

komfovent[®]

Description of C5 controller Modbus

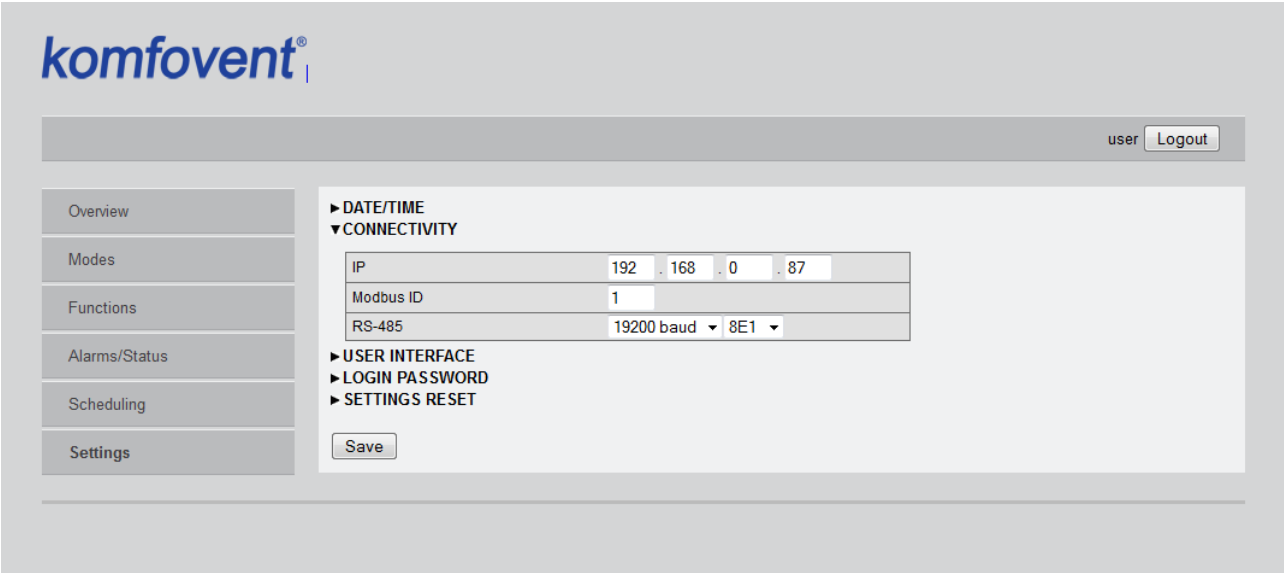
2015.05.03
Rev. 2.0

Modbus RTU protocol works via RS485 interface (Table 1), connection is provided to terminals 1,2,3 of the C5 controller (Picture 2). The interface settings can be changed using the website (Picture 1). The Modbus RTU protocol ID can be changed in the same window. To connect devices use twisted pair cable. Maximum cable length is 150m. The ground points of devices should be connected together, if distance between the RS485 interfaces is more than 10m.

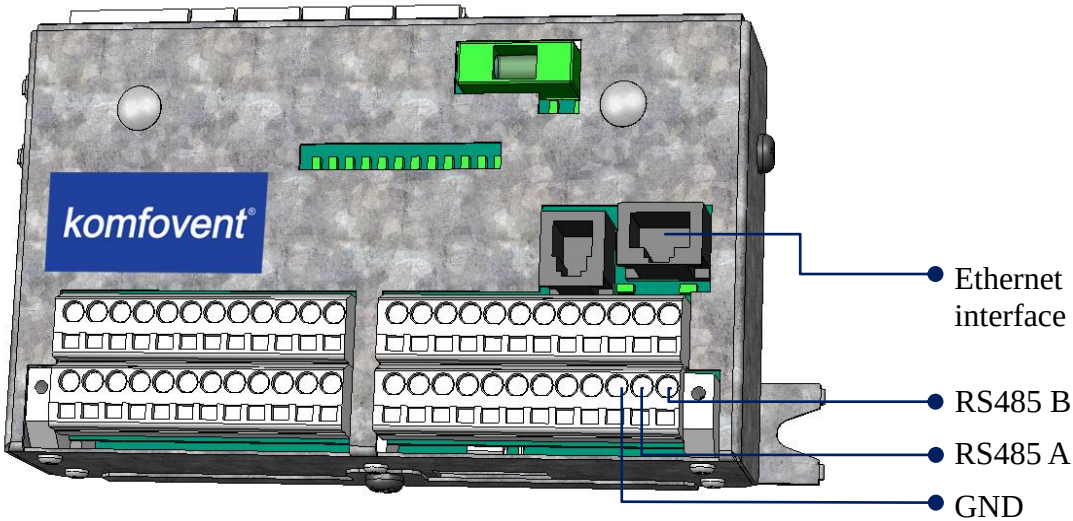
Table 1. Default settings of RS485 interface

