

WS-RB Mod-Bus-Parameterliste V2.0 RTU / TCP / 30.06.2020

Download: www.maico-ventilatoren.de
 Version: V2.0
 Date: 30.06.2020
 Owner: Maico Elektroapparate-Fabrik GmbH - 78056 Villingen-Schwenningen - TH/SH

Modbus Mode	RTU / TCP (TCP ab FW-V1.1.1)
Baud rate	9600
Data bits	8
Parity	Even
Stop Bit	1
Modbus address:	10
Register sequence	High-Word/Low-Word
Byte order	High-Byte/Low-Byte



Gruppe	Modbus Code (decimal)	BIT/Value	Parameter	Access read	Access write ModBus RTU	Access write ModBus TCP	Quantity Values	Data type	Raw min value	Raw max value	ACTUAL min value	ACTUAL max value	Format	Comment
Setting Basic setting	100		Date - year	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	2015	2100	2015	2100	YYYY	Year
	101		Date - month	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	1	12	1	12	MM	Month
	102		Date - day	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	1	31	1	31	DD	Day
	103		Time - hour	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	23	0	23	HH	Hour
	104		Time - minute	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	59	0	59	mm	Minute
	105		Time second	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	59	0	59	ss	Second
	106		Block ventilation level OFF	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	1	0	1		Block Ventilation level OFF 0=OFF possible 1=OFF blocked
	107		Locking of control unit	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	1	0	1		Locking RLS 1 WR 0=Control unit not blocked 1=Control unit blocked
	108		Language	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	3	0	3		Language selection control unit / WebServer 0=German 1=English; 2=French
109		Room sensor configuration	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	3	0	3		Room sensor configurion (Source room temperature) 0=Touch panel control unit 1= External 2=Internal 3=Bus	
Setting Ventilation	150		Filter life device filter	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	3	12	3 months	12 months	Months	
	151		Filter life external filter	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	3	18	3 months	18 months	Months	
	152		Filter life room filter	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	1	6	1 month	6 months	Months	
	153		Duration ventilation level	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	5	90	5 min	90 min	Minute	
	154		Volume flow rate ventilation level reduced ventilation	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	40*	500*	80m³/h	80m³/h	m³/h	* Threshold values are depending on type of device
	155		Volume flow rate ventilation level nominal ventilation	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	40*	500*	150m³/h	150m³/h	m³/h	* Threshold values are depending on type of device
	156		Volume flow rate ventilation level intensive ventilation	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	40*	500*	200m³/h	200m³/h	m³/h	* Threshold values are depending on type of device
	157		Filter change device filter	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	1	0	1		1= filter changed
	158		Filter change outside filter	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	1	0	1		1= filter changed
159		Filter change room filter	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	unsigned 16 Bit	0	1	0	1		1= filter changed	
Setting Temperature	300		Adjustment room temperature	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	signed 16 Bit	-30	30	-3°C	3°C	Temperature * 10 (°C)	Step size 1 (= 0,1°C)
	301		T supply air min. cooling	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	signed 16 Bit	8	29	8°C	29°C	Temperature in°C	Step size 1 (= 1°C)
	302		T room max.	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	signed 16 Bit	180	300	18°C	30°C	Temperature * 10 (°C)	Step size 5 (= 0,5°C)
EnOcean	350		EnOcean radio sensor type CO2 to ID0	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	351		EnOcean radio sensor type CO2 to ID1	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	352		EnOcean radio sensor type CO2 to ID2	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	353		EnOcean radio sensor type CO2 to ID3	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	354		EnOcean radio sensor type CO2 to ID4	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	355		EnOcean radio sensor type CO2 to ID5	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	356		EnOcean radio sensor type CO2 to ID6	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	357		EnOcean radio sensor type CO2 to ID7	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	358		EnOcean radio sensor type rF to ID0	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.	
	359		EnOcean radio sensor type rF to ID1	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.	
	360		EnOcean radio sensor type rF to ID2	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.	
	361		EnOcean radio sensor type rF to ID3	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.	
	362		EnOcean radio sensor type rF to ID4	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.	
	363		EnOcean radio sensor type rF to ID5	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.	
364		EnOcean radio sensor type rF to ID6	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.		
365		EnOcean radio sensor type rF to ID7	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0	100	% r.F.		
366		EnOcean radio sensor type VOC to ID0	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm		
367		EnOcean radio sensor type VOC to ID1	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm		

