

Description of  
**C8**  
controller Modbus

This manual is compatible with C8 controller firmware version x.x.x.4 and above (X – does not matter).

C8 controller supports **Modbus RTU** and **Modbus TCP** protocols. Both protocols are using main commands to read and preset registers. Supported Modbus commands are presented in Table 1.

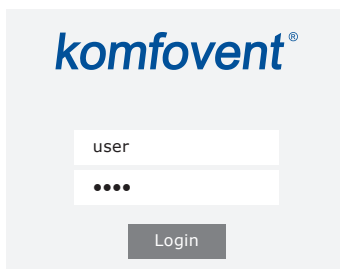
**Table 1. Supported Modbus commands**

Function code	Description
03	Read Holding Registers
06	Preset Single Register
16	Preset Multiple Registers

**Modbus RTU** protocol works via RS-485 interface. Default interface settings are presented in Table 2. Default interface settings and Modbus RTU protocol ID can be changed using the website. To change settings, connect air handling unit (AHU) to your network. Default AHU IP address is 192.168.0.60. Go to your browser and type default AHU IP address. You should see „Login“ window (Fig. 1). To login type username and password. Default username: „user“ and password: „user“.

**Table 2. Default settings of RS485 interface**

<b>Baudrate</b>	19200
<b>Word length</b>	8
<b>Parity</b>	EVEN
<b>Stop bits</b>	1



**Fig. 1. Website login window**

To find RS-485 interface settings and Modbus RTU protocol ID go to „SETTINGS“ and „CONNECTIVITY“ (Fig. 2). If you logged in, but can't open „SETTINGS“ window make sure, that JavaScript in your web browser is enabled (activated).

CONNECTIVITY

Status	Connected			
DHCP	<input type="checkbox"/>			
IP address	192	168	0	60
Subnet mask	255	255	255	0
Gateway	192	168	0	1
BACnet ID	60			
BACnet Port	47808			
Modbus RTU	Panel			

Fig. 2. Connectivity settings

If you can't see „Login“ window, make sure that:

- your device and air handling unit are connected in the same network;
- your device and air handling unit are in the same subnet;
- your proxy server and firewall isn't blocking connection;
- you typed correct IP address.

If your device is connected directly to C8 controller, make sure, that your DHCP server is disabled and your static IP is in same subnet. If you are using PC and Windows operating system, go to „Local Area Connection Properties“, go to „Internet Protocol Version 4 (TCP/IPv4) Properties“ (Fig. 3), check „Use the following IP address“ and type your static parameters, for example:

- IP address: 192.168.0.61;
- Subnet Mask: 255.255.255.0;
- Default gateway: 192.168.0.1.

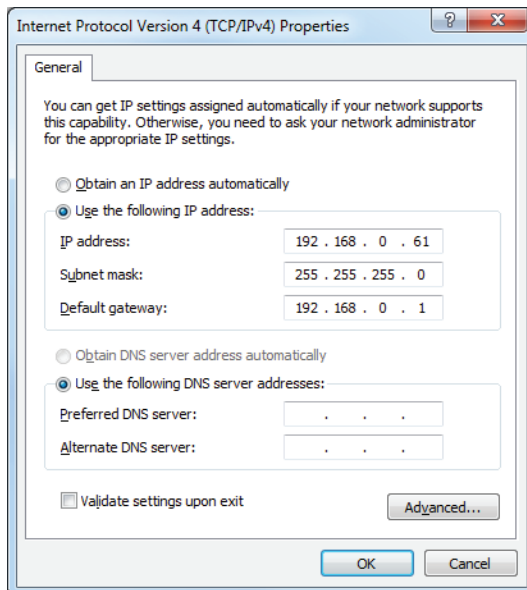
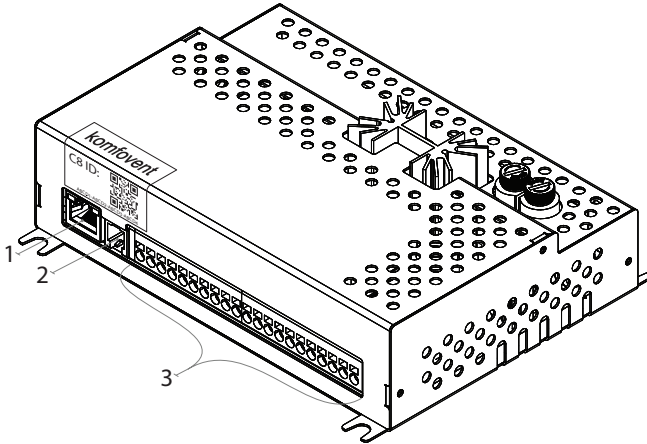


Fig. 3. Personal computer static IP address configuration

The air handling unit has external connection terminals in the control box, inside the air handling unit. Modbus A and B communication wires can be connected to 1 and 2 terminals of connection for external elements (Fig. 4, Fig. 5). To connect devices use twisted pair cable. Maximum cable length is 150 m. C8 controller ground point (any GND terminal from connection too external elements – 4, 7, 10, 12) and other device should be connected together, if distance between the RS-485 interfaces is more than 10 m. (Fig. 4, Fig. 5).



