4 5 = 1 - 2 - 3 - 4 - 5 (Default)
3763	Enable Fan Auto/Off	Fan_EnableAutoOff_3763	r/w	0...3	0 = disable 1 = OFF 2 = Auto 3 = Auto + OFF (Default)
3764	Display Fan In Temp Menu Units with fan adjustment...Default = 1 Units without fan adjustment...Default = 0	Fan_DisplayInTempMenu_3764	r/w	0...1	0 = nothing displayed 1 = display

Default Holding Address	Parameter description	Register Name	Access	Value	Range
3800	Presence Function	Presence_Function_3800	r/w	0...2	0 = (default) If Presence Status is "unoccupied", the buttons for temperature, fan and light/sun protection adjustment are blocked against value changes. You can still navigate through all menus and wake up from the screen saver. The Presence Status is changed to "occupied" and all buttons are enable by pressing the presence button, by presetting via the bus or via a configured DI input. 1 = If Presence Status is "unoccupied", all buttons remain active (value change and navigation through the menus). Pressing any button changes the status to "occupied". 2 = If Presence Status is "unoccupied", the buttons for temperature, fan and light/sun protection adjustment as well as the sensor button for changing values and navigating through the menus remain active. Presence Status stays on "unoccupied" until a change to Presence Status "occupied" is made via the presence button, by specification via the bus or via a configured DI input.
3801	Presence Enable DI Reboot The configuration selected here specifies the status of the Presence Enable DI in address 412.	Enable_PresenceDI_Reboot_3801	r/w	0...1	0 = disable 1 = enable (default)
3802	Icon Enable DI Reboot The configuration selected here specifies the status of the Icon Enable DI in address 413.	Enable_IconDI_Reboot_3802_bitField			
	bit 0 = frost protection	Enable_FrostProtectionDI_3802_bit0	r/w	0/1	0 = disable 1 = enable (default)
	bit 1 = window contact	Enable_WindowContactDI_3802_bit1	r/w	0/1	0 = disable 1 = enable (default)
	bit 2 = dew point	Enable_DewPointDI_3802_bit2	r/w	0/1	0 = disable 1 = enable (default)
	bit 3 = ECO	Enable_ECODI_3802_bit3	r/w	0/1	0 = disable 1 = enable (default)
	bit 4 = error	Enable_ErrorDI_3802_bit4	r/w	0/1	0 = disable 1 = enable (default)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
Input configuration					
3900	Input 1 Config DI1 for potential-free contact or external temperature sensor (NTC10K)	Input1_Config_3900	r/w	Interface: 0...16	0 = deactivated (default) 1 = External temperature sensor NTC10K 2 = DI as pure bus value 3 = DI window contact NO contact 4 = DI window contact NC contact 5 = DI dew point monitors NO contact 6 = DI dew point monitors NC contact 7 = DI presence contact NO contact 8 = DI presence contact NC contact 9 = DI keycard NO contact 10 = DI keycard NC contact 11 = DI alarm NO contact 12 = DI alarm NC contact 13 = DI antifreeze protection NO contact 14 = DI antifreeze protection NC contact 15 = DI ECO NO contact 16 = DI ECO NC contact
3901	Input 2 Config DI2 for potential-free contact	Input2_Config_3901	r/w	Interface: 0...16	0 = deactivated (default) 1 = reserved 2 = DI as pure bus value 3 = DI window contact NO contact 4 = DI window contact NC contact 5 = DI dew point monitors NO contact 6 = DI dew point monitors NC contact 7 = DI presence contact NO contact 8 = DI presence contact NC contact 9 = DI keycard NO contact 10 = DI keycard NC contact 11 = DI alarm NO contact 12 = DI alarm NC contact 13 = DI antifreeze protection NO contact 14 = DI antifreeze protection NC contact 15 = DI ECO NO contact 16 = DI ECO NC contact

