SAVE Modbus Variable List
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1 Information

Modbus is a serial communication protocol used for transmitting information over serial lines between electronic devices. The device requesting the information is called "Master", while devices supplying the requested information are "Slaves". When it comes to planning data communication for open, multi-vendor industrial control systems, Modbus is the first choice of end users and integrators alike.

The Modbus/RTU protocol defines how a "master" device polls one or more "slave" devices to read and write data in real time by means of RS232, RS422, or RS485 serial data communication. Modbus/TCP, an extension of Modbus/RTU, defines how Modbus/RTU and Modbus/ASCII messages are encoded within and transported over TCP/IP-based networks. Modbus/TCP is just as simple to implement and flexible to apply as the original Modbus/RTU.

1.1 Physical layer

New Systemair controls have standard and readily available Modbus/RTU over three-wire (A, B and GND) RS485 on the Connection Board (CB) and Modbus/TCP over TCP/IP using Internet Access Module (available as an accessory - Art. No. 211243). For Modbus/TCP connection over TCP/IP using Internet Access Module refer to the IAM quick guide.

Slave address: 1 to 247
Baud rate: 9600 to 115200
Parity: None, Even, Odd
Stop bits: 1 (fixed)

Parameters can be changed in Modbus page (*Service -> Communication -> Modbus*) in the Control Panel.

1.2 Transmission modes

The registers are Input registers (read-only) and Holding registers (read-write) when using Modbus/RTU and Holding registers (read-write) when using Modbus/TCP.

All registers are 16 bit Integers.

Table 1 Signal types used

Unsigned Integers	I
Signed Integers	I*

Table 2 Register types used

Input Registers	16-bit quantity, Analog Input Register provided by an I/O system, read-only, Modbus Function 04
Holding registers	16-bit quantity, analog output HR alterable by an application program, read-write , Modbus function 03 / 06 / 16

2 Modbus variable list

Tables below provides an extensive list of Modbus variables used in SAVE system grouped according to the functionality the variables are related to.

2.1 Demand Control

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_DEMC_RH_HIGHEST	I	Read Input Register (Function 04)	1001	0	100	Highest value of all RH sensors
REG_DEMC_CO2_HIGHEST	I	Read Input Register (Function 04)	1002	0	2000	Highest value of all CO2 sensors
REG_DEMC_RH_PI_SP	I	Read Input Register (Function 04)	1011	0	100	Set point for RH demand control
REG_DEMC_RH_PI_FEEDBACK	I	Read Input Register (Function 04)	1012	0	100	Sensor value for RH demand control
REG_DEMC_RH_PI_OUTPUT	I	Read Input Register (Function 04)	1019			Output value for RH demand control.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow

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Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_DEMC_CO2_PI_SP	I	Read Input Register (Function 04)	1021	0	2000	Set point for CO2 demand control
REG_DEMC_CO2_PI_FEEDBACK	I	Read Input Register (Function 04)	1022	0	2000	Sensor value for CO2 demand control
REG_DEMC_CO2_PI_OUTPUT	I	Read Input Register (Function 04)	1029			Output value for CO2 demand control(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_DEMC_RH_SETTINGS_PBAND	I	Holding Register (Function 03/06/16)	1031	1	100	Pband setting for RH demand control
REG_DEMC_RH_SETTINGS_SP_SUMMER	I	Holding Register (Function 03/06/16)	1033	10	100	Set point setting for RH demand control during (temperature based) winter time
REG_DEMC_RH_SETTINGS_SP_WINTER	I	Holding Register (Function 03/06/16)	1034	10	100	Set point setting for RH demand control during (temperature based) summer time
REG_DEMC_RH_SETTINGS_ON_OFF	I	Holding Register (Function 03/06/16)	1035	0	1	Flag indicating if RH demand control is allowed
REG_SUMMER_WINTER	I	Read Input Register (Function 04)	1039	0	1	Actual seasson for Demand Control0: Summer1: Winter
REG_DEMC_CO2_SETTINGS_PBAND	I	Holding Register (Function 03/06/16)	1041	50	2000	Pband setting for CO2 demand control
REG_DEMC_CO2_SETTINGS_SP	I	Holding Register (Function 03/06/16)	1043	100	2000	Set point setting for CO2 demand control
REG_DEMC_CO2_SETTINGS_ON_OFF	I	Holding Register (Function 03/06/16)	1044	0	1	Flag indicating if CO2 demand control is allowed
REG_IAQ_SPEED_LEVEL_MIN	I	Holding Register (Function 03/06/16)	1121	2	3	Minimum level for Demand Control2: Low3: Normal
REG_IAQ_SPEED_LEVEL_MAX	I	Holding Register (Function 03/06/16)	1122	3	5	Maximum level for user Demand Control3: Normal4: High5: Maximum
REG_IAQ_LEVEL	I	Read Input Register (Function 04)	1123	0	2	Actual IAQ level:0: Economic1: Good2: Improving

2.2 User modes

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_USERMODE_HOLIDAY_TIME	I	Holding Register (Function 03/06/16)	1101	1	365	Time delay setting for user mode Holiday
REG_USERMODE_AWAY_TIME	I	Holding Register (Function 03/06/16)	1102	1	72	Time delay setting for user mode Away
REG_USERMODE_FIREPLACE_TIME	I	Holding Register (Function 03/06/16)	1103	1	60	Time delay setting for user mode Fire Place
REG_USERMODE_REFRESH_TIME	I	Holding Register (Function 03/06/16)	1104	1	240	Time delay setting for user mode Refresh
REG_USERMODE_CROWDED_TIME	I	Holding Register (Function 03/06/16)	1105	1	8	Time delay setting for user mode Crowded
REG_USERMODE_REMAINING_TIME_L	I	Read Input Register (Function 04)	1111			Remaining time for the state Holiday/Away/Fire Place/Refresh/Crowded
REG_USERMODE_REMAINING_TIME_H	I	Read Input Register (Function 04)	1112			Remaining time for the state Holiday/Away/Fire Place/Refresh/Crowded
REG_USERMODE_CROWDED_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1135	3	5	Fan speed level for mode Crowded3: Normal4: High5: Maximum
REG_USERMODE_CROWDED_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1136	3	5	Fan speed level for mode Crowded3: Normal4: High5: Maximum
REG_USERMODE_REFRESH_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1137	3	5	Fan speed level for mode Refresh3: Normal4: High5: Maximum
REG_USERMODE_REFRESH_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1138	3	5	Fan speed level for mode Refresh3: Normal4: High5: Maximum
REG_USERMODE_FIREPLACE_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1139	3	5	Fan speed level for mode Fire Place3: Normal4: High5: Maximum

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_USERMODE_FIREPLACE_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1140	1	3	Fan speed level for mode Fire Place1: Minimum2: Low3: Normal
REG_USERMODE_AWAY_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1141	0	3	Fan speed level for mode Away.0: Off(1)1: Minimum2: Low3: Normal.(1): value Off only allowed if contents of register REG_FAN_MANUAL_STOP_ALLOWED is 1.
REG_USERMODE_AWAY_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1142	0	3	Fan speed level for mode Away.0: Off(1)1: Minimum2: Low3: Normal.(1): value Off only allowed if contents of register REG_FAN_MANUAL_STOP_ALLOWED is 1.
REG_USERMODE_HOLIDAY_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1143	0	3	Fan speed level for mode Holiday.0: Off(1) 1: Minimum2: Low3: Normal.(1): value Off only allowed if contents of register REG_FAN_MANUAL_STOP_ALLOWED is 1.
REG_USERMODE_HOLIDAY_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1144	0	3	Fan speed level for mode Holiday.0: Off(1) 1: Minimum2: Low3: Normal.(1): value Off only allowed if contents of register REG_FAN_MANUAL_STOP_ALLOWED is 1.
REG_USERMODE_COOKERHOOD_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1145	1	5	Fan speed level for mode Cooker Hood2: Low3: Normal4: High
REG_USERMODE_COOKERHOOD_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1146	1	5	Fan speed level for mode Cooker Hood1: Minimum2: Low3: Normal
REG_USERMODE_VACUUMCLEANER_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1147	1	5	Fan speed level for mode Vacuum Cleaner2: Low3: Normal4: High
REG_USERMODE_VACUUMCLEANER_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1148	1	5	Fan speed level for mode Vacuum Cleaner1: Minimum2: Low3: Normal
REG_USERMODE_CROWDED_T_OFFSET	I*	Holding Register (Function 03/06/16)	1151	-100	0	Temperature setpoint offset for user mode Crowded
REG_USERMODE_MODE	I	Read Input Register (Function 04)	1161	0	12	Active User mode.0: Auto1: Manual2: Crowded3: Refresh4: Fireplace5: Away6: Holiday7: Cooker Hood8: Vacuum Cleaner9: CDI110: CDI211: CDI312: PressureGuard
REG_USERMODE_HMI_CHANGE_REQUEST	I	Holding Register (Function 03/06/16)	1162	0	7	New desired user mode as requested by HMI0: None1: AUTO2: Manual 3: Crowded4: Refresh5: Fireplace6: Away7: Holiday
REG_CDI_1_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1171	0	5	Fan speed level for configurable digital input 1.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_CDI_1_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1172	0	5	Fan speed level for configurable digital input 1.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_CDI_2_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1173	0	5	Fan speed level for configurable digital input 2.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_CDI_2_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1174	0	5	Fan speed level for configurable digital input 2.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_CDI_3_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1175	0	5	Fan speed level for configurable digital input 3.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_CDI_3_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1176	0	5	Fan speed level for configurable digital input 3.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_PRESSURE_GUARD_AIRFLOW_LEVEL_SAF	I	Holding Register (Function 03/06/16)	1177	0	5	Fan speed level for configurable pressure guard function.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_PRESSURE_GUARD_AIRFLOW_LEVEL_EAF	I	Holding Register (Function 03/06/16)	1178	0	5	Fan speed level for configurable pressure guard function.0: Off1: Minimum2: Low3: Normal4: High5: Maximum
REG_SENSOR_DI_AWAY	I	Read Input Register (Function 04)	12301	0	1	Value of physical Digital Input of Away function
REG_SENSOR_DI_HOLIDAY	I	Read Input Register (Function 04)	12302	0	1	Value of physical Digital Input of Holiday function
REG_SENSOR_DI_FIREPLACE	I	Read Input Register (Function 04)	12303	0	1	Value of physical Digital Input of Fireplace function