Baudrate	19200
Word lenght	8
Parity	EVEN
Stop bits	1

Modbus TCP protocol works via Ethernet interface, connection is provided to RJ-45 socket on the C5 controller (Picture 2). Default IP address is 192.168.0.50, and port is 502. The IP address can be changed using the website (Picture 1). For connection the CAT5 category cable should be used. The maximum cable length between device and controller C5 is 100m.



Picture 1. Changing settings of ETHERNET/RS485 interface



Picture 2. MODBUS connection via ETHERNET/RS485.

Table 2. Modbus registers.

Modbus register	Data				Description	Data values	
	Type	Access	Range	Default			
MODES	1	int	R/W	0-1	0	AHU On/Off control	0-Off, 1-On
	100	int	R/W	1-6	1	Operation mode selection	1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
	101-102	int32	R/W	-	-	Comfort1: Supply flow	Auto-correction to be within allowed range (20-100% of maximum supply flow or 0)
	103-104	int32	R/W	-	-	Comfort1: Extract flow	Auto-correction to be within allowed range (20-100% of maximum extract flow or 0)
	105	int	R/W	50-400	210	Comfort1: Setpoint temperature	200 => 20,0C
	106-107	int32	R/W	-	-	Comfort2: Supply flow	Auto-correction to be within allowed range (20-100% of maximum supply flow or 0)
	108-109	int32	R/W	-	-	Comfort2: Extract flow	Auto-correction to be within allowed range (20-100% of maximum extract flow or 0)
	110	int	R/W	50-400	210	Comfort2: Setpoint temperature	200 => 20,0C
	111-112	int32	R/W	-	-	Economy1: Supply flow	Auto-correction to be within allowed range (20-100% of maximum supply flow or 0)
	113-114	int32	R/W	-	-	Economy1: Extract flow	Auto-correction to be within allowed range (20-100% of maximum extract flow or 0)
	115	int	R/W	50-400	200	Economy1: Setpoint temperature	200 => 20,0C
	116-117	int32	R/W	-	-	Economy2: Supply flow	Auto-correction to be within allowed range (20-100% of maximum supply flow or 0)
	118-119	int32	R/W	-	-	Economy2: Extract flow	Auto-correction to be within allowed range (20-100% of maximum extract flow or 0)
	120	int	R/W	50-400	190	Economy2: Setpoint temperature	200 => 20,0C
	121-122	int32	R/W	-	-	Special: Supply flow	Auto-correction to be within allowed range (20-100% of maximum supply flow or 0)
	123-124	int32	R/W	-	-	Special: Extract flow	Auto-correction to be within allowed range (20-100% of maximum extract flow or 0)
125	int	R/W	50-400	210	Special: Setpoint temperature	200 => 20,0C	
126	bin	R/W	-	31	Special: Configuration	b4-Dehumidifying, b3-Humidifying, b2-Recirculation, b1-Cooling, b0-Heating (1-Enable, 0-Disable)	
127	int	R/W	0-2	0	Flow control mode	0-Off/CAV, 1-VAV, 2-DCV	
128	int	R/W	0-2	0	Temp. control mode	0-Supply, 1-Extract, 2-Room, 3-Balance	
129	int	R/W	0-4	0	VAV status/calibration	0-Not calibrated, 1-Calibrating, 2-Supply, 3-Extract, 4-Double. Write 0x99C5 to start VAV calibration	