	368	EnOcean radio sensor type VOC to ID2	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	369	EnOcean radio sensor type VOC to ID3	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	370	EnOcean radio sensor type VOC to ID4	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	371	EnOcean radio sensor type VOC to ID5	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	372	EnOcean radio sensor type VOC to ID6	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
	373	EnOcean radio sensor type VOC to ID7	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0	5000	ppm	
Errors and notes	401	Actual error / High-Word	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Bitfield	Error active if Bit = True Error Bit number: 0 = no error active 1 = error communication ZP1 2 = error communication ZP 2 3 = error sensor temperature exhaust air 4 = error communication control unit 5 = error system memory 6 = error system bus 7 = unknown error
	402	Actual error / Low-Word	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Bitfield	Error active if Bit = True Error Bit number: 0= No error active 1 = Error Supply air fan 2 = Error exhaust air fan 3 = Error sensor T air entry 4 = Error sensor T supply air 5 = Error sensor T outgoing air 6 = Error sensor T room control unit 7 = Error sensor T room 8 = Error sensor T outside air before geothermal heat exchanger 9 = Error bypass 10 = Error zone valve 11 = Error combi-sensor 12 = Error humidity protection 13 = Error external preheating 14 = Error supply air / exhaust air too cold 15 = External safety switch-off 16 = Error sensor T-Tarum Bus
	403	Actual note / High-Word	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Bitfield	Note active if Bit = True Actual note (Bit number): 0 = no active note 1 = External safety switch-off active 2 = Communication ModBus 3 = Switch test active 4 = Filter initialisation active 5 = Initialisation pressure consistency 6 = Pressure setpoint not reached
	404	Actual note / Low Word	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Bitfield	NOTE active if Bit = True Actual note (Bit number): 0= No note 1 = Brine geothermal heat exchanger low cooling capacity 2 = Communication EnOcean 3 = Communication KNX 4 = Communication air@home 5 = Bypass active 6 = Zone ventilation active 7= Frost protection active 8 = Frost protection volume flow reduction 9 = Key lock 10 = Device filter dirty 11 = External filter dirty 12 = Room filter dirty 13 = Volume flow measurement active 14 = Moisture protection active 15 = Door contact switch triggered
	405	Error reset	-	06-Write Single Register	16-Write Multiple Register	1	uint16	0	1	0	1		1= Error reset
Basic setting Device operation	550	Operation mode	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	uint16	0	5	0	5		Operating modes 0=Off; 1=Manual; 2=Auto time; 3= Auto sensor; 4=Eco supply air; 5=Eco exhaust air
	551	Boost ventilation	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	uint16	0	1	0	1		Function boost ventilation 0=inactive 1=active
	552	Time of year	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	uint16	0	1	0	1		0=Winter; 1=Summer
	553	Preset temperature room	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	int16	180	250	18°C	25°C	Temperature * 10 (°C)	Step size 5 (= 0,5°C)
554	Ventilation level	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	uint16	0	4	0	4		0=Off; 1=Humidity protection; 2=Reduced; 3=Nom; 4=Intensive	
ation	650	Actual ventilation level	03-Read Holding Register(4x)	-	-	1	uint16	0	4	0	4		Ventilation level currently selected 0=Off; 1=Humidity protection; 2=Reduced; 3=Nom; 4=Intensive
	651	Actual speed supply air fan	03-Read Holding Register(4x)	-	-	1	uint16	0	5000	0	5000	U/min	Current speed supply air fan
	652	Actual speed exhaust air fan	03-Read Holding Register(4x)	-	-	1	uint16	0	5000	0	5000	U/min	Current speed exhaust air fan
	653	Actual volume flow rate supply air fan	03-Read Holding Register(4x)	-	-	1	uint16	0	300*	0 m³/h	300 m³/h	m³/h	Current volume flow supply air fan