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Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_SENSOR_DI_REHRESH	I	Read Input Register (Function 04)	12304	0	1	Value of physical Digital Input of Refresh function
REG_SENSOR_DI_CROWDED	I	Read Input Register (Function 04)	12305	0	1	Value of physical Digital Input of Crowded function
REG_SENSOR_DI_COOKERHOOD	I	Read Input Register (Function 04)	12306	0	1	Value of physical Digital Input of Cookerhood function
REG_SENSOR_DI_VACUUMCLEANER	I	Read Input Register (Function 04)	12307	0	1	Value of physical Digital Input of Vacuum Cleaner function
REG_USERMODE_HOLIDAY_DI_OFF_DELAY	I	Holding Register (Function 03/06/16)	1181	0	365	Off delay for DI
REG_USERMODE_AWAY_DI_OFF_DELAY	I	Holding Register (Function 03/06/16)	1182	0	72	Off delay for DI
REG_USERMODE_FIRPLACE_DI_OFF_DELAY	I	Holding Register (Function 03/06/16)	1183	0	60	Off delay for DI
REG_USERMODE_REFRESH_DI_OFF_DELAY	I	Holding Register (Function 03/06/16)	1184	0	240	Off delay for DI
REG_USERMODE_CROWDED_DI_OFF_DELAY	I	Holding Register (Function 03/06/16)	1185	0	8	Off delay for DI
REG_CDI1_OFF_DELAY	I	Holding Register (Function 03/06/16)	1188	0	240	Off delay for DI
REG_CDI2_OFF_DELAY	I	Holding Register (Function 03/06/16)	1189	0	240	Off delay for DI
REG_CDI3_OFF_DELAY	I	Holding Register (Function 03/06/16)	1190	0	240	Off delay for DI
REG_SPEED_CDI1_SAF	I	Read Input Register (Function 04)	1221			SAF speed value for user mode Holiday.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_SPEED_CDI1_EAF	I	Read Input Register (Function 04)	1222			EAF speed value for user mode Holiday.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_SPEED_CDI2_SAF	I	Read Input Register (Function 04)	1223			SAF speed value for mode Cooker Hood.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_SPEED_CDI2_EAF	I	Read Input Register (Function 04)	1224			EAF speed value for mode Cooker Hood.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_SPEED_CDI3_SAF	I	Read Input Register (Function 04)	1225			SAF speed value for mode Vacuum Cleaner. (1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_SPEED_CDI3_EAF	I	Read Input Register (Function 04)	1226			EAF speed value for mode Vacuum Cleaner. (1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_SPEED_PRESSURE_GUARD_SAF	I	Read Input Register (Function 04)	1227			SAF speed value for low fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_SPEED_PRESSURE_GUARD_EAF	I	Read Input Register (Function 04)	1228			EAF speed value for low fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_USERMODE_REMAINING_TIME_CDI1_L	I	Read Input Register (Function 04)	1621			Remaining time
REG_USERMODE_REMAINING_TIME_CDI1_H	I	Read Input Register (Function 04)	1622			
REG_USERMODE_REMAINING_TIME_CDI2_L	I	Read Input Register (Function 04)	1623			Remaining time
REG_USERMODE_REMAINING_TIME_CDI2_H	I	Read Input Register (Function 04)	1624			
REG_USERMODE_REMAINING_TIME_CDI3_L	I	Read Input Register (Function 04)	1625			Remaining time
REG_USERMODE_REMAINING_TIME_CDI3_H	I	Read Input Register (Function 04)	1626			
REG_FUNCTION_ACTIVE_PRESSURE_GUARD	I	Read Input Register (Function 04)	3114	0	1	Indicates if function is active

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FUNCTION_ACTIVE_CDI_1	I	Read Input Register (Function 04)	3115	0	1	Indicates if function is active
REG_FUNCTION_ACTIVE_CDI_2	I	Read Input Register (Function 04)	3116	0	1	Indicates if function is active
REG_FUNCTION_ACTIVE_CDI_3	I	Read Input Register (Function 04)	3117	0	1	Indicates if function is active
REG_SENSOR_DI_PRESSURE_GUARD	I	Read Input Register (Function 04)	12316	0	1	Indicates if physical DI is active
REG_SENSOR_DI_CDI_1	I	Read Input Register (Function 04)	12317	0	1	Indicates if physical DI is active
REG_SENSOR_DI_CDI_2	I	Read Input Register (Function 04)	12318	0	1	Indicates if physical DI is active
REG_SENSOR_DI_CDI_3	I	Read Input Register (Function 04)	12319	0	1	Indicates if physical DI is active

2.3 Airflow Control

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_SENSOR_RPM_SAF	I	Read Input Register (Function 04)	12401	0	5000	Supply Air Fan RPM indication from TACHO
REG_SENSOR_RPM_EAF	I	Read Input Register (Function 04)	12402	0	5000	Extract Air Fan RPM indication from TACHO
REG_SYSTEM_UNIT_FLOW	I	Holding Register (Function 03/06/16)	9001	0	2	Unit for CAV control mode.0: l/s1: m3/h2: cfm
REG_SYSTEM_UNIT_PRESSURE	I	Holding Register (Function 03/06/16)	9002	0	1	Units for VAV control mode.0: Pa1: InH2O
REG_MANUAL_OVERRIDE_OUTPUT_SAF	I	Holding Register (Function 03/06/16)	13601	0	1	SAF Override.0: Auto1: Manual
REG_MANUAL_OVERRIDE_OUTPUT_EAF	I	Holding Register (Function 03/06/16)	13602	0	1	EAF Override.0: Auto1: Manual
REG_MANUAL_OVERRIDE_OUTPUT_ SAF_VALUE	I	Holding Register (Function 03/06/16)	13801	0	100	SAF Override value in % if manual (1) selected
REG_MANUAL_OVERRIDE_OUTPUT_ EAF_VALUE	I	Holding Register (Function 03/06/16)	13802	0	100	EAF override value in % if manual (1) selected
REG_USERMODE_MANUAL_AIRFLOW_ LEVEL_SAF	I	Holding Register (Function 03/06/16)	1131	1	4	Fan speed level for mode Manual, supply fan.(1): value Off only allowed if contents of register 1352 is 1.(1): Off2: Low3: Normal4: High
REG_USERMODE_MANUAL_AIRFLOW_ LEVEL_EAF	I	Holding Register (Function 03/06/16)	1132	2	4	Fan speed level for mode Manual, extract fan.2: Low3: Normal4: High
REG_FAN_MANUAL_STOP_ALLOWED	I	Holding Register (Function 03/06/16)	1353	0	1	Allow manual fan stop (also as selection for user modes and Week schedule).0: Manual stop not allowed1: Manual stop allowed
REG_FAN_REGULATION_UNIT	I	Holding Register (Function 03/06/16)	1274	0	4	Type of fan control mode.0: Manual1: RPM2: VAV (Constant Pressure)3: CAV (Constant Flow)4: DCV (External)
REG_SPEED_FANS_RUNNING	I	Read Input Register (Function 04)	1351	0	1	Indicates that both fans are running
REG_SPEED_SAF_DESIRED_OFF	I	Read Input Register (Function 04)	1352	0	1	Indicates that the SAF shall be turned off once the electrical reheater is cooled down.
REG_FAN_LEVEL_SAF_MIN	I	Read Input Register (Function 04)	1301			SAF speed value for minimum fan speed. (1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_EAF_MIN	I	Read Input Register (Function 04)	1302			EAF speed value for minimum fan speed. (1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_SAF_LOW	I	Read Input Register (Function 04)	1303			SAF speed value for low fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow

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Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_FAN_LEVEL_EAF_LOW	I	Read Input Register (Function 04)	1304			EAF speed value for low fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_SAF_NORMAL	I	Read Input Register (Function 04)	1305			SAF speed value for normal fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_EAF_NORMAL	I	Read Input Register (Function 04)	1306			EAF speed value for normal fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_SAF_HIGH	I	Read Input Register (Function 04)	1307			SAF speed value for high fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_EAF_HIGH	I	Read Input Register (Function 04)	1308			EAF speed value for high fan speed.(1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_SAF_MAX	I	Read Input Register (Function 04)	1309			SAF speed value for maximum fan speed. (1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_EAF_MAX	I	Read Input Register (Function 04)	1310			EAF speed value for maximum fan speed. (1): Depends on regulation type. Value can be %, RPM, Pressure or Flow
REG_FAN_LEVEL_SAF_MIN_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1401	16	100	SAF speed value for minimum fan speed
REG_FAN_LEVEL_EAF_MIN_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1402	16	100	EAF speed value for minimum fan speed
REG_FAN_LEVEL_SAF_LOW_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1403	16	100	SAF speed value for low fan speed
REG_FAN_LEVEL_EAF_LOW_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1404	16	100	EAF speed value for low fan speed
REG_FAN_LEVEL_SAF_NORMAL_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1405	16	100	SAF speed value for normal fan speed
REG_FAN_LEVEL_EAF_NORMAL_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1406	16	100	EAF speed value for normal fan speed
REG_FAN_LEVEL_SAF_HIGH_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1407	16	100	SAF speed value for high fan speed
REG_FAN_LEVEL_EAF_HIGH_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1408	16	100	EAF speed value for high fan speed
REG_FAN_LEVEL_SAF_MAX_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1409	16	100	SAF speed value for maximum fan speed
REG_FAN_LEVEL_EAF_MAX_ PERCENTAGE	I	Holding Register (Function 03/06/16)	1410	16	100	EAF speed value for maximum fan speed
REG_FAN_LEVEL_SAF_MIN_RPM	I	Holding Register (Function 03/06/16)	1411	500	5000	SAF speed value for minimum fan speed
REG_FAN_LEVEL_EAF_MIN_RPM	I	Holding Register (Function 03/06/16)	1412	500	5000	EAF speed value for minimum fan speed
REG_FAN_LEVEL_SAF_LOW_RPM	I	Holding Register (Function 03/06/16)	1413	500	5000	SAF speed value for low fan speed
REG_FAN_LEVEL_EAF_LOW_RPM	I	Holding Register (Function 03/06/16)	1414	500	5000	EAF speed value for low fan speed
REG_FAN_LEVEL_SAF_NORMAL_RPM	I	Holding Register (Function 03/06/16)	1415	500	5000	SAF speed value for normal fan speed
REG_FAN_LEVEL_EAF_NORMAL_RPM	I	Holding Register (Function 03/06/16)	1416	500	5000	EAF speed value for normal fan speed
REG_FAN_LEVEL_SAF_HIGH_RPM	I	Holding Register (Function 03/06/16)	1417	500	5000	SAF speed value for high fan speed
REG_FAN_LEVEL_EAF_HIGH_RPM	I	Holding Register (Function 03/06/16)	1418	500	5000	EAF speed value for high fan speed
REG_FAN_LEVEL_SAF_MAX_RPM	I	Holding Register (Function 03/06/16)	1419	500	5000	SAF speed value for maximum fan speed
REG_FAN_LEVEL_EAF_MAX_RPM	I	Holding Register (Function 03/06/16)	1420	500	5000	EAF speed value for maximum fan speed

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FAN_LEVEL_SAF_MIN_PRESSURE	I	Holding Register (Function 03/06/16)	1421			SAF speed value for minimum fan speed
REG_FAN_LEVEL_EAF_MIN_PRESSURE	I	Holding Register (Function 03/06/16)	1422			EAF speed value for minimum fan speed
REG_FAN_LEVEL_SAF_LOW_PRESSURE	I	Holding Register (Function 03/06/16)	1423			SAF speed value for low fan speed
REG_FAN_LEVEL_EAF_LOW_PRESSURE	I	Holding Register (Function 03/06/16)	1424			EAF speed value for low fan speed
REG_FAN_LEVEL_SAF_NORMAL_PRESSURE	I	Holding Register (Function 03/06/16)	1425			SAF speed value for normal fan speed
REG_FAN_LEVEL_EAF_NORMAL_PRESSURE	I	Holding Register (Function 03/06/16)	1426			EAF speed value for normal fan speed
REG_FAN_LEVEL_SAF_HIGH_PRESSURE	I	Holding Register (Function 03/06/16)	1427			SAF speed value for high fan speed
REG_FAN_LEVEL_EAF_HIGH_PRESSURE	I	Holding Register (Function 03/06/16)	1428			EAF speed value for high fan speed
REG_FAN_LEVEL_SAF_MAX_PRESSURE	I	Holding Register (Function 03/06/16)	1429			SAF speed value for maximum fan speed
REG_FAN_LEVEL_EAF_MAX_PRESSURE	I	Holding Register (Function 03/06/16)	1430			EAF speed value for maximum fan speed
REG_FAN_LEVEL_SAF_MIN_FLOW	I	Holding Register (Function 03/06/16)	1431			SAF speed value for minimum fan speed
REG_FAN_LEVEL_EAF_MIN_FLOW	I	Holding Register (Function 03/06/16)	1432			EAF speed value for minimum fan speed
REG_FAN_LEVEL_SAF_LOW_FLOW	I	Holding Register (Function 03/06/16)	1433			SAF speed value for low fan speed
REG_FAN_LEVEL_EAF_LOW_FLOW	I	Holding Register (Function 03/06/16)	1434			EAF speed value for low fan speed
REG_FAN_LEVEL_SAF_NORMAL_FLOW	I	Holding Register (Function 03/06/16)	1435			SAF speed value for normal fan speed
REG_FAN_LEVEL_EAF_NORMAL_FLOW	I	Holding Register (Function 03/06/16)	1436			EAF speed value for normal fan speed
REG_FAN_LEVEL_SAF_HIGH_FLOW	I	Holding Register (Function 03/06/16)	1437			SAF speed value for high fan speed
REG_FAN_LEVEL_EAF_HIGH_FLOW	I	Holding Register (Function 03/06/16)	1438			EAF speed value for high fan speed
REG_FAN_LEVEL_SAF_MAX_FLOW	I	Holding Register (Function 03/06/16)	1439			SAF speed value for maximum fan speed
REG_FAN_LEVEL_EAF_MAX_FLOW	I	Holding Register (Function 03/06/16)	1440			EAF speed value for maximum fan speed
REG_INPUT_EXTERNAL_CTRL_SAF	I	Read Input Register (Function 04)	2101	0	100	Value from External Controller Input, SAF. In %.
REG_INPUT_EXTERNAL_CTRL_EAF	I	Read Input Register (Function 04)	2102	0	100	Value from External Controller Input, EAF. In %.
REG_OUTPUT_SAF	I	Read Input Register (Function 04)	14001	0	100	SAF fan speed
REG_OUTPUT_EAF	I	Read Input Register (Function 04)	14002	0	100	EAF fan speed
REG_OUTPUT_FAN_SPEED1	I	Read Input Register (Function 04)	14371	0	100	Supply air fan control signal in %
REG_OUTPUT_FAN_SPEED2	I	Read Input Register (Function 04)	14372	0	100	Extract air fan control signal in %

2.4   Outdoor Airflow Compensation

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FAN_OUTDOOR_COMP_TYPE	I	Holding Register (Function 03/06/16)	1251	0	1	Compensate only SF or both SF and EF0: SAF1: SAF/EAF
REG_FAN_OUTDOOR_COMP_MAX_VALUE	I	Holding Register (Function 03/06/16)	1252	0	50	Compensation value at lowest temperature.
REG_FAN_OUTDOOR_COMP_STOP_T_WINTER	I*	Holding Register (Function 03/06/16)	1253	-300	0	Temperature at which compensation reaches maximum value during the winter period.
REG_FAN_OUTDOOR_COMP_MAX_TEMP	I*	Holding Register (Function 03/06/16)	1254	-300	0	Temperature at which highest compensation is applied.
REG_FAN_OUTDOOR_COMP_START_T_WINTER	I	Holding Register (Function 03/06/16)	1256	-300	0	Temperature at which compensation starts during the winter period.
REG_FAN_OUTDOOR_COMP_START_T_SUMMER	I	Holding Register (Function 03/06/16)	1257	150	300	Temperature at which compensation starts during the summer period.
REG_FAN_OUTDOOR_COMP_STOP_T_SUMMER	I	Holding Register (Function 03/06/16)	1258	150	400	Temperature at which compensation reaches maximum value during the summer period.
REG_FAN_OUTDOOR_COMP_VALUE_SUMMER	I	Holding Register (Function 03/06/16)	1259	0	50	Compensation value during summer period