Modbus register		Data				Description	Data values
		Type	Access	Range	Default		
OPERATION PROGRAM	200	bin	R/W	-	0	Event01: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	201	int8x2	R/W	0:00-23:59	0:00	Event01: Start time	0x0805 => 8:05
	202	int8x2	R/W	0:00-24:00	0:00	Event01: Stop time	0x0805 => 8:05
	203	int	R/W	0-5	0	Event01: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	204	bin	R/W	-	0	Event02: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	205	int8x2	R/W	0:00-23:59	0:00	Event02: Start time	0x0805 => 8:05
	206	int8x2	R/W	0:00-24:00	0:00	Event02: Stop time	0x0805 => 8:05
	207	int	R/W	0-5	0	Event02: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	208	bin	R/W	-	0	Event03: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	209	int8x2	R/W	0:00-23:59	0:00	Event03: Start time	0x0805 => 8:05
	210	int8x2	R/W	0:00-24:00	0:00	Event03: Stop time	0x0805 => 8:05
	211	int	R/W	0-5	0	Event03: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	212	bin	R/W	-	0	Event04: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	213	int8x2	R/W	0:00-23:59	0:00	Event04: Start time	0x0805 => 8:05
	214	int8x2	R/W	0:00-24:00	0:00	Event04: Stop time	0x0805 => 8:05
	215	int	R/W	0-5	0	Event04: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	216	bin	R/W	-	0	Event05: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	217	int8x2	R/W	0:00-23:59	0:00	Event05: Start time	0x0805 => 8:05
	218	int8x2	R/W	0:00-24:00	0:00	Event05: Stop time	0x0805 => 8:05
	219	int	R/W	0-5	0	Event05: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	220	bin	R/W	-	0	Event06: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	221	int8x2	R/W	0:00-23:59	0:00	Event06: Start time	0x0805 => 8:05
	222	int8x2	R/W	0:00-24:00	0:00	Event06: Stop time	0x0805 => 8:05
	223	int	R/W	0-5	0	Event06: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	224	bin	R/W	-	0	Event07: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	225	int8x2	R/W	0:00-23:59	0:00	Event07: Start time	0x0805 => 8:05
	226	int8x2	R/W	0:00-24:00	0:00	Event07: Stop time	0x0805 => 8:05
227	int	R/W	0-5	0	Event07: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special	

228	bin	R/W	-	0	Event08: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
229	int8x2	R/W	0:00-23:59	0:00	Event08: Start time	0x0805 => 8:05
230	int8x2	R/W	0:00-24:00	0:00	Event08: Stop time	0x0805 => 8:05
231	int	R/W	0-5	0	Event08: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
232	bin	R/W	-	0	Event09: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
233	int8x2	R/W	0:00-23:59	0:00	Event09: Start time	0x0805 => 8:05
234	int8x2	R/W	0:00-24:00	0:00	Event09: Stop time	0x0805 => 8:05
235	int	R/W	0-5	0	Event09: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
236	bin	R/W	-	0	Event10: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
237	int8x2	R/W	0:00-23:59	0:00	Event10: Start time	0x0805 => 8:05
238	int8x2	R/W	0:00-24:00	0:00	Event10: Stop time	0x0805 => 8:05
239	int	R/W	0-5	0	Event10: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
240	bin	R/W	-	0	Event11: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
241	int8x2	R/W	0:00-23:59	0:00	Event11: Start time	0x0805 => 8:05
242	int8x2	R/W	0:00-24:00	0:00	Event11: Stop time	0x0805 => 8:05
243	int	R/W	0-5	0	Event11: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
244	bin	R/W	-	0	Event12: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
245	int8x2	R/W	0:00-23:59	0:00	Event12: Start time	0x0805 => 8:05
246	int8x2	R/W	0:00-24:00	0:00	Event12: Stop time	0x0805 => 8:05
247	int	R/W	0-5	0	Event12: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
248	bin	R/W	-	0	Event13: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
249	int8x2	R/W	0:00-23:59	0:00	Event13: Start time	0x0805 => 8:05
250	int8x2	R/W	0:00-24:00	0:00	Event13: Stop time	0x0805 => 8:05
251	int	R/W	0-5	0	Event13: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
252	bin	R/W	-	0	Event14: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
253	int8x2	R/W	0:00-23:59	0:00	Event14: Start time	0x0805 => 8:05
254	int8x2	R/W	0:00-24:00	0:00	Event14: Stop time	0x0805 => 8:05
255	int	R/W	0-5	0	Event14: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
256	bin	R/W	-	0	Event15: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
257	int8x2	R/W	0:00-23:59	0:00	Event15: Start time	0x0805 => 8:05
258	int8x2	R/W	0:00-24:00	0:00	Event15: Stop time	0x0805 => 8:05
259	int	R/W	0-5	0	Event15: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special