Default Holding Address	Parameter description	Register Name	Access	Value	Range
Sun protection configuration					
4201	Sun protect display If the display is deactivated, the user moves on sight (view of sun protection)	SP_Display_4201	r/w	0...1	0 = Position and angle shown on the display deactivated 1 = Position and angle shown on the display activated (default)
4250 - 4261	Sun Protect 1 Label	SP1_Label_4250-4261	r/w	Max. 10 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Blind English: Blind Spanish: Persiana French: Store Italian: Persiana Russian: жалюзи	
4263	Sun Protect 1 OpMode <u>Short-long key press (for fast bus line)</u> A short or long key press (long > 1s) is recorded in the "Key Status" data register. After reading, the BMS must write the value "not pressed" back to the "Key Status" data register. The BMS writes the position and angle back to the "Value" data register to be shown on the display. <u>Hold key press (for fast bus line)</u> The button press is recorded in the "Key Status" data register up until the user releases the button. After the button is released, RYMASKON resets the value back to "not pressed". The BMS writes the position and angle back to the "Value" data register to be shown on the display. <u>Setpoint mode</u> If the user presses one of the two buttons, the position and angle are written directly to the "Value" data register and shown on the display. The BMS receives the position as a setpoint value.	SP1_OpMode_4263	r/w	0...2	0 = short-long key (default) 1 = hold key 2 = setpoint mode
4264	Sun Protect 1 Type	SP1_Type_4264	r/w	0...2	0 = Sun protection position 1 = Slat angle 2 = Sun protection position + slat angle (default)
4265	Sun Protect 1 Position Step Size	SP1_PositionStepSize_4265	r/w	1...1000	0.1... 100% (default 0.5%)
4266	Sun Protect 1 Angle Step Size	SP1_AngleStepSize_4266	r/w	1...90	1... 90° (default 10°)
4267	Sun Protect 1 Position Min	SP1_PositionMin_4267	r/w	0...100	0...100 % (default 0%)
4268	Sun Protect 1 Position Max	SP1_PositionMax_4268	r/w	0...100	0...100 % (default 100%)
4269	Sun Protect 1 Angle Min	SP1_AngleMin_4269	r/w	-90...90	-90°...90° (default 0°)
4270	Sun Protect 1 Angle max	SP1_AngleMax_4270	r/w	-90...90	-90°...90° (default 80°)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
4300 - 4311	Sun Protect 2 Label	SP2_Label_4300-4311	r/w	Max. 10 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Blind English: Blind Spanish: Persiana French: Store Italian: Persiana Russian: жалюзи	
4313	Sun Protect 2 OpMode <u>Short-long key press (for fast bus line)</u> A short or long key press (long > 1s) is recorded in the "Key Status" data register. After reading, the BMS must write the value "not pressed" back to the "Key Status" data register. The BMS writes the position and angle back to the "Value" data register to be shown on the display. <u>Hold key press (for fast bus line)</u> The button press is recorded in the "Key Status" data register up until the user releases the button. After the button is released, RYMASKON resets the value back to "not pressed". The BMS writes the position and angle back to the "Value" data register to be shown on the display. <u>Setpoint mode</u> If the user presses one of the two buttons, the position and angle are written directly to the "Value" data register and shown on the display. The BMS receives the position as a setpoint value.	SP2_OpMode_4313	r/w	0...2	0 = short-long key (default) 1 = hold key 2 = setpoint mode
4314	Sun Protect 2 Type	SP2_Type_4314	r/w	0...2	0 = Sun protection position 1 = Slat angle 2 = Sun protection position + slat angle (default)
4315	Sun Protect 2 Position Step Size	SP2_PositionStepSize_4315	r/w	1...1000	0.1... 100% (default 0.5%)
4316	Sun Protect 2 Angle Step Size	SP2_AngleStepSize_4316	r/w	1...90	1... 90° (default 10°)
4317	Sun Protect 2 Position Min	SP2_PositionMin_4317	r/w	0...100	0...100 % (default 0%)
4318	Sun Protect 2 Position Max	SP2_PositionMax_4318	r/w	0...100	0...100 % (default 100%)
4319	Sun Protect 2 Angle Min	SP2_AngleMin_4319	r/w	-90...90	-90°...90° (default 0°)
4320	Sun Protect 2 Angle Max	SP2_AngleMax_4320	r/w	-90...90	-90°...90° (default 80°)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
Light configuration					
5301	Light display If the display is deactivated, the user moves on sight (view of lamps)	L_Display_5301	r/w	0...1	0 = Display of the dimming value or On/Off on the display deactivated 1 = Display of the dimming value or On/Off on the display activated (default)
5350-5361	Light 1 Label	L1_Label_5350-5361	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Licht English: Light Spanish: Luz French: Éclairage Italian: Luce Russian: свет	
5363	Light 1 Dimmable	L1_Dimmable_5363	r/w	0...1	0 = Light dimming deactivated 1 = Light dimming activated (default)
5364	Light 1 OpMode <u>Short-long key press (for fast bus line)</u> A short or long key press (long > 1s) is recorded in the "Key Status" data register. After reading, the BMS must write the value "not pressed" back to the "Key Status" data register. The BMS writes the dimming value to the "Value" data register to be shown on the display. <u>Hold key press (for fast bus line)</u> The button press is recorded in the "Key Status" data register up until the user releases the button. After the button is released, RYMASKON resets the value back to "not pressed". The BMS writes the dimming value to the "Value" data register to be shown on the display. <u>Setpoint mode</u> If the user presses one of the two buttons, the dimming value is written directly to the "Value" data register and shown on the display. The BMS receives the light intensity (dimming value) as a setpoint value.	L1_OpMode_5364	r/w	0...2	0 = short-long key (default) 1 = hold key 2 = setpoint mode
5368	Light 1 Dimm Step Size	L1_DimmStepSize_5368	r/w	1...100	1... 100% (default 10%)

