SAVECair

Commissioning Record

systemair

Contents

1 General Information

Company:

Responsible:

Customer:	Date:	Installation:
Object/Unit:	Item:	Installation address:
Model/Size:	Serial number (unit ID):	Main board software version: IAM software version: HMI software version:

Time and date set: ☐   Week schedule set: ☐

External connections (sensors, dampers, external alarm, etc.) performed: ☐

2 Control Regulation

2.1 Temperature Control

Table 1 Temperature control settings

Function	Default setting		Set value	
Control mode	Supply air temperature control	☒	Supply air temperature control	☐
	Room temperature control	☐	Room temperature control	☐
	Extract air temperature control	☐	Extract air temperature control	☐
Set-point	18°C		____ °C	
Temperature unit	Celsius	☒	Celsius	☐
	Fahrenheit	☐	Fahrenheit	☐

Table 2 Cascade settings*

Function	Default setting	Set value
Cascade setpoint	18°C	____ °C
Cascade control min supply setpoint	12°C	____ °C
Cascade control max supply setpoint	40°C	____ °C

* Only available if Room temperature control or Extract air temperature control mode is selected.

2.2 ECO mode

Function	Default setting	Set value
Heater offset	–3°C	____ °C

systemair

2.3 Fan Control

Function	Default setting		Set value	
Airflow Type	Manual	☒	Manual	☐
	RPM	☐	RPM	☐
	Flow	☐	Flow	☐
	Pressure	☐	Pressure	☐
	External	☐	External	☐
P-Band*			_____	
Manual Fan Stop	OFF	☒	OFF	☐
	ON	☐	ON	☐

Note:

* Make sure to change P-Band after changing Airflow Type. P-Band value do not change automatically to match the airflow type. It has to be changed manually.

2.3.1 Airflow Levels Settings

Function	Default setting	Set value	
MAXIMUM LEVEL			
Supply Airflow		_____	_____ airflow unit
Extract Airflow		_____	_____ airflow unit
HIGH LEVEL:			
Supply Airflow		_____	_____ airflow unit
Extract Airflow		_____	_____ airflow unit
NORMAL LEVEL			
Supply Airflow		_____	_____ airflow unit
Extract Airflow		_____	_____ airflow unit
LOW LEVEL			
Supply Airflow		_____	_____ airflow unit
Extract Airflow		_____	_____ airflow unit
MINIMUM LEVEL			
Supply Airflow		_____	_____ airflow unit
Extract Airflow		_____	_____ airflow unit

2.3.2 Pressure Sensors*

Function	Default setting	Set value
SUPPLY AIR FAN CONTROL		
Pressure at 0V	0 Pa	_____ Pa
Pressure at 10V	1000 Pa	_____ Pa
EXTRACT AIR FAN CONTROL		
Pressure at 0V	0 Pa	_____ Pa
Pressure at 10V	1000 Pa	_____ Pa
SAF K-Factor (Airflow type: Flow)	20	_____

Function	Default setting		Set value	
EAF F-Faktor (Airflow type: Flow)	20		____	
Unit (Airflow type: Flow)	l/s	☒	l/s	☐
	m³/h	☐	m³/h	☐
	ft³/h	☐	ft³/h	☐
Unit (Airflow type: Pressure)	Pa	☒	Pa	☐
	inwc	☐	inwc	☐

* Only available if Flow or Pressure airflow type is selected.

2.4 Demand Control

Function	Default setting		Set value	
SENSORS	OFF	☒	OFF	☐
	RH Sensor	☐	RH Sensor	☐
	CO₂ Sensor	☐	CO₂ Sensor	☐
	Relative humidity / CO₂	☐	Relative humidity / CO₂	☐
RH Sensor Setpoint Summer	50 %		____ %	
RH Sensor Setpoint Winter	50 %		____ %	
CO₂ Sensor Setpoint	900 ppm		____ ppm	
INDOOR AIR QUALITY CONTROL				
Improving Air Quality	Normal	☒	Normal	☐
	High	☐	High	☐
	Maximum	☐	Maximum	☐
Good Air Quality	Low	☒	Low	☐
	Normal	☐	Normal	☐

2.5 Moisture Transfer Control

Function	Default setting		Set value	
Status	OFF	☒	OFF	☐
	ON	☐	ON	☐
Setpoint	40%		____ %	

2.6 Defrosting Control*

Function	Default setting		Set value	
Mode	Soft	☐	Soft	☐
	Normal	☒	Normal	☐
	Hard	☐	Hard	☐
Bypass location	None	☒	None	☐
	Supply	☐	Supply	☐
	Extract	☐	Extract	☐

* Only available if heat exchanger type is selected as Plate.