260	bin	R/W	-	0	Event16: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
261	int8x2	R/W	0:00-23:59	0:00	Event16: Start time	0x0805 => 8:05
262	int8x2	R/W	0:00-24:00	0:00	Event16: Stop time	0x0805 => 8:05
263	int	R/W	0-5	0	Event16: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
264	bin	R/W	-	0	Event17: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
265	int8x2	R/W	0:00-23:59	0:00	Event17: Start time	0x0805 => 8:05
266	int8x2	R/W	0:00-24:00	0:00	Event17: Stop time	0x0805 => 8:05
267	int	R/W	0-5	0	Event17: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
268	bin	R/W	-	0	Event18: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
269	int8x2	R/W	0:00-23:59	0:00	Event18: Start time	0x0805 => 8:05
270	int8x2	R/W	0:00-24:00	0:00	Event18: Stop time	0x0805 => 8:05
271	int	R/W	0-5	0	Event18: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
272	bin	R/W	-	0	Event19: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
273	int8x2	R/W	0:00-23:59	0:00	Event19: Start time	0x0805 => 8:05
274	int8x2	R/W	0:00-24:00	0:00	Event19: Stop time	0x0805 => 8:05
275	int	R/W	0-5	0	Event19: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
276	bin	R/W	-	0	Event20: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
277	int8x2	R/W	0:00-23:59	0:00	Event20: Start time	0x0805 => 8:05
278	int8x2	R/W	0:00-24:00	0:00	Event20: Stop time	0x0805 => 8:05
279	int	R/W	0-5	0	Event20: Mode	0-Standby,1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special

Modbus register	Data				Description	Data values
	Type	Access	Range	Default		
HOLIDAY SCHEDULE	300	int	R/W	2010-2250	Event01: Start year	
	301	int8x2	R/W	01.01-12.31	Event01: Start date	0x020C => Feb12
	302	int	R/W	2010-2250	Event01: Stop year	
	303	int8x2	R/W	01.01-12.31	Event01: Stop date	0x020C => Feb12
	304	int	R/W	0-6	Event01: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
	305	int	R/W	2010-2250	Event02: Start year	
	306	int8x2	R/W	01.01-12.31	Event02: Start date	0x020C => Feb12
	307	int	R/W	2010-2250	Event02: Stop year	
	308	int8x2	R/W	01.01-12.31	Event02: Stop date	0x020C => Feb12
	309	int	R/W	0-6	Event02: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
	310	int	R/W	2010-2250	Event03: Start year	
	311	int8x2	R/W	01.01-12.31	Event03: Start date	0x020C => Feb12
	312	int	R/W	2010-2250	Event03: Stop year	
	313	int8x2	R/W	01.01-12.31	Event03: Stop date	0x020C => Feb12
	314	int	R/W	0-6	Event03: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
	315	int	R/W	2010-2250	Event04: Start year	
	316	int8x2	R/W	01.01-12.31	Event04: Start date	0x020C => Feb12
	317	int	R/W	2010-2250	Event04: Stop year	
	318	int8x2	R/W	01.01-12.31	Event04: Stop date	0x020C => Feb12
	319	int	R/W	0-6	Event04: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
	320	int	R/W	2010-2250	Event05: Start year	
	321	int8x2	R/W	01.01-12.31	Event05: Start date	0x020C => Feb12
	322	int	R/W	2010-2250	Event05: Stop year	
	323	int8x2	R/W	01.01-12.31	Event05: Stop date	0x020C => Feb12
	324	int	R/W	0-6	Event05: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
	325	int	R/W	2010-2250	Event06: Start year	
	326	int8x2	R/W	01.01-12.31	Event06: Start date	0x020C => Feb12
	327	int	R/W	2010-2250	Event06: Stop year	
	328	int8x2	R/W	01.01-12.31	Event06: Stop date	0x020C => Feb12
329	int	R/W	0-6	Event06: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program	

