



# Corrigo ventilation

List of network variables for EXOline, Modbus and BACnet communication.



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THE CHALLENGER IN BUILDING AUTOMATION

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# Chapter 1 Corrigo with EXOline, Modbus and BACnet communication

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## Introduction

Corrigo ventilation is a pre-programmed application for control of an air handling unit. The Corrigo controller can be used either stand-alone or integrated in an existing EXO project. In both cases, it is configured via the display or by using the configuration tool E tool<sup>®</sup> on a PC.

This document describes all signals that are accessible via EXOline, Modbus and BACnet. It does not describe how to create an EXO project.

## Signal types

All signals accessible from a SCADA system are described further in this document. Signals with a default value are settings that can be changed via a SCADA system. Signals without a default value are actual values which cannot be changed using a SCADA system.

**NOTE:** In this manual, the term "Exhaust air" is used to describe the air extracted from inside of a building. The term "Extract air" is used to describe the air leaving a ventilation system.

### EXOL type

The EXOL type of the signals:

R = Real (-3.3E38 - 3.3E38)

I = Integer (-32768 - 32767)

X = Index (0 - 255)

L = Logic (0/1)

### Modbus type

The Modbus type of the signals:

1 = Coil Status Register (Modbus function = 1, 5 and 15)

2 = Input Status Register (Modbus function = 2)

3 = Holding Register (Modbus function = 3, 6 and 16)

4 = Input Register (Modbus function = 4)

Supported Modbus functions:

1 = Read Coils

2 = Read Discrete Input

3 = Read Holding Register

4 = Read Input Register

5 = Write Single Coil

6 = Write Single Register

15 = Write Multiple Coils

16 = Write Multiple Registers

## Baudrate

150, 300, 600, 1200, 2400, 4800, 9600

## BACnet communication

Corrigo is capable of communication via the BACnet-AAC (Advanced Application Controller) protocol, using either IP or MS/TP data link formats. A B-AAC unit is a device that may be intended for a specific application, but which supports some degree of programmability allows the user to do more – such as generate alarms, define schedules, synchronize clocks, etc.

In order to connect a Corrigo running a ventilation application to a BAS (Building Automation System) via BACnet/IP, a third generation Corrigo with a TCP/IP port is required. To connect to a BAS via BACnet MS/TP, a third generation Corrigo with an RS485 communication port is required.

With the default install path entered upon software installation, BACnet objects lists will be located in the following directory:

**C:\Program Files\EXO\SLib\Corrigo\VentilationProgram3\_6\BACnet**

The lists can also be found in E tool<sup>®</sup>, under the menu “Help”.

## BACnet type

The BACnet type of signals:

10XXX = Read and write binary

20XXX = Read binary

30XXX = Read and write analogue

40XXX = Read analogue

30XXX = Read and write multistate

40XXX = Read multistate

(Where XXX = Modbus address)

**NOTE:** In the variable lists contained in this manual, the following abbreviations are used:

**AV** = Analogue Value

**BV** = Binary Value

**MSV** = Multistate Value

BACnet object names are the same as for EXOL type objects, but are shortened by removing the preamble “Cor\_” (e.g.: “**VentSettings.Cor\_OverHeatFastStop**” becomes “**VentSettings.OverHeatFastStop**”, etc.).

## BACnet/IP configuration

Upon delivery, the BACnet/IP protocol is disabled as a default. To enable BACnet communication, simply change the setting “Not active” to “Active”. The protocol will now be available for use:



```
BACnet/IP
communication
Active      →
```

```
Device name
CorrigoVentilation
BBMD address
```

```
Device ID low
2640
Device ID high
0          (x10000)
```

### Device name

This is the devices name that is shown on the BAS when a device is discovered.

### BBMD address

The BBMD address (BACnet/IP Broadcast Management Device) is used for discovering devices that are attached to different BACnet/IP subnets and separated by an IP router. The address is entered as **host:port**, where “host” can be the host’s name if DNS is configured. If DNS is not configured, the host address should be entered in the format “xxx.xxx.xxx.xxx”, followed by the port number (default setting 47808).

**Example:** mybbmd:47808 (with DNS configured) or 10.100.50.99:47808

### Device ID

The ID of a device, used to identify it on the BACnet network. This number **cannot** be duplicated **anywhere** on the BACnet network and must therefore be unique. To set an ID value of 34600, the low number would be set to 4600 and the high number to 3.

### DHCP

The Dynamic Host Configuration Protocol (DHCP) is a network protocol used on Internet Protocol (IP) networks for dynamic distribution of network configuration parameters, such as IP addresses, DNS servers and other services. The Corrigo can be configured to either obtain an IP address from a DHCP server (dynamic) or the address can be set manually (static).

If you wish to set a static IP address for the Corrigo, simply enter the IP address you wish to use along with the subnet mask, gateway address and DNS server address:

```
TCP/IP      →
```

```
DHCP: Yes
Set static IP →
Current IP
-
```

```
IP
192.168.001.234
Subnet mask
255.255.255.000
```

```
Current subnet mask
-
Current gateway
-
```

```
Default gateway
192.168.001.001
DNS
192.168.001.001
```

```
Current DNS
-
```

## BACnet MS/TP Configuration

Upon delivery, the BACnet MS/TP protocol is disabled as a default. To enable BACnet communication, the function must first be activated. The default communication settings upon delivery are as follows:

Speed = 9600 bps

MAC address = 0

Device ID = 2640

Max Master = 127

```
Function port1  →
Slave
```

```
BACnet MS/TP
communication
port1
Active →
```

```
Device name
CorrigoVentilation
MAC
0
```

```
Device ID low
2640
Device ID high
0 (x10000)
```

```
Speed
9600 bps
Max master address
127
```

### Device name

This is the name of the device, as shown on the BAS when discovering devices.

### MAC

The MAC address of the device. This needs to be unique only to the subnet to which the device is attached.

### Device ID

The ID of a device, used to identify it on the BACnet network. This number **cannot** be duplicated **anywhere** on the BACnet network and must therefore be unique. To set an ID value of 34600, the low number would be set to 4600 and the high number to 3.

### Speed

Sets the communication speed of the MS/TP network. This value is typically set to 38400 or 76800 but can be 9600, 19200, 38400 or 76800.

### Alarm delays in BACnet

The alarms for an object have only one common delay time, even if the object includes three different alarms. The long delay time is displayed in the used BACnet tool.

## Max master address

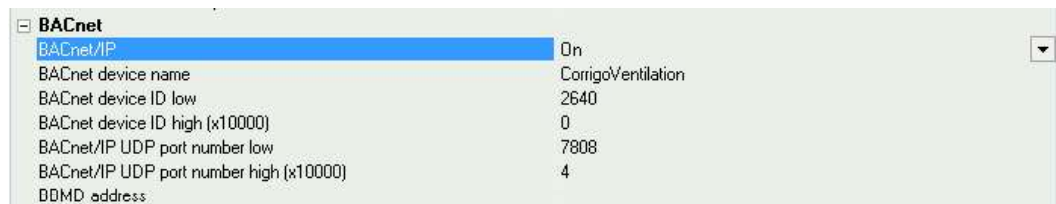
The max master is the MAC address of the highest master device on the BACnet MS/TP network segment. Setting this number above the highest MAC address will decrease network performance.

For additional information, see the Corrigo PICS document, available via [www.regincontrols.com](http://www.regincontrols.com).

## BACnet in E tool<sup>©</sup>

### Addressing

The below picture illustrates the appearance of BACnet addressing in E tool<sup>©</sup>:



BACnet	
BACnet/IP	On
BACnet device name	CorrigoVentilation
BACnet device ID low	2640
BACnet device ID high (x10000)	0
BACnet/IP UDP port number low	7808
BACnet/IP UDP port number high (x10000)	4
BBMD address	

BACnet/IP = Activation status of BACnet/IP protocol.

BACnet device name = The name of the device.

The device ID is divided into two parts, one low and one high. For example: If the high part of the ID would be “1”, then the device ID above would be “00012640”.

BACnet device ID low = The lower part of the device identification.

BACnet device ID high (x10000) = The higher part of the device identification.

The port number is divided into two parts, one low and one high. For example: In the picture above, the port number is “47808”.

BACnet/IP UDP port number low = Port number, lower part.

BACnet/IP UDP port number high (x10000) = Port number, higher part. This is the dedicated communication port.

BBMD address = BACnet Broadcast Management Device address. This is used for communication over the Internet between devices running BACnet.

## Modbus

### Communication limitations

The Modbus master must wait for a minimum of 3.5 character times (4 ms at 9600 bps) between two messages.

### Scale factor Modbus

Real signals have scale factor 10, except for the time setting signals which have scale factor 100, the SAF and EAF runtime which have a scale factor 0.1, and the air flow signals which have scale factor 1 for Modbus communication. Integer, Index and Logic always have scale factor 1.

### Modbus wiring, etc.

A protocol like Modbus consists of several layers (OSI-model). The bottom layer is always the physical layer; the number of wires and signal levels. The next layer describes the communication digits (number of data bits, stop-bits, parity etc). Next are the layers describing the Modbus-specific functions (number of digits per message, the meaning of different messages, etc.).

For Modbus, the bottom layer can be RS485, RS422, RS232 or Modbus TCP.

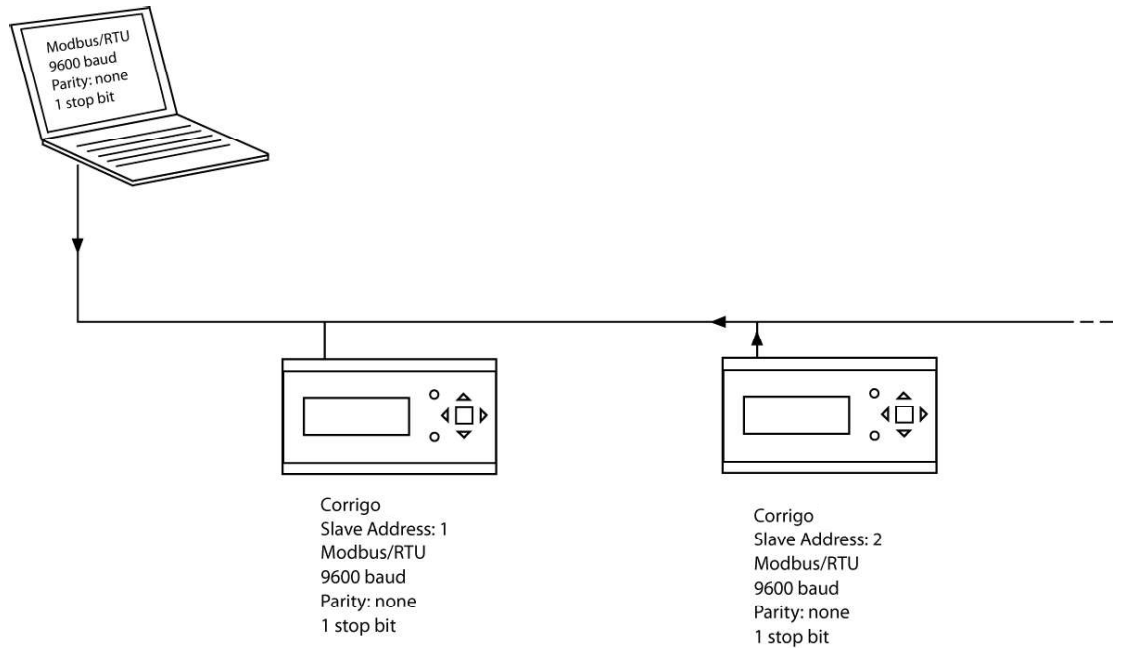


## Max. 47 registers

A maximum of 47 registers can be read in one message.

## Visualised example

The simplified example below visualises the Master/Slave relation. In addition to the figure, checksums for message validation are also transmitted in both query and answer.



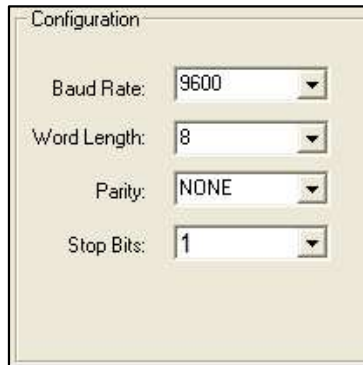
# Chapter 2 System integration using Modbus

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## Configuration

The communication parameters for the Modbus line is the most important thing to configure first. As described earlier, these parameters must be identical in both the master unit and slave units, since they define the structure of messages and the transmission speed.

The default configuration values of a Corrigo controller are shown in the figure below.



The image shows a 'Configuration' dialog box with four dropdown menus. The first is 'Baud Rate' set to 9600. The second is 'Word Length' set to 8. The third is 'Parity' set to NONE. The fourth is 'Stop Bits' set to 1.

Corrigo is set to Slave Address 1 as a default. If more units are added, a new Modbus address can be set for each unit using the Corrigo display or E tool<sup>®</sup>.

## Transmission mode

Corrigo uses the RTU transmission mode; not to be confused with the ASCII mode in the settings. The settings for the transmission mode must be the same in the master unit and the slave units, since Modbus/RTU cannot understand Modbus/ASCII messages. The configuration parameter Word length is always 8 for Modbus/RTU.



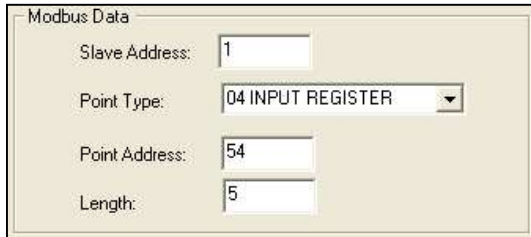
The image shows a 'Transmission Mode' dialog box. It has the text 'STANDARD' at the top. Below it are two radio buttons: 'ASCII' (unselected) and 'RTU' (selected).

## Writing values

To override the Corrigo output values, set the output to manual mode using a Modbus signal. Then set the corresponding ...\_ManSet signal to the wanted level. These signals are listed in Chapter 5: Holding Registers. Remember that only values with a default value are adjustable, you will find these in the chapters Coil Status Register and Holding Register.

## Reading values

An effective way to read values is to read multiple variables simultaneously. To, for example, read all analogue outputs, set the Modbus query to the values shown in the figure below. The first analogue output variable starts at address 54 (QAnaOut.AQ1). To read address 54 to 58, set the length to 5. The Modbus answer will then communicate all 5 values in just one message, making the communication more effective.



The image shows a window titled "Modbus Data" with four input fields:

- Slave Address: 1
- Point Type: 04 INPUT REGISTER (dropdown menu)
- Point Address: 54
- Length: 5

# Chapter 3 Coil Status Register

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_OverHeatFastStop	L	00001	0	Settings, General	Enable fast stop if overheat alarm
VentSettings.Cor_CoolStepAlarmBlock	L	00002	0	Settings, General	Blocks cooling step signals if set and alarm "Malfunction P1 cooler" is triggered
VentSettings.Cor_AlaAcknowAll	L	00003	0	Settings, General	Command to acknowledge all alarms
VentSettings.Cor_AlaAcknowAll	L	00003	0	Alarm Acknowledging, Blocking and Unblocking	Command to acknowledge all alarms
VentSettings.Cor_ReservedL	L	00004	0	Settings, General	Not used
VentSettings.Cor_RecycleNightCool	L	00005	0	Recirculation	Enable the night cool function when Recirculation run
VentSettings.Cor_RecycleExtraTimeGroup5	L	00006	0	Recirculation	Use ExtraTimeGroup 5 to start Recirculation run
VentSettings.Cor_CompSAFOnly	L	00007	0	SAF/EAF Pressure and Flow	Set only if SAF pressure should be compensated
VentSettings.Cor_NeedControl	L	00008	0	Settings, General	Enable support control if the unit is shut down
VentSettings.Cor_DeIcingFunction	L	00009	0	Extract air temp./De-icing exchanger	Enable the de-icing function
VentSettings.Cor_FilterAlarmReset	L	00010	0	Settings, General	Resets the filter alarm counter
VentSettings.Cor_ReservedL	L	00011	0	Settings, General	Not used
VentSettings.Cor_ReservedL	L	00012	0	Settings, General	Not used
VentSettings.Cor_ReservedL	L	00013	0	Settings, General	Not used
VentSettings.Cor_ReservedL	L	00014	0	Settings, General	Not used
VentSettings.Cor_ReservedL	L	00015	0	Settings, General	Not used
VentSettings.Cor_ReservedL	L	00016	0	Settings, General	Not used

# Chapter 4 Input Register

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_Outdoor temp(0)	R	30001		Actual/Setpoint	Outdoor temperature (read-only)
VentActual.Cor_Efficiency	R	30002		Actual/Setpoint	Efficiency in % for exchanger
VentActual.Cor_RunMode	X	30003		Actual/Setpoint	Modbus: 0=Stopped 1=Starting up 2=Starting reduced speed 3=Starting full speed 4=Starting normal run 5=Normal run 6=Support control heating 7=Support control cooling 8=CO <sub>2</sub> run 9=Night cooling 10=Full speed stop 11=Stopping fan BACnet: 1=Stopped 2=Starting up 3=Starting reduced speed 4=Starting full speed 5=Starting normal run 6=Normal run 7=Support control heating 8=Support control cooling 9=CO <sub>2</sub> run 10=Night cooling 11=Full speed stop 12=Stopping fan
VentActual.Cor_SAFRunTime	R	30004		Actual/Setpoint	Running time (hour) supply air fan
VentActual.Cor_EAFRunTime	R	30005		Actual/Setpoint	Running time (hour) extract air fan
VentActual.Cor_ExtendedRunMin	I	30006		Actual/Setpoint	Number of minutes extended operation
VentActual.Cor_SupplyAirTemp	R	30007		Supply, Extract and Room temperatures	Supply air temperature
VentActual.Cor_SupplyPID_SetP	R	30008		Supply, Extract and Room temperatures	Calculated setpoint supply air temperature when outdoor compensated control function or cascade control is active
VentActual.Cor_ExhaustAirTemp: (NB: This is actually the variable for the <b>extract</b> air temp!)	R	30009		Supply, Extract and Room temperatures	Extract air temperature

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_RoomTemp1	R	30010		Supply, Extract and Room temperatures	Room temperature 1
VentActual.Cor_RoomTemp2	R	30011		Supply, Extract and Room temperatures	Room temperature 2
VentActual.Cor_NeedRunTime	I	30012		Supply, Extract and Room temperatures	Number of minutes in ongoing support heating/cooling
VentActual.Cor_SAFPressure	R	30013		SAF/EAF Pressure and Flow	Supply air fan pressure (Pa)
VentActual.Cor_EAFPressure	R	30014		SAF/EAF Pressure and Flow	Extract air fan pressure (Pa)
VentActual.Cor_SAFAirFlow	R	30015		SAF/EAF Pressure and Flow	Supply air fan flow (m <sup>3</sup> /h). Scale factor = 1
VentActual.Cor_EAFAirFlow	R	30016		SAF/EAF Pressure and Flow	Extract air fan flow (m <sup>3</sup> /h). Scale factor = 1
VentActual.Cor_CO2Sensor	R	30017		CO <sub>2</sub>	CO <sub>2</sub> (ppm)
VentActual.Cor_DemandRunTime	I	30018		CO <sub>2</sub>	Number of minutes support run time CO <sub>2</sub>
VentActual.Cor_FrostprotectionTemp	R	30019		Frost protection	Frost protection temperature
VentActual.Cor_ExtractAirTemp: (NB: This is actually the variable for the exhaust air temp!)	R	30020		Exhaust air temp	Exhaust air temperature
VentActual.Cor_DeIcingTemp	R	30021		De-icing exchanger	De-icing temperature exchanger
VentActual.Cor_DeIcingTime	X	30022		Extract air temp./De-icing exchanger	Number of minutes for ongoing de-icing
VentActual.Cor_HumidityRoom	R	30023		Humidity	Humidity room
VentActual.Cor_HumidityDuct	R	30024		Humidity	Humidity duct
VentActual.Cor_ExtraSensor	R	30025		Additional sensor/ External setpoint	Extra sensor 1/External setpoint (depending on configuration)
VentActual.Cor_AnalogInput1(0)	R	30026		Analogue inputs	The scaled and filtered value of AI1
VentActual.Cor_AnalogInput2	R	30027		Analogue inputs	The scaled and filtered value of AI2
VentActual.Cor_AnalogInput3	R	30028		Analogue inputs	The scaled and filtered value of AI3
VentActual.Cor_AnalogInput4	R	30029		Analogue inputs	The scaled and filtered value of AI4
VentActual.Cor_AnalogInput5	R	30030		Universal inputs	The scaled and filtered value of UAI1