Query ventil	654	Actual volume flow rate exhaust air fan	03-Read Holding Register(4x)	-	-	1	uint16	0	300*	0 m³/h	300 m³/h	m³/h	Current volume flow exhaust air fan
	655	Remaining term device filter	03-Read Holding Register(4x)	-	-	1	uint16	0	366	0 Tage	366 days	Days	Remaining term in days
	656	Remaining term outside filter	03-Read Holding Register(4x)	-	-	1	uint16	0	549	0 Tage	549 days	Days	Remaining term in days
	657	Remaining term room filter	03-Read Holding Register(4x)	-	-	1	uint16	0	183	0 Tage	183 days	Days	Remaining term in days
Query Current temperatures	700	- Temperature room	03-Read Holding Register(4x)	-	-	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Display room temperature acc. to room sensor configuration
	701	- Temperature room external	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Only valid if an external room temperature sensor is configured
	702	- Temperature outside air before geothermal heat exchange	03-Read Holding Register(4x)	-	-	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Only valid if an air geothermal heat exchanger is configured (ZP1)
	703	- Temperature air entry	03-Read Holding Register(4x)	-	-	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Current temperature outside air sensor (after heating battery)
	704	- Temperature supply air	03-Read Holding Register(4x)	-	-	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Current temperature supply air sensor
	705	- Temperature exhaust air	03-Read Holding Register(4x)	-	-	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Current temperature exhaust air sensor
	706	- Temperature outgoing air	03-Read Holding Register(4x)	-	-	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Current temperature outgoing air sensor
707	T room Bus	-	06-Write Single Register	16-Write Multiple Register	1	int16	-300	1200	-30°C	120°C	Temperature * 10 (°C)	Only valid if a bus room temperature sensor is configured / write cycle min. 10min	
Range sensor data	750	- r.h. exhaust air	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0%	100%	relative humidity * 10 (%)	not available
	751	- r.h. sensor 1	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0%	100%	relative humidity * 10 (%)	Only valid if sensor 1 is configured as r.h. sensor
	752	- r.h. sensor 2	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0%	100%	relative humidity * 10 (%)	Only valid if sensor 2 is configured as r.h. sensor
	753	- r.F. sensor 3	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0%	100%	relative humidity * 10 (%)	Only valid if sensor 3 is configured as r.h. sensor
	754	- r.h. sensor 4	03-Read Holding Register(4x)	-	-	1	uint16	0	1000	0%	100%	relative humidity * 10 (%)	Only valid if sensor 4 is configured as r.h. sensor
	755	- CO2 sensor 1	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	CO2 concentration * 10 (ppm)	Only valid if sensor 1 is configured as CO2 sensor
	756	- CO2 sensor 2	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	CO2 concentration * 10 (ppm)	Only valid if sensor 2 is configured as CO2 sensor
	757	- CO2 sensor 3	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	CO2 concentration * 10 (ppm)	Only valid if sensor 3 is configured as CO2 sensor
	758	- CO2 sensor 4	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	CO2 concentration * 10 (ppm)	Only valid if sensor 4 is configured as CO2 sensor
	759	- VOC sensor 1	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	VOC concentration * 10 (ppm)	Only valid if sensor 1 is configured as VOC sensor
	760	- VOC sensor 2	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	VOC concentration * 10 (ppm)	Only valid if sensor 2 is configured as VOC sensor
	761	- VOC sensor 3	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	VOC concentration * 10 (ppm)	Only valid if sensor 3 is configured as VOC sensor
	762	- VOC sensor 4	03-Read Holding Register(4x)	-	-	1	uint16	0	50000	0ppm	5000ppm	VOC concentration * 10 (ppm)	Only valid if sensor 4 is configured as VOC sensor
	763	r.h. Bus	-	06-Write Single Register	16-Write Multiple Register	1	uint16	0	100	0 %r.F	100 %r.F		write cycle minimum 10min
764	LQ-Bus	-	06-Write Single Register	16-Write Multiple Register	1	uint16	0	5000	0ppm	5000ppm		write cycle minimum 10min	
Query Switching states	800	Fan Supply air	03-Read Holding Register(4x)	-	-	1	uint16	0	1	0	1		Status supply air fan 0=Off 1=On
	801	Fan Exhaust air	03-Read Holding Register(4x)	-	-	1	uint16	0	1	0	1		Status exhaust air fan 0=Off 1=On
	802	Actuator Summer bypass	03-Read Holding Register(4x)	-	-	1	uint16	0	1	0	1		Status bypass 0=Closed 1=Open
	803	PTC-heater battery	03-Read Holding Register(4x)	-	-	1	uint16	0	1	0	1		Status heater battery at X5 0=Off 1=On
	804	Switch contact basic board	03-Read Holding Register(4x)	-	-	1	uint16	0	1	0	1		Status multifunctional contact 0=Off 1=On
	805	Relay Reheater (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	1	0	1		Status preheater at ZP1 0=Off 1=On
	806	Brine circulating pump (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	2	0	2		Status brine circulation pump (ZP1) 0=Off 1=Heat 2=Cool
	807	3-way air valve (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	2	0	2		Status 3-way air damper (ZP1) 0=Off 1=Heat 2=Cool
808	Zone valve (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	3	0	3		Status zone valve (ZP1) 0=Off 1=Zone1 2=Zone2 3=Zone sensor	
ation hours	850	Operating hours humidity protection ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word
	851	Operating hours humidity protection ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word
	852	Operating hours reduced ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word
	853	Operating hours reduced ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word
	854	Operating hours nominal ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word
	855	Operating hours nominal ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word
	856	Operating hours intensive ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word
	857	Operating hours intensive ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word
	858	Operating hours total ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word
	859	Operating hours total ventilation	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word

Address	Description	Register Type	Access	Access	Length	Unit	Min	Max	Min	Max	Unit	Scale	Range	
													High-Word	Low-Word
Query Oper	860	Relay reheater (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word	
	861	Relay reheater (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word	
	862	Brine circulating pump (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word	
	863	Brine circulating (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word	
	864	3-way air valve (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word	
	865	3-way air valve (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word	
	866	Zone valve (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word	
	867	Zone valve (ZP1)	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word	
	868	Switching contact	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	High-Word	
	869	Switching contact	03-Read Holding Register(4x)	-	-	1	uint16	0	65535	0	65535	Hours	Low-Word	
Filter monitoring ZP2	900	Permissible delta p filter monitoring	03-Read Holding Register(4x)	06-Write Single Register	16-Write Multiple Register	1	uint16	10	200	10%	200%	%		