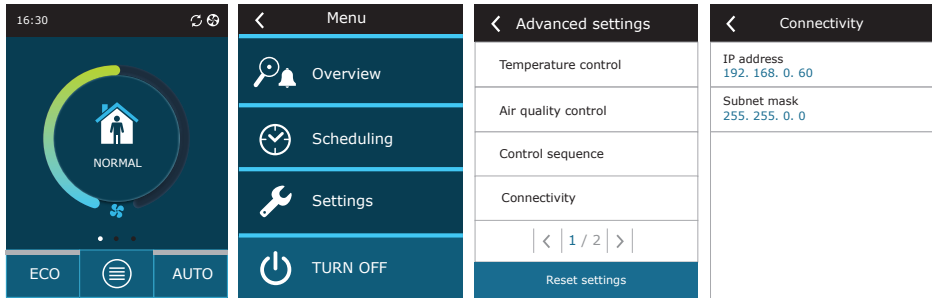
- 1. Ethernet connection of computer network or Internet
- 2. Controller panel connection
- 3. Connection of external elements

**Fig. 4.** Controller with the connection terminals

1	A	Modbus RTU	RS485
2	B		
3	+24V	Air quality sensor / Humidity sensor	B8
4	GND		
5	0..10V	Water mixing valve actuator / DX control Frost protection	AOUT
6	+24V		
7	GND		
8	0..10V	Supply air temperature sensor	B1
9	NTC		
10	GND	Return water temperature sensor	B5
11	NTC		
12	GND	General Fire alarm Priority	DIN
13	C		
14	NC		
15	NO	General Heating Cooling	DOUT
16	C		
17	NO		
18	NO	Air damper actuators Max 15W	FG1
19	~		
20	~230V		
21	N		

**Fig. 5.** Connection diagram for external elements

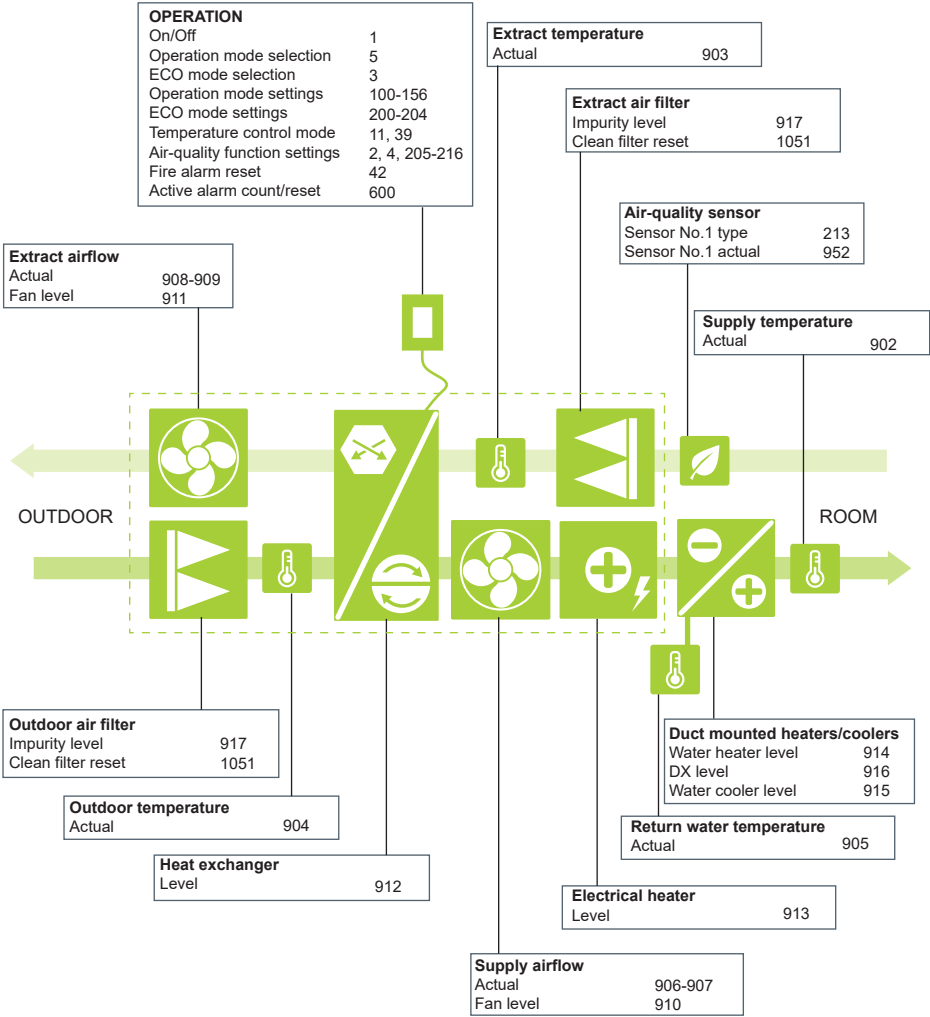
**Modbus TCP** protocol works via Ethernet interface, connection is provided to RJ-45 socket on the C8 controller (Fig. 4). Default IP address is 192.168.0.60, and port is 502. To connect C8 controller via Modbus TCP make sure, that proxy servers or firewall isn't blocking device destination IP address and 502 port is opened. Controller IP address can be changed using the website (Fig. 2). Instructions how to connect and login to website was presented at Modbus RTU section. IP address and subnet mask also can be changed using C6.1 touch panel. To find these settings click touch C6.1 panel screen, click „Menu“ button, click „Settings“ button and don't release it, for more than 5 seconds, after that „Advanced settings“ window will pop-up. Click „Connectivity“ button and here you will find IP address and subnet mask (Fig. 6). If you want to change one of these parameters, just click on it and edit.