2.5   Temperature Control

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_SYSTEM_UNIT_TEMPERATURE	I	Holding Register (Function 03/06/16)	9003	0	1	Units for temperature.0: Celcius1: Fahrenheit
REG_TC_CONTROL_MODE	I	Holding Register (Function 03/06/16)	2031	0	2	Unit temperature control mode0: Supply1: Room2: Extract
REG_TC_SP	I*	Holding Register (Function 03/06/16)	2001	120	300	Temperature setpoint for the supply air temperature
REG_TC_SP_SATC	I*	Read Input Register (Function 04)	2054	120	300	Temperature setpoint for the supply air temperature
REG_TC_CASCADE_SP	I*	Holding Register (Function 03/06/16)	2013	120	400	Temperature set point for SATC, as calculated by RATC/EATC during cascade control
REG_TC_ROOM_CTRL_SP_SATC	I*	Read Input Register (Function 04)	2053	120	400	Temperature set point for SATC, as calculated by RATC/EATC during cascade control
REG_TC_CASCADE_SP_MIN	I*	Holding Register (Function 03/06/16)	2021	120	400	Minimum temperature set point for the SATC
REG_TC_CASCADE_SP_MAX	I*	Holding Register (Function 03/06/16)	2022	120	400	Maximum temperature set point for the SATC
REG_TC_EAT_RAT_SP	I*	Read Input Register (Function 04)	2051	120	400	EAT or RAT value, used for room/extract air controller.
REG_SATC_HEAT_DEMAND	I	Read Input Register (Function 04)	2055	0	100	Output of the SATC (0-100%)
REG_SATC_PI_SP	I*	Read Input Register (Function 04)	2061	120	300	SATC setpoint value
REG_SATC_PI_OUTPUT	I*	Read Input Register (Function 04)	2069	0	100	SATC output signal
REG_ROOM_CTRL_PI_SP	I*	Read Input Register (Function 04)	2071	120	300	RATC setpoint value
REG_ROOM_CTRL_PI_OUTPUT	I*	Read Input Register (Function 04)	2079	0	100	RATC output signal

2.6 Cooler

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_COOLER_FROM_SATC	I	Read Input Register (Function 04)	2311	0	100	Cooler signal
REG_COOLER_OAT_INTERLOCK_T	I	Holding Register (Function 03/06/16)	2316	120	250	Temperature at which cooling is interlocked
REG_COOLER_CIRC_PUMP_START_T	I	Holding Register (Function 03/06/16)	2314	0	200	Temperature at which the cooler circulation pump is started
REG_COOLER_CIRC_PUMP_STOP_DELAY	I	Holding Register (Function 03/06/16)	2317	0	60	Off time delay for the cooler circulation pump in minutes
REG_OUTPUT_Y3_CIRC_PUMP	I	Read Input Register (Function 04)	14302			Cooler circulation pump output
REG_OUTPUT_Y3_ANALOG	I	Read Input Register (Function 04)	14201	0	100	Cooler AO state.
REG_OUTPUT_Y3_DIGITAL	I	Read Input Register (Function 04)	14202	0	1	Cooler DO state:0: Output not active1: Output active

2.7 Heater

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_HEATER_CIRC_PUMP_START_T	I*	Holding Register (Function 03/06/16)	2113	0	200	Temperature at which the Heater circulation pump is started
REG_HEATER_CIRC_PUMP_STOP_DELAY	I	Holding Register (Function 03/06/16)	2122	0	60	Off time delay for the heater circulation pump in minutes
REG_OUTPUT_Y1_CIRC_PUMP	I	Read Input Register (Function 04)	14301			Heating circulation pump output
REG_SPEED_ELECTRICAL_HEATER_HOT_ COUNTER	I	Read Input Register (Function 04)	1357			Electrical Heater hot counter. Count down from 120 sec.
REG_FAN_SPEED_AFTER_HEATER_ COOLING_DOWN_SAF	I	Read Input Register (Function 04)	1358	0	100	Supply Air Fan Speed Level After Heater Cooling Down
REG_FAN_SPEED_AFTER_HEATER_ COOLING_DOWN_EAF	I	Read Input Register (Function 04)	1359	0	100	Extract Air Fan Speed Level After Heater Cooling Down
REG_FUNCTION_ACTIVE_HEATER_COOL_ DOWN	I	Read Input Register (Function 04)	3113	0	1	Active Heater Cool Down
REG_OUTPUT_TRIAC_CONFIGURED	I	Holding Register (Function 03/06/16)	13201	0	1	Indicates if the TRIAC shall be used
REG_PWM_TRIAC_OUTPUT	I	Read Input Register (Function 04)	2149	0	100	TRIAC after manual override
REG_OUTPUT_TRIAC	I	Read Input Register (Function 04)	14381	0	1	TRIAC control signal
REG_OUTPUT_Y1_ANALOG	I	Read Input Register (Function 04)	14101	0	100	Heater AO state.
REG_OUTPUT_Y1_DIGITAL	I	Read Input Register (Function 04)	14102	0	1	Heater DO state:0: Output not active1: Output active

2.8 Extra Controller

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_EXTRA_CONTROLLER_CIRC_PUMP_ START_T	I*	Holding Register (Function 03/06/16)	2404	0	200	Start temperature for extra controller circulation pump
REG_EXTRA_CONTROLLER_CIRC_PUMP_ STOP_DELAY	I	Holding Register (Function 03/06/16)	2405	0	60	Off time delay for the extra controller circulation pump in minutes
REG_OUTPUT_Y4_CIRC_PUMP	I	Read Input Register (Function 04)	14304			Extra controller circulation pump output
REG_EXTRA_CONTROLLER_SET_PI_ SETPOINT	I*	Holding Register (Function 03/06/16)	2403	-300	400	Set point value for the extra controller PI regulator

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Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_EXTRA_CONTROLLER_PREHEATER_SETPOINT_TYPE	I	Holding Register (Function 03/06/16)	2418	0	1	Temperature setpoint for the preheater.0: Auto1: Manual
REG_SENSOR_DI_EXTRA_CONTROLLER_EMT	I	Read Input Register (Function 04)	12310	0	1	Extra controller EMT input value
REG_OUTPUT_Y4_ANALOG	I	Read Input Register (Function 04)	14203	0	100	Extra controller AO state.
REG_OUTPUT_Y4_DIGITAL	I	Read Input Register (Function 04)	14204	0	1	Extra controller DO state:0: Output not active1: Output active

2.9   Change-over (Heating/Cooling)

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_CHANGE_OVER_CIRC_PUMP_START_T	I*	Holding Register (Function 03/06/16)	2451	0	200	Start temperature for the change-over circulation pump
REG_CHANGE_OVER_CIRC_PUMP_STOP_DELAY	I	Holding Register (Function 03/06/16)	2452	0	60	Off time delay for the change-over circulation pump in minutes
REG_OUTPUT_Y1_Y3_CIRC_PUMP	I	Read Input Register (Function 04)	14303			Change-over circulation pump output

2.10   Moisture transfer control

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_HEAT_EXCHANGER_RH_TRANSFER_CTRL_ENABLED	I	Read Input Register (Function 04)	2147			Indicates if RH trasnfer control shall be applied
REG_ROTOR_RH_TRANSFER_CTRL_PBAND	I	Holding Register (Function 03/06/16)	2201	100-0	40	Pband setting for RH transfer control
REG_ROTOR_RH_TRANSFER_CTRL_ITIME	I	Holding Register (Function 03/06/16)	2202	120	0	Itime setting for RH transfer control
REG_ROTOR_RH_TRANSFER_CTRL_SETPOINT	I	Holding Register (Function 03/06/16)	2203	100	45	Set point setting for RH transfer control
REG_ROTOR_RH_TRANSFER_CTRL_ON_OFF	I	Holding Register (Function 03/06/16)	2204	1	1	Enabling of humidity transfer control

2.11   Cooling recovery

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_COOLER_RECOVERY_LIMIT_T	I	Holding Register (Function 03/06/16)	2315	0	100	Temperature at which cooling recovery is allowed
REG_HEAT_EXCHANGER_COOLING_RECOVERY_ON_OFF	I	Holding Register (Function 03/06/16)	2134	0	1	Enabling of cooling recovery

2.12   ECO mode

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_ECO_T_Y1_OFFSET	I*	Holding Register (Function 03/06/16)	2504	0	100	Temperature offset for heating during Eco mode
REG_ECO_MODE_ON_OFF	I	Holding Register (Function 03/06/16)	2505	0	1	Enabling of eco mode
REG_ECO_FUNCTION_ACTIVE	I	Read Input Register (Function 04)	2506	0	1	Indicates if conditions for ECO mode are active (low temperature)

2.13 Free Cooling

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FREE_COOLING_ON_OFF	I	Holding Register (Function 03/06/16)	4101		1	Indicates if free cooling is enabled
REG_FREE_COOLING_OUTDOOR_ DAYTIME_T	I*	Holding Register (Function 03/06/16)	4102	120	300	Minimum of highest daytime temperature for start of free cooling.
REG_FREE_COOLING_OUTDOOR_ NIGHTTIME_DEACTIVATION_HIGH_T_ LIMIT	I*	Holding Register (Function 03/06/16)	4103	70	300	Highest night temperature limit for termination free cooling
REG_FREE_COOLING_OUTDOOR_ NIGHTTIME_DEACTIVATION_LOW_T_ LIMIT	I*	Holding Register (Function 03/06/16)	4104	70	300	Lowest night temperature limit for termination free cooling
REG_FREE_COOLING_ROOM_CANCEL_T	I*	Holding Register (Function 03/06/16)	4105	120	300	Lowest temperature room temperature for termination of free cooling
REG_FREE_COOLING_START_TIME_H	I	Holding Register (Function 03/06/16)	4106			Start time of free cooling night-period, hour. Valid range is from 0 to 8 and from 21 to 23.
REG_FREE_COOLING_START_TIME_M	I	Holding Register (Function 03/06/16)	4107	0	59	Start time of free cooling night-period, Minute
REG_FREE_COOLING_END_TIME_H	I	Holding Register (Function 03/06/16)	4108			End time of free cooling night-period, hour. Valid range is from 0 to 8 and from 21 to 23.
REG_FREE_COOLING_END_TIME_M	I	Holding Register (Function 03/06/16)	4109	0	59	End time of free cooling night-period, Minute
REG_FREE_COOLING_ACTIVE	I	Read Input Register (Function 04)	4111	0	1	Indicates if free cooling is being performed
REG_FREE_COOLING_MIN_SPEED_ LEVEL_SAF	I	Holding Register (Function 03/06/16)	4112	3	5	Minimum speed level during free cooling, SAF.3: Normal4: High5: Maximum
REG_FREE_COOLING_MIN_SPEED_ LEVEL_EAF	I	Holding Register (Function 03/06/16)	4113	3	5	Minimum speed level during free cooling, EAF.3: Normal4: High5: Maximum

2.14 Week Schedule

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FREE_COOLING_ON_OFF	I	Holding Register (Function 03/06/16)	4101		1	Indicates if free cooling is enabled
REG_WS_T_OFFSET_ACTIVE	I*	Holding Register (Function 03/06/16)	5001	-100	0	Temperature offset during active week schedule.
REG_WS_T_OFFSET_INACTIVE	I*	Holding Register (Function 03/06/16)	5002	-100	0	Temperature offset during inactive week schedule.
REG_WS_DAY1_PRD1_START_H	I	Holding Register (Function 03/06/16)	5003	0	23	Monday, Period 1, start
REG_WS_DAY1_PRD1_START_M	I	Holding Register (Function 03/06/16)	5004	0	59	
REG_WS_DAY1_PRD1_END_H	I	Holding Register (Function 03/06/16)	5005	0	23	Monday, Period 1, end
REG_WS_DAY1_PRD1_END_M	I	Holding Register (Function 03/06/16)	5006	0	59	
REG_WS_DAY1_PRD2_START_H	I	Holding Register (Function 03/06/16)	5007	0	23	Monday, Period 2, start
REG_WS_DAY1_PRD2_START_M	I	Holding Register (Function 03/06/16)	5008	0	59	
REG_WS_DAY1_PRD2_END_H	I	Holding Register (Function 03/06/16)	5009	0	23	Monday, Period 2, end
REG_WS_DAY1_PRD2_END_M	I	Holding Register (Function 03/06/16)	5010	0	59	
REG_WS_DAY2_PRD1_START_H	I	Holding Register (Function 03/06/16)	5011	0	23	Tuesday, Period 1, start
REG_WS_DAY2_PRD1_START_M	I	Holding Register (Function 03/06/16)	5012	0	59	

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Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_WS_DAY2_PRD1_END_H	I	Holding Register (Function 03/06/16)	5013	0	23	Tuesday, Period 1, end
REG_WS_DAY2_PRD1_END_M	I	Holding Register (Function 03/06/16)	5014	0	59	
REG_WS_DAY2_PRD2_START_H	I	Holding Register (Function 03/06/16)	5015	0	23	Tuesday, Period 2, start
REG_WS_DAY2_PRD2_START_M	I	Holding Register (Function 03/06/16)	5016	0	59	
REG_WS_DAY2_PRD2_END_H	I	Holding Register (Function 03/06/16)	5017	0	23	Tuesday, Period 2, end
REG_WS_DAY2_PRD2_END_M	I	Holding Register (Function 03/06/16)	5018	0	59	
REG_WS_DAY3_PRD1_START_H	I	Holding Register (Function 03/06/16)	5019	0	23	Wednesday, Period 1, start
REG_WS_DAY3_PRD1_START_M	I	Holding Register (Function 03/06/16)	5020	0	59	
REG_WS_DAY3_PRD1_END_H	I	Holding Register (Function 03/06/16)	5021	0	23	Wednesday, Period 1, end
REG_WS_DAY3_PRD1_END_M	I	Holding Register (Function 03/06/16)	5022	0	59	
REG_WS_DAY3_PRD2_START_H	I	Holding Register (Function 03/06/16)	5023	0	23	Wednesday, Period 2, start
REG_WS_DAY3_PRD2_START_M	I	Holding Register (Function 03/06/16)	5024	0	59	
REG_WS_DAY3_PRD2_END_H	I	Holding Register (Function 03/06/16)	5025	0	23	Wednesday, Period 2, end
REG_WS_DAY3_PRD2_END_M	I	Holding Register (Function 03/06/16)	5026	0	59	
REG_WS_DAY4_PRD1_START_H	I	Holding Register (Function 03/06/16)	5027	0	23	Thursday, Period 1, start
REG_WS_DAY4_PRD1_START_M	I	Holding Register (Function 03/06/16)	5028	0	59	
REG_WS_DAY4_PRD1_END_H	I	Holding Register (Function 03/06/16)	5029	0	23	Thursday, Period 1, end
REG_WS_DAY4_PRD1_END_M	I	Holding Register (Function 03/06/16)	5030	0	59	
REG_WS_DAY4_PRD2_START_H	I	Holding Register (Function 03/06/16)	5031	0	23	Thursday, Period 2, start
REG_WS_DAY4_PRD2_START_M	I	Holding Register (Function 03/06/16)	5032	0	59	
REG_WS_DAY4_PRD2_END_H	I	Holding Register (Function 03/06/16)	5033	0	23	Thursday, Period 2, end
REG_WS_DAY4_PRD2_END_M	I	Holding Register (Function 03/06/16)	5034	0	59	
REG_WS_DAY5_PRD1_START_H	I	Holding Register (Function 03/06/16)	5035	0	23	Friday, Period 1, start
REG_WS_DAY5_PRD1_START_M	I	Holding Register (Function 03/06/16)	5036	0	59	
REG_WS_DAY5_PRD1_END_H	I	Holding Register (Function 03/06/16)	5037	0	23	Friday, Period 1, end
REG_WS_DAY5_PRD1_END_M	I	Holding Register (Function 03/06/16)	5038	0	59	
REG_WS_DAY5_PRD2_START_H	I	Holding Register (Function 03/06/16)	5039	0	23	Friday, Period 2, start
REG_WS_DAY5_PRD2_START_M	I	Holding Register (Function 03/06/16)	5040	0	59	
REG_WS_DAY5_PRD2_END_H	I	Holding Register (Function 03/06/16)	5041	0	23	Friday, Period 2, end
REG_WS_DAY5_PRD2_END_M	I	Holding Register (Function 03/06/16)	5042	0	59	