2.7 Cooling Control

Table 3 Cooling recovery

Function	Default setting		Set value	
Cooling recovery	OFF	☒	OFF	☐
	ON	☐	ON	☐
Cooling limit	2°C		____°C	

Table 4 Free Cooling

Function	Default setting		Set value	
Status	OFF	☒	OFF	☐
	ON	☐	ON	☐
Supply air fan level	Normal	☒	Normal	☐
	High	☐	High	☐
	Maximum	☐	Maximum	☐
Extract air fan level	Normal	☒	Normal	☐
	High	☐	High	☐
	Maximum	☐	Maximum	☐
START CONDITIONS				
Outdoor daytime temperature activation	25°C		____°C	
END CONDITIONS				
Extract/Room cancel temperature	18°C		____°C	
Outdoor nighttime activation high limit	23°C		____°C	
Outdoor nighttime activation low limit	12°C		____°C	
Start Time	00:00		__:__	
End Time	08:00		__:__	

3 Components

3.1 Heat Exchanger

Function	Default setting		Set value	
Type (depending on type of the unit)			Rotating	☐
			Plate	☐
Bypass location (only for VTC units)	None	☒	None	☐
	Supply	☐	Supply	☐
	Extract	☐	Extract	☐
Bypass air damper (only VTC units)	Inactive	☒	Inactive	☐
	Configured	☐	Configured	☐
Actuator			0–10V	☐
			10–0V	☐
			2–10V	☐
			10–2V	☐

Table 5 Passive house*

Function	Default setting		Set value	
Status	OFF	☒	OFF	☐
	ON	☐	ON	☐

* Only available if heat exchanger type is selected as Rotating.

3.2 Heater

Function	Default setting		Set value	
Type	None	☒	None	☐
	Electrical	☐	Electrical	☐
	Water	☐	Water	☐
	Change-over*	☐	Change-over*	☐
TRIAC OUTPUT (TRIAC configurable at Service > Output > ANALOG	Inactive Output	☒	Inactive Output	☐
	Y1 Heating	☐	Y1 Heating	☐
Heater control function (Heater configurable at Service > Output > ANALOG or DIGITAL			Analog (Y1 Heating)	☐
			Digital (Step controller Y1 Heating) (On/Off)	☐
			Digital Start/Stop circulation pump, Y1 Heating	☐

systemair

Function	Default setting	Set value	
`Actuator`		0–10V	☐
		10–0V	☐
		2–10V	☐
		10–2V	☐
`Circulation Pump Start Temperature`**	10°C	____°C	
`Circulation Pump Stop Delay`**	5 min	____ min	

* If `Change-over` is selected at heater type, the cooler type must be also set as `Change-over`.

** Only available if heater type `Water` or `Change-over` is selected.

3.3 Cooler

Function	Default setting		Set value	
`Type`	`None`	☒	`None`	☐
	`Water`	☐	`Water`	☐
	`Change-over`*	☐	`Change-over`*	☐
`Outside Air Temperature Interlock`	10°C		____ °C	
Cooler control function (Cooler configurable at `Service` > `Output` > `ANALOG` or `DIGITAL`			Analog (`Y3 Cooling`)	☐
			Digital (`Step controller Y3 Cooling`) (On/Off)	☐
			Digital (`Start/Stop circulation pump, Y3 Cooling`)	☐
`Actuator`			0–10V	☐
			10–0V	☐
			2–10V	☐
			10–2V	☐
`Circulation Pump Stop Delay`**	5 min		____ min	

* If `Change-over` is selected at cooler type, the heater type must be also set as `Change-over`.

** Only available if heater type `Water` or `Change-over` is selected.

3.4 Extra Controller

Function	Default setting		Set value	
`Extra Controller Mode`	`None`	☒	`None`	☐
	`Preheater`	☐	`Preheater`	☐
	`Heating`	☐	`Heating`	☐
	`Cooling`	☐	`Cooling`	☐

Function	Default setting	Set value	
Extra controller control function (Extra controller configurable at Service > Output > ANALOG or DIGITAL		Analog (Y4 Extra Controller)	☐
		Digital (Step Controller Y4 Extra Controller)	☐
		Digital (Start/Stop circulation pump, Y4 Extra Controller)	☐
Set-Point	0°C	_____ °C	
P-Band	4 °C	_____ °C	
I-Time	0	_____ seconds	
Actuator		0–10V	☐
		10–0V	☐
		2–10V	☐
		10–2V	☐
Circulation Pump Start Temperature*	10°C	_____ °C	
Circulation Pump Stop Delay	5 min	_____ min	