330	int	R/W	2010-2250	Event07: Start year	
331	int8x2	R/W	01.01-12.31	Event07: Start date	0x020C => Feb12
332	int	R/W	2010-2250	Event07: Stop year	
333	int8x2	R/W	01.01-12.31	Event07: Stop date	0x020C => Feb12
334	int	R/W	0-6	Event07: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
335	int	R/W	2010-2250	Event08: Start year	
336	int8x2	R/W	01.01-12.31	Event08: Start date	0x020C => Feb12
337	int	R/W	2010-2250	Event08: Stop year	
338	int8x2	R/W	01.01-12.31	Event08: Stop date	0x020C => Feb12
339	int	R/W	0-6	Event08: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
340	int	R/W	2010-2250	Event09: Start year	
341	int8x2	R/W	01.01-12.31	Event09: Start date	0x020C => Feb12
342	int	R/W	2010-2250	Event09: Stop year	
343	int8x2	R/W	01.01-12.31	Event09: Stop date	0x020C => Feb12
344	int	R/W	0-6	Event09: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
345	int	R/W	2010-2250	Event10: Start year	
346	int8x2	R/W	01.01-12.31	Event10: Start date	0x020C => Feb12
347	int	R/W	2010-2250	Event10: Stop year	
348	int8x2	R/W	01.01-12.31	Event10: Stop date	0x020C => Feb12
349	int	R/W	0-6	Event10: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program

Modbus register	Data				Description	Data values	
	Type	Access	Range	Default			
RECIRCULATION SCHEDULE	400	bin	R/W	-	0	Event01: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	401	int8x2	R/W	0:00-23:59	0:00	Event01: Start time	0x0805 => 8:05
	402	int8x2	R/W	0:00-24:00	0:00	Event01: Stop time	0x0805 => 8:05
	403	int	R/W	0..100	0	Event01: Level	
	404	bin	R/W	-	0	Event02: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	405	int8x2	R/W	0:00-23:59	0:00	Event02: Start time	0x0805 => 8:05
	406	int8x2	R/W	0:00-24:00	0:00	Event02: Stop time	0x0805 => 8:05
	407	int	R/W	0..100	0	Event02: Level	
	408	bin	R/W	-	0	Event03: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	409	int8x2	R/W	0:00-23:59	0:00	Event03: Start time	0x0805 => 8:05
	410	int8x2	R/W	0:00-24:00	0:00	Event03: Stop time	0x0805 => 8:05
	411	int	R/W	0..100	0	Event03: Level	
	412	bin	R/W	-	0	Event04: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	413	int8x2	R/W	0:00-23:59	0:00	Event04: Start time	0x0805 => 8:05
	414	int8x2	R/W	0:00-24:00	0:00	Event04: Stop time	0x0805 => 8:05
	415	int	R/W	0..100	0	Event04: Level	
	416	bin	R/W	-	0	Event05: Days	b6-Sun, b5-Sat, b4-Fri, b3-Thu, b2-Wed, b1-Tue, b0-Mon (1-Select, 0-Deselect)
	417	int8x2	R/W	0:00-23:59	0:00	Event05: Start time	0x0805 => 8:05
	418	int8x2	R/W	0:00-24:00	0:00	Event05: Stop time	0x0805 => 8:05
419	int	R/W	0..100	0	Event05: Level		

Modbus register		Data				Description	Data values
		Type	Access	Range	Default		
SETTINGS	450	int8x2	R/W	0:00-23:59	0:00	Time	0x0805 => 8:05
	451	int	R/W	0-59	0	Seconds	
	452	int	R	1-7	7	Day of week	1-Mon, 2-Tue, 3-Wed, 4-Thu, 5-Fri, 6-Sat, 7-Sun
	453	int8x2	R/W	01.01-12.31	01.01	Date	0x020C => Feb12
	454	int	R/W	2010-2250	2012	Year	
	455	int	R/W	0-3	0	Language	0-English,1-Lithuanian,2-Russian, 3-Polish
	456	int	R/W	1-247	1	Modbus address	
	457-458	int32	R/W	-	192.168.0.5 0	IP address	
	459	int	R/W	0-3	0	Flow units	0-m3/h, 1-l/s, 2-m3/s, 3-Pa
	460-467	int8x2	R	-		AHU S/N	
	468-479	int8x2	R			AHU name	