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_WS_DAY6_PRD1_START_H	I	Holding Register (Function 03/06/16)	5043	0	23	Saturday, Period 1, start
REG_WS_DAY6_PRD1_START_M	I	Holding Register (Function 03/06/16)	5044	0	59	
REG_WS_DAY6_PRD1_END_H	I	Holding Register (Function 03/06/16)	5045	0	23	Saturday, Period 1, end
REG_WS_DAY6_PRD1_END_M	I	Holding Register (Function 03/06/16)	5046	0	59	
REG_WS_DAY6_PRD2_START_H	I	Holding Register (Function 03/06/16)	5047	0	23	Saturday, Period 2, start
REG_WS_DAY6_PRD2_START_M	I	Holding Register (Function 03/06/16)	5048	0	59	
REG_WS_DAY6_PRD2_END_H	I	Holding Register (Function 03/06/16)	5049	0	23	Saturday, Period 2, end
REG_WS_DAY6_PRD2_END_M	I	Holding Register (Function 03/06/16)	5050	0	59	
REG_WS_DAY7_PRD1_START_H	I	Holding Register (Function 03/06/16)	5051	0	23	Sunday, Period 1, start
REG_WS_DAY7_PRD1_START_M	I	Holding Register (Function 03/06/16)	5052	0	59	
REG_WS_DAY7_PRD1_END_H	I	Holding Register (Function 03/06/16)	5053	0	23	Sunday, Period 1, end
REG_WS_DAY7_PRD1_END_M	I	Holding Register (Function 03/06/16)	5054	0	59	
REG_WS_DAY7_PRD2_START_H	I	Holding Register (Function 03/06/16)	5055	0	23	Sunday, Period 2, start
REG_WS_DAY7_PRD2_START_M	I	Holding Register (Function 03/06/16)	5056	0	59	
REG_WS_DAY7_PRD2_END_H	I	Holding Register (Function 03/06/16)	5057	0	23	Sunday, Period 2, end
REG_WS_DAY7_PRD2_END_M	I	Holding Register (Function 03/06/16)	5058	0	59	
REG_WS_ACTIVE	I	Read Input Register (Function 04)	5059	0	1	Indicates that the current time lays within the indicated intervals
REG_WS_FAN_LEVEL_SCHEDULED	I	Holding Register (Function 03/06/16)	5060	1	5	Fan speed levels for SAF and EAF during active week schedule.1: Off(1)2: Low3: Normal4: High5: Demand(2)(1): Off available if Manual Fan Stop is enabled.(2): Demand available if demand control active or external fan control enabled.
REG_WS_FAN_LEVEL_UNSCHEDULED	I	Holding Register (Function 03/06/16)	5061	1	5	Fan speed levels for SAF and EAF during inactive week schedule.1: Off(1)2: Low3: Normal4: High5: Demand(2)(1): Off available if Manual Fan Stop is enabled.(2): Demand available if demand control active or external fan control enabled.
REG_WS_DAY1_PRD1_ENABLED	I	Holding Register (Function 03/06/16)	5101	0	1	Flag indicating if this period is enabled.
REG_WS_DAY1_PRD2_ENABLED	I	Holding Register (Function 03/06/16)	5102	0	1	Flag indicating if this period is enabled.
REG_WS_DAY2_PRD1_ENABLED	I	Holding Register (Function 03/06/16)	5103	0	1	Flag indicating if this period is enabled.
REG_WS_DAY2_PRD2_ENABLED	I	Holding Register (Function 03/06/16)	5104	0	1	Flag indicating if this period is enabled.
REG_WS_DAY3_PRD1_ENABLED	I	Holding Register (Function 03/06/16)	5105	0	1	Flag indicating if this period is enabled.
REG_WS_DAY3_PRD2_ENABLED	I	Holding Register (Function 03/06/16)	5106	0	1	Flag indicating if this period is enabled.
REG_WS_DAY4_PRD1_ENABLED	I	Holding Register (Function 03/06/16)	5107	0	1	Flag indicating if this period is enabled.
REG_WS_DAY4_PRD2_ENABLED	I	Holding Register (Function 03/06/16)	5108	0	1	Flag indicating if this period is enabled.

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Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_WS_DAY5_PRD1_ENABLED	I	Holding Register (Function 03/06/16)	5109	0	1	Flag indicating if this period is enabled.
REG_WS_DAY5_PRD2_ENABLED	I	Holding Register (Function 03/06/16)	5110	0	1	Flag indicating if this period is enabled.
REG_WS_DAY6_PRD1_ENABLED	I	Holding Register (Function 03/06/16)	5111	0	1	Flag indicating if this period is enabled.
REG_WS_DAY6_PRD2_ENABLED	I	Holding Register (Function 03/06/16)	5112	0	1	Flag indicating if this period is enabled.
REG_WS_DAY7_PRD1_ENABLED	I	Holding Register (Function 03/06/16)	5113	0	1	Flag indicating if this period is enabled.
REG_WS_DAY7_PRD2_ENABLED	I	Holding Register (Function 03/06/16)	5114	0	1	Flag indicating if this period is enabled.

2.15   Time and Date

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_TIME_YEAR	I	Holding Register (Function 03/06/16)	6001	0	2999	Current time
REG_TIME_MONTH	I	Holding Register (Function 03/06/16)	6002	1	12	Current time
REG_TIME_DAY	I	Holding Register (Function 03/06/16)	6003	1	31	Current time
REG_TIME_HOUR	I	Holding Register (Function 03/06/16)	6004	0	23	Current time
REG_TIME_MINUTE	I	Holding Register (Function 03/06/16)	6005	0	59	Current time
REG_TIME_SECOND	I	Holding Register (Function 03/06/16)	6006	0	59	Current time
REG_TIME_AUTO_SUM_WIN	I	Holding Register (Function 03/06/16)	6007	0	1	Flag indicating if DST is enabled.0: Daylight saving time not enabled1: Daylight saving time enabled
REG_HOUR_FORMAT	I	Holding Register (Function 03/06/16)	6008	0	1	Indicates the presentation of time in the HMI. 24H/12H
REG_DAY_OF_THE_WEEK	I	Read Input Register (Function 04)	6009	0	6	Monday (0)...Sunday (6)
REG_DST_PERIOD_ACTIVE	I	Read Input Register (Function 04)	6010	0	1	
REG_TIME_RTC_SECONDS_L	I	Read Input Register (Function 04)	6011			Now time in seconds. Lower 16 bits.
REG_TIME_RTC_SECONDS_H	I	Read Input Register (Function 04)	6012			Now time in seconds. Higher 16 bits.
REG_SYSTEM_START_UP_TIME_L	I	Read Input Register (Function 04)	6021			
REG_SYSTEM_START_UP_TIME_H	I	Read Input Register (Function 04)	6022			
REG_TIME_RTC	I	Read Input Register (Function 04)	6101			RTC value in seconds, highest 16 bits

2.16   Filter replacement

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FILTER_PERIOD	I	Holding Register (Function 03/06/16)	7001	3	15	Filter replacement time in months
REG_FILTER_REPLACEMENT_TIME_L	I	Holding Register (Function 03/06/16)	7002			Timestamp of latest filter replcement, lower 16 bits

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FILTER_REPLACEMENT_TIME_H	I	Holding Register (Function 03/06/16)	7003			Timestamp of latest filter replcement, higher 16 bits
REG_FILTER_PERIOD_SET	I	Read Input Register (Function 04)	7004			Indicates that the LastFilterReplacementTime shall be set Now.
REG_FILTER_REMAINING_TIME_L	I	Read Input Register (Function 04)	7005			Remaining filter time in seconds, lower 16 bits.
REG_FILTER_REMAINING_TIME_H	I	Read Input Register (Function 04)	7006			Remaining filter time in seconds, higher 16 bits.

2.17 Analog Input values (Temperatures, CO2, RH)

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_SENSOR_FPT	I*	Holding Register (Function 03/06/16)	12101	-400	800	Frost Protection Temperature sensor value (Water Heater)
REG_SENSOR_OAT	I*	Holding Register (Function 03/06/16)	12102	-400	800	Outdoor Air Temperature sensor (standard)
REG_SENSOR_SAT	I*	Holding Register (Function 03/06/16)	12103	-400	800	Supply Air Temperature sensor (standard)
REG_SENSOR_RAT	I*	Holding Register (Function 03/06/16)	12104	-400	800	Room Air Temperature sensor (accessory)
REG_SENSOR_EAT	I*	Holding Register (Function 03/06/16)	12105	-400	800	Extract Air Temperature sensor (accessory)
REG_SENSOR_ECT	I*	Holding Register (Function 03/06/16)	12106	-400	800	Extra Controller Temperature sensor (accessory)
REG_SENSOR_EFT	I*	Holding Register (Function 03/06/16)	12107	-400	800	Efficiency temperature sensor (accessory)
REG_SENSOR_OHT	I*	Holding Register (Function 03/06/16)	12108	-400	800	Over Heat Temperature sensor (Electrical Heater)
REG_SENSOR_RHS	I	Holding Register (Function 03/06/16)	12109	0	100	Relative Humidity Sensor (Accessory)
REG_SENSOR_CO2S	I	Holding Register (Function 03/06/16)	12115	0	2000	CO2 value (accessory)
REG_SENSOR_PDM_EAT_VALUE	I	Holding Register (Function 03/06/16)	12544	-400	800	PDM EAT sensor value (standard)
REG_SENSOR_RHS_PDM	I	Holding Register (Function 03/06/16)	12136	0	100	PDM RHS sensor value (standard)
REG_SENSOR_CO2S_1	I	Holding Register (Function 03/06/16)	12151	0	2000	CO2 sensor value - UI1 (accessory)
REG_SENSOR_CO2S_2	I	Holding Register (Function 03/06/16)	12152	0	2000	CO2 sensor value - UI2 (accessory)
REG_SENSOR_CO2S_3	I	Holding Register (Function 03/06/16)	12153	0	2000	CO2 sensor value - UI3 (accessory)
REG_SENSOR_CO2S_4	I	Holding Register (Function 03/06/16)	12154	0	2000	CO2 sensor value - UI4 (accessory)
REG_SENSOR_CO2S_5	I	Holding Register (Function 03/06/16)	12155	0	2000	CO2 sensor value - UI5 (accessory)
REG_SENSOR_RHS_1	I	Holding Register (Function 03/06/16)	12161	0	100	RH sensor value - UI1 (accessory)
REG_SENSOR_RHS_2	I	Holding Register (Function 03/06/16)	12162	0	100	RH sensor value - UI2 (accessory)
REG_SENSOR_RHS_3	I	Holding Register (Function 03/06/16)	12163	0	100	RH sensor value - UI3 (accessory)
REG_SENSOR_RHS_4	I	Holding Register (Function 03/06/16)	12164	0	100	RH sensor value - UI4 (accessory)
REG_SENSOR_RHS_5	I	Holding Register (Function 03/06/16)	12165	0	100	RH sensor value - UI5 (accessory)

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Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_INPUT_ANALOG_UI_1	I	Holding Register (Function 03/06/16)	12011			mV
REG_INPUT_ANALOG_UI_2	I	Holding Register (Function 03/06/16)	12012			mV
REG_INPUT_ANALOG_UI_3	I	Holding Register (Function 03/06/16)	12013			mV
REG_INPUT_ANALOG_UI_4	I	Holding Register (Function 03/06/16)	12014			mV
REG_INPUT_ANALOG_UI_5	I	Holding Register (Function 03/06/16)	12015			mV
REG_INPUT_DIGITAL_UI_1	I	Holding Register (Function 03/06/16)	12021	0	1	State of UI1
REG_INPUT_DIGITAL_UI_2	I	Holding Register (Function 03/06/16)	12022	0	1	State of UI2
REG_INPUT_DIGITAL_UI_3	I	Holding Register (Function 03/06/16)	12023	0	1	State of UI3
REG_INPUT_DIGITAL_UI_4	I	Holding Register (Function 03/06/16)	12024	0	1	State of UI4
REG_INPUT_DIGITAL_UI_5	I	Holding Register (Function 03/06/16)	12025	0	1	State of UI5

2.18   Digital Input functions

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_SENSOR_RGS	I	Read Input Register (Function 04)	12112	0	1	Rotating guard Sensor input
REG_SENSOR_DI_EXTERNAL_STOP	I	Read Input Register (Function 04)	12308	0	1	External Stop input value
REG_SENSOR_DI_LOAD_DETECTED	I	Read Input Register (Function 04)	12309	0	1	Load Detected input value
REG_SENSOR_DI_FIRE_ALARM	I	Read Input Register (Function 04)	12311	0	1	Fire Alarm input value
REG_SENSOR_DI_CHANGE_OVER_FEEDBACK	I	Read Input Register (Function 04)	12312	0	1	Change over feedback value
REG_DI_CONNECTION_1	I	Holding Register (Function 03/06/16)	11401	0	18	Indicates what kind of DI functionality is connected to DI1.0: None /Away/ BYP/ Vacuum Cleaner/ Cooker Hood/ Crowded/ EMT/ External Stop/ Extra Controller Alarm/ Fireplace/ Holiday/ Refresh/ RGS/ Change Over Feedback/ 14: Fire Alarm/ ConfigurableDI1 / ConfigurableDI2 / ConfigurableDI3 / 18: Pressure Guard
REG_DI_CONNECTION_2	I	Holding Register (Function 03/06/16)	11402	0	18	Indicates what kind of DI functionality is connected to DI1.0: None /Away/ BYP/ Vacuum Cleaner/ Cooker Hood/ Crowded/ EMT/ External Stop/ Extra Controller Alarm/ Fireplace/ Holiday/ Refresh/ RGS/ Change Over Feedback/ 14: Fire Alarm/ ConfigurableDI1 / ConfigurableDI2 / ConfigurableDI3 / 18: Pressure Guard
REG_DI_CFG_POLARITY_1	I	Holding Register (Function 03/06/16)	11421	0	1	Polarity of DI1.0: NO1: NC
REG_DI_CFG_POLARITY_2	I	Holding Register (Function 03/06/16)	11422	0	1	Polarity of DI1.0: NO1: NC
REG_INPUT_DIGITAL_DI_1	I	Read Input Register (Function 04)	12031	0	1	Boolean
REG_INPUT_DIGITAL_DI_2	I	Read Input Register (Function 04)	12032	0	1	Boolean

2.19 Output values

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_SENSOR_RGS	I	Read Input Register (Function 04)	12112	0	1	Rotating guard Sensor input
REG_DO1_AFTER_MUX	I	Read Input Register (Function 04)	13301	0	1	Digital output after multiplexer
REG_DO2_AFTER_MUX	I	Read Input Register (Function 04)	13302	0	1	Digital output after multiplexer
REG_DO3_AFTER_MUX	I	Read Input Register (Function 04)	13303	0	1	Digital output after multiplexer
REG_DO4_AFTER_MUX	I	Read Input Register (Function 04)	13304	0	1	Digital output after multiplexer
REG_AO1_AFTER_MUX	I	Read Input Register (Function 04)	13311	0	100	Analog output after multiplexer
REG_AO2_AFTER_MUX	I	Read Input Register (Function 04)	13312	0	100	Analog output after multiplexer
REG_AO3_AFTER_MUX	I	Read Input Register (Function 04)	13313	0	100	Analog output after multiplexer
REG_AO4_AFTER_MUX	I	Read Input Register (Function 04)	13314	0	100	Analog output after multiplexer
REG_AO5_AFTER_MUX	I	Read Input Register (Function 04)	13315	0	100	Analog output after multiplexer
REG_OUTPUT_OUTDOOR_EXTRACT_DAMPER	I	Read Input Register (Function 04)	14004	0	1	Indicates if Outdoor/Exhaust air damper signal is On/Off
REG_OUTPUT_Y2_ANALOG	I	Read Input Register (Function 04)	14103	0	100	Heat Exchanger AO state.
REG_OUTPUT_Y2_DIGITAL	I	Read Input Register (Function 04)	14104	0	1	Heat Exchanger DO state.0: Output not active1: Output active
REG_OUTPUT_AO1	I	Read Input Register (Function 04)	14351			Voltage signal from AO1
REG_OUTPUT_AO2	I	Read Input Register (Function 04)	14352			Voltage signal from AO2
REG_OUTPUT_AO3	I	Read Input Register (Function 04)	14353			Voltage signal from AO3
REG_OUTPUT_AO4	I	Read Input Register (Function 04)	14354			Voltage signal from AO4
REG_OUTPUT_AO5	I	Read Input Register (Function 04)	14355			Voltage signal from AO5
REG_OUTPUT_DO1	I	Read Input Register (Function 04)	14361	0	1	State of DO1
REG_OUTPUT_DO2	I	Read Input Register (Function 04)	14362	0	1	State of DO2
REG_OUTPUT_DO3	I	Read Input Register (Function 04)	14363	0	1	State of DO3
REG_OUTPUT_DO4	I	Read Input Register (Function 04)	14364	0	1	State of DO4

2.20 Alarms

Symbolic register name	Sig.	Modbus Reg. type	Modbus Adr.	Min	Max	Description
REG_FILTER_ALARM_WAS_DETECTED	I	Read Input Register (Function 04)	7007			Indicates if the filter warning alarm was generated.
REG_OUTPUT_ALARM	I	Read Input Register (Function 04)	14003	0	1	Sum Alarm DO 0: Output not active 1: Output active

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Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_ALARM_SAF_CTRL_ALARM	I	Read Input Register (Function 04)	15002	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_SAF_CTRL_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15003	0	1	Signal to clear the alarm
REG_ALARM_EAF_CTRL_ALARM	I	Read Input Register (Function 04)	15009	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_EAF_CTRL_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15010	0	1	Signal to clear the alarm
REG_ALARM_FROST_PROT_ALARM	I	Read Input Register (Function 04)	15016	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_FROST_PROT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15017	0	1	Signal to clear the alarm
REG_ALARM_DEFROSTING_ALARM	I	Read Input Register (Function 04)	15023	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_DEFROSTING_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15024	0	1	Signal to clear the alarm
REG_ALARM_SAF_RPM_ALARM	I	Read Input Register (Function 04)	15030	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_SAF_RPM_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15031	0	1	Signal to clear the alarm
REG_ALARM_EAF_RPM_ALARM	I	Read Input Register (Function 04)	15037	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_EAF_RPM_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15038	0	1	Signal to clear the alarm
REG_ALARM_FPT_ALARM	I	Read Input Register (Function 04)	15058	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_FPT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15059	0	1	Signal to clear the alarm
REG_ALARM_OAT_ALARM	I	Read Input Register (Function 04)	15065	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_OAT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15066	0	1	Signal to clear the alarm
REG_ALARM_SAT_ALARM	I	Read Input Register (Function 04)	15072	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_SAT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15073	0	1	Signal to clear the alarm
REG_ALARM_RAT_ALARM	I	Read Input Register (Function 04)	15079	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_ALARM_RAT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15080	0	1	Signal to clear the alarm
REG_ALARM_EAT_ALARM	I	Read Input Register (Function 04)	15086	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_EAT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15087	0	1	Signal to clear the alarm
REG_ALARM_ECT_ALARM	I	Read Input Register (Function 04)	15093	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_ECT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15094	0	1	Signal to clear the alarm
REG_ALARM_EFT_ALARM	I	Read Input Register (Function 04)	15100	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_EFT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15101	0	1	Signal to clear the alarm
REG_ALARM_OHT_ALARM	I	Read Input Register (Function 04)	15107	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_OHT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15108	0	1	Signal to clear the alarm
REG_ALARM_EMT_ALARM	I	Read Input Register (Function 04)	15114	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_EMT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15115	0	1	Signal to clear the alarm
REG_ALARM_RGS_ALARM	I	Read Input Register (Function 04)	15121	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_RGS_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15122	0	1	Signal to clear the alarm
REG_ALARM_BYS_ALARM	I	Read Input Register (Function 04)	15128	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_BYS_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15129	0	1	Signal to clear the alarm
REG_ALARM_SECONDARY_AIR_ALARM	I	Read Input Register (Function 04)	15135	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_SECONDARY_AIR_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15136	0	1	Signal to clear the alarm
REG_ALARM_FILTER_ALARM	I	Read Input Register (Function 04)	15142	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_FILTER_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15143	0	1	Signal to clear the alarm

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Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_ALARM_EXTRA_CONTROLLER_ ALARM	I	Read Input Register (Function 04)	15149	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_EXTRA_CONTROLLER_ CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15150	0	1	Signal to clear the alarm
REG_ALARM_EXTERNAL_STOP_ALARM	I	Read Input Register (Function 04)	15156	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_EXTERNAL_STOP_CLEAR_ ALARM	I	Holding Register (Function 03/06/16)	15157	0	1	Signal to clear the alarm
REG_ALARM_RH_ALARM	I	Read Input Register (Function 04)	15163	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_RH_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15164	0	1	Signal to clear the alarm
REG_ALARM_CO2_ALARM	I	Read Input Register (Function 04)	15170	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_CO2_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15171	0	1	Signal to clear the alarm
REG_ALARM_LOW_SAT_ALARM	I	Read Input Register (Function 04)	15177	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_LOW_SAT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15178	0	1	Signal to clear the alarm
REG_ALARM_MANUAL_OVERRIDE_ OUTPUTS_ALARM	I	Read Input Register (Function 04)	15502	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_MANUAL_OVERRIDE_ OUTPUTS_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15503	0	1	Signal to clear the alarm
REG_ALARM_PDM_RHS_ALARM	I	Read Input Register (Function 04)	15509	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_PDM_RHS_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15510	0	1	Signal to clear the alarm
REG_ALARM_PDM_EAT_ALARM	I	Read Input Register (Function 04)	15516	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_PDM_EAT_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15517	0	1	Signal to clear the alarm
REG_ALARM_MANUAL_FAN_STOP_ ALARM	I	Read Input Register (Function 04)	15523	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_MANUAL_FAN_STOP_ CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15524	0	1	Signal to clear the alarm
REG_ALARM_OVERHEAT_ TEMPERATURE_ALARM	I	Read Input Register (Function 04)	15530	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_ALARM_OVERHEAT_TEMPERATURE_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15531	0	1	Signal to clear the alarm
REG_ALARM_FIRE_ALARM_ALARM	I	Read Input Register (Function 04)	15537	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_FIRE_ALARM_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15538	0	1	Signal to clear the alarm
REG_ALARM_FILTER_WARNING_ALARM	I	Read Input Register (Function 04)	15544	0	3	Alarm active/inactive. 0: Inactive 1: Active 2: Waiting 3: Cleared Error Active
REG_ALARM_FILTER_WARNING_CLEAR_ALARM	I	Holding Register (Function 03/06/16)	15545	0	1	Signal to clear the alarm
REG_ALARM_FILTER_WARNING_ALARM_ERROR_DURATION_COUNTER	I	Read Input Register (Function 04)	15549			Counter for delay
REG_ALARM_TYPE_A	I	Read Input Register (Function 04)	15901	0	1	Indicates if an alarm Type A is active
REG_ALARM_TYPE_B	I	Read Input Register (Function 04)	15902	0	1	Indicates if an alarm Type B is active
REG_ALARM_TYPE_C	I	Read Input Register (Function 04)	15903	0	1	Indicates if an alarm Type C is active

2.21 System settings

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_PASSWD_ADMIN	I	Holding Register (Function 03/06/16)	16001			Administrator password. Bit 12-15: digit 1 Bit 8-11: digit 2 Bit 4-7: digit 3 Bit 0-3: digit 4
REG_LOCKED_USER	I	Holding Register (Function 03/06/16)	16002	0	1	Indicates if the User level is locked. 0: User menu locked 1: User menu not locked
REG_LOCKED_FILTER	I	Holding Register (Function 03/06/16)	16003	0	1	Indicates if the Filter menu is locked. 0: menu locked 1: menu not locked
REG_LOCKED_WEEK_SCHEDULE	I	Holding Register (Function 03/06/16)	16004	0	1	Indicates if the Week schedule menu is locked. 0: menu locked 1: menu not locked
REG_PASSWD_USER_LEVEL_REQUIRED	I	Holding Register (Function 03/06/16)	16051	0	1	Home screen lock
REG_PASSWD_FILTER_REQUIRED	I	Holding Register (Function 03/06/16)	16052	0	1	Filter Change menu lock
REG_PASSWD_WEEK_SCHEDULE_REQUIRED	I	Holding Register (Function 03/06/16)	16053	0	1	Week schedule menu lock
REG_PASSWD_PC_SETTINGS	I	Holding Register (Function 03/06/16)	16061			
REG_PASSWD_PC_UNLOCKED	I	Read Input Register (Function 04)	16062	0	1	
REG_SUW_REQUIRED	I	Holding Register (Function 03/06/16)	16101	0	1	Indicates if the start-up wizard shall be activated.

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2.22 Modbus

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_COMM_MODBUS_ADDRESS	I	Holding Register (Function 03/06/16)	17001	0	255	Modbus address of the MB. Only relevant if the MB is a modbus slave.
REG_COMM_MODBUS_BAUD_RATE	I	Holding Register (Function 03/06/16)	17002	0	10	Baudrate of the modbus connection 0=1200 1=2400 2=4800 3=9600 4=14400 5=19200 6=28800 7=38400 8=57600 9=76800 10=115200
REG_COMM_MODBUS_PARITY	I	Holding Register (Function 03/06/16)	17003	0	2	Parity setting for the modbus connection. 0: None 1: Even 2: Odd

2.23 Unit Backups

Symbolic register name	Sig.	Modbus Reg. type	Mod-bus Adr.	Min	Max	Description
REG_FACTORY_RESET	I	Holding Register (Function 03/06/16)	30101	322-8	3228	Activates setting of the parameters to their default values. Only activated by writing 3228 to this register.
REG_SET_USER_SAFE_CONFIG	I	Holding Register (Function 03/06/16)	30103	0	1	
REG_ACTIVATE_USER_SAFE_CONFIG	I	Holding Register (Function 03/06/16)	30104	0	1	
REG_USER_SAFE_CONFIG_VALID	I	Read Input Register (Function 04)	30105			
REG_SAFE_CONFIG_VALID	I	Read Input Register (Function 04)	30106			

3   Revision table

Main board software compatibility	Modbus Table Revision	Change Log
1.5.0	20180927 (Rev. 25)	-
1.6.0	20190116 (Rev. 29)	Chapter 2.3. User modesRegisters:**12316**, … , **12319** were added.**1171**, … , **1190**,**1221**, … , **1228**,**1621**, … , **1626**,**3114**, … , **3117**,**12316**, … , **12319** were addedRegisters:**1141**, … , **1144**, **1161** have increase range.Changes related to Away and Holiday User modes, and 4 new user functions added - CDI 1-3 and Pressure Guard.
		Chapter 2.5. Outdoor Airflow Compensation.Registers **1253**. **1256** … **1259** were added. Compensation starting temperature for winter is added. Summer outdoor compensation is added.
		Chapter 2.18. Digital Input Functions.Registers **11401** and **11402**.Max range changed from 14 to 18 adding new DI functions.
		Chapter 2.20. Alarms.Registers **7007**, **15544**, **15545** and **15549** added.Filter warning Alarm added.
		Chapter 2.23. Unit Backups.Registers **30103**, … , **30106** added. Registers allow to set, check and use safe user settings (store unit configuration in memory).

systemair