**Fig. 6.** C6.1 touch panel connectivity settings

For connection the CAT5 category cable should be used. The maximum cable length between device and controller C8 is 100 m.

C8 controller Modbus registers with descriptions are presented in Table 3.



**Table 3**

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments
				Access	Type	Range		
Main control	Modes	1	ON/OFF status	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		2	Auto mode control	RO	unsigned char	0 - 1	Scheduling = 0, Air Quality = 1	
		3	ECO mode	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		4	AUTO mode	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		5	Current mode	R/W	unsigned char	0 - 10	READ ONLY: Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4, Kitchen = 5, Fireplace = 6, Override = 7, Holiday = 8, Air quality = 9, Off = 10 WRITE ONLY: Away = 1, Normal = 2, Intensive = 3, Boost = 4	
		6	Scheduler operation mode	R/W	unsigned char	0 - 3	StayAtHome = 0, WorkingWeek = 1, Office = 2, Custom = 3	
		7	Next mode	RO	unsigned char	0 - 8	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4, Kitchen = 5, Fireplace = 6, Override = 7, Holidays = 8	
		8	Next mode start time	RO	unsigned short	0 - 1439	Minutes	(0 - 1439 => 0:00 - 23:59); 130 => 2:10
		9	Next mode weekday	RO	unsigned char	0 - 7	Week days: None = 0, Mo = 1, Tu = 2, We = 3, Th = 4, Fr = 5, Sa = 6, Su = 7	
		10	Before been mode mask	RO	Unsigned char	0 - 31	Standby => 0, Away => 1 bit, Normal => 2 bit, Intensive => 3 bit, Boost => 4 bit	
	Temperature control	11	Temperature control	R/W	unsigned char	0 - 3	Supply = 0, Extract = 1, Balance = 2, Room = 3	
		39	Room sensor	R/W	unsigned char	0 - 1	Panel temperature(1) = 0, Panel temperature(2) = 1	

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Main control	Control sequence	19	Stage 1	R/W	unsigned char	0-3	None = 0, External coil = 1, Electric heater = 2, External Dx unit = 3,		
		20	Stage 2	R/W	unsigned char	0-3	None = 0, External coil = 1, Electric heater = 2, External Dx unit = 3,		
		22	Coil type	R/W	unsigned char	0-1	Hot water = 0, Cold water = 1, Combi = 2,		
		40	Icing protection	R/W	unsigned char	0-2	Off = 0, On = 1, External coil = 2	Only for plate heat exchanger	
		41	Indoor humidity	R/W	unsigned char	-1; 10-90	Auto = -1, Manual = 10-90%RH	Only for plate heat exchanger	
		43	Allow dehumidify with Dx	R/W	unsigned char	0-1	Off = 0, On = 1,		
	Connectivity	35	DHCP On/Off	R/W	unsigned char	0-1	Off = 0, On = 1		
		23-24	IP	R/W	unsigned int		default 192.168.0.60		
		25-26	Mask	R/W	unsigned int		default 255.255.255.0		
		36-37	Gateway	R/W	unsigned int		default 192.168.0.1		
		38	BACnet ID	R/W	unsigned int	0-4194303	default 60		
		44	Bacnet Port	R/W	unsigned short	1-65535	default 47808		
	Settings	27	Language	R/W	unsigned char	0-255	English = 0, Lithuanian = 1, Russian = 2, ...		
		42	Fire alarm restart	R/W	unsigned char	0-1	Manual = 0, Auto = 1		
	Time and date	29	Time, HH:MM	R/W	unsigned short	MSB 0x00 - 0x17, LSB 0x00 - 0x3B	MSB - hours, LSB - minutes	0x0B36 => 11:54	
		30	Year	R/W	unsigned short	2017 - 2035	Year	0x07E0 => 2016	
		31	Month/Day	R/W	unsigned short	MSB 0x01 - 0x0C, LSB 0x01 - 0x1F	MSB - month, LSB - day	0x020C => Feb12	
		32	Week day	RO	unsigned char	1-7	Mo = 1, Tu = 2, We = 3, Th = 4, Fr = 5, Sa = 6, Su = 7		
		33-34	Time since 1970	RO	unsigned int	1483228800 - 2051222400	based on seconds since standard epoch of 1/1/1970	1456329600 => 2016.02.24 16:00:00	
	Mode settings	Away	100-101	Supply flow	R/W	unsigned int	0 - 200000	%	
			102-103	Extract flow	R/W	unsigned int	0 - 200000	%	
104			Setpoint	R/W	signed short	50 - 400	x10 C		
105			Heating	R/W	unsigned char	0-1	Off = 0, On = 1		
159			Humidity setpoint	R/W	unsigned char	RH: 10-90	%		
Normal		106-107	Supply flow	R/W	unsigned int	0 - 200000	%		
		108-109	Extract flow	R/W	unsigned int	0 - 200000	%		
		110	Setpoint	R/W	signed short	50 - 400	x10 C		
		111	Heating	R/W	unsigned char	0-1	Off = 0, On = 1		
Intensive		160	Humidity setpoint	R/W	unsigned char	RH: 10-90	%		
		112-113	Supply flow	R/W	unsigned int	0 - 200000	%		
		114-115	Extract flow	R/W	unsigned int	0 - 200000	%		
		116	Setpoint	R/W	signed short	50 - 400	x10 C		
		117	Heating	R/W	unsigned char	0-1	Off = 0, On = 1		
161	Humidity setpoint	R/W	unsigned char	RH: 10-90	%				



Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments
				Access	Type	Range		
Mode settings	Boost	118-119	Supply flow	R/W	unsigned int	0 - 200000	%	
		120-121	Extract flow	R/W	unsigned int	0 - 200000	%	
		122	Setpoint	R/W	signed short	50 - 400	x10 C	
		123	Heating	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		162	Humidity setpoint	R/W	unsigned char	RH: 10-90	%	
	Kitchen	124-125	Supply flow	R/W	unsigned int	0 - 200000	%	
		126-127	Extract flow	R/W	unsigned int	0 - 200000	%	
		128	Setpoint	R/W	signed short	50 - 400	x10 C	
		129	Heating	R/W	unsigned char	0 - 1	Off = 0, On = 1	
	Fireplace	130	Timer time	R/W	unsigned short	0 - 300	Minutes	
		131-132	Supply flow	R/W	unsigned int	0 - 200000	%	
		133-134	Extract flow	R/W	unsigned int	0 - 200000	%	
		135	Setpoint	R/W	signed short	50 - 400	x10 C	
	Override	136	Heating	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		137	Timer time	R/W	unsigned short	0 - 300	Minutes	
		138-139	Supply flow	R/W	unsigned int	0 - 200000	%	
		140-141	Extract flow	R/W	unsigned int	0 - 200000	%	
		142	Setpoint	R/W	signed short	50 - 400	x10 C	
		143	Heating	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		144	Mode	R/W	unsigned char	0 - 2	All time = 0, If on = 1, If off = 2	
		145	Timer time	R/W	unsigned short	0 - 300	Minutes	
	Holidays	157	Delayed start	R/W	unsigned char	0 - 10	Minutes	
		158	Delayed stop	R/W	unsigned char	0 - 30	Minutes	
		146	Microventilation	R/W	unsigned char	1 - 4	Once per day = 1, Twice per day = 2, Thrice per day = 3, Four times per day = 4,	
		147	Setpoint	R/W	signed short	50 - 400	x10 C	
		148	Heating	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		149-150	From Day/Month	R/W	unsigned int	1483228800 - 2051222400	based on seconds since standard epoch of 1/1/1970	1456329600 => 2016.02.24 16:00:00
		151-152	Till Day/Month	R/W	unsigned int	1483228800 - 2051222400	based on seconds since standard epoch of 1/1/1970	1456329600 => 2016.02.24 16:00:00
153		Year, from	R/W	unsigned short	2017 - 2035			
154		Month/Day, from	R/W	unsigned short	MSB 0x01 - 0x0C, LSB 0x01 - 0x1F	MSB = month, LSB = day	0x020C => Feb12	
155		Year, till	R/W	unsigned short	2017 - 2035			
156	Month/Day, till	R/W	unsigned short	MSB 0x01 - 0x0C, LSB 0x01 - 0x1F	MSB = month, LSB = day	0x020C => Feb12		
Eco	Eco	200	Minimum supply air temperature	R/W	unsigned short	50 - 400	x10 C	
		201	Maximum supply air temperature	R/W	unsigned short	50 - 400	x10 C	
		202	Free heating/cooling	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		203	Heating enable denied	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		204	Cooling enable denied	R/W	unsigned char	0 - 1	Off = 0, On = 1	
		217	Non stop recuperation	R/W	unsigned char	0 - 1	Off = 0, On = 1	

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Air quality	Air quality	205	Air quality Enable	R/W	unsigned char	0 - 1	Disabled = 0, Enabled = 1			
		206	Temperature setpoint	R/W	signed short	50 - 400	x10 C			
		207	Air quality setpoint	R/W	unsigned short	CO2: 0 - 2000, VOC: 0 - 100,	ppm, %			
		208	Humidity setpoint	R/W	unsigned short	RH: 0 - 100,	%			
		209	Air quality minimum intensivity	R/W	unsigned char	0, 20 - 100	%			
		210	Air quality maximum intensivity	R/W	unsigned char	0, 20 - 100	%			
		211	Air quality heating	R/W	unsigned char	0 - 1	Off = 0, On = 1			
		212	Air quality check period	R/W	unsigned char	1 - 24	Hours			
		213	Air quality sensor type B8	R/W	unsigned char	0 - 3	None = 0, CO2 = 1, VOC = 2, RH = 3			
		215	Humidity control	R/W	unsigned char	0-1	Disabled = 0, Enabled = 1			
		216	Outdoor humidity	R/W	unsigned char	0-2	None = 0, Sensor = 1			
		Scheduler	Stay at home	Operation program 1	Weekday mask	300	Weekday mask	R/W	unsigned char	0b00000000 - 0b01111111
Event 1	301				Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive=3, Boost = 4	
	302				Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	303				Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
Event 2	304				Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive=3, Boost = 4	
	305				Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	306				Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
Event 3	307				Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive=3, Boost = 4	
	308				Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	309				Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
Event 4	310				Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive=3, Boost = 4	
	311				Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	312				Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
Event 5	313				Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive=3, Boost = 4	
	314				Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	315	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05			

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Scheduler	Stay at home	Operation program 2	Weekday mask	316	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	317	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 1	318	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				319	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	320	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				321	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				322	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 3	323	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				324	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				325	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 4	326	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				327	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				328	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 5	329	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				330	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
		331		Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Operation program 3	Weekday mask	332	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	333	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				334	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				335	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	336	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				337	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				338	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments
				Access	Type	Range		
Scheduler Stay at home	Operation program 3	Event 3	339	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			340	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			341	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
		Event 4	342	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			343	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			344	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
		Event 5	345	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			346	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			347	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
	Operation program 4	Weekday mask	348	Weekday mask	R/W	unsigned char	0b00000000- 0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit
		Event 1	349	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			350	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			351	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
		Event 2	352	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			353	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			354	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
		Event 3	355	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			356	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			357	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
		Event 4	358	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			359	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			360	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
		Event 5	361	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
			362	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
	363		Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Scheduler	Working week	Operation program 1								
		Weekday mask	364	Weekday mask	R/W	unsigned char	0b00000000 - 0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit		
			Event 1	365	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4	
				366	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
		367		Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 2	368	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4		
			369	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			370	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 3	371	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4		
			372	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			373	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 4	374	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4		
			375	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			376	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 5	377	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4		
			378	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			379	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Operation program 2								
		Weekday mask	380	Weekday mask	R/W	unsigned char	0b00000000 - 0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit		
			Event 1	381	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4	
				382	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
		383		Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 2	384	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal = 2, Intensive = 3, Boost = 4		
			385	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			386	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Scheduler	Operation program 2	Event 3	387	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			388	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			389	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 4	390	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			391	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			392	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 5	393	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			394	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			395	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Operation program 3	Weekday mask	396	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	397	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				398	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				399	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	400	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				401	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	402			Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 3		403	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			404	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			405	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 4		406	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			407	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			408	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 5		409	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			410	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		411	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Scheduler	Working week	Operation program 4	Weekday mask	412	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	413	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 1	414	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				415	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	416	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 2	417	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				418	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 3	419	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 3	420	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				421	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 4	422	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 4	423	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				424	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 5	425	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 5	426	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	427	Stop time		R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		
	Office	Operation program 1	Weekday mask	428	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	429	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 1	430	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				431	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	432	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 2	433	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				434	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Scheduler Office	Operation program 1	Event 3	435	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			436	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			437	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 4	438	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			439	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			440	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Event 5	441	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			442	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			443	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Operation program 2	Weekday mask	444	Weekday mask	R/W	unsigned char	0b00000000- 0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	445	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				446	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				447	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	448	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				449	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	450			Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 3		451	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			452	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			453	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 4		454	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			455	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			456	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 5		457	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
			458	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		459	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		



Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments			
				Access	Type	Range					
Scheduler	Office	Operation program 3	Weekday mask	460	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit		
			Event 1	461	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				462	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
				463	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			Event 2	464	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				465	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
				466	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			Event 3	467	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				468	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
				469	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			Event 4	470	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				471	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
				472	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			Event 5	473	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				474	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
				475	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
			Operation program 4	Weekday mask	476	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
				Event 1	477	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
					478	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
					479	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				Event 2	480	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
					481	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
					482	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments			
				Access	Type	Range					
Scheduler	Office	Event 3	483	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4			
			484	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		
			485	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		
		Event 4	486	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4			
			487	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		
			488	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		
		Event 5	489	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4			
			490	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		
			491	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		
		Custom	Operation program 1	Weekday mask	492	Weekday mask	R/W	unsigned char	0b00000000 - 0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
				Event 1	493	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
					494	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
					495	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				Event 2	496	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
					497	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
	498				Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 3			499	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				500	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
				501	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 4			502	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				503	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
				504	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
	Event 5			505	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4		
				506	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		507	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05			

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Scheduler	Custom	Operation program 2	Weekday mask	508	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	509	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			Event 1	510	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				511	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	512	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				513	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				514	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 3	515	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				516	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				517	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 4	518	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				519	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				520	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 5	521	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				522	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
		523		Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05	
		Operation program 3	Weekday mask	524	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit	
			Event 1	525	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				526	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
				527	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
			Event 2	528	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
				529	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05
		530	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes	0x0805 => 8:05		

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Scheduler Custom	Operation program 3	Event 3	531	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			532	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
			533	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
		Event 4	534	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			535	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
			536	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
		Event 5	537	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			538	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
			539	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
		Operation program 4	Weekday mask	540	Weekday mask	R/W	unsigned char	0b00000000-0b01111111	Mo => 0 bit, Tu => 1 bit, We => 2 bit, Th => 3 bit, Fr => 4 bit, Sa => 5 bit, Su => 6 bit
			Event 1	541	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
				542	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
				543	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
			Event 2	544	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4
				545	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05
	546			Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
	Event 3		547	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			548	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
			549	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
	Event 4		550	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			551	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
			552	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
	Event 5		553	Mode	R/W	unsigned char	0 - 4	Standby = 0, Away = 1, Normal =2, Intensive =3, Boost = 4	
			554	Start time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05	
		555	Stop time	R/W	unsigned short	0:00 - 23:59	MSB - hours, LSB - minutes 0x0805 => 8:05		