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AnalogInput6	R	30031		Universal inputs	The scaled and filtered value of UAI2
VentActual.Cor_AnalogInput7	R	30032		Universal inputs	The scaled and filtered value of UAI3
VentActual.Cor_AnalogInput8	R	30033		Universal inputs	The scaled and filtered value of UAI4
VentSettings.Cor_Ai1(0)	X	30034		Analogue inputs	Connected signal on AI1: 0=Not used 1=Outdoor temp 2=Supplytemp 3=Extracttemp 4=Roomtemp1 5=Roomtemp2 6=Exhausttemp 7=Extrasensor 8=SAF pressure 9=EAF pressure 10=Deicingtemp 11=Frost prot.temp 12=CO <sub>2</sub> 13=Humidity room 14=Humidity duct 15=Extra unit temp 16=External SAF control 17=External EAF control 18=SAF pressure 2 19=Humidity outdoor
VentSettings.Cor_Ai2	X	30035		Analogue inputs	Connected signal on AI2:
VentSettings.Cor_Ai3	X	30036		Analogue inputs	Connected signal on AI3:
VentSettings.Cor_Ai4	X	30037		Analogue inputs	Connected signal on AI4:
VentSettings.Cor_UAi1	X	30038		Universal inputs	Connected signal on UAI1: 0=Not used 1=Outdoor temp 2=Supplytemp 3=Extracttemp 4=Roomtemp1 5=Roomtemp2 6=Exhausttemp 7=Extrasensor 8=SAF pressure 9=EAF pressure 10=Deicingtemp 11=Frost prot.temp 12=CO <sub>2</sub> 13=Humidity room 14=Humidity duct 15=Extra unit temp 16=External SAF control 17=External EAF control 18=SAF pressure 2 19=Humidity outdoor
VentSettings.Cor_UAi2	X	30039		Universal inputs	Connected signal on UAI2: (See signal list for UAI1)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_UAi3	X	3040		Universal inputs	Connected signal on UAI3: (See signal list for UAI1)
VentSettings.Cor_UAi4	X	30041		Universal inputs	Connected signal on UAI4: (See signal list for UAI1)
VentSettings.Cor_Di1(0)	X	30042		Digital inputs	Connected signal on DI1: 0=Not used 1=SAF-Ind 2=EAF-Ind 3=P1-Heating 4=P1-Exchanger 5=P1-Cooling 6=Filter guard 7=Fire alarm 8=Fire damper-ind 9=Ext run 1/1 10=Ext run 1/2 11=External alarm 12=External switch 13=Flow guard 14=Rot.sent.exch 15=De-icing 16=Frostprotection 17=Overheatprotection 18=Recirculation run 19=Change over 20=Filter guard 2
VentSettings.Cor_Di2	X	30043		Digital inputs	Connected signal on DI2: (See signal list for DI1)
VentSettings.Cor_Di3	X	30044		Digital inputs	Connected signal on DI3: (See signal list for DI1)
VentSettings.Cor_Di4	X	30045		Digital inputs	Connected signal on DI4: (See signal list for DI1)
VentSettings.Cor_Di5	X	30046		Digital inputs	Connected signal on DI5: (See signal list for DI1)
VentSettings.Cor_Di6	X	30047		Digital inputs	Connected signal on DI6: (See signal list for DI1)
VentSettings.Cor_Di7	X	30048		Digital inputs	Connected signal on DI7: (See signal list for DI1)
VentSettings.Cor_Di8	X	30049		Digital inputs	Connected signal on DI8: (See signal list for DI1)



Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_UDi1	X	30050		Universal inputs	Connected signal on UDI1: 0=Not used 1=SAF-Ind 2=EAF-Ind 3=P1-Heating 4=P1-Exchanger 5=P1-Cooling 6=Filter guard 7=Fire alarm 8=Fire damper-ind 9=Ext run 1/1 10=Ext run ½ 11=External alarm 12=External switch 13=Flow guard 14=Rot.sent.exch 15=De-icing 16=Frostprotection 17=Overheatprotection 18=Recirculation run 19=Change over 20=Filter guard 2
VentSettings.Cor_UDi2	X	30051		Universal inputs	Connected signal on UDI2: (See signal list for UDI1)
VentSettings.Cor_UDi3	X	30052		Universal inputs	Connected signal on UDI3: (See signal list for UDI1)
VentSettings.Cor_UDi4	X	30053		Universal inputs	Connected signal on UDI4: (See signal list for UDI1)
QAnaOut.AQ1	R	30054		Analogue outputs	Value of AO1
QAnaOut.AQ2	R	30055		Analogue outputs	Value of AO2
QAnaOut.AQ3	R	30056		Analogue outputs	Value of AO3
QAnaOut.AQ4	R	30057		Analogue outputs	Value of AO4
QAnaOut.AQ5	R	30058		Analogue outputs	Value of AO5
VentSettings.Cor_Ao1(0)	X	30059		Analogue outputs	Connected signal on AO1: 0=Not used 1=Y1-Heating 2=Y2-Exchanger 3=Y3-Cooling 4=SAF 5=EAF 6=Y6-Humidity 7=Split of Y1, Y2 or Y3 8=Extra unit 9=Heat/Cool (change over) 10=Extra sequence Y4

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_Ao2	X	30060		Analogue outputs	Connected signal on AO2: (See signal list for AO1)
VentSettings.Cor_Ao3	X	30061		Analogue outputs	Connected signal on AO3: (See signal list for AO1)
VentSettings.Cor_Ao4	X	30062		Analogue outputs	Connected signal on AO4: (See signal list for AO1)
VentSettings.Cor_Ao5	X	30063		Analogue outputs	Connected signal on AO5: (See signal list for AO1)
VentSettings.Cor_Do1(0)	X	30064		Digital outputs	Connected signal on DO1: 0 = Not Used 1 = SAFStart1 2 = EAFStart1 3 = SAFStart2 4 = EAFStart2 5 = HeatingPumpStart 6 = ExchangerStart 7 = CoolingPumpStart 8 = FireDamper 9 = SumAlarm 10 = SumAlarmA 11 = SumAlarmB 12 = SAFFrequencyStart 13 = EAFFrequencyStart 14 = HeatingActivate 15 = ExchangerActivate 16 = CoolingActivate 17 = RecycleAirDamper 18 = FreshAirDamper 19 = ExtractAirDamper 20 = HeatingIncrease 21 = HeatingDecrease 22 = ExchangerIncrease 23 = ExchangerDecrease 24 = CoolingIncrease 25 = CoolingDecrease 26 = HeatStep1 27 = HeatStep2 28 = HeatStep3 29 = HeatStep4 30 = CoolStep1 31 = CoolStep2 32 = CoolStep3 33 = TimeChannel1 34 = TimeChannel2 35 = TimeChannel3 36 = TimeChannel4 37 = TimeChannel5 38 = Humidity start 39 = Extra unit start 40 = Heat/Cool step 1 41 = Heat/Cool step 2 42 = Heat/Cool step 3 43 = Night cool run

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_Do2	X	30065		Digital outputs	Connected signal on DO2: (See signal list for DO1)
VentSettings.Cor_Do3	X	30066		Digital outputs	Connected signal on DO3: (See signal list for DO1)
VentSettings.Cor_Do4	X	30067		Digital outputs	Connected signal on DO4: (See signal list for DO1)
VentSettings.Cor_Do5	X	30068		Digital outputs	Connected signal on DO5: (See signal list for DO1)
VentSettings.Cor_Do6	X	30069		Digital outputs	Connected signal on DO6: (See signal list for DO1)
VentSettings.Cor_Do7	X	30070		Digital outputs	Connected signal on DO7: (See signal list for DO1)
AlaData.AlaPt1_Status	X	30071		Alarm Status	Supply air fan malfunction
AlaData.AlaPt2_Status	X	30072		Alarm Status	0=Not used
AlaData.AlaPt3_Status	X	30073		Alarm Status	1=Normal
AlaData.AlaPt4_Status	X	30074		Alarm Status	2=Blocked
AlaData.AlaPt5_Status	X	30075		Alarm Status	3=Acknowledge
AlaData.AlaPt6_Status	X	30076		Alarm Status	Filter guard
AlaData.AlaPt7_Status	X	30077		Alarm Status	Flow guard
AlaData.AlaPt8_Status	X	30078		Alarm Status	External frost guard
AlaData.AlaPt9_Status	X	30079		Alarm Status	Deicing pressure guard
AlaData.AlaPt10_Status	X	30080		Alarm Status	Fire alarm
AlaData.AlaPt11_Status	X	30081		Alarm Status	External switch
AlaData.AlaPt12_Status	X	30082		Alarm Status	External alarm
AlaData.AlaPt13_Status	X	30083		Alarm Status	Supply Air control error
AlaData.AlaPt14_Status	X	30084		Alarm Status	Humidity control error
AlaData.AlaPt15_Status	X	30085		Alarm Status	High supply air temp
AlaData.AlaPt16_Status	X	30086		Alarm Status	Low supply air temp
AlaData.AlaPt17_Status	X	30087		Alarm Status	Supply Air Fan max limit
AlaData.AlaPt18_Status	X	30088		Alarm Status	Supply Air Fan min limit
AlaData.AlaPt19_Status	X	30089		Alarm Status	High room temp
AlaData.AlaPt20_Status	X	30090		Alarm Status	Low room temp
AlaData.AlaPt21_Status	X	30091		Alarm Status	High extract air temp
AlaData.AlaPt22_Status	X	30092		Alarm Status	Low extract air temp
AlaData.AlaPt23_Status	X	30093		Alarm Status	Electric heating is overheated
AlaData.AlaPt24_Status	X	30094		Alarm Status	Frost risk
AlaData.AlaPt25_Status	X	30095		Alarm Status	Low frost guard temp

Signal name	EXOL type	Modbus address	Default value	Function	Description
AlaData.AlaPt26_Status	X	30096		Alarm Status	Low efficiency
AlaData.AlaPt27_Status	X	30097		Alarm Status	Sensor error outdoor temp
AlaData.AlaPt28_Status	X	30098		Alarm Status	Analogue deicing
AlaData.AlaPt29_Status	X	30099		Alarm Status	Rotation guard exchanger
AlaData.AlaPt30_Status	X	30100		Alarm Status	Fire damper malfunction
AlaData.AlaPt31_Status	X	30101		Alarm Status	Supply air fan control error
AlaData.AlaPt32_Status	X	30102		Alarm Status	Extract air fan control error
AlaData.AlaPt33_Status	X	30103		Alarm Status	Supply air fan external operation
AlaData.AlaPt34_Status	X	30104		Alarm Status	Extract air fan external operation
AlaData.AlaPt35_Status	X	30105		Alarm Status	Ventilation manual mode
AlaData.AlaPt36_Status	X	30106		Alarm Status	Manual supply air control
AlaData.AlaPt37_Status	X	30107		Alarm Status	Supply air fan manual mode
AlaData.AlaPt38_Status	X	30108		Alarm Status	Manual supply air fan freq. control
AlaData.AlaPt39_Status	X	30109		Alarm Status	Extract air fan manual mode
AlaData.AlaPt40_Status	X	30110		Alarm Status	Manual extract air fan freq. control
AlaData.AlaPt41_Status	X	30111		Alarm Status	Manual heater control
AlaData.AlaPt42_Status	X	30112		Alarm Status	Manual exchanger control
AlaData.AlaPt43_Status	X	30113		Alarm Status	Manual cooler control
AlaData.AlaPt44_Status	X	30114		Alarm Status	Manual P1 heater
AlaData.AlaPt45_Status	X	30115		Alarm Status	Manual P1 exchanger
AlaData.AlaPt46_Status	X	30116		Alarm Status	Manual P1 cooler
AlaData.AlaPt47_Status	X	30117		Alarm Status	Manual fire damper
AlaData.AlaPt48_Status	X	30118		Alarm Status	Internal battery error
VentActual.Cor_HeatCV1(0)	R	30119		Analogue outputs	Control signal heating Y1 (0...10 V)
VentActual.Cor_ExchCV1	R	30120		Analogue outputs	Control signal exchanger Y2 (0...10 V)
VentActual.Cor_CoolCV1	R	30121		Analogue outputs	Control signal cooler Y3 (0...10 V)
VentActual.Cor_SAF	R	30122		SAF/EAF Pressure and Flow	Control signal supply air fan (0...10 V)
VentActual.Cor_EAF	R	30123		SAF/EAF Pressure and Flow	Control signal extract air fan (0...10 V)
VentActual.Cor_Humidity	R	30124		Humidity	Control signal humidity (0...10 V)
VentActual.Cor_Split	R	30125		Analogue outputs	Control signal split (0...10 V)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_SupplyPID_Output	R	30126		Supply, Extract and Room temperatures	Supply controller output (0...100 %)
VentActual.Cor_ExtractPID_Output	R	30127		Supply, Extract and Room temperatures	Extract controller output (0...100 %)
VentActual.Cor_SAFPID_Output	R	30128		SAF/EAF Pressure and Flow	SAF controller output (0...100 %)
VentActual.Cor_EAFPID_Output	R	30129		SAF/EAF Pressure and Flow	EAF controller output (0...100 %)
VentActual.Cor_FrostPID_Output	R	30130		Frost protection	Frost protection controller output if ventilation unit is stopped (0...100 %)
VentActual.Cor_CO2PID_Output	R	30131		CO <sub>2</sub>	CO <sub>2</sub> controller output (0...100 %)
VentActual.Cor_RoomPID_Output	R	30132		Supply, Extract and Room temperatures	Room controller output (0...100 %)
VentActual.Cor_DeIcePID_Output	R	30133		Extract air temp/ De-icing exchanger	De-icing controller output (0...100 %)
VentActual.Cor_HumidityPID_Output	R	30134		Humidity	Humidity controller output (0...100 %)
VentActual.Cor_RoomTemp	R	30135		Supply, Extract and Room temperatures	Room temperature 1 and 2
AlaData.AlaPt49_Status	X	30137		Alarm Status	Sensor error, supply air temp.
AlaData.AlaPt50_Status	X	30138		Alarm Status	Sensor error, extract air temp.
AlaData.AlaPt51_Status	X	30139		Alarm Status	Sensor error, room temp. 1
AlaData.AlaPt52_Status	X	30140		Alarm Status	Sensor error, room temp. 2
AlaData.AlaPt53_Status	X	30141		Alarm Status	Sensor error, extract air temp.
AlaData.AlaPt54_Status	X	30142		Alarm Status	Sensor error, extra sensor
AlaData.AlaPt55_Status	X	30143		Alarm Status	Sensor error SAF pressure
AlaData.AlaPt56_Status	X	30144		Alarm Status	Sensor error EAF pressure
AlaData.AlaPt57_Status	X	30145		Alarm Status	Sensor error, deicing temp.
AlaData.AlaPt58_Status	X	30146		Alarm Status	Sensor error, frost protection temp.
AlaData.AlaPt59_Status	X	30147		Alarm Status	Sensor error CO <sub>2</sub>
AlaData.AlaPt60_Status	X	30148		Alarm Status	Sensor error Humidity room
AlaData.AlaPt61_Status	X	30149		Alarm Status	Sensor error Humidity duct
VentActual.Cor_ExtraUnitTemp(0)	R	30150		Extra Unit	Extra Unit temp

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_ExtSAFControl	R	30151		SAF/EAF Pressure and Flow	External SAF signal control (%)
VentActual.Cor_ExtEAFControl	R	30152		SAF/EAF Pressure and Flow	External EAF signal control (%)
VentActual.Cor_SAFPressure2	R	30153		SAF/EAF Pressure and Flow	Pressure transmitter 2 supply air (Pa)
VentActual.Cor_SAFAirFlow2	R	30154		SAF/EAF Pressure and Flow	Counted air flow m <sup>3</sup> /h supply air 2 airflow = Cor_AirFlowK * Cor_SAFPressure2^Cor_AirFlowx)
VentActual.Cor_HumidityOutdoor	R	30155		Humidity	Humidity outdoor
AlaData.AlaPt62_Status	X	30156		Alarm Status	Sensor error, extra unit temp.
AlaData.AlaPt63_Status	X	30157		Alarm Status	Sensor error, external control SAF
AlaData.AlaPt64_Status	X	30158		Alarm Status	Sensor error, external control EAF
AlaData.AlaPt65_Status	X	30159		Alarm Status	Sensor error, SAF pressure 2
AlaData.AlaPt66_Status	X	30160		Alarm Status	Sensor error, outdoor humidity
AlaData.AlaPt67_Status	X	30161		Alarm Status	Sensor error, intake temp
AlaData.AlaPt68_Status	X	30162		Alarm Status	Sensor error Reserved 2
AlaData.AlaPt69_Status	X	30163		Alarm Status	Sensor error Reserved 3
AlaData.AlaPt70_Status	X	30164		Alarm Status	Sensor error Reserved 4
AlaData.AlaPt71_Status	X	30165		Alarm Status	Sensor error Reserved 5
AlaData.AlaPt72_Status	X	30166		Alarm Status	Sensor error, extra SAF pressure
AlaData.AlaPt73_Status	X	30167		Alarm Status	Sensor error, extra EAF pressure
AlaData.AlaPt74_Status	X	30168		Alarm Status	Sensor error, filter guard 1
AlaData.AlaPt75_Status	X	30169		Alarm Status	Sensor error, filter guard 2
AlaData.AlaPt76_Status	X	30170		Alarm Status	Sensor error, exchanger pressure
AlaData.AlaPt77_Status	X	30171		Alarm Status	Alarm frequency, converter SAF
AlaData.AlaPt78_Status	X	30172		Alarm Status	Alarm frequency, converter EAF
AlaData.AlaPt79_Status	X	30173		Alarm Status	Communication error, frequency SAF
AlaData.AlaPt80_Status	X	30174		Alarm Status	Communication error, frequency EAF
AlaData.AlaPt81_Status	X	30175		Alarm Status	Communication error, expansion unit 1
AlaData.AlaPt82_Status	X	30176		Alarm Status	Communication error, expansion unit 2
AlaData.AlaPt83_Status	X	30177		Alarm Status	Warning frequency, converter SAF
AlaData.AlaPt84_Status	X	30178		Alarm Status	Warning frequency, converter EAF
AlaData.AlaPt85_Status	X	30179		Alarm Status	Output in manual mode

Signal name	EXOL type	Modbus address	Default value	Function	Description
AlaData.AlaPt86_Status	X	30180		Alarm Status	Time for service
AlaData.AlaPt87_Status	X	30181		Alarm Status	Y4 extra sequence control manual
VentActual.Cor_ExpAnalogInput(0)	R	30182		Analogue inputs	The scaled and filtered value of AI1 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(1)	R	30183		Analogue inputs	The scaled and filtered value of AI2 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(2)	R	30184		Analogue inputs	The scaled and filtered value of AI3 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(3)	R	30185		Analogue inputs	The scaled and filtered value of AI4 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(4)	R	30186		Universal inputs	The scaled and filtered value of UAI1 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(5)	R	30187		Universal inputs	The scaled and filtered value of UAI2 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(6)	R	30188		Universal inputs	The scaled and filtered value of UAI3 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(7)	R	30189		Universal inputs	The scaled and filtered value of UAI3 Exp.Unit 1
VentActual.Cor_ExpAnalogInput(8)	R	30190		Analogue inputs	The scaled and filtered value of AI1 Exp.Unit 2
VentActual.Cor_ExpAnalogInput(9)	R	30191		Analogue inputs	The scaled and filtered value of AI2 Exp.Unit 2
VentActual.Cor_ExpAnalogInput(10)	R	30192		Analogue inputs	The scaled and filtered value of AI3 Exp.Unit 2
VentActual.Cor_ExpAnalogInput(11)	R	30193		Analogue inputs	The scaled and filtered value of AI4 Exp.Unit 2
VentActual.Cor_ExpAnalogInput(12)	R	30194		Universal inputs	The scaled and filtered value of UAI1 Exp.Unit 2
VentActual.Cor_ExpAnalogInput(13)	R	30195		Universal inputs	The scaled and filtered value of UAI2 Exp.Unit 2
VentActual.Cor_ExpAnalogInput(14)	R	30196		Universal inputs	The scaled and filtered value of UAI3 Exp.Unit 2
VentActual.Cor_ExpAnalogInput(15)	R	30197		Universal inputs	The scaled and filtered value of UAI3 Exp.Unit 2