Default Holding Address	Parameter description	Register Name	Access	Value	Range
5400-5411	Light 2 Label	L2_Label_5400-5411	r/w	Max. 12 characters. One register in UTF16 format, Latin and Cyrillic alphabet per character Default: German: Licht English: Light Spanish: Luz French: Éclairage Italian: Luce Russian: свет	
5413	Light 2 Dimmable	L2_Dimmable_5413	r/w	0...1	0 = Light dimming deactivated 1 = Light dimming activated (default)
5414	Light 2 OpMode <u>Short-long key press (for fast bus line)</u> A short or long key press (long > 1s) is recorded in the "Key Status" data register. After reading, the BMS must write the value "not pressed" back to the "Key Status" data register. The BMS writes the dimming value to the "Value" data register to be shown on the display. <u>Hold key press (for fast bus line)</u> The button press is recorded in the "Key Status" data register up until the user releases the button. After the button is released, RYMASKON resets the value back to "not pressed". The BMS writes the dimming value to the "Value" data register to be shown on the display. <u>Setpoint mode</u> If the user presses one of the two buttons, the dimming value is written directly to the "Value" data register and shown on the display. The BMS receives the light intensity (dimming value) as a setpoint value.	L2_OpMode_5414	r/w	0...2	0 = short-long key (default) 1 = hold key 2 = Setpoint mode
5418	Light 2 Dimm Step Size	L2_DimmStepSize_5418	r/w	1...100	1... 100% (default 10%)

