

BAS integration guide

Modbus protocol

Doc. Name:
D-EIGOC00212-25_07EN

Product name:
Data

Control software name:
Fujin Data



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1. Introduction

This document contains information to incorporate a Microtech 4 Unit Controller into a building automation system (BAS) via Modbus communication protocols.

Microtech 4 is suitable for network integration. Data points accessible from a Modbus network are made available to a BAS provided that the proper communication module is installed / activated.

Modbus terms are not defined. Refer to the standard Modbus specifications for definitions and details about the protocol.



2. About this document

2.1 Notice

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- **Modbus** from Schneider Electric (originally from Modicon)
- **MicroTech III** from Daikin Applied Europe.
- **MicroTech 4** from Daikin Applied Europe.

2.2 Before starting

Application range

This document refers to the following components:

Microtech III	Controller
Microtech 4	Controller
POL902.00/STD	Modbus MSTP module

Users

Users of this document are intended to be:

- Modbus systems integrators
- Service Technicians
- Plant Engineers
- Sales staff

Conventions

Microtech III e Microtech 4 further in this document and when proper will be referred to as "Microtech"

Abbreviation

BSP	Board Support Package (operating system)	
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References

- Siemens Building Technologies - CB1J3960en - **Modbus** communication, slave mode
- Siemens Building Technologies - CB1Q3934en - ClimatixTM **Modbus** communication modules POL902.00
- The Modbus Organization - www.modbus.org



3. Safety information

Only personnel qualified in accordance with IEC (International Electrotechnical Commission) recommendations may be permitted access to electrical components. It is particularly recommended that all sources of electricity to the unit be shut off before any work is begun. Shut off main power supply at the main circuit breaker or isolator.

IMPORTANT: This equipment uses and emits electromagnetic signals. Tests have shown that the equipment conforms to all applicable codes with respect to electromagnetic compatibility.



RISK OF ELECTROCUTION: Even when the main circuit breaker or isolator is switched off, certain circuits may still be energized, since they may be connected to a separate power source.



RISK OF BURNS: Electrical currents cause components to get hot either temporarily or permanently. Handle power cable, electrical cables and conduits, terminal box covers and motor frames with great care.

Field of application		Use Modbus communication module only for control and monitoring functions in ventilation, air conditioning and refrigeration plants.
Intended use		Trouble-free and safe product operation of the above products presupposes transport, storage, mounting, installation, and commissioning as intended as well as careful operation.
Electrical installation		Fuses, switches, wiring and grounding must comply with local safety regulations for electrical installations.
Wiring		When wiring, strictly separate AC 230 V mains voltage from AC 24 V safety extralow voltage (SELV) to protect against electrical shock!
Commissioning and maintenance		Only qualified staff trained accordingly may prepare for use, commission, and maintain Modbus communication modules. Maintenance of Modbus communication modules generally only means regular cleaning. We recommend removing dust and dirt from system components installed in the control panels during standard service.
Faults		Only authorized staff may diagnose and correct faults and recommission the plant. This applies to working within the panel as well (e.g. testing or changing fuses).
Storage and transport		Refer to the environmental conditions specified in the respective data sheets for storage and transport. If in doubt, contact your supplier.
Disposal		Devices contain electrical and electronic components; do not dispose of them in household garbage. Observe all local and applicable laws.



4. Commission this unit in a Modbus network

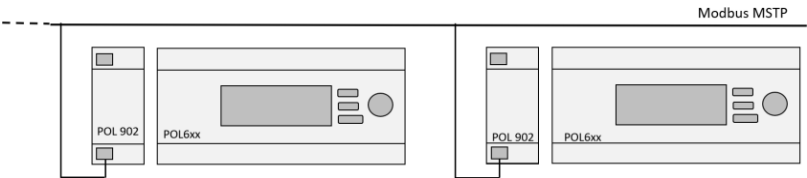
4.1 General information

Microtech 4 controller can be integrated in a Modbus network provided one of the followings:

- a) it is equipped with the proper communication module
- b) the onboard communication has been made available (software option).