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_ExpAi(0)	X	30198		Analogue inputs	Connected signal on AI1 Exp. Unit 1: 0=Not used 1=Outdoor temp 2=Supplytemp 3=Extracttemp 4=Roomtemp1 5=Roomtemp2 6=Exhausttemp 7=Extrasensor 8=SAF pressure 9=EAF pressure 10=Deicingtemp 11=Frost prot.temp 12=CO <sub>2</sub> 13=Humidity room 14=Humidity duct 15=Extra unit temp 16=External SAF control 17=External EAF control 18=SAF pressure 2 19=Humidity outdoor
VentSettings.Cor_ExpAi(1)	X	30199		Analogue inputs	Connected signal on AI2 Exp. Unit 1
VentSettings.Cor_ExpAi(2)	X	30200		Analogue inputs	Connected signal on AI3 Exp. Unit 1
VentSettings.Cor_ExpAi(3)	X	30201		Analogue inputs	Connected signal on AI4 Exp. Unit 1
VentSettings.Cor_ExpAi(4)	X	30202		Analogue inputs	Connected signal on UAI1 Exp. Unit 1
VentSettings.Cor_ExpAi(5)	X	30203		Analogue inputs	Connected signal on UAI2 Exp. Unit 1
VentSettings.Cor_ExpAi(6)	X	30204		Analogue inputs	Connected signal on UAI3 Exp. Unit 1
VentSettings.Cor_ExpAi(7)	X	30205		Analogue inputs	Connected signal on UAI4 Exp. Unit 1
VentSettings.Cor_ExpAi(8)	X	30206		Analogue inputs	Connected signal on AI1 Exp. Unit 2
VentSettings.Cor_ExpAi(9)	X	30207		Analogue inputs	Connected signal on AI2 Exp. Unit 2
VentSettings.Cor_ExpAi(10)	X	30208		Analogue inputs	Connected signal on AI3 Exp. Unit 2
VentSettings.Cor_ExpAi(11)	X	30209		Analogue inputs	Connected signal on AI4 Exp. Unit 2
VentSettings.Cor_ExpAi(12)	X	30210		Analogue inputs	Connected signal on UAI1 Exp. Unit 2
VentSettings.Cor_ExpAi(13)	X	30211		Analogue inputs	Connected signal on UAI2 Exp. Unit 2
VentSettings.Cor_ExpAi(14)	X	30212		Analogue inputs	Connected signal on UAI3 Exp. Unit 2
VentSettings.Cor_ExpAi(15)	X	30213		Analogue inputs	Connected signal on UAI4 Exp. Unit 2



Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_ExpDi(0)	X	30214		Digital inputs	Connected signal on DI1 Exp. Unit 1: 0=Not used 1=SAF-Ind 2=EAF-Ind 3=P1-Heating 4=P1-Exchanger 5=P1-Cooling 6=Filter guard 7=Fire alarm 8=Fire damper-ind 9=Ext run 1/1 10=Ext run ½ 11=External alarm 12=External switch 13=Flow guard 14=Rot.sent.exch 15=De-icing 16=Frostprotection 17=Overheatprotection 18=Recirculation run 19=Change over 20=Filter guard 2
VentSettings.Cor_ExpDi(1)	X	30215		Digital inputs	Connected signal on DI2 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(2)	X	30216		Digital inputs	Connected signal on DI3 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(3)	X	30217		Digital inputs	Connected signal on DI4 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(4)	X	30218		Digital inputs	Connected signal on DI5 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(5)	X	30219		Digital inputs	Connected signal on DI6 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(6)	X	30220		Digital inputs	Connected signal on DI7 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(7)	X	30221		Digital inputs	Connected signal on DI8 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(8)	X	30222		Digital inputs	Connected signal on UDI1 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(9)	X	30223		Digital inputs	Connected signal on UDI2 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(10)	X	30224		Digital inputs	Connected signal on UDI3 Exp. Unit 1: (See signal list for DI1)
VentSettings.Cor_ExpDi(11)	X	30225		Digital inputs	Connected signal on UDI4 Exp. Unit 1: (See signal list for DI1)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_ExpDi(12)	X	30226		Digital inputs	Connected signal on DI1 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(13)	X	30227		Digital inputs	Connected signal on DI2 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(14)	X	30228		Digital inputs	Connected signal on DI3 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(15)	X	30229		Digital inputs	Connected signal on DI4 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(16)	X	30230		Digital inputs	Connected signal on DI5 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(17)	X	30231		Digital inputs	Connected signal on DI6 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(18)	X	30232		Digital inputs	Connected signal on DI7 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(19)	X	30233		Digital inputs	Connected signal on DI8 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(20)	X	30234		Digital inputs	Connected signal on UDI1 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(21)	X	30235		Digital inputs	Connected signal on UDI2 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(22)	X	30236		Digital inputs	Connected signal on UDI3 Exp. Unit 2: (See signal list for DI1)
VentSettings.Cor_ExpDi(23)	X	30237		Digital inputs	Connected signal on UDI4 Exp. Unit 2: (See signal list for DI1)
InputOutput.Exp1AnaOut1	R	30238		Analogue outputs	Value of AO1 Exp. Unit 1
InputOutput.Exp1AnaOut2	R	30239		Analogue outputs	Value of AO2 Exp. Unit 1
InputOutput.Exp1AnaOut3	R	30240		Analogue outputs	Value of AO3 Exp. Unit 1
InputOutput.Exp1AnaOut4	R	30241		Analogue outputs	Value of AO4 Exp. Unit 1
InputOutput.Exp1AnaOut5	R	30242		Analogue outputs	Value of AO5 Exp. Unit 1
InputOutput.Exp2AnaOut1	R	30243		Analogue outputs	Value of AO1 Exp. Unit 2
InputOutput.Exp2AnaOut2	R	30244		Analogue outputs	Value of AO2 Exp. Unit 2
InputOutput.Exp2AnaOut3	R	30245		Analogue outputs	Value of AO3 Exp. Unit 2

Signal name	EXOL type	Modbus address	Default value	Function	Description
InputOutput.Exp2AnaOut4	R	30246		Analogue outputs	Value of AO4 Exp. Unit 2
InputOutput.Exp2AnaOut5	R	30247		Analogue outputs	Value of AO5 Exp. Unit 2
VentSettings.Cor_ExpAo(0)	X	30248		Analogue outputs	Connected signal on AO1 Exp. Unit 1: 0=Not used 1=Y1-Heating 2=Y2-Exchanger 3=Y3-Cooling 4=SAF 5=EAF 6=Y6-Humidity 7=Split of Y1, Y2 or Y3 8=Extra unit 9=Heat/Cool (change over) 10=Extra sequence Y4
VentSettings.Cor_ExpAo(1)	X	30249		Analogue outputs	Connected signal on AO2 Exp. Unit 1: (See signal list for AO1)
VentSettings.Cor_ExpAo(2)	X	30250		Analogue outputs	Connected signal on AO3 Exp. Unit 1: (See signal list for AO1)
VentSettings.Cor_ExpAo(3)	X	30251		Analogue outputs	Connected signal on AO4 Exp. Unit 1: (See signal list for AO1)
VentSettings.Cor_ExpAo(4)	X	30252		Analogue outputs	Connected signal on AO5 Exp. Unit 1: (See signal list for AO1)
VentSettings.Cor_ExpAo(5)	X	30253		Analogue outputs	Connected signal on AO1 Exp. Unit 2: (See signal list for AO1)
VentSettings.Cor_ExpAo(6)	X	30254		Analogue outputs	Connected signal on AO2 Exp. Unit 2: (See signal list for AO1)
VentSettings.Cor_ExpAo(7)	X	30255		Analogue outputs	Connected signal on AO3 Exp. Unit 2: (See signal list for AO1)
VentSettings.Cor_ExpAo(8)	X	30256		Analogue outputs	Connected signal on AO4 Exp. Unit 2: (See signal list for AO1)
VentSettings.Cor_ExpAo(9)	X	30257		Analogue outputs	Connected signal on AO5 Exp. Unit 2: (See signal list for AO1)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_ExpDo(0)	X	30258		Digital outputs	Connected signal on DO1 Exp. Unit 1: 0 = Not Used 1 = SAFStart1 2 = EAFStart1 3 = SAFStart2 4 = EAFStart2 5 = HeatingPumpStart 6 = ExchangerStart 7 = CoolingPumpStart 8 = FireDamper 9 = SumAlarm 10 = SumAlarmA 11 = SumAlarmB 12 = SAFFrequencyStart 13 = EAFFrequencyStart 14 = HeatingActivate 15 = ExchangerActivate 16 = CoolingActivate 17 = RecycleAirDamper 18 = FreshAirDamper 19 = ExtractAirDamper 20 = HeatingIncrease 21 = HeatingDecrease 22 = ExchangerIncrease 23 = ExchangerDecrease 24 = CoolingIncrease 25 = CoolingDecrease 26 = HeatStep1 27 = HeatStep2 28 = HeatStep3 29 = HeatStep4 30 = CoolStep1 31 = CoolStep2 32 = CoolStep3 33 = TimeChannel1 34 = TimeChannel2 35 = TimeChannel3 36 = TimeChannel4 37 = TimeChannel5 38 = Humidity start 39 = Extra unit start 40 = Heat/Cool step 1 41 = Heat/Cool step 2 42 = Heat/Cool step 3 43 = Night cool run
VentSettings.Cor_ExpDo(1)	X	30259		Digital outputs	Connected signal on DO2 Exp. Unit 1: (See signal list for DO1)
VentSettings.Cor_ExpDo(2)	X	30260		Digital outputs	Connected signal on DO3 Exp. Unit 1: (See signal list for DO1)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_ExpDo(3)	X	30261		Digital outputs	Connected signal on DO4 Exp. Unit 1: (See signal list for DO1)
VentSettings.Cor_ExpDo(4)	X	30262		Digital outputs	Connected signal on DO5 Exp. Unit 1: (See signal list for DO1)
VentSettings.Cor_ExpDo(5)	X	30263		Digital outputs	Connected signal on DO6 Exp. Unit 1: (See signal list for DO1)
VentSettings.Cor_ExpDo(6)	X	30264		Digital outputs	Connected signal on DO7 Exp. Unit 1: (See signal list for DO1)
VentSettings.Cor_ExpDo(7)	X	30265		Digital outputs	Connected signal on DO1 Exp. Unit 2: (See signal list for DO1)
VentSettings.Cor_ExpDo(8)	X	30266		Digital outputs	Connected signal on DO2 Exp. Unit 2: (See signal list for DO1)
VentSettings.Cor_ExpDo(9)	X	30267		Digital outputs	Connected signal on DO3 Exp. Unit 2: (See signal list for DO1)
VentSettings.Cor_ExpDo(10)	X	30268		Digital outputs	Connected signal on DO4 Exp. Unit 2: (See signal list for DO1)
VentSettings.Cor_ExpDo(11)	X	30269		Digital outputs	Connected signal on DO5 Exp. Unit 2: (See signal list for DO1)
VentSettings.Cor_ExpDo(12)	X	30270		Digital outputs	Connected signal on DO6 Exp. Unit 2: (See signal list for DO1)
VentSettings.Cor_ExpDo(13)	X	30271		Digital outputs	Connected signal on DO7 Exp. Unit 2: (See signal list for DO1)
VentActual.Cor_SAFMotorSpeedHz	R	30272		SAF/EAF Pressure and Flow	SAF Motor speed Hz
VentActual.Cor_SAFMotorCurrent	R	30273		SAF/EAF Pressure and Flow	SAF Motor current A
VentActual.Cor_SAFMotorPower	R	30274		SAF/EAF Pressure and Flow	SAF Motor Power % of nominal
VentActual.Cor_SAFAccumPower	R	30275		SAF/EAF Pressure and Flow	SAF Accumulated Power consumption

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_EAFMotorSpeedHz	R	30276		SAF/EAF Pressure and Flow	EAF Motor speed Hz
VentActual.Cor_EAFMotorCurrent	R	30277		SAF/EAF Pressure and Flow	EAF Motor current A
VentActual.Cor_EAFMotorPower	R	30278		SAF/EAF Pressure and Flow	EAF Motor Power % of nominal
VentActual.Cor_EAFAccumPower	R	30279		SAF/EAF Pressure and Flow	EAF Accumulated Power consumption
VentActual.Cor_ExtraUnitCV1(0)	R	30280		Extra Unit	Control signal Extra Unit (0...10 V)
VentActual.Cor_ExtraUnitPID1_Output(0)	R	30281		Extra Unit	Extra Unit controller output (0...100 %)
VentActual.Cor_HeatCoolCV1	R	30282		Analogue outputs	Control signal Heating or Cooling controlled by changeover (0...10 V)
VentActual.Cor_ExtraSeqCV1	R	30283		Analogue outputs	Control signal extra sequence Y4 (0...10 V)
VentActual.Cor_UnitRunMode	X	30284		Actual/Setpoint	Unit run mode: Modbus: 0=Off 1=Reduced speed 2=Normal speed 3=Stop because of alarm BACnet: 1=Off 2=Reduced speed 3=Normal speed 4=Stop because of alarm
AlaData.AlaPt88_Status	X	30285		Alarm Status	Restart blocked after power-on
VentActual.Cor_IntakeAirTemp	R	30286		Actual/Setpoint	Intake air temperature
VentActual.Cor_ExtraSensor2	R	30287		Actual/Setpoint	Extrasensor 2 temperature
VentActual.Cor_ExtraSensor3	R	30288		Actual/Setpoint	Extrasensor 3 temperature
VentActual.Cor_ExtraSensor4	R	30289		Actual/Setpoint	Extrasensor 4 temperature
VentActual.Cor_ExtraSensor5	R	30290		Actual/Setpoint	Extrasensor 5 temperature
VentActual.Cor_ExtraSAFPressure	R	30291		SAF/EAF Pressure and Flow	Extrasensor SAF Pressure
VentActual.Cor_ExtraEAFPressure	R	30292		SAF/EAF Pressure and Flow	Extrasensor EAF Pressure

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_ExtraSAFAirFlow	R	30293		SAF/EAF Pressure and Flow	Extrasensor SAF Flow
VentActual.Cor_ExtraEAFAirFlow	R	30294		SAF/EAF Pressure and Flow	Extrasensor EAF Flow
VentActual.Cor_ExternalFlowSetP	R	30295		SAF/EAF Pressure and Flow	External setpoint SAF airflow (m <sup>3</sup> /h)
VentActual.Cor_ExtraSeqY5	R	30296		Analogue outputs	Control valve Extra sequence Y5 (0...10 V)
AlaData.AlaPt89_Status	X	30297		Alarm Status	Manual Y5 extra sequence control
VentActual.Cor_SFP	R	30298		SFP (Specific Fan Power)	Actual SFP (kW/m <sup>3</sup> /s)
VentActual.Cor_SFPDay	R	30299		SFP (Specific Fan Power)	Day average SFP
VentActual.Cor_SFPMonth	R	30300		SFP (Specific Fan Power)	Month average (30 day average) SFP
VentActual.Cor_FilterGuard1AI	R	30301		Actual/Setpoint	Analogue filter 1 value (Pa)
VentActual.Cor_FilterGuard2AI	R	30302		Actual/Setpoint	Analogue filter 2 value (Pa)
AlaData.AlaPt90_Status	X	30303		Alarm Status	Filter guard 2
AlaData.AlaPt91_Status	X	30304		Alarm Status	High temp. extra sensor 1
AlaData.AlaPt92_Status	X	30305		Alarm Status	Low temp. extra sensor 1
AlaData.AlaPt93_Status	X	30306		Alarm Status	High temp. extra sensor 2
AlaData.AlaPt94_Status	X	30307		Alarm Status	Low temp. extra sensor 2
AlaData.AlaPt95_Status	X	30308		Alarm Status	High temp. extra sensor 3
AlaData.AlaPt96_Status	X	30309		Alarm Status	Low temp. extra sensor 3
AlaData.AlaPt97_Status	X	30310		Alarm Status	High temp. extra sensor 4
AlaData.AlaPt98_Status	X	30311		Alarm Status	Low temp. extra sensor 4
AlaData.AlaPt99_Status	X	30312		Alarm Status	High temp. extra sensor 5
AlaData.AlaPt100_Status	X	30313		Alarm Status	Low temp. extra sensor 5
AlaData.AlaPt101_Status	X	30314		Alarm Status	Extra alarm 1
AlaData.AlaPt102_Status	X	30315		Alarm Status	Extra alarm 2
AlaData.AlaPt103_Status	X	30316		Alarm Status	Extra alarm 3
AlaData.AlaPt104_Status	X	30317		Alarm Status	Extra alarm 4
AlaData.AlaPt105_Status	X	30318		Alarm Status	Extra alarm 5
AlaData.AlaPt106_Status	X	30319		Alarm Status	Extra alarm 6
AlaData.AlaPt107_Status	X	30320		Alarm Status	Extra alarm 7
AlaData.AlaPt108_Status	X	30321		Alarm Status	Extra alarm 8

Signal name	EXOL type	Modbus address	Default value	Function	Description
AlaData.AlaPt109_Status	X	30322		Alarm Status	Extra alarm 9
AlaData.AlaPt110_Status	X	30323		Alarm Status	Extra alarm 10
AlaData.AlaPt111_Status	X	30324		Alarm Status	Extra unit in manual mode
AlaData.AlaPt112_Status	X	30325		Alarm Status	Malfunction motor control 1
AlaData.AlaPt113_Status	X	30326		Alarm Status	Malfunction motor control 2
AlaData.AlaPt114_Status	X	30327		Alarm Status	Motor control 1 external operation
AlaData.AlaPt115_Status	X	30328		Alarm Status	Motor control 2 external operation
VentActual.Cor_EfficiencyTemp	R	30329		Actual/Setpoint	Temperature efficiency sensor
VentActual.Cor_TemperatureOutput	R	30330		Actual/Setpoint	This is an analogue output signal with a selectable temperature output; the selected temperature being presented here as 0....10 V
VentActual.Cor_TotalPower	R	30331		Actual/Setpoint	Total calculated power consumption (kW)
AlaData.AlaPt116_Status	X	30332		Not used	Not used
AlaData.AlaPt117_Status	X	30333		Alarm Status	Motor control 1 in manual mode
AlaData.AlaPt118_Status	X	30334		Alarm Status	Motor control 2 in manual mode
AlaData.AlaPt119_Status	X	30335		Alarm Status	Communication error expansion unit 3
AlaData.AlaPt120_Status	X	30336		Alarm Status	Communication error expansion unit 4
AlaData.AlaPt121_Status	X	30337		Alarm Status	Low outdoor air temp.
AlaData.AlaPt122_Status	X	30338		Alarm Status	High outdoor air temp.
AlaData.AlaPt123_Status	X	30339		Alarm Status	Malfunction adiabatic cooling
AlaData.AlaPt124_Status	X	30340		Alarm Status	Communication error expansion unit 5
AlaData.AlaPt125_Status	X	30341		Alarm Status	Communication error expansion unit 6
VentActual.Cor_ExchPressure	R	30342		Actual/Setpoint	Exchanger pressure
VentActual.Cor_ExpAnalogInput(24)	R	30343		Analogue inputs	The scaled and filtered value of UAI1 Exp.Unit 3
VentActual.Cor_ExpAnalogInput(25)	R	30344		Analogue inputs	The scaled and filtered value of UAI2 Exp.Unit 3
VentActual.Cor_ExpAnalogInput(26)	R	30345		Analogue inputs	The scaled and filtered value of Pressure A Exp.Unit 3
VentActual.Cor_ExpAnalogInput(27)	R	30346		Analogue inputs	The scaled and filtered value of Pressure B Exp.Unit 3
VentActual.Cor_ExpAnalogInput(28)	R	30347		Analogue inputs	The scaled and filtered value of UAI1 Exp.Unit 4



Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_ExpAnalogInput(29)	R	30348		Analogue inputs	The scaled and filtered value of UAI2 Exp.Unit 4
VentActual.Cor_ExpAnalogInput(30)	R	30349		Analogue inputs	The scaled and filtered value of Pressure A Exp.Unit 4
VentActual.Cor_ExpAnalogInput(31)	R	30350		Analogue inputs	The scaled and filtered value of Pressure B Exp.Unit 4
VentActual.Cor_ExpAnalogInput2(0)	R	30351		Analogue inputs	The scaled and filtered value of UAI1 Exp.Unit 5
VentActual.Cor_ExpAnalogInput2(1)	R	30352		Analogue inputs	The scaled and filtered value of UAI2 Exp.Unit 5
VentActual.Cor_ExpAnalogInput2(2)	R	30353		Analogue inputs	The scaled and filtered value of Pressure A Exp.Unit 5
VentActual.Cor_ExpAnalogInput2(3)	R	30354		Analogue inputs	The scaled and filtered value of Pressure B Exp.Unit 5
VentActual.Cor_ExpAnalogInput2(4)	R	30355		Analogue inputs	The scaled and filtered value of UAI1 Exp.Unit 6
VentActual.Cor_ExpAnalogInput2(5)	R	30356		Analogue inputs	The scaled and filtered value of UAI2 Exp.Unit 6
VentActual.Cor_ExpAnalogInput2(6)	R	30357		Analogue inputs	The scaled and filtered value of Pressure A Exp.Unit 6
VentActual.Cor_ExpAnalogInput2(7)	R	30358		Analogue inputs	The scaled and filtered value of Pressure B Exp.Unit 6
VentActual.Cor_ExchAirFlow	R	30359		Actual/Setpoint	Exchanger air flow