Modbus register	Data				Description	Data values	
	Type	Access	Range	Default			
FUNCTIONS	500	int	R/W	0..1	0	Air quality control: Enable	0-Disable, 1-Enable
	501	int	R/W	200..1800	600	Air quality control: Setpoint 1	200..1800ppm, 10..90%, 10..90%RH, 5..45C
	502	int	R/W	1..5	1	Air quality control: Mode 1	1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	503	int	R/W	200..1800	900	Air quality control: Setpoint 2	200..1800ppm, 10..90%, 10..90%RH, 5..45C
	504	int	R/W	1..5	2	Air quality control: Mode 2	1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	505	int	R/W	0..1	0	Outdoor comp. ventilation: Enable/Disable	0-Disable, 1-Enable
	506	int	R/W	-400..500	-400	Outdoor comp. ventilation: Winter comp. stop	-150 => -15.0C
	507	int	R/W	-400..500	0	Outdoor comp. ventilation: Winter comp. start	-150 => -15.0C
	508	int	R/W	-400..500	200	Outdoor comp. ventilation: Summer comp. start	250 => 25.0C
	509	int	R/W	-400..500	500	Outdoor comp. ventilation: Summer comp. stop	250 => 25.0C
	510	int	R/W	0..1	0	Min. temperature control: Enable/Disable	0-Disable, 1-Enable
	511	int	R/W	-400..500	150	Min. temperature control: Setpoint	-150 => -15.0C
	512	int	R/W	0..1	1	Override function: Enable/Disable	0-Disable, 1-Enable
	513	int	R/W	0..2	0	Override function: Override type	0-All time, 1-If on, 2-If off
	514	int	R/W	0..6	2	Override function: Mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 6-Program
	515	int	R/W	0..1	0	Summer night cooling: Enable/Disable	0-Disable, 1-Enable
	516	int	R/W	150..500	250	Summer night cooling: Start temperature	250 => 25.0C
	517	int	R/W	0..1	0	Operation on demand: Enable/Disable	0-Disable, 1-Enable
	518	int	R/W	200..1800	500	Operation on demand: Setpoint	200..1800ppm, 10..90%, 10..90%RH, 5..45C
	519	int	R/W	0..1	0	Recirculation control: Enable/Disable	0-Disable, 1-Enable
	520	int	R/W	200..1800	600	Recirculation control: Setpoint 1	200..1800ppm, 10..90%, 10..90%RH, 5..45C
	521	int	R/W	0..100	40	Recirculation control: Min. fresh air 1	
	522	int	R/W	-400..500	-400	Recirculation control: Winter recirculation end	-150 => -15.0C
523	int	R/W	-400..500	0	Recirculation control: Winter recirculation start	-150 => -15.0C	

	524	int	R/W	-400..500	200	Recirculation control: Summer recirculation start	250 => 25.0C
	525	int	R/W	-400..500	500	Recirculation control: Summer recirculation end	250 => 25.0C
	526	int	R/W	0..100	0	Recirculation control: Default recirculation	
	527	int	R/W	0..100	60	Recirculation control: Activated recirculation	
	528	int	R/W	0..1	0	Humidity control: Enable/Disable	0-Disable, 1-Enable
	529	int	R/W	10..90	55	Humidity control: Setpoint 1	10..90%RH
	530	int	R/W	1..5	1	Humidity control: Mode 1	1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	531	int	R/W	10..90	65	Humidity control: Setpoint 2	10..90%RH
	532	int	R/W	1..5	2	Humidity control: Mode 2	1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	533	int	R/W	1..5	1	Recirculation control: Mode 1	1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	534	int	R/W	200..1800	900	Recirculation control: Setpoint 2	200..1800ppm, 10..90%, 10..90%RH, 5..45C
	535	int	R/W	1..5	2	Recirculation control: Mode 2	1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special
	536	int	R/W	0..100	20	Recirculation control: Min. fresh air 2	
	537	int	R/W	150..500	200	Summer night cooling: Stop temperature	200 => 20.0C
	538	bin	R/W	0..1	0	Inspection lighting: Enable/Disable	
	539	bin	R/W	0..1	0	Additional zone 1: Enable/Disable	
	540	int	R/W	-400..400	210	Additional zone 1: Setpoint	200 => 20,0C
541	bin	R/W	0..1	0	Additional zone 2: Enable/Disable		
542	int	R/W	-400..400	210	Additional zone 2: Setpoint	200 => 20,0C	