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Alarms	Active alarms	600	Active alarms count	R/W	unsigned char	0 - 10		Writing 0x99C6 - Active alarms reset and restore previous mode	
		601	Active alarm 1 code (newest)	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		602	Active alarm 2 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		603	Active alarm 3 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		604	Active alarm 4 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		605	Active alarm 5 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		606	Active alarm 6 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		607	Active alarm 7 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		608	Active alarm 8 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		609	Active alarm 9 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
	610	Active alarm 10 code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)		
	Alarms history	Alarm 1	611	Alarm history count	RO	unsigned char	0 - 50		
			612	Alarm (newest) year	RO	unsigned short	2016 - 2250	Year	
			613	Alarm (newest) month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			614	Alarm (newest) time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			615	Alarm (newest) seconds	RO	unsigned char	0 - 59	Seconds	
		616	Alarm (newest) code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 2	617	Alarm year	RO	unsigned short	2016 - 2250	Year	
			618	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			619	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
620			Alarm seconds	RO	unsigned char	0 - 59	Seconds		
621	Alarm code		RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)		

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Alarms	Alarms history	Alarm 3	622	Alarm year	RO	unsigned short	2016 - 2250	Year	
			623	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			624	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			625	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		626	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 4	627	Alarm year	RO	unsigned short	2016 - 2250	Year	
			628	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			629	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			630	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		631	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 5	632	Alarm year	RO	unsigned short	2016 - 2250	Year	
			633	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			634	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			635	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		636	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 6	637	Alarm year	RO	unsigned short	2016 - 2250	Year	
			638	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			639	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			640	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		641	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 7	642	Alarm year	RO	unsigned short	2016 - 2250	Year	
			643	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			644	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			645	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		646	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 8	647	Alarm year	RO	unsigned short	2016 - 2250	Year	
			648	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			649	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			650	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		651	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 9	652	Alarm year	RO	unsigned short	2016 - 2250	Year	
			653	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			654	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			655	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		656	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Alarms	Alarms history	Alarm 10	657	Alarm year	RO	unsigned short	2016 - 2250	Year	
			658	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			659	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			660	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		661	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 11	662	Alarm year	RO	unsigned short	2016 - 2250	Year	
			663	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			664	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			665	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		666	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 12	667	Alarm year	RO	unsigned short	2016 - 2250	Year	
			668	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			669	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			670	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		671	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 13	672	Alarm year	RO	unsigned short	2016 - 2250	Year	
			673	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			674	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			675	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		676	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 14	677	Alarm year	RO	unsigned short	2016 - 2250	Year	
			678	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			679	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			680	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		681	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 15	682	Alarm year	RO	unsigned short	2016 - 2250	Year	
			683	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			684	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			685	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		686	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 16	687	Alarm year	RO	unsigned short	2016 - 2250	Year	
			688	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			689	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			690	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		691	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Alarms	Alarms history	Alarm 17	692	Alarm year	RO	unsigned short	2016 - 2250	Year	
			693	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			694	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			695	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		696	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 18	697	Alarm year	RO	unsigned short	2016 - 2250	Year	
			698	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			699	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			700	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		701	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 19	702	Alarm year	RO	unsigned short	2016 - 2250	Year	
			703	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			704	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			705	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		706	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 20	707	Alarm year	RO	unsigned short	2016 - 2250	Year	
			708	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			709	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			710	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		711	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 21	712	Alarm year	RO	unsigned short	2016 - 2250	Year	
			713	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			714	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			715	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		716	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 22	717	Alarm year	RO	unsigned short	2016 - 2250	Year	
			718	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			719	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			720	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		721	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
Alarm 23	722	Alarm year	RO	unsigned short	2016 - 2250	Year			
	723	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12		
	724	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05		
	725	Alarm seconds	RO	unsigned char	0 - 59	Seconds			
726	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)		



Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Alarms	Alarms history	Alarm 24	727	Alarm year	RO	unsigned short	2016 - 2250	Year	
			728	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			729	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			730	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		731	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 25	732	Alarm year	RO	unsigned short	2016 - 2250	Year	
			733	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			734	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			735	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		736	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 26	737	Alarm year	RO	unsigned short	2016 - 2250	Year	
			738	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			739	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			740	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		741	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 27	742	Alarm year	RO	unsigned short	2016 - 2250	Year	
			743	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			744	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			745	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		746	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 28	747	Alarm year	RO	unsigned short	2016 - 2250	Year	
			748	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			749	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			750	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		751	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 29	752	Alarm year	RO	unsigned short	2016 - 2250	Year	
			753	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			754	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			755	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		756	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
Alarm 30	757	Alarm year	RO	unsigned short	2016 - 2250	Year			
	758	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12		
	759	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05		
	760	Alarm seconds	RO	unsigned char	0 - 59	Seconds			
761	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms		0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)			

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Alarms	Alarms history	Alarm 31	762	Alarm year	RO	unsigned short	2016 - 2250	Year	
			763	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			764	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			765	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		766	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 32	767	Alarm year	RO	unsigned short	2016 - 2250	Year	
			768	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			769	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			770	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		771	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 33	772	Alarm year	RO	unsigned short	2016 - 2250	Year	
			773	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			774	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			775	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		776	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 34	777	Alarm year	RO	unsigned short	2016 - 2250	Year	
			778	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			779	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			780	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		781	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 35	782	Alarm year	RO	unsigned short	2016 - 2250	Year	
			783	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			784	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			785	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		786	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 36	787	Alarm year	RO	unsigned short	2016 - 2250	Year	
			788	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			789	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			790	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		791	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 37	792	Alarm year	RO	unsigned short	2016 - 2250	Year	
			793	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			794	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			795	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		796	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments	
				Access	Type	Range			
Alarms	Alarms history	Alarm 38	797	Alarm year	RO	unsigned short	2016 - 2250	Year	
			798	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			799	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			800	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		801	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 39	802	Alarm year	RO	unsigned short	2016 - 2250	Year	
			803	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			804	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			805	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		806	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 40	807	Alarm year	RO	unsigned short	2016 - 2250	Year	
			808	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			809	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			810	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		811	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 41	812	Alarm year	RO	unsigned short	2016 - 2250	Year	
			813	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			814	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			815	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		816	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 42	817	Alarm year	RO	unsigned short	2016 - 2250	Year	
			818	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			819	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			820	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		821	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 43	822	Alarm year	RO	unsigned short	2016 - 2250	Year	
			823	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			824	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			825	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		826	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)
		Alarm 44	827	Alarm year	RO	unsigned short	2016 - 2250	Year	
			828	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12
			829	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05
			830	Alarm seconds	RO	unsigned char	0 - 59	Seconds	
		831	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments		
				Access	Type	Range				
Alarms	Alarms history	Alarm 45	832	Alarm year	RO	unsigned short	2016 - 2250	Year		
			833	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12	
			834	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05	
			835	Alarm seconds	RO	unsigned char	0 - 59	Seconds		
		836	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 46	837	Alarm year	RO	unsigned short	2016 - 2250	Year		
			838	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12	
			839	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05	
			840	Alarm seconds	RO	unsigned char	0 - 59	Seconds		
		841	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 47	842	Alarm year	RO	unsigned short	2016 - 2250	Year		
			843	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12	
			844	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05	
			845	Alarm seconds	RO	unsigned char	0 - 59	Seconds		
		846	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 48	847	Alarm year	RO	unsigned short	2016 - 2250	Year		
			848	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12	
			849	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05	
			850	Alarm seconds	RO	unsigned char	0 - 59	Seconds		
		851	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 49	852	Alarm year	RO	unsigned short	2016 - 2250	Year		
			853	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12	
			854	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05	
			855	Alarm seconds	RO	unsigned char	0 - 59	Seconds		
		856	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Alarm 50	857	Alarm year	RO	unsigned short	2016 - 2250	Year		
			858	Alarm month-day	RO	unsigned short	01.01 - 12.31	Month and day	0x020C => Feb12	
			859	Alarm time	RO	unsigned short	0:00 - 23:59	Hours and minutes	0x0805 => 8:05	
			860	Alarm seconds	RO	unsigned char	0 - 59	Seconds		
		861	Alarm code	RO	unsigned char	1 - 127 F alarms, 129 - 255 W alarms			0x02 => 2F (MSb = 0), 0x82 => 2W (MSb = 1)	
		Monitoring	Detailed information	900	Status icon bit mask	RO	unsigned short	0 - 8191		Starting => 0 bit, Stoping => 1 bit, Fan => 2 bit, Rotor => 3 bit, Heating => 4 bit, Cooling => 5 bit, HeatingDenied => 6 bit, CoolingDenied => 7 bit, FlowDown => 8 bit, FreeHeating => 9 bit, FreeCooling => 10 bit, AlarmF => 11 bit, AlarmW => 12 bit

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments
				Access	Type	Range		
Monitoring	Detailed information	901	Heating/cooling config	RO	unsigned char	0 - 7	Electric heater => 0 bit, Water cooler/heater => 1 bit, DX unit => 2 bit	
		902	Supply temperature	RO	signed short	-500 - 1200	x10 C	30000=>B1 sensor not used
		903	Extract Temperature	RO	signed short	-500 - 1200	x10 C	
		904	Outdoor temp	RO	signed short	-500 - 1200	x10 C	
		905	Water temperature	RO	signed short	-500 - 1200	x10 C	
		906-907	Current supply flow	RO	unsigned int	0 - 200000	m <sup>3</sup> /h, l/s	
		908-909	Current extract flow	RO	unsigned int	0 - 200000	m <sup>3</sup> /h, l/s	
		910	Current supply fan intensity	RO	unsigned short	0 - 1000	x10 %	
		911	Current extract fan intensity	RO	unsigned short	0 - 1000	x10 %	
		912	Heat exchanger	RO	unsigned short	0 - 1000	x10 %	
		913	Electric heater	RO	unsigned short	0 - 1000	x10 %	
		914	Water heater	RO	unsigned short	0 - 1000	x10 %	
		915	Water cooler	RO	unsigned short	0 - 1000	x10 %	
		916	DX unit	RO	signed short	-1000 - +1000	x10 %	
		917	Filters Impurity	RO	unsigned char	0 - 100	%	
		918	Air dampers	RO	unsigned char	0 - 100	%	
		952	Air quality or humidity (sensor 1 -BB)	RO	unsigned short	0 - 65535	ppm,%	
		956	Indoor humidity	RO	unsigned short	AH: -2 - 10000	sensor fail - 2, sensor not found - 1, AHU is off - 0, value 1 - 10000 x100 g/m3	561 = > 5.61 g/m3
	957	Outdoor humidity	RO	unsigned short	AH: -2 - 10000	sensor fail - 2, sensor not found - 1, AHU is off - 0, value 1 - 10000 x100 g/m3	1305 = > 13.05 g/m3	
	Operation counters	927-928	Supply fan, Day	RO	unsigned int	0 - 4294967296	h	
		929-930	Supply fan, Month	RO	unsigned int	0 - 4294967296	h	
		931-932	Supply fan, Total	RO	unsigned int	0 - 4294967296	h	
		933-934	Exhaust fan, Day	RO	unsigned int	0 - 4294967296	h	
		935-936	Exhaust fan, Month	RO	unsigned int	0 - 4294967296	h	
		937-938	Exhaust fan, Total	RO	unsigned int	0 - 4294967296	h	
		939-940	Electric heater, Day	RO	unsigned int	0 - 4294967296	h	
		941-942	Electric heater, Month	RO	unsigned int	0 - 4294967296	h	
		943-944	Electric heater, Total	RO	unsigned int	0 - 4294967296	h	
		961-962	Heat exchanger, Day	RO	unsigned int	0 - 4294967296	h	
	963-964	Heat exchanger, Month	RO	unsigned int	0 - 4294967296	h		
965-966	Heat exchanger, Total	RO	unsigned int	0 - 4294967296	h			
Panel	946	Panel 1 temperature	RO	signed short	-500 - 1200, -32768 - panel not connected	x10 C		
	947	Panel 1 humidity	RO	signed char	0 - 100, -100 - panel not connected	%		
	948	Panel 1 air quality	RO	unsigned short	0 - 65535	ppm, ppb		
	949	Panel 2 temperature	RO	signed short	-500 - 1200, -32768 - panel not connected	x10 C		
	950	Panel 2 humidity	RO	signed char	0 - 100, -100 - panel not connected	%		
	951	Panel 2 air quality	RO	unsigned short	0 - 65535	ppm, ppb		
	954	Connected panels	RO	unsigned char	0 - 3	None = 0, Panel(1) = 1, Panel(2) = 2, Panel(1) and Panel(2) = 3		