# Chapter 5 Holding Register

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_Supply Setpoint	R	40001	18°C	Supply, Extract and Room temperatures	Setpoint supply air temperature when constant supply air temperature function
VentSettings.Cor_Curve1_X1	R	40002	-20°C	Supply, Extract and Room temperatures	Outdoor temp for first curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_X2	R	40003	-15°C	Supply, Extract and Room temperatures	Outdoor temp for second curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_X3	R	40004	-10°C	Supply, Extract and Room temperatures	Outdoor temp for third curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_X4	R	40005	-5°C	Supply, Extract and Room temperatures	Outdoor temp for fourth curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_X5	R	40006	0°C	Supply, Extract and Room temperatures	Outdoor temp for fifth curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_X6	R	40007	5°C	Supply, Extract and Room temperatures	Outdoor temp for sixth curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_X7	R	40008	10°C	Supply, Extract and Room temperatures	Outdoor temp for seventh curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_X8	R	40009	15°C	Supply, Extract and Room temperatures	Outdoor temp for eighth curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y1	R	40010	25°C	Supply, Extract and Room temperatures	Setpoint for first curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y2	R	40011	24°C	Supply, Extract and Room temperatures	Setpoint for second curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y3	R	40012	23°C	Supply, Extract and Room temperatures	Setpoint for third curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y4	R	40013	23°C	Supply, Extract and Room temperatures	Setpoint for fourth curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y5	R	40014	22°C	Supply, Extract and Room temperatures	Setpoint for fifth curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y6	R	40015	20°C	Supply, Extract and Room temperatures	Setpoint for sixth curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y7	R	40016	18°C	Supply, Extract and Room temperatures	Setpoint for seventh curve point for outdoor compensated setpoint
VentSettings.Cor_Curve1_Y8	R	40017	18°C	Supply, Extract and Room temperatures	Setpoint for eight curve point for outdoor compensated setpoint
VentSettings.Cor_ExhaustSetpoint	R	40018	21°C	Supply, Extract and Room temperatures	Setpoint extract air temp if extract air temp control function

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_RoomSetP	R	40019	21°C	Supply, Extract and Room temperatures	Room setpoint if room temp control function
VentSettings.Cor_NeedHeatStart	R	40020	15°C	Supply, Extract and Room temperatures	Room temp for start the unit if intermittent heating control is active
VentSettings.Cor_NeedHeatStop	R	40021	21°C	Supply, Extract and Room temperatures	Room temp for stop the unit if intermittent heating control is active
VentSettings.Cor_NeedCoolStart	R	40022	30°C	Supply, Extract and Room temperatures	Room temp for start the unit if intermittent cooling control is active
VentSettings.Cor_NeedCoolStop	R	40023	28°C	Supply, Extract and Room temperatures	Room temp for stop the unit if intermittent cooling control is active
VentSettings.Cor_SAFFullspeedPressure	R	40024	500 Pa	SAF/EAF Pressure and Flow	Setpoint full speed supply air fan pressure
VentSettings.Cor_SAFHalfspeedPressure	R	40025	250 Pa	SAF/EAF Pressure and Flow	Setpoint reduced speed supply air fan pressure
VentSettings.Cor_EAFFullspeedPressure	R	40026	500 Pa	SAF/EAF Pressure and Flow	Setpoint full speed extract air fan pressure
VentSettings.Cor_EAFHalfspeedPressure	R	40027	250 Pa	SAF/EAF Pressure and Flow	Setpoint reduced speed extract air fan pressure
VentSettings.Cor_SAFFullspeedAirFlow	R	40028	2000 m <sup>3</sup> /h	SAF/EAF Pressure and Flow	Setpoint full speed supply air fan flow. Scale factor = 1
VentSettings.Cor_SAFHalfspeedAirFlow	R	40029	1000 m <sup>3</sup> /h	SAF/EAF Pressure and Flow	Setpoint reduced speed supply air fan flow. Scale factor = 1
VentSettings.Cor_EAFFullspeedAirFlow	R	40030	2000 m <sup>3</sup> /h	SAF/EAF Pressure and Flow	Setpoint full speed extract air fan flow. Scale factor = 1
VentSettings.Cor_EAFHalfspeedAirFlow	R	40031	1000 m <sup>3</sup> /h	SAF/EAF Pressure and Flow	Setpoint reduced speed extract air fan flow. Scale factor = 1
VentSettings.Cor_CO2Setpoint	R	40032	1000 ppm	CO <sub>2</sub>	Setpoint CO <sub>2</sub>
VentSettings.Cor_FrostProtSPStop	R	40033	25°C	Frost protection	Setpoint frost protection if the ventilation unit is stopped
VentSettings.Cor_FrostProtPGain	R	40034	5°C	Frost protection	P-Gain frost protection when running (alarm limit+PGain)
VentSettings.Cor_DeIcingSetpoint	R	40035	-3°C	Extract air temp/De-icing exchanger	Setpoint de-icing temp
VentSettings.Cor_DeIcingHyst	R	40036	1°C	Extract air temp/De-icing exchanger	Hysteresis for stop of de-icing
VentSettings.Cor_HumiditySetpoint	R	40037	50 % RH	Humidity	Setpoint humidity room
VentSettings.Cor_HumidityMaxDuct	R	40038	80 % RH	Humidity	Max limit humidity duct
VentSettings.Cor_HumidityHyst	R	40039	20 % RH	Humidity	Hysteresis to start humidity control after stop max limitation

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeDp.Posts(0).T1	R	40040	7	Timer Normal Speed	Start time period 1 Mon. normal speed (HH.MM)
TimeDp.Posts(0).T2	R	40041	16	Timer Normal Speed	Stop time period 1 Mon. normal speed
TimeDp.Posts(0).T3	R	40042	0	Timer Normal Speed	Start time period 2 Mon. normal speed
TimeDp.Posts(0).T4	R	40043	0	Timer Normal Speed	Stop time period 2 Mon. normal speed
TimeDp.Posts(1).T1	R	40044	7	Timer Normal Speed	Start time period 1 Tue. normal speed
TimeDp.Posts(1).T2	R	40045	16	Timer Normal Speed	Stop time period 1 Tue. normal speed
TimeDp.Posts(1).T3	R	40046	0	Timer Normal Speed	Start time period 2 Tue. normal speed
TimeDp.Posts(1).T4	R	40047	0	Timer Normal Speed	Stop time period 2 Tue. normal speed
TimeDp.Posts(2).T1	R	40048	7	Timer Normal Speed	Start time period 1 Wed. normal speed
TimeDp.Posts(2).T2	R	40049	16	Timer Normal Speed	Stop time period 1 Wed. normal speed
TimeDp.Posts(2).T3	R	40050	0	Timer Normal Speed	Start time period 2 Wed. normal speed
TimeDp.Posts(2).T4	R	40051	0	Timer Normal Speed	Stop time period 2 Wed. normal speed
TimeDp.Posts(3).T1	R	40052	7	Timer Normal Speed	Start time period 1 Thu. normal speed
TimeDp.Posts(3).T2	R	40053	16	Timer Normal Speed	Stop time period 1 Thu. normal speed
TimeDp.Posts(3).T3	R	40054	0	Timer Normal Speed	Start time period 2 Thu. normal speed
TimeDp.Posts(3).T4	R	40055	0	Timer Normal Speed	Stop time period 2 Thu. normal speed
TimeDp.Posts(4).T1	R	40056	7	Timer Normal Speed	Start time period 1 Fri. normal speed
TimeDp.Posts(4).T2	R	40057	16	Timer Normal Speed	Stop time period 1 Fri. normal speed
TimeDp.Posts(4).T3	R	40058	0	Timer Normal Speed	Start time period 2 Fri. normal speed
TimeDp.Posts(4).T4	R	40059	0	Timer Normal Speed	Stop time period 2 Fri. normal speed
TimeDp.Posts(5).T1	R	40060	0	Timer Normal Speed	Start time period 1 Sat. normal speed
TimeDp.Posts(5).T2	R	40061	0	Timer Normal Speed	Stop time period 1 Sat. normal speed
TimeDp.Posts(5).T3	R	40062	0	Timer Normal Speed	Start time period 2 Sat. normal speed
TimeDp.Posts(5).T4	R	40063	0	Timer Normal Speed	Stop time period 2 Sat. normal speed
TimeDp.Posts(6).T1	R	40064	0	Timer Normal Speed	Start time period 1 Sun. normal speed
TimeDp.Posts(6).T2	R	40065	0	Timer Normal Speed	Stop time period 1 Sun. normal speed
TimeDp.Posts(6).T3	R	40066	0	Timer Normal Speed	Start time period 2 Sun. normal speed
TimeDp.Posts(6).T4	R	40067	0	Timer Normal Speed	Stop time period 2 Sun. normal speed
TimeDp.Posts(7).T1	R	40068	0	Timer Normal Speed	Start time period 1 Holiday normal speed
TimeDp.Posts(7).T2	R	40069	0	Timer Normal Speed	Stop time period 1 Holiday normal speed
TimeDp.Posts(7).T3	R	40070	0	Timer Normal Speed	Start time period 2 Holiday normal speed
TimeDp.Posts(7).T4	R	40071	0	Timer Normal Speed	Stop time period 2 Holiday normal speed

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeDp.Posts(8).T1	R	40072	0	Timer Reduced Speed	Start time period 1 Mon. reduced speed (HH.MM)
TimeDp.Posts(8).T2	R	40073	0	Timer Reduced Speed	Stop time period 1 Mon. reduced speed
TimeDp.Posts(8).T3	R	40074	0	Timer Reduced Speed	Start time period 2 Mon. reduced speed
TimeDp.Posts(8).T4	R	40075	0	Timer Reduced Speed	Stop time period 2 Mon. reduced speed
TimeDp.Posts(9).T1	R	40076	0	Timer Reduced Speed	Start time period 1 Tue. reduced speed
TimeDp.Posts(9).T2	R	40077	0	Timer Reduced Speed	Stop time period 1 Tue. reduced speed
TimeDp.Posts(9).T3	R	40078	0	Timer Reduced Speed	Start time period 2 Tue. reduced speed
TimeDp.Posts(9).T4	R	40079	0	Timer Reduced Speed	Stop time period 2 Tue. reduced speed
TimeDp.Posts(10).T1	R	40080	0	Timer Reduced Speed	Start time period 1 Wed. reduced speed
TimeDp.Posts(10).T2	R	40081	0	Timer Reduced Speed	Stop time period 1 Wed. reduced speed
TimeDp.Posts(10).T3	R	40082	0	Timer Reduced Speed	Start time period 2 Wed. reduced speed
TimeDp.Posts(10).T4	R	40083	0	Timer Reduced Speed	Stop time period 2 Wed. reduced speed
TimeDp.Posts(11).T1	R	40084	0	Timer Reduced Speed	Start time period 1 Thu. reduced speed
TimeDp.Posts(11).T2	R	40085	0	Timer Reduced Speed	Stop time period 1 Thu. reduced speed
TimeDp.Posts(11).T3	R	40086	0	Timer Reduced Speed	Start time period 2 Thu. reduced speed
TimeDp.Posts(11).T4	R	40087	0	Timer Reduced Speed	Stop time period 2 Thu. reduced speed
TimeDp.Posts(12).T1	R	40088	0	Timer Reduced Speed	Start time period 1 Fri. reduced speed
TimeDp.Posts(12).T2	R	40089	0	Timer Reduced Speed	Stop time period 1 Fri. reduced speed
TimeDp.Posts(12).T3	R	40090	0	Timer Reduced Speed	Start time period 2 Fri. reduced speed
TimeDp.Posts(12).T4	R	40091	0	Timer Reduced Speed	Stop time period 2 Fri. reduced speed
TimeDp.Posts(13).T1	R	40092	0	Timer Reduced Speed	Start time period 1 Sat. reduced speed
TimeDp.Posts(13).T2	R	40093	0	Timer Reduced Speed	Stop time period 1 Sat. reduced speed
TimeDp.Posts(13).T3	R	40094	0	Timer Reduced Speed	Start time period 2 Sat. reduced speed
TimeDp.Posts(13).T4	R	40095	0	Timer Reduced Speed	Stop time period 2 Sat. reduced speed
TimeDp.Posts(14).T1	R	40096	0	Timer Reduced Speed	Start time period 1 Sun. reduced speed
TimeDp.Posts(14).T2	R	40097	0	Timer Reduced Speed	Stop time period 1 Sun. reduced speed
TimeDp.Posts(14).T3	R	40098	0	Timer Reduced Speed	Start time period 2 Sun. reduced speed
TimeDp.Posts(14).T4	R	40099	0	Timer Reduced Speed	Stop time period 2 Sun. reduced speed
TimeDp.Posts(15).T1	R	40100	0	Timer Reduced Speed	Start time period 1 Holiday reduced speed
TimeDp.Posts(15).T2	R	40101	0	Timer Reduced Speed	Stop time period 1 Holiday reduced speed
TimeDp.Posts(15).T3	R	40102	0	Timer Reduced Speed	Start time period 2 Holiday reduced speed
TimeDp.Posts(15).T4	R	40103	0	Timer Reduced Speed	Stop time period 2 Holiday reduced speed

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeDp.Posts(16).T1	R	40104	7	Timer Output 1	Start time period 1 Mon. timer output 1 (HH.MM)
TimeDp.Posts(16).T2	R	40105	16	Timer Output 1	Stop time period 1 Mon. timer output 1
TimeDp.Posts(16).T3	R	40106	0	Timer Output 1	Start time period 2 Mon. timer output 1
TimeDp.Posts(16).T4	R	40107	0	Timer Output 1	Stop time period 2 Mon. timer output 1
TimeDp.Posts(17).T1	R	40108	7	Timer Output 1	Start time period 1 Tue. timer output 1
TimeDp.Posts(17).T2	R	40109	16	Timer Output 1	Stop time period 1 Tue. timer output 1
TimeDp.Posts(17).T3	R	40110	0	Timer Output 1	Start time period 2 Tue. timer output 1
TimeDp.Posts(17).T4	R	40111	0	Timer Output 1	Stop time period 2 Tue. timer output 1
TimeDp.Posts(18).T1	R	40112	7	Timer Output 1	Start time period 1 Wed. timer output 1
TimeDp.Posts(18).T2	R	40113	16	Timer Output 1	Stop time period 1 Wed. timer output 1
TimeDp.Posts(18).T3	R	40114	0	Timer Output 1	Start time period 2 Wed. timer output 1
TimeDp.Posts(18).T4	R	40115	0	Timer Output 1	Stop time period 2 Wed. timer output 1
TimeDp.Posts(19).T1	R	40116	7	Timer Output 1	Start time period 1 Thu. timer output 1
TimeDp.Posts(19).T2	R	40117	16	Timer Output 1	Stop time period 1 Thu. timer output 1
TimeDp.Posts(19).T3	R	40118	0	Timer Output 1	Start time period 2 Thu. timer output 1
TimeDp.Posts(19).T4	R	40119	0	Timer Output 1	Stop time period 2 Thu. timer output 1
TimeDp.Posts(20).T1	R	40120	7	Timer Output 1	Start time period 1 Fri. timer output 1
TimeDp.Posts(20).T2	R	40121	16	Timer Output 1	Stop time period 1 Fri. timer output 1
TimeDp.Posts(20).T3	R	40122	0	Timer Output 1	Start time period 2 Fri. timer output 1
TimeDp.Posts(20).T4	R	40123	0	Timer Output 1	Stop time period 2 Fri. timer output 1
TimeDp.Posts(21).T1	R	40124	0	Timer Output 1	Start time period 1 Sat. timer output 1
TimeDp.Posts(21).T2	R	40125	0	Timer Output 1	Stop time period 1 Sat. timer output 1
TimeDp.Posts(21).T3	R	40126	0	Timer Output 1	Start time period 2 Sat. timer output 1
TimeDp.Posts(21).T4	R	40127	0	Timer Output 1	Stop time period 2 Sat. timer output 1
TimeDp.Posts(22).T1	R	40128	0	Timer Output 1	Start time period 1 Sun. timer output 1
TimeDp.Posts(22).T2	R	40129	0	Timer Output 1	Stop time period 1 Sun. timer output 1
TimeDp.Posts(22).T3	R	40130	0	Timer Output 1	Start time period 2 Sun. timer output 1
TimeDp.Posts(22).T4	R	40131	0	Timer Output 1	Stop time period 2 Sun. timer output 1
TimeDp.Posts(23).T1	R	40132	0	Timer Output 1	Start time period 1 Holiday timer output 1
TimeDp.Posts(23).T2	R	40133	0	Timer Output 1	Stop time period 1 Holiday timer output 1
TimeDp.Posts(23).T3	R	40134	0	Timer Output 1	Start time period 2 Holiday timer output 1
TimeDp.Posts(23).T4	R	40135	0	Timer Output 1	Stop time period 2 Holiday timer output 1

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeDp.Posts(24).T1	R	40136	7	Timer Output 2	Start time period 1 Mon. timer output 2 (HH.MM)
TimeDp.Posts(24).T2	R	40137	16	Timer Output 2	Stop time period 1 Mon. timer output 2
TimeDp.Posts(24).T3	R	40138	0	Timer Output 2	Start time period 2 Mon. timer output 2
TimeDp.Posts(24).T4	R	40139	0	Timer Output 2	Stop time period 2 Mon. timer output 2
TimeDp.Posts(25).T1	R	40140	7	Timer Output 2	Start time period 1 Tue. timer output 2
TimeDp.Posts(25).T2	R	40141	16	Timer Output 2	Stop time period 1 Tue. timer output 2
TimeDp.Posts(25).T3	R	40142	0	Timer Output 2	Start time period 2 Tue. timer output 2
TimeDp.Posts(25).T4	R	40143	0	Timer Output 2	Stop time period 2 Tue. timer output 2
TimeDp.Posts(26).T1	R	40144	7	Timer Output 2	Start time period 1 Wed. timer output 2
TimeDp.Posts(26).T2	R	40145	16	Timer Output 2	Stop time period 1 Wed. timer output 2
TimeDp.Posts(26).T3	R	40146	0	Timer Output 2	Start time period 2 Wed. timer output 2
TimeDp.Posts(26).T4	R	40147	0	Timer Output 2	Stop time period 2 Wed. timer output 2
TimeDp.Posts(27).T1	R	40148	7	Timer Output 2	Start time period 1 Thu. timer output 2
TimeDp.Posts(27).T2	R	40149	16	Timer Output 2	Stop time period 1 Thu. timer output 2
TimeDp.Posts(27).T3	R	40150	0	Timer Output 2	Start time period 2 Thu. timer output 2
TimeDp.Posts(27).T4	R	40151	0	Timer Output 2	Stop time period 2 Thu. timer output 2
TimeDp.Posts(28).T1	R	40152	7	Timer Output 2	Start time period 1 Fri. timer output 2
TimeDp.Posts(28).T2	R	40153	16	Timer Output 2	Stop time period 1 Fri. timer output 2
TimeDp.Posts(28).T3	R	40154	0	Timer Output 2	Start time period 2 Fri. timer output 2
TimeDp.Posts(28).T4	R	40155	0	Timer Output 2	Stop time period 2 Fri. timer output 2
TimeDp.Posts(29).T1	R	40156	0	Timer Output 2	Start time period 1 Sat. timer output 2
TimeDp.Posts(29).T2	R	40157	0	Timer Output 2	Stop time period 1 Sat. timer output 2
TimeDp.Posts(29).T3	R	40158	0	Timer Output 2	Start time period 2 Sat. timer output 2
TimeDp.Posts(29).T4	R	40159	0	Timer Output 2	Stop time period 2 Sat. timer output 2
TimeDp.Posts(30).T1	R	40160	0	Timer Output 2	Start time period 1 Sun. timer output 2
TimeDp.Posts(30).T2	R	40161	0	Timer Output 2	Stop time period 1 Sun. timer output 2
TimeDp.Posts(30).T3	R	40162	0	Timer Output 2	Start time period 2 Sun. timer output 2
TimeDp.Posts(30).T4	R	40163	0	Timer Output 2	Stop time period 2 Sun. timer output 2
TimeDp.Posts(31).T1	R	40164	0	Timer Output 2	Start time period 1 Holiday timer output 2
TimeDp.Posts(31).T2	R	40165	0	Timer Output 2	Stop time period 1 Holiday timer output 2
TimeDp.Posts(31).T3	R	40166	0	Timer Output 2	Start time period 2 Holiday timer output 2
TimeDp.Posts(31).T4	R	40167	0	Timer Output 2	Stop time period 2 Holiday timer output 2

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeDp.Posts(32).T1	R	40168	7	Timer Output 3	Start time period 1 Mon. timer output 3 (HH.MM)
TimeDp.Posts(32).T2	R	40169	16	Timer Output 3	Stop time period 1 Mon. timer output 3
TimeDp.Posts(32).T3	R	40170	0	Timer Output 3	Start time period 2 Mon. timer output 3
TimeDp.Posts(32).T4	R	40171	0	Timer Output 3	Stop time period 2 Mon. timer output 3
TimeDp.Posts(33).T1	R	40172	7	Timer Output 3	Start time period 1 Tue. timer output 3
TimeDp.Posts(33).T2	R	40173	16	Timer Output 3	Stop time period 1 Tue. timer output 3
TimeDp.Posts(33).T3	R	40174	0	Timer Output 3	Start time period 2 Tue. timer output 3
TimeDp.Posts(33).T4	R	40175	0	Timer Output 3	Stop time period 2 Tue. timer output 3
TimeDp.Posts(34).T1	R	40176	7	Timer Output 3	Start time period 1 Wed. timer output 3
TimeDp.Posts(34).T2	R	40177	16	Timer Output 3	Stop time period 1 Wed. timer output 3
TimeDp.Posts(34).T3	R	40178	0	Timer Output 3	Start time period 2 Wed. timer output 3
TimeDp.Posts(34).T4	R	40179	0	Timer Output 3	Stop time period 2 Wed. timer output 3
TimeDp.Posts(35).T1	R	40180	7	Timer Output 3	Start time period 1 Thu. timer output 3
TimeDp.Posts(35).T2	R	40181	16	Timer Output 3	Stop time period 1 Thu. timer output 3
TimeDp.Posts(35).T3	R	40182	0	Timer Output 3	Start time period 2 Thu. timer output 3
TimeDp.Posts(35).T4	R	40183	0	Timer Output 3	Stop time period 2 Thu. timer output 3
TimeDp.Posts(36).T1	R	40184	7	Timer Output 3	Start time period 1 Fri. timer output 3
TimeDp.Posts(36).T2	R	40185	16	Timer Output 3	Stop time period 1 Fri. timer output 3
TimeDp.Posts(36).T3	R	40186	0	Timer Output 3	Start time period 2 Fri. timer output 3
TimeDp.Posts(36).T4	R	40187	0	Timer Output 3	Stop time period 2 Fri. timer output 3
TimeDp.Posts(37).T1	R	40188	0	Timer Output 3	Start time period 1 Sat. timer output 3
TimeDp.Posts(37).T2	R	40189	0	Timer Output 3	Stop time period 1 Sat. timer output 3
TimeDp.Posts(37).T3	R	40190	0	Timer Output 3	Start time period 2 Sat. timer output 3
TimeDp.Posts(37).T4	R	40191	0	Timer Output 3	Stop time period 2 Sat. timer output 3
TimeDp.Posts(38).T1	R	40192	0	Timer Output 3	Start time period 1 Sun. timer output 3
TimeDp.Posts(38).T2	R	40193	0	Timer Output 3	Stop time period 1 Sun. timer output 3
TimeDp.Posts(38).T3	R	40194	0	Timer Output 3	Start time period 2 Sun. timer output 3
TimeDp.Posts(38).T4	R	40195	0	Timer Output 3	Stop time period 2 Sun. timer output 3
TimeDp.Posts(39).T1	R	40196	0	Timer Output 3	Start time period 1 Holiday timer output 3
TimeDp.Posts(39).T2	R	40197	0	Timer Output 3	Stop time period 1 Holiday timer output 3
TimeDp.Posts(39).T3	R	40198	0	Timer Output 3	Start time period 2 Holiday timer output 3
TimeDp.Posts(39).T4	R	40199	0	Timer Output 3	Stop time period 2 Holiday timer output 3



Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeDp.Posts(40).T1	R	40200	7	Timer Output 4	Start time period 1 Mon. timer output 4 (HH.MM)
TimeDp.Posts(40).T2	R	40201	16	Timer Output 4	Stop time period 1 Mon. timer output 4
TimeDp.Posts(40).T3	R	40202	0	Timer Output 4	Start time period 2 Mon. timer output 4
TimeDp.Posts(40).T4	R	40203	0	Timer Output 4	Stop time period 2 Mon. timer output 4
TimeDp.Posts(41).T1	R	40204	7	Timer Output 4	Start time period 1 Tue. timer output 4
TimeDp.Posts(41).T2	R	40205	16	Timer Output 4	Stop time period 1 Tue. timer output 4
TimeDp.Posts(41).T3	R	40206	0	Timer Output 4	Start time period 2 Tue. timer output 4
TimeDp.Posts(41).T4	R	40207	0	Timer Output 4	Stop time period 2 Tue. timer output 4
TimeDp.Posts(42).T1	R	40208	7	Timer Output 4	Start time period 1 Wed. timer output 4
TimeDp.Posts(42).T2	R	40209	16	Timer Output 4	Stop time period 1 Wed. timer output 4
TimeDp.Posts(42).T3	R	40210	0	Timer Output 4	Start time period 2 Wed. timer output 4
TimeDp.Posts(42).T4	R	40211	0	Timer Output 4	Stop time period 2 Wed. timer output 4
TimeDp.Posts(43).T1	R	40212	7	Timer Output 4	Start time period 1 Thu. timer output 4
TimeDp.Posts(43).T2	R	40213	16	Timer Output 4	Stop time period 1 Thu. timer output 4
TimeDp.Posts(43).T3	R	40214	0	Timer Output 4	Start time period 2 Thu. timer output 4
TimeDp.Posts(43).T4	R	40215	0	Timer Output 4	Stop time period 2 Thu. timer output 4
TimeDp.Posts(44).T1	R	40216	7	Timer Output 4	Start time period 1 Fri. timer output 4
TimeDp.Posts(44).T2	R	40217	16	Timer Output 4	Stop time period 1 Fri. timer output 4
TimeDp.Posts(44).T3	R	40218	0	Timer Output 4	Start time period 2 Fri. timer output 4
TimeDp.Posts(44).T4	R	40219	0	Timer Output 4	Stop time period 2 Fri. timer output 4
TimeDp.Posts(45).T1	R	40220	0	Timer Output 4	Start time period 1 Sat. timer output 4
TimeDp.Posts(45).T2	R	40221	0	Timer Output 4	Stop time period 1 Sat. timer output 4
TimeDp.Posts(45).T3	R	40222	0	Timer Output 4	Start time period 2 Sat. timer output 4
TimeDp.Posts(45).T4	R	40223	0	Timer Output 4	Stop time period 2 Sat. timer output 4
TimeDp.Posts(46).T1	R	40224	0	Timer Output 4	Start time period 1 Sun. timer output 4
TimeDp.Posts(46).T2	R	40225	0	Timer Output 4	Stop time period 1 Sun. timer output 4
TimeDp.Posts(46).T3	R	40226	0	Timer Output 4	Start time period 2 Sun. timer output 4
TimeDp.Posts(46).T4	R	40227	0	Timer Output 4	Stop time period 2 Sun. timer output 4
TimeDp.Posts(47).T1	R	40228	0	Timer Output 4	Start time period 1 Holiday timer output 4
TimeDp.Posts(47).T2	R	40229	0	Timer Output 4	Stop time period 1 Holiday timer output 4
TimeDp.Posts(47).T3	R	40230	0	Timer Output 4	Start time period 2 Holiday timer output 4
TimeDp.Posts(47).T4	R	40231	0	Timer Output 4	Stop time period 2 Holiday timer output 4

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeDp.Posts(48).T1	R	40232	7	Timer Output 5	Start time period 1 Mon. timer output 5 (HH.MM)
TimeDp.Posts(48).T2	R	40233	16	Timer Output 5	Stop time period 1 Mon. timer output 5
TimeDp.Posts(48).T3	R	40234	0	Timer Output 5	Start time period 2 Mon. timer output 5
TimeDp.Posts(48).T4	R	40235	0	Timer Output 5	Stop time period 2 Mon. timer output 5
TimeDp.Posts(49).T1	R	40236	7	Timer Output 5	Start time period 1 Tue. timer output 5
TimeDp.Posts(49).T2	R	40237	16	Timer Output 5	Stop time period 1 Tue. timer output 5
TimeDp.Posts(49).T3	R	40238	0	Timer Output 5	Start time period 2 Tue. timer output 5
TimeDp.Posts(49).T4	R	40239	0	Timer Output 5	Stop time period 2 Tue. timer output 5
TimeDp.Posts(50).T1	R	40240	7	Timer Output 5	Start time period 1 Wed. timer output 5
TimeDp.Posts(50).T2	R	40241	16	Timer Output 5	Stop time period 1 Wed. timer output 5
TimeDp.Posts(50).T3	R	40242	0	Timer Output 5	Start time period 2 Wed. timer output 5
TimeDp.Posts(50).T4	R	40243	0	Timer Output 5	Stop time period 2 Wed. timer output 5
TimeDp.Posts(51).T1	R	40244	7	Timer Output 5	Start time period 1 Thu. timer output 5
TimeDp.Posts(51).T2	R	40245	16	Timer Output 5	Stop time period 1 Thu. timer output 5
TimeDp.Posts(51).T3	R	40246	0	Timer Output 5	Start time period 2 Thu. timer output 5
TimeDp.Posts(51).T4	R	40247	0	Timer Output 5	Stop time period 2 Thu. timer output 5
TimeDp.Posts(52).T1	R	40248	7	Timer Output 5	Start time period 1 Fri. timer output 5
TimeDp.Posts(52).T2	R	40249	16	Timer Output 5	Stop time period 1 Fri. timer output 5
TimeDp.Posts(52).T3	R	40250	0	Timer Output 5	Start time period 2 Fri. timer output 5
TimeDp.Posts(52).T4	R	40251	0	Timer Output 5	Stop time period 2 Fri. timer output 5
TimeDp.Posts(53).T1	R	40252	0	Timer Output 5	Start time period 1 Sat. timer output 5
TimeDp.Posts(53).T2	R	40253	0	Timer Output 5	Stop time period 1 Sat. timer output 5
TimeDp.Posts(53).T3	R	40254	0	Timer Output 5	Start time period 2 Sat. timer output 5
TimeDp.Posts(53).T4	R	40255	0	Timer Output 5	Stop time period 2 Sat. timer output 5
TimeDp.Posts(54).T1	R	40256	0	Timer Output 5	Start time period 1 Sun. timer output 5
TimeDp.Posts(54).T2	R	40257	0	Timer Output 5	Stop time period 1 Sun. timer output 5
TimeDp.Posts(54).T3	R	40258	0	Timer Output 5	Start time period 2 Sun. timer output 5
TimeDp.Posts(54).T4	R	40259	0	Timer Output 5	Stop time period 2 Sun. timer output 5
TimeDp.Posts(55).T1	R	40260	0	Timer Output 5	Start time period 1 Holiday timer output 5
TimeDp.Posts(55).T2	R	40261	0	Timer Output 5	Stop time period 1 Holiday timer output 5
TimeDp.Posts(55).T3	R	40262	0	Timer Output 5	Start time period 2 Holiday timer output 5
TimeDp.Posts(55).T4	R	40263	0	Timer Output 5	Stop time period 2 Holiday timer output 5

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeHp.Posts(0).FromDate	R	40264	01.01	Holidays	Start date holiday period 1 (MM.DD)
TimeHp.Posts(0).ToDate	R	40265	01.01	Holidays	End date holiday period 1 (MM.DD)
TimeHp.Posts(1).FromDate	R	40266	01.01	Holidays	Start date holiday period 2 (MM.DD)
TimeHp.Posts(1).ToDate	R	40267	01.01	Holidays	End date holiday period 2 (MM.DD)
TimeHp.Posts(2).FromDate	R	40268	01.01	Holidays	Start date holiday period 3 (MM.DD)
TimeHp.Posts(2).ToDate	R	40269	01.01	Holidays	End date holiday period 3 (MM.DD)
TimeHp.Posts(3).FromDate	R	40270	01.01	Holidays	Start date holiday period 4 (MM.DD)
TimeHp.Posts(3).ToDate	R	40271	01.01	Holidays	End date holiday period 4 (MM.DD)
TimeHp.Posts(4).FromDate	R	40272	01.01	Holidays	Start date holiday period 5 (MM.DD)
TimeHp.Posts(4).ToDate	R	40273	01.01	Holidays	End date holiday period 5 (MM.DD)
TimeHp.Posts(5).FromDate	R	40274	01.01	Holidays	Start date holiday period 6 (MM.DD)
TimeHp.Posts(5).ToDate	R	40275	01.01	Holidays	End date holiday period 6 (MM.DD)
TimeHp.Posts(6).FromDate	R	40276	01.01	Holidays	Start date holiday period 7 (MM.DD)
TimeHp.Posts(6).ToDate	R	40277	01.01	Holidays	End date holiday period 7 (MM.DD)
TimeHp.Posts(7).FromDate	R	40278	01.01	Holidays	Start date holiday period 8 (MM.DD)
TimeHp.Posts(7).ToDate	R	40279	01.01	Holidays	End date holiday period 8 (MM.DD)
TimeHp.Posts(8).FromDate	R	40280	01.01	Holidays	Start date holiday period 9 (MM.DD)
TimeHp.Posts(8).ToDate	R	40281	01.01	Holidays	End date holiday period 9 (MM.DD)
TimeHp.Posts(9).FromDate	R	40282	01.01	Holidays	Start date holiday period 10 (MM.DD)
TimeHp.Posts(9).ToDate	R	40283	01.01	Holidays	End date holiday period 10 (MM.DD)
TimeHp.Posts(10).FromDate	R	40284	01.01	Holidays	Start date holiday period 11 (MM.DD)
TimeHp.Posts(10).ToDate	R	40285	01.01	Holidays	End date holiday period 11 (MM.DD)
TimeHp.Posts(11).FromDate	R	40286	01.01	Holidays	Start date holiday period 12 (MM.DD)
TimeHp.Posts(11).ToDate	R	40287	01.01	Holidays	End date holiday period 12 (MM.DD)
TimeHp.Posts(12).FromDate	R	40288	01.01	Holidays	Start date holiday period 13 (MM.DD)

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeHp.Posts(12).ToDate	R	40289	01.01	Holidays	End date holiday period 13 (MM.DD)
TimeHp.Posts(13).FromDate	R	40290	01.01	Holidays	Start date holiday period 14 (MM.DD)
TimeHp.Posts(13).ToDate	R	40291	01.01	Holidays	End date holiday period 14 (MM.DD)
TimeHp.Posts(14).FromDate	R	40292	01.01	Holidays	Start date holiday period 15 (MM.DD)
TimeHp.Posts(14).ToDate	R	40293	01.01	Holidays	End date holiday period 15 (MM.DD)
TimeHp.Posts(15).FromDate	R	40294	01.01	Holidays	Start date holiday period 16 (MM.DD)
TimeHp.Posts(15).ToDate	R	40295	01.01	Holidays	End date holiday period 16 (MM.DD)
TimeHp.Posts(16).FromDate	R	40296	01.01	Holidays	Start date holiday period 17 (MM.DD)
TimeHp.Posts(16).ToDate	R	40297	01.01	Holidays	End date holiday period 17 (MM.DD)
TimeHp.Posts(17).FromDate	R	40298	01.01	Holidays	Start date holiday period 18 (MM.DD)
TimeHp.Posts(17).ToDate	R	40299	01.01	Holidays	End date holiday period 18 (MM.DD)
TimeHp.Posts(18).FromDate	R	40300	01.01	Holidays	Start date holiday period 19 (MM.DD)
TimeHp.Posts(18).ToDate	R	40301	01.01	Holidays	End date holiday period 19 (MM.DD)
TimeHp.Posts(19).FromDate	R	40302	01.01	Holidays	Start date holiday period 20 (MM.DD)
TimeHp.Posts(19).ToDate	R	40303	01.01	Holidays	End date holiday period 20 (MM.DD)
TimeHp.Posts(20).FromDate	R	40304	01.01	Holidays	Start date holiday period 21 (MM.DD)
TimeHp.Posts(20).ToDate	R	40305	01.01	Holidays	End date holiday period 21 (MM.DD)
TimeHp.Posts(21).FromDate	R	40306	01.01	Holidays	Start date holiday period 22 (MM.DD)
TimeHp.Posts(21).ToDate	R	40307	01.01	Holidays	End date holiday period 22 (MM.DD)
TimeHp.Posts(22).FromDate	R	40308	01.01	Holidays	Start date holiday period 23 (MM.DD)
TimeHp.Posts(22).ToDate	R	40309	01.01	Holidays	End date holiday period 23 (MM.DD)

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimeHp.Posts(23).FromDate	R	40310	01.01	Holidays	Start date holiday period 24 (MM.DD)
TimeHp.Posts(23).ToDate	R	40311	01.01	Holidays	End date holiday period 24 (MM.DD)
VentSettings.Cor_SupplyPID_PGain	R	40312	33°C	Settings, Control Temp	P-band supply air control
VentSettings.Cor_SupplyPID_ITime	R	40313	100 s	Settings, Control Temp	I-time supply air control
VentSettings.Cor_ExtractPID_PGain	R	40314	100°C	Settings, Control Temp	P-band extract air control
VentSettings.Cor_ExtractPID_ITime	R	40315	300 s	Settings, Control Temp	I-time extract air control
VentSettings.Cor_RoomPID_PGain	R	40316	100°C	Settings, Control Temp	P-band room air control
VentSettings.Cor_RoomPID_ITime	R	40317	300 s	Settings, Control Temp	I-time room air control
VentSettings.Cor_FrostPID_PGain	R	40318	100°C	Settings, Control Temp	P-band switchdown mode
VentSettings.Cor_FrostPID_ITime	R	40319	100 s	Settings, Control Temp	I-time switchdown mode
VentSettings.Cor_DeIcePID_PGain	R	40320	100°C	Settings, Control Temp	P-band de-icing
VentSettings.Cor_DeIcePID_ITime	R	40321	100 s	Settings, Control Temp	I-time de-icing
VentSettings.Cor_SAFPID_PGain	R	40322	500 Pa	Settings, Control Pressure	P-band pressure control SAF
VentSettings.Cor_SAFPID_ITime	R	40323	60 s	Settings, Control Pressure	I-time pressure control SAF
VentSettings.Cor_EAFPID_PGain	R	40324	500 Pa	Settings, Control Pressure	P-band pressure control EAF
VentSettings.Cor_EAFPID_ITime	R	40325	60 s	Settings, Control Pressure	I-time pressure control EAF
VentSettings.Cor_SAFAirFlowPID_PGain	R	40326	1000 m <sup>3</sup> /h	Settings, Control Flow	P-band flow control SAF
VentSettings.Cor_SAFPID_ITime	R	40327	60 s	Settings, Control Flow	I-time flow control SAF
VentSettings.Cor_EAFAirFlowPID_PGain	R	40328	1000 m <sup>3</sup> /h	Settings, Control Flow	P-band flow control EAF
VentSettings.Cor_EAFPID_ITime	R	40329	60 s	Settings, Control Flow	I-time flow control EAF
VentSettings.Cor_HumidityPID_PGain	R	40330	100 % RH	Settings, Control Humidity	P-band humidity control

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_HumidityPID_ITime	R	40331	300 s	Settings, Control Humidity	I-time humidity control
VentSettings.Cor_SupplyMaxDiff	R	40332	10°C	Settings, Alarm Limits	Max control deviation supply air temp
VentSettings.Cor_SupplyHighAlarmLimit	R	40333	30°C	Settings, Alarm Limits	High alarm limit supply air temp
VentSettings.Cor_SupplyLowAlarmLimit	R	40334	10°C	Settings, Alarm Limits	Low alarm limit supply air temp
VentSettings.Cor_ExtractAirTempHigh	R	40335	30°C	Settings, Alarm Limits	High alarm limit extract air temp
VentSettings.Cor_ExtractAirTempLow	R	40336	10°C	Settings, Alarm Limits	Low alarm limit extract air temp
VentSettings.Cor_RoomHighLimit	R	40337	30°C	Settings, Alarm Limits	High alarm limit room air temp
VentSettings.Cor_RoomLowLimit	R	40338	10°C	Settings, Alarm Limits	Low alarm limit room air temp
VentSettings.Cor_FrostLimit	R	40339	7°C	Settings, Alarm Limits	Alarm limit frost protection
VentSettings.Cor_SAFMaxDiffPressure	R	40340	50 Pa	Settings, Alarm Limits	Max control deviation pressure SAF
VentSettings.Cor_EAFMaxDiffPressure	R	40341	50 Pa	Settings, Alarm Limits	Max control deviation pressure EAF
VentSettings.Cor_EfficiencyLowLimit	R	40342	50 %	Settings, Alarm Limits	Low efficiency
AlaData.AlaPt13_DelayValue	I	40343	30 min	Settings, Alarm Delays	Alarm delay control deviation supply air temp
AlaData.AlaPt15_DelayValue	I	40344	5 s	Settings, Alarm Delays	Alarm delay high supply air temp
AlaData.AlaPt16_DelayValue	I	40345	5 s	Settings, Alarm Delays	Alarm delay low supply air temp
AlaData.AlaPt21_DelayValue	I	40346	30 min	Settings, Alarm Delays	Alarm delay high extract air temp
AlaData.AlaPt22_DelayValue	I	40347	30 min	Settings, Alarm Delays	Alarm delay low extract air temp
AlaData.AlaPt19_DelayValue	I	40348	30 min	Settings, Alarm Delays	Alarm delay high room air temp
AlaData.AlaPt20_DelayValue	I	40349	30 min	Settings, Alarm Delays	Alarm delay low alarm room air temp
AlaData.AlaPt25_DelayValue	I	40350	0 s	Settings, Alarm Delays	Alarm delay frost protection
AlaData.AlaPt31_DelayValue	I	40351	30 min	Settings, Alarm Delays	Alarm delay max control deviation pressure SAF

Signal name	EXOL type	Modbus address	Default value	Function	Description
AlaData.AlaPt32_DelayValue	I	40352	30 min	Settings, Alarm Delays	Alarm delay max control deviation pressure EAF
AlaData.AlaPt26_DelayValue	I	40353	30 min	Settings, Alarm Delays	Alarm delay low efficiency
AlaData.AlaPt1_DelayValue	I	40354	120 s	Settings, Alarm Delays	Alarm delay malfunction SAF
AlaData.AlaPt2_DelayValue	I	40355	120 s	Settings, Alarm Delays	Alarm delay malfunction EAF
AlaData.AlaPt3_DelayValue	I	40356	5 s	Settings, Alarm Delays	Alarm delay malfunction P1-Heating
AlaData.AlaPt4_DelayValue	I	40357	5 s	Settings, Alarm Delays	Alarm delay malfunction P1-Cooling
AlaData.AlaPt5_DelayValue	I	40358	20 s	Settings, Alarm Delays	Alarm delay malfunction P1-Exchanger
AlaData.AlaPt6_DelayValue	I	40359	180 s	Settings, Alarm Delays	Alarm delay filter monitoring
AlaData.AlaPt7_DelayValue	I	40360	5 s	Settings, Alarm Delays	Alarm delay flow switch
AlaData.AlaPt8_DelayValue	I	40361	0 s	Settings, Alarm Delays	Alarm delay frost protection
AlaData.AlaPt9_DelayValue	I	40362	0 s	Settings, Alarm Delays	Alarm delay frost protection digital input
AlaData.AlaPt10_DelayValue	I	40363	0 s	Settings, Alarm Delays	Alarm delay fire alarm
AlaData.AlaPt12_DelayValue	I	40364	0 s	Settings, Alarm Delays	Alarm delay external alarm
AlaData.AlaPt23_DelayValue	I	40365	0 s	Settings, Alarm Delays	Alarm delay electric heater
AlaData.AlaPt27_DelayValue	I	40366	5 s	Settings, Alarm Delays	Alarm delay sensor error
AlaData.AlaPt29_DelayValue	I	40367	20 s	Settings, Alarm Delays	Alarm delay rotation guard exchanger
VentSettings.Cor_AirUnitAutoMode	X	40368	3	Manual/Auto	Running mode air unit: Modbus: 0=Manual off 1=Manual reduced speed 2=Manual normal speed 3=Auto BACnet: 1=Manual off 2=Manual reduced speed 3=Manual normal speed 4=Auto

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_SupplyPID_Select	X	40369	2	Manual/Auto	Supply temp controller mode: 0=Manual off 1=Manual on 2=Auto
VentSettings.Cor_SupplyPID_ManSet	R	40370	0 %	Manual/Auto	Supply temp controller output if manual on mode
VentSettings.Cor_SAFAutoMode(0)	X	40371	3	Manual/Auto	Running mode SAF: 0=Off 1=Manual half speed 2=Manual full speed 3=Auto
VentSettings.Cor_EAFAutoMode	X	40372	3	Manual/Auto	Running mode EAF: 0=Off 1=Manual half speed 2=Manual full speed 3=Auto
VentSettings.Cor_SAFFrequencyAutoMode	X	40373	3	Manual/Auto	Running mode frequency controlled SAF 0=Manual 1=Man. half speed 2=Man. Fullspeed 3=Auto
VentSettings.Cor_SAFManual	R	40374	0 %	Manual/Auto	Freguencer controller output SAF if manual mode
VentSettings.Cor_EAFFrequencyAutoMode	X	40375	3	Manual/Auto	Running mode frequency controlled EAF 0=Manual 1=Man. half speed 2=Man. Fullspeed 3=Auto
VentSettings.Cor_EAFManual	R	40376	0 %	Manual/Auto	Freguencer controller output EAF if manual mode
VentSettings.Cor_HeatCoilAutoMode(0)	X	40377	2	Manual/Auto	Running mode Heating: 0=Off 1=Manual 2=Auto
VentSettings.Cor_HeatCoilManual(0)	R	40378	0	Manual/Auto	Heating controller output if manual mode
VentSettings.Cor_ExchCoilAutoMode	X	40379	2	Manual/Auto	Running mode Exchanger: 0=Off 1=Manual 2=Auto
VentSettings.Cor_ExchCoilManual	R	40380	0	Manual/Auto	Exchanger controller output if manual mode
VentSettings.Cor_CoolCoilAutoMode	X	40381	2	Manual/Auto	Running mode Cooling: 0=Off 1=Manual 2=Auto



Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_CoolCoolManual	R	40382	0	Manual/Auto	Cooling controller output if manual mode
VentSettings.Cor_HumidityPID_Select	X	40383	2	Manual/Auto	Running mode Humidification/Dehumidification: 0=Off 1=Manual 2=Auto
VentSettings.Cor_HumidityPID_ManSet	R	40384	0	Manual/Auto	Humidification/Dehumidification controller output if manual mode
VentSettings.Cor_HeatPumpAutoMode(0)	X	40385	2	Manual/Auto	Running mode P1-Heating: 0=Manual off 1=Manual on 2=Auto
VentSettings.Cor_ExchPumpAutoMode	X	40386	2	Manual/Auto	Running mode P1-Exchanger: 0=Manual off 1=Manual on 2=Auto
VentSettings.Cor_CoolPumpAutoMode	X	40387	2	Manual/Auto	Running mode P1-Cooling: 0=Manual off 1=Manual on 2=Auto
VentSettings.Cor_FireDamperAutoMode	X	40388	2	Manual/Auto	Running mode fire damper: 0=Close 1=Open 2=Auto
VentSettings.Cor_FreshAirDamperAutoMode	X	40389	2	Manual/Auto	Running mode fresh air damper: 0=Close 1=Open 2=Auto
VentSettings.Cor_RecycleAirDamperAutoMode	X	40390	2	Manual/Auto	Running mode recirculation damper: 0=Close 1=Open 2=Auto
VentSettings.Cor_ExtractAirDamperAutoMode	X	40391	2	Manual/Auto	Running mode extract air damper: 0=Close 1=Open 2=Auto
VentActual.Cor_OutdoorTemp(0)	R	40392		Actual/Setpoint	Outdoor temperature (Can be modified if it's not connected to a physical analogue input).

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimePro.TimeGroupStatusFanFullSpeed	X	40393	4	Manual/Auto	Manual/Auto Full Speed time channel: Modbus: 0=Manual-Off 1=Manual-On 2=Forced Off 3=Forced On 4=Auto BACnet: 1=Manual-Off 2=Manual-On 3=Forced Off 4=Forced On 5=Auto
TimePro.TimeGroupStatusFanHalfSpeed	X	40394	4	Manual/Auto	Manual/Auto Half Speed time channel: Modbus: 0=Manual-Off 1=Manual-On 2=Forced Off 3=Forced On 4=Auto BACnet: 1=Manual-Off 2=Manual-On 3=Forced Off 4=Forced On 5=Auto
TimePro.TimeGroupStatusCor_ExtraTimeGroup1	X	40395	4	Manual/Auto	Manual/Auto Timer output 1: 0=Manual-Off 1=Manual-On 2=Forced Off 3=Forced On 4=Auto
TimePro.TimeGroupStatusCor_ExtraTimeGroup2	X	40396	4	Manual/Auto	Manual/Auto Timer output 2: 0=Manual-Off 1=Manual-On 2=Forced Off 3=Forced On 4=Auto
TimePro.TimeGroupStatusCor_ExtraTimeGroup3	X	40397	4	Manual/Auto	Manual/Auto Timer output 3: 0=Manual-Off 1=Manual-On 2=Forced Off 3=Forced On 4=Auto
TimePro.TimeGroupStatusCor_ExtraTimeGroup4	X	40398	4	Manual/Auto	Manual/Auto Timer output 4: 0=Manual-Off 1=Manual-On 2=Forced Off 3=Forced On 4=Auto

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimePro.TimeGroupStatusCor_ExtraTimeGroup5	X	40399	4	Manual/Auto	Manual/Auto Timer output 5: Modbus: 0=Manual-Off 1=Manual-On 2=Forced Off 3=Forced On 4=Auto BACnet: 1=Manual-Off 2=Manual-On 3=Forced Off 4=Forced On 5=Auto
Alarms.AlaAcknow	X	40400	255	Alarm Acknowledging, Blocking and Unblocking	External alarm acknowledge by setting this signal to the alarm number that should be acknowledge.
Alarms.AlaBlock	X	40401	255	Alarm Acknowledging, Blocking and Unblocking	External alarm blocking by setting this signal to the alarm number that should be blocked.
Alarms.AlaUnBlock	X	40402	255	Alarm Acknowledging, Blocking and Unblocking	External alarm unblocking by setting this signal to the alarm number that should be unblocked.
VentSettings.Cor_HeatPumpLimit	R	40403	10°C	Actual/Setpoint	If lower outdoor temp the heating pump is not stopped
VentSettings.Cor_SupplySetpointMax	R	40404	30°C	Supply, Extract and Room temperatures	Max limit of supply setpoint when cascade control
VentSettings.Cor_SupplySetpointMin	R	40405	12°C	Supply, Extract and Room temperatures	Min limit of supply setpoint when cascade control
QSystem.Sec	X	40406		Real Time Clock	Real time clock: Second 0-59
QSystem.Minute	X	40407		Real Time Clock	Real time clock: Minute 0-59
QSystem.Hour	X	40408		Real Time Clock	Real time clock: Hour 0-23
QSystem.WDay	X	40409		Real Time Clock	Real time clock: Day of Week 1-7, 1=Monday
QSystem.Week	X	40410		Real Time Clock	Real time clock: Week number 1-53
QSystem.Date	X	40411		Real Time Clock	Real time clock: Day of month 1-31
QSystem.Month	X	40412		Real Time Clock	Real time clock: Month 1-12
QSystem.Year	X	40413		Real Time Clock	Real time clock: Year 0-99
VentSettings.Cor_Comp1Pressure	R	40414	0	SAF/EAF Pressure and Flow	Pressure compensation at breakpoint 1
VentSettings.Cor_Comp1Temp	R	40415	-20	SAF/EAF Pressure and Flow	Outdoor temp breakpoint 1 (must be lower than breakpoint 2 temp)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_Comp2 Pressure	R	40416	0	SAF/EAF Pressure and Flow	Pressure compensation at breakpoint 2
VentSettings.Cor_Comp2 Temp	R	40417	10	SAF/EAF Pressure and Flow	Outdoor temp breakpoint 2 (must be higher than breakpoint 1 temp)
VentSettings.Cor_HumidityMaxDiff	R	40418	10 % RH	Humidity	Max allowed difference between setpoint and humidity in room before alarm
VentSettings.Cor_HumidityStartLimit	R	40419	15 % RH	Humidity	Start limit in % to start digital output signal "Cor_HumidityStart(0)"
VentSettings.Cor_HumidityStopLimit	R	40420	5 % RH	Humidity	Stop limit in % to stop digital output signal "Cor_HumidityStart(0)"
VentSettings.Cor_HumidityAutoMode	X	40421	2	Manual/Auto	Running mode humidity start signal 0=Off 1=On 2=Auto
VentSettings.Cor_ExchangeStartDelay	I	40422	0 s	Settings, General	Start delay Exchanger (s)
VentSettings.Cor_DXBlockLimit	R	40423	0°C	Settings, General	If lower outdoor temperature all steps for DX-cooling is blocked
VentSettings.Cor_SAFFullspeedOutput	R	40424	75 %	SAF/EAF Pressure and Flow	Output signal (0...100 %) full speed SAF if Frequency control manually
VentSettings.Cor_SAFHalfspeedOutput	R	40425	50 %	SAF/EAF Pressure and Flow	Output signal (0...100 %) half speed SAF if Frequency control manually
VentSettings.Cor_EAFFullspeedOutput	R	40426	75 %	SAF/EAF Pressure and Flow	Output signal (0...100 %) full speed EAF if Frequency control manually
VentSettings.Cor_EAFHalfspeedOutput	R	40427	50 %	SAF/EAF Pressure and Flow	Output signal (0...100 %) half speed EAF if Frequency control manually
VentSettings.Cor_CoolStepBlock1	R	40428	0 %	Settings, General	If frequens output signal SAF is lower cool step 1 is blocked
VentSettings.Cor_CoolStepBlock2	R	40429	0 %	Settings, General	If frequens output signal SAF is lower cool step 2 is blocked
VentSettings.Cor_CoolStepBlock3	R	40430	0 %	Settings, General	If frequens output signal SAF is lower cool step 3 is blocked
VentSettings.Cor_CoolStepBlockLimit1(0)	R	40431	13°C	Settings, General	If lower outdoor temperature Cool step 1 is blocked
VentSettings.Cor_CoolStepBlockLimit2	R	40432	13°C	Settings, General	If lower outdoor temperature Cool step 2 is blocked
VentSettings.Cor_CoolStepBlockLimit3	R	40433	13°C	Settings, General	If lower outdoor temperature Cool step 3 is blocked
VentSettings.Cor_ExtraUnitFunc	X	40434	0	Extra Unit	Start/Stop function Extra Unit: 0=Off 1=Always running 2=Running if unit is running

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_ExtraUnitSetP	R	40435	18°C	Extra Unit	Setpoint Extra Unit
VentSettings.Cor_ExtraUnitPID1Mode	X	40436	0	Extra Unit	Control mode Extra Unit 0=Heating Controller 1=Cooling Controller
VentSettings.Cor_ExtraUnitPID1_Select(0)	X	40437	2	Manual/Auto	Manual/Auto Extra Unit Controller 0=Off 1=Manual 2=Auto
VentSettings.Cor_ExtraUnitPID1_ManSet(0)	R	40438	0	Manual/Auto	Extra Unit Controller output if manual mode
VentSettings.Cor_RecycleSetP	R	40439	18°C	Recirculation	Recirculation setpoint
VentSettings.Cor_RecycleMaxRoomTemp	R	40440	25°C	Recirculation	If higher room temp when Recirculation run recirculation damper is closed and fresh air damper is opened
VentSettings.Cor_RecycleSAFOffset	R	40441	0	Recirculation	Setpoint offset if pressure/flow controlled SAF (Pa)
VentSettings.Cor_RecycleEAFOffset	R	40442	0	Recirculation	Setpoint offset if pressure/flow controlled EAF (this is not used)
VentSettings.Cor_SAFAirFlowK	R	40443	100	SAF/EAF Pressure and Flow	K-constant for counting air flow SAF $\text{airflow} = \text{Cor\_AirFlowK} * \text{Cor\_SAFP}^{\text{Pressure}}^{\text{Cor\_AirFlowx}}$
VentSettings.Cor_SAFAirFlowx	R	40444	0.5	SAF/EAF Pressure and Flow	X-constant for counting air flow SAF
VentSettings.Cor_EAFAirFlowK	R	40445	100	SAF/EAF Pressure and Flow	K-constant for counting air flow EAF $\text{airflow} = \text{Cor\_AirFlowK} * \text{Cor\_SAFP}^{\text{Pressure}}^{\text{Cor\_AirFlowx}}$
VentSettings.Cor_EAFAirFlowx	R	40446	0.5	SAF/EAF Pressure and Flow	X-constant for counting air flow EAF
VentSettings.Cor_EAFFrequencyFact	R	40447	1	SAF/EAF Pressure and Flow	Factor for controlling EAF if CAV fan control is configured (EAF is controlled by SAF with this factor)
VentSettings.Cor_ExtraSeqCoilAutoMode	X	40448	2	Manual/Auto	Manual/Auto Extra Sequence Y4 0=Off 1=Manual 2=Auto
VentSettings.Cor_ExtraSeqCoilManual	R	40449	0	Manual/Auto	Extra Sequence Y4 output if manual mode
VentSettings.Cor_FilterAlarmTime	I	40450	0	Settings, Alarm Delays	Time in month between filter exchange (Service Alarm)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_ExternalControl	X	40451	2	Manual/Auto	External control: Modbus: 0=Extended run full speed 1=External stop 2=No external control 3=External stop with support control BACnet: 1=Extended run full speed 2=External stop 3=No external control 4=External stop with support control
VentSettings.Cor_PreHeatStart	R	40452	8	Settings, PreTreatment	If outdoor temp. is lower, preheat is activated
VentSettings.Cor_PreCoolStart	R	40453	19	Settings, PreTreatment	If outdoor temp. is higher, precool is activated
VentSettings.Cor_PreTreatmentHyst	R	40454	1	Settings, PreTreatment	Hysteresis to start/stop pretreatment
VentSettings.Cor_PreTreatmentMinDiff	R	40455	1	Settings, PreTreatment	Min. diff. intake air temp. and outdoor air temp.
VentSettings.Cor_PreTreatmentAutoMode	X	40456	2	Settings, PreTreatment	Run mode pretreatment: 0=Closed 1=Open 2=Auto
VentSettings.Cor_PreTreatmentFreeCool	X	40457	0	Settings, PreTreatment	Select whether pretreatment should be activated during free cooling
VentSettings.Cor_PreTreatmentBlockTime	X	40458	6	Settings, PreTreatment	Hour that pretreatment is blocked if diff. intake/outdoor is too low
VentSettings.Cor_PreTreatmentMinRunTime	X	40459	5	Settings, PreTreatment	Min. runtime (minutes) for pretreatment
VentSettings.Cor_RestartPowerOn	X	40460	1	Settings, General	Automatic restart after power-up (=1)
VentSettings.Cor_DXFullSpeed	X	40461	0	Settings, General	Switch to full speed if DX-Cooling
VentSettings.Cor_RecirculationSetPOffset	R	40462	0	Recirculation	Offset for recirculation setpoint
VentSettings.Cor_RecirculationSetPControl	X	40463	0	Recirculation	Select if constant setpoint or setpoint adjustment when recirculation runs: 0=Constant setpoint 1=Supply air setpoint with adjustment
VentSettings.Cor_RecirculationTempControl	X	40464	0	Recirculation	Enable supply air temp control when recirculation runs: 0=No temp control 1=Heating/cooling 2=Only heating 3=Only cooling
VentSettings.Cor_DemandCO2Value1	R	40465	800	CO <sub>2</sub>	Activation of demand-controlled ventilation, 1/2-speed

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_DemandCO2Value2	R	40466	1000	CO <sub>2</sub>	Activation of demand-controlled ventilation, 1/1-speed
VentSettings.Cor_DemandCO2Diff	R	40467	160	CO <sub>2</sub>	Hysteresis for stop of demand controlled ventilation (ppm)
VentSettings.Cor_CascadeTemp	R	40468	13	Supply, Extract and Room temperatures	Outdoor temp for switching between outdoor compensated or cascade control if Cor_VentControl = 4 or 5 (if higher outdoor temp then cascade control)
VentSettings.Cor_ExtraSeqY5AutoMode	X	40469	2	Manual/Auto	Run mode Extra seq coil Y5 (0=Off, 1=Manual, 2=Auto)
VentSettings.Cor_ExtraSeqY5Manual	R	40470	0	Manual/Auto	Manual setting Extra seq coil Y5 if manual mode
VentSettings.Cor_ExtraSeqY5Min	R	40471	0	Actual/Setpoint	Min. limit for Y5 in Auto mode
VentSettings.Cor_ReducedSetPOffset	R	40472	0	Actual/Setpoint	Temperature setpoint offset in reduced speed
VentSettings.Cor_ChangeOverSelect	X	40473	2	Settings, General	Select change-over external: Modbus: 0=Heating 1=Cooling 2=Auto BACnet: 1=Heating 2=Cooling 3=Auto
VentSettings.Cor_VentControl	X	40474	0	Settings, General	Select temperature control mode: 0=Const. supply air 1=Outdoor compensated supply air 2=Cascade room temp control 3=Extract temp control 4=Outdoor dependent supply or room temp 5=Outdoor dependent supply or extract temp 6=Cascade outdoor compensated room temp control 7=Cascade outdoor compensated extract temp control

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_FanType	X	40475	0	Settings, General	Select fan control mode: 0=1-Speed. 1=2-Speed. 2=Frequency control pressure 3=Frequency control air flow 4=Frequency control manually 5=Direct frequency control 6=Frequency control with slave controlled EAF 7=Frequency control with slave controlled EAF air flow depending 8=Frequency control with slave controlled SAF 9=Frequency control with slave controlled SAF air flow depending
VentSettings.Cor_HeatType	X	40476	0	Settings, General	Type of heating: 0=Water 1=Electric 2=Not connected 3=Both water and electric
VentSettings.Cor_CoolType	X	40477	0	Settings, General	Type of cooling: 0=Water 1=DX 2=Not connected 3=DX with exchange control
VentSettings.Cor_ExchangeType	X	40478	2	Settings, General	Type of heat exchanger: 0=Damper 1=Rot.exchanger 2=Plate exchanger 3=Liquid exchanger 4=Not connected
VentSettings.Cor_NightCoolDayLimit	R	40479	22	Settings, Free cooling	If outdoor temp. has been higher during daytime, free cooling is activated at night
VentSettings.Cor_NightCoolHighLimit	R	40480	18	Settings, Free cooling	If outdoor temp. is higher at night, free cooling is stopped
VentSettings.Cor_NightCoolLowLimit	R	40481	10	Settings, Free cooling	If outdoor temp is lower at night, free cooling is stopped
VentSettings.Cor_NightCoolRoomLimit	R	40482	18	Settings, Free cooling	If room temp is lower at night, free cooling is stopped
VentSettings.Cor_NightCoolStartTime	X	40483	0	Settings, Free cooling	Start time free cool function
VentSettings.Cor_NightCoolStopTime	X	40484	7	Settings, Free cooling	Stop time free cool function
VentSettings.Cor_NightCoolHeatBlockTime	I	40485	60	Settings, Free cooling	Time in minutes to block heat output when starting after running free cooling



Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_NightCoolSAFOutput	R	40486	0	Settings, Free cooling	SAF output when free cooling and frequency fan: 0=The output is normal speed
VentSettings.Cor_NightCoolEAFOutput	R	40487	0	Settings, free cooling	EAF output when free cooling and frequency fan: 0=The output is normal speed
AlaData.AlaPt90_DelayValue	I	40488	180	Settings, Alarm Delays	Filter guard 2
VentSettings.Cor_ExtraSensor1HighLimit(0)	R	40489	30	Settings, Alarm limits	Alarm limit high temp Extra sensor 1
VentSettings.Cor_ExtraSensor2HighLimit	R	40490	30	Settings, Alarm limits	Alarm limit high temp Extra sensor 2
VentSettings.Cor_ExtraSensor3HighLimit	R	40491	30	Settings, Alarm limits	Alarm limit high temp Extra sensor 3
VentSettings.Cor_ExtraSensor4HighLimit	R	40492	30	Settings, Alarm limits	Alarm limit high temp Extra sensor 4
VentSettings.Cor_ExtraSensor5HighLimit	R	40493	30	Settings, Alarm limits	Alarm limit high temp Extra sensor 5
VentSettings.Cor_ExtraSensor1LowLimit(0)	R	40494	10	Settings, Alarm limits	Alarm limit low temp Extra sensor 1
VentSettings.Cor_ExtraSensor2LowLimit	R	40495	10	Settings, Alarm limits	Alarm limit low temp Extra sensor 2
VentSettings.Cor_ExtraSensor3LowLimit	R	40496	10	Settings, Alarm limits	Alarm limit low temp Extra sensor 3
VentSettings.Cor_ExtraSensor4LowLimit	R	40497	10	Settings, Alarm limits	Alarm limit low temp Extra sensor 4
VentSettings.Cor_ExtraSensor5LowLimit	R	40498	10	Settings, Alarm limits	Alarm limit low temp Extra sensor 5
VentSettings.Cor_FilterGuard1Limit	R	40499	100	Settings, Alarm limits	Alarm limit filter guard 1 (Pa)
VentSettings.Cor_FilterGuard2Limit	R	40500	100	Settings, Alarm limits	Alarm limit filter guard 2 (Pa)
VentSettings.Cor_FilterGuard1Limit_X1	R	40501	1000	Settings, Alarm limits	Alarm limit filter guard 1 X1 (m <sup>3</sup> /h)
VentSettings.Cor_FilterGuard1Limit_Y1	R	40502	50	Settings, Alarm limits	Alarm limit filter guard 1 Y1 (Pa)
VentSettings.Cor_FilterGuard1Limit_X2	R	40503	2000	Settings, Alarm limits	Alarm limit filter guard 1 X2 (m <sup>3</sup> /h)
VentSettings.Cor_FilterGuard1Limit_Y2	R	40504	150	Settings, Alarm limits	Alarm limit filter guard 1 Y2 (Pa)
VentSettings.Cor_FilterGuard2Limit_X1	R	40505	1000	Settings, Alarm limits	Alarm limit filter guard 2 X1 (m <sup>3</sup> /h)
VentSettings.Cor_FilterGuard2Limit_Y1	R	40506	50	Settings, Alarm limits	Alarm limit filter guard 2 Y1 (Pa)

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_FilterGuard2Limit_X2	R	40507	2000	Settings, Alarm limits	Alarm limit filter guard 2 X2 (m <sup>3</sup> /h)
VentSettings.Cor_FilterGuard2Limit_Y2	R	40508	150	Settings, Alarm limits	Alarm limit filter guard 2 Y2 (Pa)
VentSettings.Cor_NeutralZone	R	40509	0	Settings, General	Neutral zone around supply setpoint before heating and cooling
VentSettings.Cor_ExtraUnitSaturationHumidityLimit	R	40510	85	Settings, General	The Extra unit can be used in Saturation mode. When the room humidity rises above the Saturation Humidity level limit (setpoint, default = 85 %), the cooler will be controlled by the extra unit instead.
VentSettings.Cor_ExtraUnitSaturationHyst	R	40511	1	Settings, General	Extra unit saturation hysteresis level (% of room humidity)
VentSettings.Cor_NightCoolSAFOffset	R	40512	0	Settings, night cooling	SAF setpoint offset if pressure/flow controlled SAF when free cool active
VentSettings.Cor_NightCoolEAFOffset	R	40513	0	Settings, night cooling	EAF setpoint offset if pressure/flow controlled EAF when free cool active
AlaData.AlaPt112_DelayValue	I	40514	120 sec	Settings, Alarm Delays	Alarm delay, motor control 1 malfunction
AlaData.AlaPt113_DelayValue	I	40515	120 sec	Settings, Alarm Delays	Alarm delay, motor control 2 malfunction
VentiOWA.Cor_iOWA_VAVAutoMode	X	40516	2	Settings, General	VAV Control mode (0=Off, 1=Manual, 2=Auto)
VentiOWA.Cor_iOWA_VAVManual	R	40517	0	Settings, General	Manual control of VAV control signal (0... 10 V)
VentSettings.Cor_ExchangeFrostProtFunc	X	40518	0	Frost protection exchanger	Exchanger frost protection function active, 0 = No, 1 = Yes
VentSettings.Cor_ExchangeFrostProtTemp	X	40519	1	Frost protection exchanger	Exchanger frost protection temperature input, 0 = Exhaust air temp, 1 = Outdoor temp, 2 = Extra unit temp
VentSettings.Cor_ExchangeFrostProtReduceSAF	R	40520	0	Frost protection exchanger	Reduce of SAF (%) in frost protection exchanger
VentSettings.Cor_ExchangeFrostProtReduceEAF	R	40521	0	Frost protection exchanger	Reduce of EAF (%) in frost protection exchanger
VentSettings.Cor_ExchangeFrostProtOffTime	I	40522	480	Frost protection exchanger	Min. time (sec) between frost protection
VentSettings.Cor_ExchangeFrostProtRunTime	I	40523	1440	Frost protection exchanger	Min. time (sec) in frost protection exchanger
VentSettings.Cor_ExchangeFrostProtSetP	R	40524	-3	Frost protection exchanger	Temperature (°C) for start of frost protection
VentSettings.Cor_FireSAFSpeed	R	40525	-1	Settings, Fire mode	SAF speed in fire mode 0... 100 %, -1 = fan runs in normal speed conditions

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentSettings.Cor_FireEAFSpeed	R	40526	-1	Settings, Fire mode	SAF speed in fire mode 0... 100 %, -1 = fan runs in normal speed conditions
VentSettings.Cor_Cmp1Pressure	R	40527	0	Settings, Control Pressure	Pressure compensation at low point. Extra comp. curve pressure/flow setpoint.
VentSettings.Cor_Cmp1Value	R	40528	15	Settings, Control Pressure	Temperature for low point. Extra comp. curve pressure/flow setpoint.
VentSettings.Cor_Cmp2Pressure	R	40529	0	Settings, Control Pressure	Pressure compensation at middle point. Extra comp. curve pressure/flow setpoint.
VentSettings.Cor_Cmp2Value	R	40530	20	Settings, Control Pressure	Temperature for middle point. Extra comp. curve pressure/flow setpoint.
VentSettings.Cor_Cmp3Pressure	R	40531	0	Settings, Control Pressure	Pressure compensation at high point. Extra comp. curve pressure/flow setpoint.
VentSettings.Cor_Cmp3Value	R	40532	25	Settings, Control Pressure	Temperature for high point. Extra comp. curve pressure/flow setpoint.

# Chapter 6 Input Status Register

Signal name	EXOL type	Modbus address	Default value	Function	Description
TimePro.TimeGroupFanFullSpeed	L	10001		Actual/Set point	Set if timechannel full speed is active
TimePro.TimeGroupFanHalfSpeed	L	10002		Actual/Set point	Set if timechannel reduced speed is active
TimePro.TimeGroupCor_ExtraTimeGroup1	L	10003		Actual/Set point	Set if timer output 1 is active
TimePro.TimeGroupCor_ExtraTimeGroup2	L	10004		Actual/Set point	Set if timer output 2 is active
TimePro.TimeGroupCor_ExtraTimeGroup3	L	10005		Actual/Set point	Set if timer output 3 is active
TimePro.TimeGroupCor_ExtraTimeGroup4	L	10006		Actual/Set point	Set if timer output 4 is active
TimePro.TimeGroupCor_ExtraTimeGroup5	L	10007		Actual/Set point	Set if timer output 5 is active
VentActual.Cor_ExtendedRunActive Full	L	10008		Actual/Set point	Set if extended operation full speed
VentActual.Cor_ExtendedRunActive Half	L	10009		Actual/Set point	Set if extended operation half speed
VentActual.Cor_NeedHeatActive	L	10010		Supply, Extract and Room temperatures	Set if ongoing support heating
VentActual. Cor_NeedCoolActive	L	10011		Supply, Extract and Room temperatures	Set if ongoing support cooling
VentActual.Cor_DemandCO2Active	L	10012		CO <sub>2</sub>	Set if ongoing support CO <sub>2</sub>
VentActual.Cor_DeIcingActive	L	10013		Extract air temp/De-icing exchanger	Set if ongoing de-icing
QDig.DI1	L	10014		Digital inputs	Value of DI1
QDig.DI2	L	10015		Digital inputs	Value of DI2

Signal name	EXOL type	Modbus address	Default value	Function	Description
QDig.DI3	L	10016		Digital inputs	Value of DI3
QDig.DI4	L	10017		Digital inputs	Value of DI4
QDig.DI5	L	10018		Digital inputs	Value of DI5
QDig.DI6	L	10019		Digital inputs	Value of DI6
QDig.DI7	L	10020		Digital inputs	Value of DI7
QDig.DI8	L	10021		Digital inputs	Value of DI8
QDig.DI9	L	10022		Universal inputs	Value of UDI1
QDig.DI10	L	10023		Universal inputs	Value of UDI2
QDig.DI11	L	10024		Universal inputs	Value of UDI3
QDig.DI12	L	10025		Universal inputs	Value of UDI4
QDig.Dq1	L	10026		Digital outputs	Value of DO1
QDig.Dq2	L	10027		Digital outputs	Value of DO2
QDig.Dq3	L	10028		Digital outputs	Value of DO3
QDig.Dq4	L	10029		Digital outputs	Value of DO4
QDig.Dq5	L	10030		Digital outputs	Value of DO5
QDig.Dq6	L	10031		Digital outputs	Value of DO6
QDig.Dq7	L	10032		Digital outputs	Value of DO7
VentActual.Cor_AlaPt(1)	L	10033		Alarm Points	Supply air fan malfunction 0=No alarm 1=Alarm
VentActual.Cor_AlaPt(2)	L	10034		Alarm Points	Extract air fan malfunction
VentActual.Cor_AlaPt(3)	L	10035		Alarm Points	P1 heater malfunction
VentActual.Cor_AlaPt(4)	L	10036		Alarm Points	P1 cooler malfunction

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AlaPt(5)	L	10037		Alarm Points	P1 exchanger malfunction
VentActual.Cor_AlaPt(6)	L	10038		Alarm Points	Filter guard 1
VentActual.Cor_AlaPt(7)	L	10039		Alarm Points	Flow guard
VentActual.Cor_AlaPt(8)	L	10040		Alarm Points	External frost guard
VentActual.Cor_AlaPt(9)	L	10041		Alarm Points	Deicing pressure guard
VentActual.Cor_AlaPt(10)	L	10042		Alarm Points	Fire alarm
VentActual.Cor_AlaPt(11)	L	10043		Alarm Points	External switch
VentActual.Cor_AlaPt(12)	L	10044		Alarm Points	External alarm
VentActual.Cor_AlaPt(13)	L	10045		Alarm Points	Supply Air control error
VentActual.Cor_AlaPt(14)	L	10046		Alarm Points	Humidity control error
VentActual.Cor_AlaPt(15)	L	10047		Alarm Points	High supply air temp
VentActual.Cor_AlaPt(16)	L	10048		Alarm Points	Low supply air temp
VentActual.Cor_AlaPt(17)	L	10049		Alarm Points	Supply Air Fan max limit
VentActual.Cor_AlaPt(18)	L	10050		Alarm Points	Supply Air Fan min limit
VentActual.Cor_AlaPt(19)	L	10051		Alarm Points	High room temp
VentActual.Cor_AlaPt(20)	L	10052		Alarm Points	Low room temp
VentActual.Cor_AlaPt(21)	L	10053		Alarm Points	High extract air temp
VentActual.Cor_AlaPt(22)	L	10054		Alarm Points	Low extract air temp
VentActual.Cor_AlaPt(23)	L	10055		Alarm Points	Electric heating is overheated
VentActual.Cor_AlaPt(24)	L	10056		Alarm Points	Frost risk
VentActual.Cor_AlaPt(25)	L	10057		Alarm Points	Low frost guard temp

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AlaPt(26)	L	10058		Alarm Points	Low efficiency
VentActual.Cor_AlaPt(27)	L	10059		Alarm Points	Sensor error outdoor temp
VentActual.Cor_AlaPt(28)	L	10060		Alarm Points	Analogue deicing
VentActual.Cor_AlaPt(29)	L	10061		Alarm Points	Rotation guard exchanger
VentActual.Cor_AlaPt(30)	L	10062		Alarm Points	Fire damper malfunction
VentActual.Cor_AlaPt(31)	L	10063		Alarm Points	Supply air fan control error
VentActual.Cor_AlaPt(32)	L	10064		Alarm Points	Extract air fan control error
VentActual.Cor_AlaPt(33)	L	10065		Alarm Points	Supply air fan external operation
VentActual.Cor_AlaPt(34)	L	10066		Alarm Points	Extract air fan external operation
VentActual.Cor_AlaPt(35)	L	10067		Alarm Points	Ventilation manual mode
VentActual.Cor_AlaPt(36)	L	10068		Alarm Points	Manual supply air control
VentActual.Cor_AlaPt(37)	L	10069		Alarm Points	Manual supply air fan mode
VentActual.Cor_AlaPt(38)	L	10070		Alarm Points	Manual supply air fan freq. control
VentActual.Cor_AlaPt(39)	L	10071		Alarm Points	Manual extract air fan mode
VentActual.Cor_AlaPt(40)	L	10072		Alarm Points	Manual extract air fan freq. control
VentActual.Cor_AlaPt(41)	L	10073		Alarm Points	Manual heater control
VentActual.Cor_AlaPt(42)	L	10074		Alarm Points	Manual exchanger control
VentActual.Cor_AlaPt(43)	L	10075		Alarm Points	Manual cooler control
VentActual.Cor_AlaPt(44)	L	10076		Alarm Points	Manual P1 heater
VentActual.Cor_AlaPt(45)	L	10077		Alarm Points	Manual P1 exchanger
VentActual.Cor_AlaPt(46)	L	10078		Alarm Points	Manual P1 cooler

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AlaPt(47)	L	10079		Alarm Points	Manual fire damper
VentActual.Cor_AlaPt(48)	L	10080		Alarm Points	Internal battery error
VentActual.Cor_SAFStart1(0)	L	10081		SAF/EAF Pressure and Flow	Start signal full speed supply air fan
VentActual.Cor_EAFStart1	L	10082		SAF/EAF Pressure and Flow	Start signal full speed extract air fan
VentActual.Cor_SAFStart2	L	10083		SAF/EAF Pressure and Flow	Start signal half speed supply air fan
VentActual.Cor_EAFStart2	L	10084		SAF/EAF Pressure and Flow	Start signal half speed extract air fan
VentActual.Cor_HeatPumpStart(0)	L	10085		Actual/Set point	Start signal Heat Pump
VentActual.Cor_ExchPumpStart	L	10086		Actual/Set point	Start signal Exchanger
VentActual.Cor_CoolPumpStart	L	10087		Actual/Set point	Start signal Cool Pump
VentActual.Cor_SAFFrequencyStart	L	10088		SAF/EAF Pressure and Flow	Start signal frequencer supply air fan
VentActual.Cor_EAFFrequencyStart	L	10089		SAF/EAF Pressure and Flow	Start signal frequencer extract air fan
VentActual.Cor_AlaPt(49)	L	10090		Alarm Points	Sensor error supply air temp.
VentActual.Cor_AlaPt(50)	L	10091		Alarm Points	Sensor error extract air temp.
VentActual.Cor_AlaPt(51)	L	10092		Alarm Points	Sensor error room temp. 1
VentActual.Cor_AlaPt(52)	L	10093		Alarm Points	Sensor error room temp. 2
VentActual.Cor_AlaPt(53)	L	10094		Alarm Points	Sensor error extract air temp.
VentActual.Cor_AlaPt(54)	L	10095		Alarm Points	Sensor error extra sensor
VentActual.Cor_AlaPt(55)	L	10096		Alarm Points	Sensor error SAF pressure
VentActual.Cor_AlaPt(56)	L	10097		Alarm Points	Sensor error EAF pressure



Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AlaPt(57)	L	10098		Alarm Points	Sensor error deicing temp.
VentActual.Cor_AlaPt(58)	L	10099		Alarm Points	Sensor error frost protection temp.
VentActual.Cor_AlaPt(59)	L	10100		Alarm Points	Sensor error CO <sub>2</sub>
VentActual.Cor_AlaPt(60)	L	10101		Alarm Points	Sensor error humidity room
VentActual.Cor_AlaPt(61)	L	10102		Alarm Points	Sensor error humidity duct
VentActual.Cor_AlaPt(62)	L	10103		Alarm Points	Sensor error extra unit temp.
VentActual.Cor_AlaPt(63)	L	10104		Alarm Points	Sensor error external control SAF
VentActual.Cor_AlaPt(64)	L	10105		Alarm Points	Sensor error external control EAF
VentActual.Cor_AlaPt(65)	L	10106		Alarm Points	Sensor error SAF pressure 2
VentActual.Cor_AlaPt(66)	L	10107		Alarm Points	Sensor error outdoor humidity
VentActual.Cor_AlaPt(67)	L	10108		Alarm Points	Sensor error intake temp.
VentActual.Cor_AlaPt(68)	L	10109		Alarm Points	Sensor error Reserved 2
VentActual.Cor_AlaPt(69)	L	10110		Alarm Points	Sensor error Reserved 3
VentActual.Cor_AlaPt(70)	L	10111		Alarm Points	Sensor error Reserved 4
VentActual.Cor_AlaPt(71)	L	10112		Alarm Points	Sensor error Reserved 5
VentActual.Cor_AlaPt(72)	L	10113		Alarm Points	Sensor error extra SAF pressure
VentActual.Cor_AlaPt(73)	L	10114		Alarm Points	Sensor error extra EAF pressure
VentActual.Cor_AlaPt(74)	L	10115		Alarm Points	Sensor error filter guard 1
VentActual.Cor_AlaPt(75)	L	10116		Alarm Points	Sensor error filter guard 2
VentActual.Cor_AlaPt(76)	L	10117		Alarm Points	Sensor error exchanger pressure
VentActual.Cor_AlaPt(77)	L	10118		Alarm Points	Alarm frequency converter SAF

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AlaPt(78)	L	10119		Alarm Points	Alarm frequency converter EAF
VentActual.Cor_AlaPt(79)	L	10120		Alarm Points	Communication error frequency SAF
VentActual.Cor_AlaPt(80)	L	10121		Alarm Points	Communication error frequency EAF
VentActual.Cor_AlaPt(81)	L	10122		Alarm Points	Communication error expansion unit 1
VentActual.Cor_AlaPt(82)	L	10123		Alarm Points	Communication error expansion unit 2
VentActual.Cor_AlaPt(83)	L	10124		Alarm Points	Warning frequency converter SAF
VentActual.Cor_AlaPt(84)	L	10125		Alarm Points	Warning frequency converter EAF
VentActual.Cor_AlaPt(85)	L	10126		Alarm Points	Output in manual mode
VentActual.Cor_AlaPt(86)	L	10127		Alarm Points	Time for service
VentActual.Cor_AlaPt(87)	L	10128		Alarm Points	Y4 extra sequence control manual
VentActual.Cor_AlaPt(88)	L	10129		Alarm Points	Restart blocked after power-on
VentActual.Cor_AlaPt(89)	L	10130		Alarm Points	Y5 extra sequence control manual
VentActual.Cor_AlaPt(90)	L	10131		Alarm Points	Filter guard 2
VentActual.Cor_AlaPt(91)	L	10132		Alarm Points	High temp extra sensor 1
VentActual.Cor_AlaPt(92)	L	10133		Alarm Points	Low temp extra sensor 1
VentActual.Cor_AlaPt(93)	L	10134		Alarm Points	High temp extra sensor 2
VentActual.Cor_AlaPt(94)	L	10135		Alarm Points	Low temp extra sensor 2
VentActual.Cor_AlaPt(95)	L	10136		Alarm Points	High temp extra sensor 3
VentActual.Cor_AlaPt(96)	L	10137		Alarm Points	Low temp extra sensor 3
VentActual.Cor_AlaPt(97)	L	10138		Alarm Points	High temp extra sensor 4
VentActual.Cor_AlaPt(98)	L	10139		Alarm Points	Low temp extra sensor 4

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AlaPt(99)	L	10140		Alarm Points	High temp extra sensor 5
VentActual.Cor_AlaPt(100)	L	10141		Alarm Points	Low temp extra sensor 5
VentActual.Cor_DIReserved(14)	L	10142		Alarm Points	Not used
VentActual.Cor_DIReserved(15)	L	10143		Alarm Points	Not used
VentActual.Cor_DIReserved(16)	L	10144		Alarm Points	Not used
InputOutput.Exp1DigIn1	L	10145		Digital inputs	Value of DI1 Expansion unit 1
InputOutput.Exp1DigIn2	L	10146		Digital inputs	Value of DI2 Expansion unit 1
InputOutput.Exp1DigIn3	L	10147		Digital inputs	Value of DI3 Expansion unit 1
InputOutput.Exp1DigIn4	L	10148		Digital inputs	Value of DI4 Expansion unit 1
InputOutput.Exp1DigIn5	L	10149		Digital inputs	Value of DI5 Expansion unit 1
InputOutput.Exp1DigIn6	L	10150		Digital inputs	Value of DI6 Expansion unit 1
InputOutput.Exp1DigIn7	L	10151		Digital inputs	Value of DI7 Expansion unit 1
InputOutput.Exp1DigIn8	L	10152		Digital inputs	Value of DI8 Expansion unit 1
InputOutput.Exp1DigIn9	L	10153		Universal inputs	Value of UDI1 Expansion unit 1
InputOutput.Exp1DigIn10	L	10154		Universal inputs	Value of UDI2 Expansion unit 1
InputOutput.Exp1DigIn11	L	10155		Universal inputs	Value of UD3 Expansion unit 1
InputOutput.Exp1DigIn12	L	10156		Universal inputs	Value of UD4 Expansion unit 1
InputOutput.Exp1DigOut1	L	10157		Digital outputs	Value of DO1 Expansion unit 1
InputOutput.Exp1DigOut2	L	10158		Digital outputs	Value of DO2 Expansion unit 1
InputOutput.Exp1DigOut3	L	10159		Digital outputs	Value of DO3 Expansion unit 1
InputOutput.Exp1DigOut4	L	10160		Digital outputs	Value of DO4 Expansion unit 1

Signal name	EXOL type	Modbus address	Default value	Function	Description
InputOutput.Exp1DigOut5	L	10161		Digital outputs	Value of DO5 Expansion unit 1
InputOutput.Exp1DigOut6	L	10162		Digital outputs	Value of DO6 Expansion unit 1
InputOutput.Exp1DigOut7	L	10163		Digital outputs	Value of DO7 Expansion unit 1
InputOutput.Exp2DigIn1	L	10164		Digital inputs	Value of DI1 Expansion unit 2
InputOutput.Exp2DigIn2	L	10165		Digital inputs	Value of DI2 Expansion unit 2
InputOutput.Exp2DigIn3	L	10166		Digital inputs	Value of DI3 Expansion unit 2
InputOutput.Exp2DigIn4	L	10167		Digital inputs	Value of DI4 Expansion unit 2
InputOutput.Exp2DigIn5	L	10168		Digital inputs	Value of DI5 Expansion unit 2
InputOutput.Exp2DigIn6	L	10169		Digital inputs	Value of DI6 Expansion unit 2
InputOutput.Exp2DigIn7	L	10170		Digital inputs	Value of DI7 Expansion unit 2
InputOutput.Exp2DigIn8	L	10171		Digital inputs	Value of DI8 Expansion unit 2
InputOutput.Exp2DigIn9	L	10172		Universal inputs	Value of UDI1 Expansion unit 2
InputOutput.Exp2DigIn10	L	10173		Universal inputs	Value of UDI2 Expansion unit 2
InputOutput.Exp2DigIn11	L	10174		Universal inputs	Value of UDI3 Expansion unit 2
InputOutput.Exp2DigIn12	L	10175		Universal inputs	Value of UDI4 Expansion unit 2
InputOutput.Exp2DigOut1	L	10176		Digital outputs	Value of DO1 Expansion unit 2
InputOutput.Exp2DigOut2	L	10177		Digital outputs	Value of DO2 Expansion unit 2
InputOutput.Exp2DigOut3	L	10178		Digital outputs	Value of DO3 Expansion unit 2
InputOutput.Exp2DigOut4	L	10179		Digital outputs	Value of DO4 Expansion unit 2
InputOutput.Exp2DigOut5	L	10180		Digital outputs	Value of DO5 Expansion unit 2
InputOutput.Exp2DigOut6	L	10181		Digital outputs	Value of DO6 Expansion unit 2

Signal name	EXOL type	Modbus address	Default value	Function	Description
InputOutput.Exp2DigOut7	L	10182		Digital outputs	Value of DO7 Expansion unit 2
VentActual.Cor_RecycleRunActive	L	10183		Actual/Set point	Start signal Heat Pump
VentActual.Cor_SumAlarm	L	10184		Alarm Status	Sum alarm: Set if any A or B alarm
VentActual.Cor_SumAlarmA	L	10185		Alarm Status	A-alarm: Set if any A-alarm in controller
VentActual.Cor_SumAlarmB	L	10186		Alarm Status	B-alarm: Set if any B- or C-alarm in controller
VentActual.Cor_AlaPt(101)	L	10187		Alarm Points	Extra alarm 1
VentActual.Cor_AlaPt(102)	L	10188		Alarm Points	Extra alarm 2
VentActual.Cor_AlaPt(103)	L	10189		Alarm Points	Extra alarm 3
VentActual.Cor_AlaPt(104)	L	10190		Alarm Points	Extra alarm 4
VentActual.Cor_AlaPt(105)	L	10191		Alarm Points	Extra alarm 5
VentActual.Cor_AlaPt(106)	L	10192		Alarm Points	Extra alarm 6
VentActual.Cor_AlaPt(107)	L	10193		Alarm Points	Extra alarm 7
VentActual.Cor_AlaPt(108)	L	10194		Alarm Points	Extra alarm 8
VentActual.Cor_AlaPt(109)	L	10195		Alarm Points	Extra alarm 9
VentActual.Cor_AlaPt(110)	L	10196		Alarm Points	Extra alarm 10
VentActual.Cor_AlaPt(111)	L	10197		Alarm Points	Extra unit in manual mode
VentActual.Cor_AlaPt(112)	L	10198		Alarm Points	Malfunction motor control 1
VentActual.Cor_AlaPt(113)	L	10199		Alarm Points	Malfunction motor control 2
VentActual.Cor_AlaPt(114)	L	10200		Alarm Points	Motor control 1 external operation
VentActual.Cor_AlaPt(115)	L	10201		Alarm Points	Motor control 2 external operation
VentActual.Cor_AlaPt(116)	L	10202		Not used	Not used
VentActual.Cor_AlaPt(117)	L	10203		Alarm Points	Motor control 1 in manual mode

Signal name	EXOL type	Modbus address	Default value	Function	Description
VentActual.Cor_AlaPt(118)	L	10204		Alarm Points	Motor control 2 in manual mode
VentActual.Cor_AlaPt(119)	L	10205		Alarm Points	Communication error expansion unit 3
VentActual.Cor_AlaPt(120)	L	10206		Alarm Points	Communication error expansion unit 4
VentActual.Cor_AlaPt(121)	L	10207		Alarm Points	Low outdoor air temp.
VentActual.Cor_AlaPt(122)	L	10208		Alarm Points	High outdoor air temp.
VentActual.Cor_AlaPt(123)	L	10209		Alarm Points	Malfunction adiabatic cooling
VentActual.Cor_AlaPt(124)	L	10210		Alarm Points	Communication error expansion unit 5
VentActual.Cor_AlaPt(125)	L	10211		Alarm Points	Communication error expansion unit 6
VentActual.Cor_DIReserved(0)	L	10212		Not used	Not used
VentActual.Cor_DIReserved(0)	L	10213		Not used	Not used
VentActual.Cor_DIReserved(0)	L	10214		Not used	Not used
VentActual.Cor_DIReserved(0)	L	10215		Not used	Not used
VentActual.Cor_DIReserved(0)	L	10216		Not used	Not used
VentActual.Cor_ExpPDT1UDi1(0)	L	10217		Digital inputs	Value of UDI1 expansion unit 3
VentActual.Cor_ExpPDT1UDi2	L	10218		Digital inputs	Value of UDI2 expansion unit 3
VentActual.Cor_ExpPDT2UDi1	L	10219		Digital inputs	Value of UDI1 expansion unit 4
VentActual.Cor_ExpPDT2UDi2	L	10220		Digital inputs	Value of UDI2 expansion unit 4
VentActual.Cor_ExpPDT3UDi1(0)	L	10221		Digital inputs	Value of UDI1 expansion unit 5
VentActual.Cor_ExpPDT3UDi2	L	10222		Digital inputs	Value of UDI2 expansion unit 5
VentActual.Cor_ExpPDT3UDi1	L	10223		Digital inputs	Value of UDI1 expansion unit 6
VentActual.Cor_ExpPDT3UDi2	L	10224		Digital inputs	Value of UDI2 expansion unit 6

# BACnet Object list

With the default install path entered upon software installation, the BACnet objects list will be located in the following directory:

**C:\Program Files\EXO\SLib\Corrigo\VentilationProgram3\_6\BACnet**

The list can also be found in E tool<sup>®</sup>, under the menu “Help”.

# Chapter 7 Frequency converters

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Version 3.4 of Corrigo ventilation supports the frequency converters listed below:

- Vacon NXL
- Lenze
- Omron V1000
- Emerson Commander
- LS
- EBM
- Danfoss FC 101
- ABB ACS
- EC Blue

When communicating via frequency converters through Modbus, it is sometimes necessary to change certain settings in the frequency converter.

Two parallel connected frequency converters for supply air and two parallel connected frequency converters for extract air can be run. The supply air fan will have address 1 and the parallel supply air fan address 3. The extract air fan will have address 2 and the parallel extract air fan address 4.

Below is described what settings are necessary in the various models:

## Vacon NXL

No settings necessary. Vacon NXL frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
2003	32003, 42003	FB Speed reference (SP)	1000	%
2001	32001, 42001	FB Status word	-	Binary
11	30011, 40011	Acc. Motor output	1	kW
80	30080, 40080	Amount of decimals for Acc. Motor output	1	kWh
2103	32103, 42103	FB Motor speed	100	%
2105	32105, 42105	Motor speed	1	+/- Rpm
2106	32106, 42106	Current	100	A
2107	32107, 42107	Torque	10	+/- % (of nominal)
1501	31501, 41501	Output	1000	kW
2110	32110, 42110	DC voltage	1	V
2111	32111, 42111	Active error	-	Error code
2101	32101, 42101	FB Status word	-	Binary

The variables presented in the display of the Corrigo are:

Frequency (Hz), Current (A), Output (kW), Accumulated power (kWh).



## Lenze

No settings necessary.

Lenze frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
49	32049, 42049	Password	-	-
50	32050, 42050	Parameter version	-	-
45	30045, 40045	FB Speed reference (SP)	50	%
2	30002, 40002	FB Status word	-	Binary
512	32512, 42512	Acc. Motor output	1	kW
528	32528, 42528	Motor frequency	10	Hz
509	32509, 42509	Current	1	A
511	32511, 42511	Output	1000	kW
506	31506, 41506	DC voltage	1	V
30	32110, 42110	Active error	-	Error code
27	32027, 42027	FB Status word	-	Binary

The variables presented in the display of the Corrigo are:

Frequency (Hz), Current (A), Output (kW), Accumulated power (kWh).

## Omron V1000

### Connected via RS485:

- R+ is connected to S+
- R- is connected to S-
- R+/S+ is connected to B on port 1 or 2
- R-/S- is connected to A on port 1 or 2

### Parameters

The following parameters must be set from the display of the frequency converter:

- H5-01 (0x425): Slave address, set to = 1 for Supply air fan and = 2 for Exhaust air fan
- H5-07 (0x42B): RTS Control, set to = 1 (enabled) for activation of RS485
- o1-03 (0x502): Frequency reference units, set to = 1 for 0-100%.
- H5-03 (0x427): Parity, set to = 0 (no parity)

Default values should be used for remaining parameters. The following values may not be changed:

- H5-02 (0x426): Communication speed, default = 3 (9600)
- H5-04 (0x428): Stopping method after communication error, default = 3 (no stop)
- H5-11 (0x43C): Communication Enter Function, default=1 (Enter command not necessary)
- H5-12 (0x43D): Run command, default=0 (bit 0=forward start/stop, bit 1= reverse start/stop)
- b1-01 (0x180): Frequency Reference selection 1, default = 2 (via Modbus)
- b2-01 (0x181): Run command selection 1, default = 2 (via Modbus)

Omron frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
3	30003, 40003	FB Speed reference (SP)	10	%
2	30002, 40002	Password	-	-
36	30036, 40036	Motor frequency	100	Hz
63	30063, 40063	Motor speed	1	+/- Rpm
39	30039, 40039	Current	10	A
40	30040, 40040	Output	10	kW
38	30038, 40038	DC voltage	10	V
33	30033, 40033	Status change	-	Binary
34	30034, 40034	Alarm	-	Binary
93	30093, 40093	Acc. Motor output	1	kW

The variables presented in the display of the Corrigo are:

Frequency (Hz), Current (A), Output (kW), Accumulated power (kWh).

### Emerson Commander

#### Connections RS485-RJ45:

- RJ45:2 (orange) is connected to B on port 1 or 2
- RJ45:7 (white/brown) is connected to A on port 1 or 2
- Possible termination resistor is connected between RJ45:1 (white/orange) and RJ45:8 (brown).

If Modbus communication is not initialised after powering up, disconnect the termination resistor and try again.

#### Terminals

- Connect terminal B4 (Drive enabled) to B2 (+24V)
- Connect terminal B5 (Forward) to B2 (+24V)

#### Parameters

The following parameters must be set from the display of the frequency converter:

- 44: Slave address, set to = 1 (default) for Supply air fan and = 2 for Exhaust air fan
- 43: Baud rate: 9.6 (default: 19.2)
- Default values should be used for remaining parameters.

#### Changing parameters

- Deactivate the unit. The display should read "iH 0.0". This is performed by opening terminal B4.
- Set parameter 10 to "L3", i.e. all parameters up to and including 95 can then be altered.
- Set parameter 43 to 9.6 (9600 baud).

Emerson frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
114	30114, 40114	Speed selection	-	-
18	30018, 40018	FB Speed reference (SP)	10	%
1038	31038, 41038	FB Status word	-	-
615	30615, 40615	Control switch	-	Binary
501	30501, 40501	Motor frequency	10	Hz
2	30002, 40002	Max speed	10	Hz
504	30504, 40504	Motor speed	1	+/- Rpm
402	30402, 40402	Current	10	A
503	30503, 40503	Output	10	kW
505	30505, 40505	DC voltage	1	V
1040	31040 41040	Status change	-	Binary

The variables presented in the display of the Corrigo are:

Frequency (Hz), Current (A), Output (kW), Accumulated power (kWh).

## LS

LS frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

### LS iG5A

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
5	30005,40005	FB Speed reference (SP)	10	%
6	30006,40006	FB Status word	-	Binary
10	30010,40010	Motor frequency	100	Hz
31	30031,40031	Torque	100	%
21	30029,40029	RPM	1	Rpm
9	30009,40009	Motor current	10	A
13	30013,40013	Output	10	kW
12	30012,40012	Voltage	10	V
14	30014,40014	Status change	-	Binary
15	30015,40015	Alarm	-	Binary
29	30029,40029	Alarm 2	-	Binary

The variables presented in the display of the Corrigo are:

Frequency (Hz), Current (A), Output (kW), Accumulated power (kWh).

## LS iS7

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
5	30005,40005	FB Speed reference (SP)	10	%
6	30006,40006	FB Status word	-	Binary
10	30010,40010	Motor frequency	100	Hz
791	30791,40791	Torque	100	%
786	30786,40786	RPM	1	Rpm
784	30784,40784	Motor current	10	A
790	30790,40790	Output	10	kW
789	30789,40789	Voltage	10	V
14	30014,40014	Status change	-	Binary
816	30816,40816	Alarm	-	Binary
817	30817,40817	Alarm 2	-	Binary

## EBM-PAPST

EBM frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
53250	30250,40250	FB Speed reference (SP)	640	%
53249	30249,40249	FB Control word	-	
53265	30265,40265	Torque		Rpm
53266	30226,40266	FB Status word	-	Binary
53267	30267,40267	Status change		Binary
53268	30268,40268	DC voltage		V
53269	30269,40269	Motor current		A

The variables presented in the display of the Corrigo are:

Frequency (Hz), Current (A), Output (kW), Accumulated power (kWh).

## Danfoss FC 101

Danfoss frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scaling	Type
3100	33100,43100	FB Speed reference (SP)	100	%
50000	350000,450000	FB Control word	-	
16130	316130,416130	Motor frequency	10	Hz
16140	316140,416140	Current	100	A
16100	316100,416100	Output	1000	kW
16300	316300,416300	DC voltage	1	V
16030	316030,416030	Status change	-	

The variables presented in the display of the Corrigo are:

Frequency (Hz), Current (A), Output (kW), Accumulated power (kWh).

## ECBlue

ECBlue frequency converters are controlled via Modbus. Communication, alarms and certain indications can be read.

The following signals can be read/written from/to the frequency converter:

Address	Modbus register	Name	Scale	Type
3	30003,40003	FB Speed reference (SP)	1	%
5	30005,40005	FB Control word	-	0 = Off 3 = On
15	30015,40015	RPM		Rpm
16	30016,40016	Current	100	A
34	30034,40034	Output	1	kW
21	30021,40021	DC voltage	1	V
13	30013,40013	Alarm	-	Error code

## Eltwin A/S EC controller (for heat exchangers)

Communication takes place using address 7, 9600 bps, 8 bits, no parity and 1 stop bit.

Version 1.01, 2015-04-03

Address	Modbus register	Name	Scaling	Type
1	30001	Running mode	-	Bit 0 = Operation 0: Stop 1: Run Bit 3 = Reset 1: Reset
2	30002	Speed	1	0... 100.0 %
3	30003	Supply voltage	-	V(RMS)
4	30004	Error code	1	Bit 0: Excess current/Ground fault Bit 1: Excess current from DC link 265V~ Bit 2: Undervoltage from DC link 170V~ Bit 3: Hardware error Bit 4: External error, input Bit 5: Overload Bit 6: Overheating, stop Bit 7: Overheating, reduced Bit 8: Rotor cover error Bit 9: Rotor cover input Bit 10: DIP 1 Bit 11: DIP 2 Bit 12: DIP 3 Bit 13: DIP 4 Bit 14: Not used Bit 15: Communication error
5	30005	Speed output	1	RPM
6	30006	Voltage output	1	Volt
7	30007	Motor current, DC link	1	mA
8	30008	Motor output	1	W

Address	Modbus register	Name	Scaling	Type
9	30009	Supplied power	1	W
10	30010	Running time	10	h
11	30011	Max. speed	1	RPM
12	30012	Min. speed	1	RPM
13	30013	Program version	1	ID
14	30014	Hardware version	1	ID
15	30015	Application version	1	ID