Input register

FUNCTION CODE 04 - READ INPUT REGISTER

Default Input-Register	Parameter description	Access	Value	Range
Sensor input				
1	Temp Sensor 1 int. value	r	-200...1220	-20.0 to 122.0 °C/°F
2	Humidity Sensor 1 int. Value	r	0...1000	0 to 100.0 % RH
3	CO2 Sensor 1 int. value	r	0...2000	0...2000 ppm
4	VOC Sensor 1 int. value ppb	r	0...30000	0...30000 ppb
5	VOC Sensor 1 int.value %	r	0...100	0...100 %
7	Temp Sensor 2 ext. value	r	-200...1220	-20.0 to 122.0 °C/°F
11	D1 Input Status	r	0...1	0 = DI1 open (default) 1 = DI1 closed
12	D2 Input Status	r	0...1	0 = DI2 open (default) 1 = DI2 closed
Room climate input				
8	Temp Setpoint Absolute	r	0...1220	0 to 122.0 °C/°F
9	OpMode Status	r	0...2	0 = Off (default) 1 = Cooling 2 = Heating
10	Fan Level	r	0...5	0 = Off 1 = Level 1 (Default) 2 = Level 2 3 = Level 3 4 = Level 4 5 = Level 5

Information register

FUNCTION CODE 03 - READ HOLDING REGISTERS

Default Holding Address	Parameter description	Register Name	Access	Value	Range
Device information					
2000	Device Type	Device_Type_2000	r	0...4	0..2 = internally assigned 3 = RYMASKON 130x interface, no control outputs 4 = RYMASKON 140x interface, no control outputs
2001	Firmware	Firmware_2001	r	1011...9999	1011...9999
2002	Prod. Date (month/year) e.g. 1024 = October 24	ProdDate_2002	r	123...1260	123...1260
2003	Operation Days (in days)	OperationDays_2003	r	0...15000	0...15000 days
2004	Bus Address	BusAddress_2004	r	1...247	1...247 (default 1)
2005	Baudrate	Baudrate_2005	r	0...4	0 = 9600 Bd 1 = 19200 Bd (default) 2 = 38400 Bd 3 = 57600 Bd 4 = 115200 Bd
2006	Parity / Stop Bits	Parity_StopBits_2006	r	0...3	0 = None (none, 1 stop bit) 1 = EVEN (even, default) 2 = ODD (odd) 3 = None (none, 2 stop bits)
3749	Fan Control	Fan_Control_3749	r	0...1	0 = no fan control 1 = with fan control
4200	Sun Protect circuits	SP_NumOfCircuits_4200	r	0...2	0 = no sun protect adjustment 1 = 1 sun protect circuit 2 = 2 sun protect circuits
5300	Light Circuits	L_NumOfCircuits_5300	r	0...2	0 = no light adjustment 1 = 1 light circuit 2 = 2 light circuits
2025	Internal Error bit 0= external temperature sensor error (NTC10K) bit 1= I2C communication error	InternalError_2025_bitField InternalError_TempS2Ext_2025_bit0 InternalError_I2CCommun_2025_bit1	r	0...1	0 = no error (default) 1 = error

Coil register

FUNCTION CODE 01 - READ COIL REGISTERS

FUNCTION CODE 05 - WRITE SINGLE COIL REGISTER

FUNCTION CODE 15 - WRITE MULTIPLE COIL REGISTERS

Default Coil-Register	Parameter description	Access	Value	Range
Room climate coils				
1	Presence Status	r	0...1	0 = unoccupied 1 = occupied (default)
2	Header Icon Frost Protection	r	0/1	0 = inactive (default) 1 = active
3	Header Icon Window Contact	r	0/1	0 = inactive (default) 1 = active
4	Header Icon Dew Point (condensation)	r	0/1	0 = inactive (default) 1 = active
5	Header Icon ECO	r	0/1	0 = inactive (default) 1 = active
6	Header Icon Error	r	0/1	0 = inactive (default) 1 = active
7	Header Icon Config Mode	r	0/1	0 = inactive (default) 1 = active
12	Temp Lock (active Temp Lock deactivated touch keys)	r/w	0/1	0 = inactive (default) 1 = active
13	Fan Lock (active Fan Lock deactivated touch keys)	r/w	0/1	0 = inactive (default) 1 = active
14	Presence Lock (active Presence Lock deactivated touch keys)	r/w	0/1	0 = inactive (default) 1 = active
196	Fan Auto Mode <u>Manual/Auto activation through:</u> a) touch keys on unit (Manual = off or 1-5 , Auto = A) b) BMS	r/w	0...1	0 = Manual 1 = Auto (default)

Default Coil-Register	Parameter description	Access	Value	Range
199	Presence Enable DI (Default is set via 3801)	r/w	0/1	0 = disable 1 = enable
200	Icon Modbus frost protection	r/w	0/1	0 = inactive (default) 1 = active
201	Icon Modbus window contact	r/w	0/1	0 = inactive (default) 1 = active
202	Icon Modbus dew point (condensation)	r/w	0/1	0 = inactive (default) 1 = active
203	Icon Modbus ECO	r/w	0/1	0 = inactive (default) 1 = active
204	Icon Modbus Error	r/w	0/1	0 = inactive (default) 1 = active
205	Icon Modbus Config Mode	r/w	0/1	0 = inactive (default) 1 = active
210	Icon DI frost protection (Default is set via 3802)	r/w	0/1	0 = disable 1 = enable
211	Icon DI window contact (Default is set via 3802)	r/w	0/1	0 = disable 1 = enable
212	Icon DI dew point (Default is set via 3802)	r/w	0/1	0 = disable 1 = enable
213	Icon DI ECO (Default is set via 3802)	r/w	0/1	0 = disable 1 = enable
214	Icon DI Error (Default is set via 3802)	r/w	0/1	0 = disable 1 = enable
Sun protection coils				
96	Sun Protect 1 automatic (touch keys deactivated when automatic is active)	r/w	0/1	0 = automatic inactive (default) 1 = automatic active
97	Sun Protect 2 automatic (touch keys deactivated when automatic is active)	r/w	0/1	0 = automatic inactive (default) 1 = automatic active
Light coils				
116	Light 1 automatic (touch keys deactivated when automatic is active)	r/w	0/1	0 = automatic inactive (default) 1 = automatic active
117	Light 2 automatic (touch keys deactivated when automatic is active)	r/w	0/1	0 = automatic inactive (default) 1 = automatic active
136	Light 1 status	r/w	0/1	0 = Light off (default) 1 = Light on
137	Light 2 status	r/w	0/1	0 = Light off (default) 1 = Light on

Diagnostics

FUNCTION CODE 08 - Diagnostics

Sub Function Code	Parameter	Data Type	Response
00	Return Query Data (Loopback)		Echo data
01	Restart Communications Option (Reset Listen Only Mode)		Echo message
04	Force Listen Only Mode		No response
10	Clear Counters and Diagnostic Register		Echo message
11	Return Bus Message Count	Unsigned 16 bit	All valid bus messages
12	Return Bus Communication Error Count (Parity, CRC, frame error, etc.)	Unsigned 16 bit	Faulty bus messages
13	Return Bus Exception Error Count	Unsigned 16 bit	Error counter
14	Return Slave Message Count	Unsigned 32 bit	Slave messages
15	Return Slave No Response Count	Unsigned 32 bit	Broadcast messages (address 0)

Report Slave ID

FUNCTION CODE 17 - Report Slave ID

Byte no.	Parameter	Data Type	Response
00	Byte Count	Unsigned 8 bit	6
01	Slave ID (Device Type)	Unsigned 8 bit	4 = On-wall Interface 5 = In-wall Interface 6 = Controller 3AO 7 = Controller 2AO+2DO 8 = Controller 230V 1AO+2DO 9 = Controller 230V 5DO
02	Slave ID (Device Class)	Unsigned 8 bit	110 = RYMASKON
03	Run Indicator Status	Unsigned 8 bit	255 = RUN, 0 = STOP
04	FW version number (release)	Unsigned 8 bit	1...9
05	FW version number (version)	Unsigned 8 bit	1...99
06	FW version number (Index)	Unsigned 8 bit	1...9

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