* Only available if Preheater or Heating is selected

4 User Modes

Function	Default setting		Set value	
Away	Supply air fan level	Low	Minimum/Low/Normal	_____
	Extract air fan level	Low	Minimum/Low/Normal	_____
	Delay time	1–72 h	Delay time	_____ h
Crowded	Supply air fan level	High	Normal/High/Maximum	_____
	Extract air fan level	High	Normal/High/Maximum	_____
	Delay time	1–8 h	Delay time	_____ h
	Temperature setpoint offset	–10 – 0°C	_____°C	
Central Vacuum Cleaner	Supply air fan level	Normal	Low/Normal/High	_____
	Extract air fan level	Low	Minimum/Low/Normal	_____
Cooker Hood	Supply air fan level	Normal	Low/Normal/High	_____
	Extract air fan level	Low	Minimum/Low/Normal	_____
Fireplace	Supply air fan level	Normal	Normal/High/Maximum	_____
	Extract air fan level	Low	Minimum/Low/Normal	_____
	Delay time	1–60 min	Delay time	_____ min
Holiday	Supply air fan level	Low	Minimum/Low/Normal	_____
	Extract air fan level	Low	Minimum/Low/Normal	_____

Function	Default setting		Set value	
	Delay time	1–365 days	Delay time	_____ days
Refresh	Supply air fan level	High	Normal/High/Maximum	_____
	Extract air fan level	High	Normal/High/Maximum	_____
	Delay time	1–240 min	Delay time	_____ min

Note:

Delay time is set during activation of the function at the main screen.

5   Input

5.1   Analog

	Default setting		Set value	
Type	Input number	Compensation	Input number	Compensation
Outdoor Air Temperature Sensor (OAT)	1–7	-9.9...9.9°C	___	____°C
Supply Air Temperature Sensor (SAT)	1–7	-9.9...9.9°C	___	____°C
Overheat Temperature Sensor (OHT)	1–7	-9.9...9.9°C	___	____°C
Frost Protection Temperature Sensor (FPT)	1–7	-9.9...9.9°C	___	____°C
Room Air Temperature Sensor (RAT)	1–7	-9.9...9.9°C	___	____°C
Extract Air Temperature Sensor (EAT)	1–7	-9.9...9.9°C	___	____°C
Extra Controller Temperature Sensor (ECT)	1–7	-9.9...9.9°C	___	____°C
Efficiency Temperature Sensor (EFT)	1–7	-9.9...9.9°C	___	____°C

5.2   Digital

	Default setting		Set value	
Type	Input number	Polarity	Input number	Polarity
Away Function	1–2	NO/NC	_____	_____
Bypass Damper (BYS)	1–2	NO/NC	_____	_____
Central Vacuum Cleaner Function	1–2	NO/NC	_____	_____
Cooker Hood Function	1–2	NO/NC	_____	_____
Crowded Function	1–2	NO/NC	_____	_____
Emergency thermostat	1–2	NO/NC	_____	_____
External Stop	1–2	NO/NC	_____	_____
Extra Controller Alarm	1–2	NO/NC	_____	_____
Fireplace Function	1–2	NO/NC	_____	_____
Holiday Function	1–2	NO/NC	_____	___
Refresh Function	1–2	NO/NC	_____	_____
Rotation Guard (RGS)	1–2	NO/NC	_____	_____
Fire Alarm	1–2	NO/NC	_____	_____
Change-over feedback	1–2	NO/NC	_____	_____

5.3 **Universal**

Table 6 Universal inputs are on Connection board only

Signal type	Input type	Default setting		Set value	
		Input number	Compensation	Input number	Compensation
ANALOG	RH Sensor (RH)	1–5	-9...9%	____	____
	CO₂ Sensor (CO₂)	1–5	-99...99 ppm	____	____
	Supply Air Fan Control (SAFC)	1–5	-99...99 l/s, m³/h, ft³/min	____	____
	Extract Air Fan Control (SAFC)	1–5	-99...99 l/s, m³/h, ft³/min	____	____
		Input number	Polarity	Input number	Polarity
DIGITAL	Away Function	1–5	NO/NC	____	____
	Bypass Damper (BYS)	1–5	NO/NC	____	____
	Central Vacuum Cleaner Function	1–5	NO/NC	____	____
	Cooker Hood Function	1–5	NO/NC	____	____
	Crowded Function	1–5	NO/NC	____	____
	Emergency thermostat (EMT)	1–5	NO/NC	____	____
	External Stop	1–5	NO/NC	____	____
	Extra Controller Alarm	1–5	NO/NC	____	____
	Fireplace Function	1–5	NO/NC	____	____
	Holiday Function	1–5	NO/NC	____	____
	Refresh Function	1–5	NO/NC	____	____
	Rotation Guard (RGS)	1–5	NO/NC	____	____
	Fire Alarm	1–5	NO/NC	____	____
	Change-over feedback	1–5	NO/NC	____	____