	Modbus register	Data				Description	Data values
		Type	Access	Range	Default		
RESET	900	bin	R/W		0	Modes reset to default	b4-Special, b3-Economy2, b2-Economy1, b1-Comfort2, b0-Comfort1
	901	bin	R/W		0	Functions reset to default	b9-ZN2, b8-ZN1, b7-HUM, b6-REC, b5-OOD, b4-SNC, b3-OVR, b2-MTC, b1-OCV, b0-AQC
	902	bin	R/W		0	Settings reset to default	b3-485_Config, b2-IP+Mask, b1-Flow_mode, b0-Temp_mode

Modbus register		Data				Description	Data values
		Type	Access	Range	Default		
ALARMS	1000	int	R/W	0..10	-	Active alarms count	Writing 0x99C5 - Active alarms reset and restore previous mode
	1001	hex	R		-	Active alarm 1 code (newest)	
	1002	hex	R		-	Active alarm 2 code	
	1003	hex	R		-	Active alarm 3 code	
	1004	hex	R		-	Active alarm 4 code	
	1005	hex	R		-	Active alarm 5 code	
	1006	hex	R		-	Active alarm 6 code	
	1007	hex	R		-	Active alarm 7 code	
	1008	hex	R		-	Active alarm 8 code	
	1009	hex	R		-	Active alarm 9 code	
	1010	hex	R		-	Active alarm 10 code	
	1100	int	R	0..50	-	Alarm history count	
	1101	int	R	2010..2250	-	Alarm1(newest) year	
	1102	int8x2	R	01.01-12.31	-	Alarm1(newest) month-day	0x020C => Feb12
	1103	int8x2	R	0:00-23:59	-	Alarm1(newest) time	0x0805 => 8:05
	1104	int	R	0..59	-	Alarm1(newest) seconds	
	1105	hex	R		-	Alarm1(newest) code	4B => 0x0104

	1346	int	R	2010..2250	-	Alarm50 year	
	1347	int8x2	R	01.01-12.31	-	Alarm50 month-day	0x020C => Feb12
1348	int8x2	R	0:00-23:59	-	Alarm50 time	0x0805 => 8:05	
1349	int	R	0..59	-	Alarm50 seconds		
1350	hex	R		-	Alarm50 code	4B => 0x0104	

Modbus register	Data				Description	Data values	
	Type	Access	Range	Default			
MONITORING DATA	2000	int	R	0-2	-	C5 Start/Stop current status	0-Stop, 1-Enabled but fans are stopped, 2-Running
	2001	int	R	0-5	-	Current mode	0-Standby, 1-Comfort1, 2-Comfort2, 3-Economy1, 4-Economy2, 5-Special, 100-On
	2002-2003	int	R	-	-	Current supply flow	3500 => 3500 m3/h, 3.500 m3/s, 3500 l/s
	2004-2005	int	R	-	-	Current extract flow	3500 => 3500 m3/h, 3.500 m3/s, 3500 l/s
	2006	int	R	-500..1200	-	Current supply temp., C	250 => 25.0C
	2007	int	R	-500..1200	-	Current extract temp., C	250 => 25.0C
	2008	int	R	-500..1200	-	Current outdoor temp., C	250 => 25.0C
	2009	int	R	-500..1200	-	Current exhaust temp., C	250 => 25.0C
	2010	int	R	-500..1200	-	Current return water temp., C	250 => 25.0C
	2011	int	R	0..1000	-	Supply air pressure	
	2012	int	R	0..1000	-	Extract air pressure	
	2013	int	R	0..4	-	Air quality sensor type	0-CO2, 1-VOCq, 2-VOCp, 3-RH, 4-TMP
	2014	int	R	0..2000	-	Current air quality level	CO2: 0..2000ppm, VOC: 0..1000(0..100%), RH: 0..1000(0..100%), TMP: 0..500(0..50C)
	2015	int	R	0..1000	-	Current supply air humidity	157 => 15.7%
	2016	int	R	0..1000	-	Water heater level	
	2017	int	R	0..1000	-	Water cooler level	
	2018	int	R	-1000..1000	-	Humidity control level	-500 => Dehumidifying level 50.0%, 800 => Humidifying level 80.0%
	2019	int	R	0..1000	-	Heat exchanger level	
	2020	int	R	0..1000	-	Recirculation level	
	2021	int	R	0..1000	-	Supply fan level	
	2022	int	R	0..1000	-	Exhaust fan level	
	2023	int	R	0..1000	-	Outdoor air damper actuator level	
	2024	int	R	0..1000	-	Exhaust air damper actuator level	
	2025	int	R	0..1000	-	Electric heater level	
	2026	int	R	-1000..1000	-	Heat pump level	
	2027	int	R	-1000..1000	-	DX level	

2028	bin	R	0..1	-	OVR input	
2029	bin	R	0..1	-	Fire system input	
2030	bin	R	0..1	-	External stop input	
2031	bin	R	0..1	-	Control input	
2032	int	R	50..400	-	Current temp. setpoint, C	250 => 25.0C
2033	int	R	50..400	-	Current supply air temp. setpoint, C	250 => 25.0C
2034	bin	R	0..1	-	Water heater pump	
2035	bin	R	0..1	-	Water cooler pump	
2036-2037	int	R	-	-	Current supply flow setpoint	3500 => 3500 m3/h, 3.500 m3/s, 3500 l/s
2038-2039	int	R	-	-	Current extract flow setpoint	3500 => 3500 m3/h, 3.500 m3/s, 3500 l/s
2200	bin	R		-	Counters/efficiencies configuration	b8-Exhaust fan units(0-h, 1-kWh), b7-Supply fan units(0-h, 1-kWh), b6-Exhaust fan counter, b5-Heater counter, b4-Extract filter, b3-Outdoor filter, b2-Exhaust SFP, b1-Supply SFP, b0-HX efficiency (0-Unavailable, 1-Available)
2201	int	R	0..100, 255	-	Heat exchanger thermal efficiency, %	255 - Unavailable
2202	int	R	0..100, 255	-	Energy saving, %	255 - Unavailable
2203-2204	int	R		-	Heat exchanger recovery, W	2500 => 2.5kW (0xFFFFFFFF - Unavailable)
2205	int	R		-	Supply SFP	125 => 1.25
2206	int	R		-	Exhaust SFP	125 => 1.25
2207	int	R	0..100	-	Outdoor air filter impurity level, %	
2208	int	R	0..100	-	Exhaust air filter impurity level, %	
2209-2210	int	R	0..1'000'000	-	Air heater operation, hours	
2211-2212	int	R	0..50'000'000	-	Supply fan operation, hours or kWh	
2213-2214	int	R	0..50'000'000	-	Exhaust fan operation, hours or kWh	
2215	int	R	0..65535	-	Current supply fan power, W	
2216	int	R	0..65535	-	Current exhaust fan power, W	
2217	bin	R		-	Active functions	b5-OOD,b4-AQC,b3-SNC,b2-MTC,b1-OVR,b0-OCV
2218-2219	int	R	0..1'000'000	-	Air cooler operation, hours	
2220-2221	int	R	0..4'000'000	-	Heat exchanger operation, kWh	
2222-2223	int	R	0..4'000'000	-	Air heater operation, kWh	

Modbus register		Data				Description	Data values
		Type	Access	Range	Default		
SERVICE	18000	int	R/W	0	-	User password reset	Write 0x99C5 to reset
	18001	int	R/W	0	-	User settings reset	Write 0x99C5 to reset
	18002	int	R/W	0	-	Clean air filters calibration	Write 0x99C5 to start calibration
	18003	int	R/W	0	-	Counters reset	Write 0x??C5 to reset, ?? => b4-Heat exchanger, b3-Air cooler, b2-Exhaust fan, b1-Supply fan, b0-Air heater (1 - Reset). 0x01C5 => Reset air heater counter only, 0x07C5 => Reset both fans and air heater counters
	18004	int	R	0..9999	-	Controller firmware version	



Vortvent is een handelsnaam van Decipol Luchtbehandeling & Ventilatie B.V.

Onze gegevens:

Adres:	Toermalijnring 1000
Postcode:	3316 LC Dordrecht
Telefoon:	085-782 64 00
Fax:	078-655 20 55
Email:	info@vortvent.nl
Web:	www.vortvent.nl
KVK:	65549236
BTW:	NL856157569B01
IBAN:	NL65ABNA0644510846