Group	Subgroups	Register number	Register name	Data			Values and Units	Examples and comments
				Access	Type	Range		
Others	DOUJ	959	Heating	RO	unsigned char	0 - 1	Off = 0, On = 1	
		960	Cooling	RO	unsigned char	0 - 1	Off = 0, On = 1	
	1000-1001	Firmware version	RO	unsigned int	1 - 4294967295	"1st number 4bit <<28, 2nd number 4bit <<24, 3rd number 4bit <<20, 4th number 8bit <<12, 5th number 12bit<<0"	18886660 => 2.1.2.3.4	
	1002-1003	Panel 1 firmware version	RO	unsigned int	1 - 4294967295	1st number 8bit <<24, 2nd number 4bit <<20, 3rd number 8bit <<12, 4th number 12bit<<0	18886660 => 1.2.3.4	
	1004-1005	Panel 2 firmware version	RO	unsigned int	1 - 4294967295	1st number 8bit <<24, 2nd number 4bit <<20, 3rd number 8bit <<12, 4th number 12bit<<0	18886660 => 1.2.3.4	
	1050	Reset settings	R/W	unsigned short	0 - 11	Reset Away settings = 1, Reset Normal settings = 2, Reset Intensive settings = 3, Reset Boost settings = 4, Reset Holidays settings = 5, Reset Override settings = 6, Reset Kitchen settings = 7, Reset Fireplace settings = 8, Reset Air quality settings = 9, Reset Eco settings = 10, Reset Advanced settings = 11		
	1051	Clean filters calibration	R/W	unsigned char	1	Confirm = 1	Resets filters counter, if filter clogging is more than 1%	

**Alarm codes (registers 600-861)**

Code		Text	Message
Hex	Dec		
03	3	F3	Water Temp B5 To Low
04	4	F4	Low Supply Air Temperature
05	5	F5	High Supply Air Temperature
06	6	F6	Electric Heater Overheat
07	7	F7	Heat Exchanger Failure
08	8	F8	Heat Exchanger Icing
09	9	F9	Internal Fire
0A	10	F10	External Fire
0B	11	F11	Supply Air Temp B1 Short
0C	12	F12	Supply Air Temp B1 Not Connected
0D	13	F13	Extract Air Temp B2 Short
0E	14	F14	Extract Air Temp B2 Not Connected
0F	15	F15	Outdoor Air Temp B3 Short
10	16	F16	Outdoor Air Temp B3 Not Connected
13	19	F19	Water Temp B5 Short
14	20	F20	Water Temp B5 Not Connected
15	21	F21	Supply Temp After Hx B10 (B14) Short

Code		Text	Message
Hex	Dec		
16	22	F22	Supply Temp After Hx B10 (B14) Not Connected
17	23	F23	Flash Fail
18	24	F24	Too Low 24V Supply Voltage
19	25	F25	Too High 24V Supply Voltage
1A	26	F26	24V Supply Voltage Overloaded
1C	28	F28	Room Temperature Sensor Fail
1D	29	F29	Room Humidity Sensor Fail
1E	30	F30	Humidity sensor failure
1F	31	F31	Impurity sensor failure
28	40	F40	Communication error
29	41	F41	Fire dampers failure
2A	42	F42	Fire damper failure
2B	43	F43	Fire damper failure
2C	44	F44	Fire damper failure
2D	45	F45	Fire damper failure
2E	46	F46	External fire alarm
2F	47	F47	External fire alarm
30	48	F48	External fire alarm
31	49	F49	External fire alarm
32	50	F50	External fire alarm
33	51	F51	Electric heater failure
81	129	W1	Change Air Filter
82	130	W2	Service Mode
83	131	W3	Water Temp B5 To Low (Warning)
84	132	W4	Humidity sensor failure
85	133	W5	Impurity sensor failure
86	134	W6	Low heat exchanger efficiency

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