**Modbus MSTP
(POL902)**

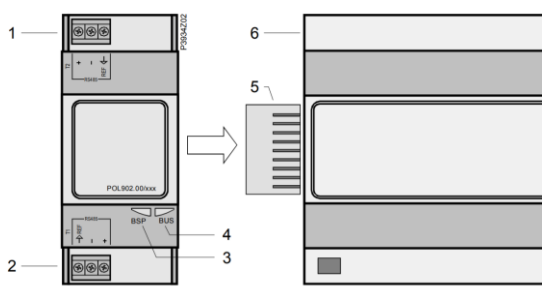
Communication module to configure Microtech controllers in Modbus network is the POL902:





4.2 Modbus module (POL902)

Module description



Part	Description
1	Modbus RS485 interface T1 (slave, channel 0).
2	Modbus RS485 interface T2 (slave, channel 1).
3	Status display "BSP" (Board Support Package).
4	Status display "BUS" (bus connections o.k. / bus traffic).
5	Plug connection "Communication extension bus".
6	Microtech III controller.

BSP Led

Color	Flashing frequency	Meaning
Green	Steady on	BSP operating and communication with controller working.
Yellow	Steady on	BSP operating, but no communication with controller.
Red	Steady on	Hardware fault.
Red/Yellow	Flashing at 1 Hz (1 second on/ 1 second off)	Upgrade mode running.
Red	Flashing at 2 Hz (0,5 second on/ 0,5 second off)	BSP error (software error).

BUS Led

Color	Flashing frequency	Meaning
Green	Steady on	Communication active.
Yellow	Steady on	Initializing
Red	Steady on	Communication interrupted.

Module connection

Step	Action
1	Power off the controller
2	Connect POL902 module to the controller via plug connection (part 5).
4	Power on the controller

Configuration procedure

Step	Action
1	Check that BUS led status is steady on green coloured.
2	Navigate the unit's keypad/display to the main menu page and set the "service" password
3	Navigate the unit's keypad/display following the path below: Main menu→Commissioning→Modbus
4	Set parameters in the table below as needed according to the local network

Configuration parameters

Parameter	Default value
Address T1	1
Parity T1	None
2 Stop bits T1	Yes
Baud rate T1	19200
Rspnce Dly T1	5 ms
Port T2	Passive
Address T2	1
Parity T2	None
2 Stop bits T2	Yes
Baud rate T2	19200
Rspnce Dly T2	5 ms

5. Change history

Document code	Software version	Changes	
D-EIGOC00212-25_01EN	FujinData_1.10.A_00		
D-EIGOC00212-25_02EN	FujinData_1.21.A_03	Coil Status	0x0004 (Added)
			0x0009 (Removed)
		Input States	1x(0057 – 0059) (Changed)
			1x0060 (Added)
		Input Register	3x0019 (Changed)
			3x(0082 – 0093) (Added)
			3x0700-3X0827 (Added)
			3x0050 (Deleted)
		Holding Register	4x0001 (Renamed)
			4x(0026 – 0028) (Added)
			4x(0030 – 0037) (Added)
D-EIGOC00212-25_03EN	FujinData_2.02.A_00	Holding Register	4x(0038 – 0039) (Added)
D-EIGOC00212-25_04EN	FujinData_2.04.A_00	Input Register	3x(0061 – 0062) (Added)
D-EIGOC00212-25_04EN	FujinData_2.04.A_00	AHU Type	
D-EIGOC00212-25_05EN	FujinData_2.04.A_00	Input States	1x0024 (Added)
D-EIGOC00212-25_06EN	FujinData_2.05.A_00	Input States	1x0063 (Added)
D-EIGOC00212-25_07EN	FujinData_2.05.A_00	Input States	1x0025 (Removed)
			1x0036 (Removed)
			1x0064 (Added)
		Input Register	3x0050 (Removed)
			3x(0078 – 0081) (Removed)
		Holding Register	4x(0040 – 0048) (Added)
		Description	More clarified description for air/fluid registers
		AHU Type	More specification for ACE

6. Data integration list

6.1 Coil Status

Address	Description	Values/Units	Remarks	AHU Type
0x0001	Alarm acknowledge input	0-1	Passive*Active	1*2*3*4
0x0002	Unit status BMS	0-1	Off*On	1*2*3*4
0x0003	Reset	0-1	Passive*Active	1*2*3*4
0x0004	Valve flow unit	0-1	l/s*l/h	1*2*3*4

AHU Type:

Available in 1= AWB, 2= ACE, 3= AVS, 4= ACB/ACC

#: Based on unit configuration

6.2 Input States

Address	Description	Values/Units	Remarks	AHU Type
1x0001	Damper feedback 1	0-1	Passive*Active	# (1*3*4)
1x0002	Damper feedback 2	0-1	Passive*Active	# (1*3*4)
1x0003	Emergency stop	0-1	Passive*Active	# (1*2*3*4)
1x0004	Fire alarm	0-1	Passive*Active	1*2*3*4
1x0005	Flood detector	0-1	Passive*Active	1*3*4
1x0006	Filter switch	0-1	Passive*Active	1*2*3*4
1x0007	Ultracap alarm	0-1	Passive*Active	1*2*3*4
1x0008	Unit switch	0-1	Passive*Active	1*2*3*4
1x0009	Fans power	0-1	Passive*Active	1*2*3*4
1x0010	Global alarm switch	0-1	Passive*Active	1*2*3*4
1x0011	Shutoff damper command	0-1	Passive*Active	# (1*3*4)
1x0012	Unit run switch	0-1	Passive*Active	1*2*3*4
1x0013	Supply fan 1 alarm	0-1	Passive*Active	1*2*3*4
1x0014	Supply fan 2 alarm	0-1	Passive*Active	# (1*3*4)
1x0015	Supply fan 3 alarm	0-1	Passive*Active	# (1*3*4)
1x0016	Supply fan 4 alarm	0-1	Passive*Active	# (1*3*4)
1x0017	Supply fan 5 alarm	0-1	Passive*Active	# (1*3*4)
1x0018	Supply fan 6 alarm	0-1	Passive*Active	# (1*3*4)
1x0019	Supply fan 7 alarm	0-1	Passive*Active	# (1*3*4)
1x0020	Supply fan 8 alarm	0-1	Passive*Active	# (1*3*4)
1x0021	Valve alarm	0-1	Passive*Active	# (1*2*3*4)
1x0022	Damper not closed	0-1	Passive*Active	# (1*3*4)
1x0023	Damper not opened	0-1	Passive*Active	# (1*3*4)
1x0024	Fan Alarm	0-1	Passive*Active	# (1*2*4)
1x0025				
1x0026	Fan 1 communication alarm	0-1	Passive*Active	1*2*3*4
1x0027	Fan 2 communication alarm	0-1	Passive*Active	# (1*3*4)
1x0028	Fan 3 communication alarm	0-1	Passive*Active	# (1*3*4)
1x0029	Fan 4 communication alarm	0-1	Passive*Active	# (1*3*4)
1x0030	Fan 5 communication alarm	0-1	Passive*Active	# (1*3*4)
1x0031	Fan 6 communication alarm	0-1	Passive*Active	# (1*3*4)
1x0032	Fan 7 communication alarm	0-1	Passive*Active	# (1*3*4)
1x0033	Fan 8 communication alarm	0-1	Passive*Active	# (1*3*4)
1x0034	Valve communication alarm	0-1	Passive*Active	# (1*2*3*4)
1x0035	Pressure alarm	0-1	Passive*Active	1*2*3*4
1x0036				
1x0037	Average return air temperature alarm	0-1	Passive*Active	1*2*3*4
1x0038	Average supply air temperature alarm	0-1	Passive*Active	1*2*3*4
1x0039	Supply air temperature 1 alarm	0-1	Passive*Active	1*2*3*4
1x0040	Supply air temperature 2 alarm	0-1	Passive*Active	# (1*2*3*4)
1x0041	Return air temperature 1 alarm	0-1	Passive*Active	1*2*3*4
1x0042	Return air temperature 2 alarm	0-1	Passive*Active	# (1*2*3*4)
1x0043	DP sensor 1 alarm	0-1	Passive*Active	# (1*2*3*4)
1x0044	DP sensor 2 alarm	0-1	Passive*Active	# (1*2*3*4)
1x0045	DP supply alarm	0-1	Passive*Active	1*2*3*4
1X0046	P2P communication alarm	0-1	Passive*Active	1*2*3*4
1X0047	Pump alarm	0-1	Passive*Active	2
1X0048	Pump feedback alarm	0-1	Passive*Active	2

1X0049	Volt Line 1	0-1	Passive*Active	1*3*4
1X0050	Volt Line 2	0-1	Passive*Active	1*3*4
1X0051	ATS Line 1	0-1	Passive*Active	1*3*4
1X0052	ATS Line 2	0-1	Passive*Active	1*3*4
1X0053	ATS State	0-1	Automatic*Lock/Manual	1*3*4
1X0054	Ultracap State	0-1	Passive*Active	1*3*4
1X0055	P2P current state	0-1	Slave*Master	# (1*2*3*4)
1X0056	Low flow alarm	0-1	Passive*Active	# (1*2*3*4)
1X0057	Damper Power	0-1	Passive*Active	# (1*2*3*4)
1X0058	Pressure not readable	0-1	Passive*Active	1*2*3*4
1X0059	Startup water temperature	0-1	Passive*Active	1*2*3*4
1X0060	Airflow alarm	0-1	Passive*Active	1*2*3*4
1X0061	Return air humidity 1 alarm	0-1	Passive*Active	1*2*3*4
1X0062	Return air humidity 2 alarm	0-1	Passive*Active	# (1*2*3*4)
1X0063	Low valve flow alarm	0-1	Passive*Active	# (1*2*3*4)
1X0064	Global alarm	0-1	Passive*Active	1*2*3*4

AHU Type:

Available in 1= AWB, 2= ACE, 3= AVS, 4= ACB/ACC

#: Based on unit configuration

6.3 Input Register

Address	Description	Values/Units	Gain	Remarks	AHU Type
3x0001	Return air humidity 1		1	%r.H	1*2*3*4
3x0002	Return air humidity 2		1	%r.H	# (1*2*3*4)
3x0003	Supply air pressure		1	Pa	1*2*3*4
3x0004	Hot isle air pressure 1		1	Pa	# (1*2*3*4)
3x0005	Hot isle air pressure 2		1	Pa	# (1*2*3*4)
3x0006	Return air temperature 1		10	°C	1*2*3*4
3x0007	Return air temperature 2		10	°C	# (1*2*3*4)
3x0008	Supply air temperature 1		10	°C	1*2*3*4
3x0009	Supply air temperature 2		10	°C	# (1*2*3*4)
3x0010	Coil signal	0 - 100	1	%	1*2*3*4
3x0011	Supply fan signal 1	0 - 100	1	%	1*2*3*4
3x0012	Supply fan signal 2	0 - 100	1	%	# (1*3*4)
3x0013	Supply fan signal 3	0 - 100	1	%	# (1*3*4)
3x0014	Supply fan signal 4	0 - 100	1	%	# (1*3*4)
3x0015	Supply fan signal 5	0 - 100	1	%	# (1*3*4)
3x0016	Supply fan signal 6	0 - 100	1	%	# (1*3*4)
3x0017	Supply fan signal 7	0 - 100	1	%	# (1*3*4)
3x0018	Supply fan signal 8	0 - 100	1	%	# (1*3*4)
3x0019	Unit status	0 - 14	1	0 = Off 1 = Off by Fire Alarm 2 = Off by Alarm 3 = Off by DI Switch 4 = Off by BMS 5 = Off by Master 6 = Fire Alarm 7 = Alarm 8 = On 9 = On by BMS 10 = On by Master 11 = Startup 12 = Test 13 = Test by Master 14 = ND	1*2*3*4
3x0020	Supply airflow / 10		0.1	m3/h	1*2*3*4
3x0021	Supply fan 1 power		1	W	1*2*3*4
3x0022	Supply fan 1 speed		1	Rpm	1*2*3*4
3x0023	Supply fan 2 power		1	W	# (1*3*4)
3x0024	Supply fan 2 speed		1	Rpm	# (1*3*4)
3x0025	Supply fan 3 power		1	W	# (1*3*4)
3x0026	Supply fan 3 speed		1	Rpm	# (1*3*4)
3x0027	Supply fan 4 power		1	W	# (1*3*4)
3x0028	Supply fan 4 speed		1	Rpm	# (1*3*4)
3x0029	Supply fan 5 power		1	W	# (1*3*4)
3x0030	Supply fan 5 speed		1	Rpm	# (1*3*4)
3x0031	Supply fan 6 power		1	W	# (1*3*4)
3x0032	Supply fan 6 speed		1	Rpm	# (1*3*4)
3x0033	Supply fan 7 power		1	W	# (1*3*4)
3x0034	Supply fan 7 speed		1	Rpm	# (1*3*4)
3x0035	Supply fan 8 power		1	W	# (1*3*4)
3x0036	Supply fan 8 speed		1	Rpm	# (1*3*4)
3x0037	Regulation fan		1	No*Yes	1*2*3*4
3x0038	Regulation return air humidity		1	%r.H	1*2*3*4

3x0039	Regulation supply air pressure		1	Pa	# (1*2*3*4)
3x0040	Regulation return air temperature		10	°C	1*2*3*4
3x0041	Regulation supply air temperature		10	°C	1*2*3*4
3x0042	EER		1		1*2*3*4
3x0043	Actual IP [1]		1		1*2*3*4
3x0044	Actual IP [2]		1		1*2*3*4
3x0045	Actual IP [3]		1		1*2*3*4
3x0046	Actual IP [4]		1		1*2*3*4
3x0047	Valve position	0 - 100	1	%	1*2*3*4
3x0048	Valve fluid flow		1	l/h	1*2*3*4
3x0049	Valve power		1	KWh	1*2*3*4
3x0050					
3x0051	Valve fluid temperature IN * 10		10	°C	1*2*3*4
3x0052	Valve fluid temperature OUT * 10		10	°C	1*2*3*4
3x0053	Actual gateway [1]		1		1*2*3*4
3x0054	Actual gateway [2]		1		1*2*3*4
3x0055	Actual gateway [3]		1		1*2*3*4
3x0056	Actual gateway [4]		1		1*2*3*4
3x0057	Actual subnet mask [1]		1		1*2*3*4
3x0058	Actual subnet mask [2]		1		1*2*3*4
3x0059	Actual subnet mask [3]		1		1*2*3*4
3x0060	Actual subnet mask [4]		1		1*2*3*4
3x0061	Supply fan 1 current		1	A	1*2*3*4
3x0062	Supply fan 2 current		1	A	# (1*3*4)
3x0063	Supply fan 3 current		1	A	# (1*3*4)
3x0064	Supply fan 4 current		1	A	# (1*3*4)
3x0065	Supply fan 5 current		1	A	# (1*3*4)
3x0066	Supply fan 6 current		1	A	# (1*3*4)
3x0067	Supply fan 7 current		1	A	# (1*3*4)
3x0068	Supply fan 8 current		1	A	# (1*3*4)
3x0069	Unit/AHU operating time		1	hr	1*2*3*4
3x0070	Supply fan 1 run time		1	hr	1*2*3*4
3x0071	Supply fan 2 run time		1	hr	# (1*3*4)
3x0072	Supply fan 3 run time		1	hr	# (1*3*4)
3x0073	Supply fan 4 run time		1	hr	# (1*3*4)
3x0074	Supply fan 5 run time		1	hr	# (1*3*4)
3x0075	Supply fan 6 run time		1	hr	# (1*3*4)
3x0076	Supply fan 7 run time		1	hr	# (1*3*4)
3x0077	Supply fan 8 run time		1	hr	# (1*3*4)
3x0078					
3x0079					
3x0080					
3x0081					
3x0082	Fan 1 Alarm	0-2	1	OK*Warning*Comm Fault	1*2*3*4
3x0083	Fan 2 Alarm	0-2	1	OK*Warning*Comm Fault	# (1*3*4)
3x0084	Fan 3 Alarm	0-2	1	OK*Warning*Comm Fault	# (1*3*4)
3x0085	Fan 4 Alarm	0-2	1	OK*Warning*Comm Fault	# (1*3*4)
3x0086	Fan 5 Alarm	0-2	1	OK*Warning*Comm Fault	# (1*3*4)
3x0087	Fan 6 Alarm	0-2	1	OK*Warning*Comm Fault	# (1*3*4)

3x0088	Fan 7 Alarm	0-2	1	OK*Warning*Comm Fault	# (1*3*4)
3x0089	Fan 8 Alarm	0-2	1	OK*Warning*Comm Fault	# (1*3*4)
3x0090	Valve Alarm	0-2	1	OK*Warning*Comm Fault	1*2*3*4
3x0091	Airflow regulation /10	0-100000	0.1	m3/h	# (1*2*3*4)
3x0092	Master address	0-128	1		# (1*2*3*4)
3x0093	P2P unit status	0-15	1	0 = P2P alarm 1 = Off 2 = Off by Fire Alarm 3 = Off by Alarm 4 = Off by DI Switch 5 = Off by BMS 6 = Off by Master 7 = Fire Alarm 8 = Alarm 9 = On 10 = On by BMS 11 = On by Master 12 = Startup 13 = Test 14 = Test by Master 15 = ND	# (1*2*3*4)
3x0700....3x0827	P2P unit 1.....128 status	0-15	1	0 = P2P alarm 1 = Off 2 = Off by Fire Alarm 3 = Off by Alarm 4 = Off by DI Switch 5 = Off by BMS 6 = Off by Master 7 = Fire Alarm 8 = Alarm 9 = On 10 = On by BMS 11 = On by Master 12 = Startup 13 = Test 14 = Test by Master 15 = ND	# (1*2*3*4)

e.g.

- 3x0700 corresponds to P2P unit 1 status
- 3x0704 corresponds to P2P unit 5 status
- 3x0827 corresponds to P2P unit 128 status

AHU Type:

Available in 1= AWB, 2= ACE, 3= AVS, 4= ACB/ACC

#: Based on unit configuration



6.4 Holding Register

Address	Description	Values/Range	Gain	Remarks	AHU Type
4x0001	Return air temperature setpoint * 10	-10 - 50	10	°C	# (1*2*3*4)
4x0002	Supply air temperature setpoint * 10	-10 - 50	10	°C	# (1*2*3*4)
4x0003	Supply fan air pressure setpoint	2 - 50	1	Pa	# (1*2*3*4)
4x0004	Supply air temperature setpoint Max * 10	-10 - 50	10	°C	# (1*2*3*4)
4x0005	Supply air temperature setpoint Min * 10	-10 - 50	10	°C	# (1*2*3*4)
4x0006	Unit status HMI	0 - 3	1	Off*On*Test	1*2*3*4
4x0007	P2P channel address	1 - 128	1		# (1*2*3*4)
4x0008	Given IP [1]		1		1*2*3*4
4x0009	Given IP [2]		1		1*2*3*4
4x0010	Given IP [3]		1		1*2*3*4
4x0011	Given IP [4]		1		1*2*3*4
4x0012	Enable DHCP	0 - 1	1	Passive*Active	1*2*3*4
4x0013	Given gateway [1]		1		1*2*3*4
4x0014	Given gateway [2]		1		1*2*3*4
4x0015	Given gateway [3]		1		1*2*3*4
4x0016	Given gateway [4]		1		1*2*3*4
4x0017	Given subnet mask [1]		1		1*2*3*4
4x0018	Given subnet mask [2]		1		1*2*3*4
4x0019	Given subnet mask [3]		1		1*2*3*4
4x0020	Given subnet mask [4]		1		1*2*3*4
4x0021	Air pressure alarm delay	0 - 1000	1	s	1*2*3*4
4x0022	Max air pressure threshold	0 - 64	1	Pa	1*2*3*4
4x0023	Min air pressure threshold	0 - 100	1	Pa	1*2*3*4
4x0024	Max supply air temperature threshold * 10	0 - 100	10	°C	1*2*3*4
4x0025	Max return air temperature threshold * 10	0 - 100	10	°C	1*2*3*4
4x0026	Startup air pressure alarm delay	0 - 1000	1	s	1*2*3*4
4x0027	Supply air pressure minimum regulation setpoint	0-200	1	Pa	1*2*3*4
4x0028	Supply air pressure maximum regulation setpoint	0-200	1	Pa	1*2*3*4
4x0029	Low airflow alarm threshold / 10	0-200000	0.1	m3/h	# (1*2*3*4)
4x0030	Startup fluid temperature delay	0-1000	1	s	1*2*3*4
4x0031	Supply fan airflow setpoint	0-200000	0.1	m3/h	# (1*2*3*4)
4x0032	Supply fan airflow minimum regulation setpoint	0-200000	0.1	m3/h	# (1*2*3*4)
4x0033	Supply fan airflow maximum regulation setpoint	0-200000	0.1	m3/h	# (1*2*3*4)
4x0034	P2P startup delay	0-600	1	s	# (1*2*3*4)
4x0035	Average supply air temperature alarm delay	0-1000	1	s	1*2*3*4
4x0036	Average supply air temperature startup alarm delay	0-600	1	min	1*2*3*4
4x0037	Fixed fan speed (off normal fan speed)	0-100	1	%	1*2*3*4
4x0038	Minimum fan speed	0-100	1	%	1*2*3*4
4x0039	Fan running delay	0-1000	1	s	1*2*3*4
4x0040	Low valve fluid flow alarm running delay	0-1000	1	s	# (1*2*3*4)
4x0041	Low valve fluid flow alarm startup delay	0-1000	1	s	# (1*2*3*4)
4x0042	Low valve fluid flow threshold	0-200000	0.1	l/s or l/h	# (1*2*3*4)
4x0043	Low airflow alarm threshold	0-200000	0.1	m3/h	# (1*2*3*4)
4x0044	Low airflow alarm startup delay	0-1000	1	s	# (1*2*3*4)
4x0045	Low airflow alarm running delay	0-1000	1	s	# (1*2*3*4)
4x0046	Fluid temperature threshold	0.1-50	1	°C	# (1*2*3*4)
4x0047	No air thermal exchange threshold	0-50	1	°C	# (1*2*3*4)
4x0048	No air thermal exchange delay	0-1000	1	s	# (1*2*3*4)



AHU Type:

Available in the following units 1= AWB, 2= ACE, 3= AVS, 4= ACB/ACC

#: Based on unit configuration

* Different setpoint combinations are considered depending on configuration. Please refer to operating manual for more details.

** Attention! This variable contains a 32-bit value, obtained concatenating the MSB at specified address+1 and LSB at specified address, i.e. [MSB, LSB]. For example [0x278, 0x277] represents the correct value of the Supply Fan Running Hours.

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