Table 7 `PDM Input 1/PDM Input 2`

Function	Default setting			Set value		
PDM configuration	None	☒	Compensation	None	☐	Compensation
	RH Sensor (RH)	☐	-9...9°C	RH Sensor (RH)	☐	____ °C
	Extract Air Temperature Sensor (EAT)	☐	-9,9...9,9°C	Extract Air Temperature Sensor (EAT)	☐	____ °C

6 **Output**

6.1 **Analog**

Type	Default setting		Set value	
	Output number	Output type	Output number	Output type
Y1 Heating	1–5	0–10; 2–10; 10–0; 10–2 V	____	___ V
Y2 Exchanger	1–5	0–10; 2–10; 10–0; 10–2 V	____	___ V
Y3 Cooler	1–5	0–10; 2–10; 10–0; 10–2 V	____	___ V
Y4 Extra Controller	1–5	0–10; 2–10; 10–0; 10–2 V	____	___ V
Y1 / Y3 Change-over	1–5	0–10; 2–10; 10–0; 10–2 V	____	___ V

6.2 Digital

Type	Default setting Output number	Set value Output number
Step Controller Y1 Heating	1–5	___
Step Controller Y2 Exchanger	1–5	___
Step Controller Y3 Cooling	1–5	___
Step Controller Y4 Extra Controller	1–5	___
Sum Alarm	1–5	___
Outdoor-/Exhaust Air Damper	1–5	___
Secondary Air (Recirculation Air)	1–5	___
Activate cooling	1–5	___
Interlock External fan control	1–5	___
Start/Stop Circulation Pump, Y1 Heating	1–5	___
Start/Stop Circulation Pump, Y3 Cooling	1–5	___
Start/Stop Circulation Pump, Y1/Y3 Change-over	1–5	___
Start/Stop Circulation Pump, Y4 Extra Controller	1–5	___

7 Communication

Function	Default setting		Set value	
Modbus	OFF	☒	OFF	☐
	ON	☐	ON	☐
Address	0		_____	
Baud Rate	1000		_____	
Parity	None	☒	None	☐
	Even	☐	Even	☐
	Odd	☐	Odd	☐
Stop Bits	0		_____	

8 Week Schedule

Function	Default setting		Set value	
Week Schedule	OFF	☒	OFF	☐
	ON	☐	ON	☐
Scheduled Period Airflow Level	Off/Low/Normal/High/Demand		_____	
Unscheduled Period Airflow Level	Off/Low/Normal/High/Demand		_____	
Scheduled Period Temperature Offset	−10 – 0°C		____°C	
Unscheduled Period Temperature Offset	−10 – 0°C		____°C	
Monday period 1 start	0–23 h 1–59 min		___ h ___ min	
Monday period 1 stop	0–23 h 1–59 min		___ h ___ min	

Function	Default setting	Set value	
Monday period 2 start	0–23 h 1–59 min	___ h	___ min
Monday period 2 stop	0–23 h 1–59 min	___ h	___ min
Tuesday period 1 start	0–23 h 1–59 min	___ h	___ min
Tuesday period 1 stop	0–23 h 1–59 min	___ h	___ min
Tuesday period 2 start	0–23 h 1–59 min	___ h	___ min
Tuesday period 2 stop	0–23 h 1–59 min	___ h	___ min
Wednesday period 1 start	0–23 h 1–59 min	___ h	___ min
Wednesday period 1 stop	0–23 h 1–59 min	___ h	___ min
Wednesday period 2 start	0–23 h 1–59 min	___ h	___ min
Wednesday period 2 stop	0–23 h 1–59 min	___ h	___ min
Thursday period 1 start	0–23 h 1–59 min	___ h	___ min
Thursday period 1 stop	0–23 h 1–59 min	___ h	___ min
Thursday period 2 start	0–23 h 1–59 min	___ h	___ min
Thursday period 2 stop	0–23 h 1–59 min	___ h	___ min
Friday period 1 start	0–23 h 1–59 min	___ h	___ min
Friday period 1 stop	0–23 h 1–59 min	___ h	___ min
Friday period 2 start	0–23 h 1–59 min	___ h	___ min
Friday period 2 stop	0–23 h 1–59 min	___ h	___ min
Saturday period 1 start	0–23 h 1–59 min	___ h	___ min
Saturday period 1 stop	0–23 h 1–59 min	___ h	___ min
Saturday period 2 start	0–23 h 1–59 min	___ h	___ min
Saturday period 2 stop	0–23 h 1–59 min	___ h	___ min
Sunday period 1 start	0–23 h 1–59 min	___ h	___ min
Sunday period 1 stop	0–23 h 1–59 min	___ h	___ min
Sunday period 2 start	0–23 h 1–59 min	___ h	___ min
Sunday period 2 stop	0–23 h 1–59 min	___ h	___ min

9 Client confirmation

Date:	Location:	Name:	Signature / Stamp: