

Compact Air Handling Units Topvex FR, SR, TR, SC, SX/C, TX/C, FC, SF

Commissioning Record

GB

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1 Commissioning record

Company:	
Responsible:	

Customer:	Date:	Installation:
Object/Unit:	Item no.:	Installation address:
Model/Size:	Serial no.:	

Time and date set:	☐	Weekly program set:	☐
External connections (sensors, dampers, external alarm etc.) performed:	☐		

1.1 Function settings

EAF is not optional for supply air units.

Function	Default setting			Set value		
Temp. (°C) Control function temp.	Supply ¹ ☐	Extract ☒	Room ☐	Supply ☐	Extract ☐	Room ☐
Set point	<u>18° C</u>	<u>22° C</u>	<u>22° C</u>	<u> </u> ° C	<u> </u> ° C	<u> </u> ° C

¹ Supply is default for SF units

Function	Default setting			Set value		
Outdoor temp. compensated supply air control						
Outdoor/supply air temp Point 1, 2 and 3	<u>-30/22 ° C</u>	<u>-20/21 ° C</u>	<u>-11/20 ° C</u>	<u> </u> ° C	<u> </u> ° C	<u> </u> ° C
Point 4, 5 and 6	<u>-4/20 ° C</u>	<u>5/19 ° C</u>	<u>12/18 ° C</u>	<u> </u> ° C	<u> </u> ° C	<u> </u> ° C
Point 7 and 8	<u>21/18 ° C</u>	<u>19/17 ° C</u>		<u> </u> ° C	<u> </u> ° C	

Function	Default value	Set value
If cascade control:		
Low supply air set point	<u>12° C</u>	<u> </u> ° C
High supply air set point	<u>30° C</u>	<u> </u> ° C
Outdoor temperature dependent switching between room/extract control and supply air control	<u>13° C</u>	<u> </u> ° C

Function	Default settings			Set value		
Pre-heater						
Pre-heater	Off	☒		On	☐	Off ☐
Extra control unit	Run if defrosting	☒		Run if defrosting	☐	Run if unit is running ☐
Temperature	0 °C			_____ °C		
Airflow						
Fan control	Airflow (m³/h) ¹	☐ (CAV)		Airflow (m³/h)	☐ (CAV)	
	Pressure (Pa) ¹	☐ (VAV)		Pressure (Pa)	☐ (VAV)	
	Manual air control	☐ % control		Manual air control	☐ % control	
Manual air control						
				Supply airflow at reduced speed	_____ (%)	
				Extract airflow at reduced speed	_____ (%)	
				Supply airflow at normal speed	_____ (%)	
				Extract air duct pressure at normal speed	_____ (%)	
CAV airflow						
Supply/extract air fan				Supply airflow at reduced speed	_____ (m³/h)	
				Extract airflow at reduced speed	_____ (m³/h)	
				Supply airflow at normal speed	_____ (m³/h)	
				Extract airflow at normal speed	_____ (m³/h)	
VAV airflow						
Duct pressure sensor, only for VAV units. Supply extract air fan ¹				Supply air duct pressure at reduced speed	_____ Pa	
				Extract air duct pressure at reduced speed	_____ Pa	
				Supply air duct pressure at normal speed	_____ Pa	
				Extract air duct pressure at normal speed	_____ Pa	
Outdoor temp. compensation	Lower point	-20° C	_____ m³/h	Lower point	_____ ° C	_____ m³/h
	Upper point	10° C	_____ m³/h	Upper point	_____ ° C	_____ m³/h
Only reduced fan speed when outdoor temperature is below:	-20° C			_____ ° C		
CO₂ control						
CO ₂ control	Off	☒		Off	☐	
	On when active time channel	☐		On when active time channel	☐	
	On when inactive time channel	☐		On when inactive time channel	☐	
	On	☐		On	☐	
	Start reduced speed at CO ₂ level:	800 ppm		Start reduced speed at CO ₂ level:	_____ ppm	
	Start normal speed at CO ₂ level:	1000 ppm		Start normal speed at CO ₂ level:	_____ ppm	
	Stop at CO ₂ level difference:	160 ppm		Stop at CO ₂ level difference:	_____ ppm	
	CO ₂ control type:	Fan	☒	CO ₂ control type:	Fan	☐
Cooling (Log on to system level required)						
Control function cooling	Not active	☒	0-10 V ☐	On/off	☐	Not active ☐
On/off function	1 step	☐	2 step ☐	Binary step	☒	1 step ☐
No. of binary steps	1	☐	2 ☒	3	☐	1 ☐
Lowering of min. control temp. supply air, DX cooling	5° C			_____ ° C		
Extended operation	60 min			_____ min		

¹ Individual settings for each unit

Function	Default settings	Set value
Frost protection (Only visible for units without EL heater)		
Mode (EL unit Off)	On ☒	On ☐ Off ☐
Frost limit temperature:	See alarm settings/low frost guard temp	See alarm settings/low frost guard temp
Set point when stopped (return water):	<u>7° C</u>	____ ° C
P-band when running	<u>5</u>	____
Free cooling		
Mode:	Off ☒	On ☐ Off ☐
Activation at outdoor temp. higher than:	<u>22° C</u>	____ ° C
Stopped at outdoor night temp. higher than:	<u>15° C</u>	____ ° C
Stopped at outdoor night temp. lower than:	<u>5° C</u>	____ ° C
Stopped at room temp. lower than:	<u>18° C</u>	____ ° C
Hour for start/stop:	Start: <u>00:00</u> Stop: <u>07:00</u>	Start: _____ Stop: _____
Time to block heat output after free cooling:	<u>60</u> min.	____ min.
Fan output when free cooling:	SAF: <u>0%</u> EAF: <u>0%</u>	SAF: _____ % EAF: _____ %
Cool recovery (Not applied for SF units)		
Mode:	On ☒	On ☐ Off ☐
Start at temp. difference:	<u>2° C</u>	____ ° C
Fire function		
Operation in case of fire alarm	Stopped ☒ Only EAF ☐ Only SAF ☐ Normal run ☐ Continuous run ☐	Stopped ☐ Only EAF ☐ Only SAF ☐ Normal run ☐ Continuous run ☐
Fire alarm input	Normally open ☒ Normally closed ☐	Normally open ☐ Normally closed ☐
Defrost function (Not applied for SF, TR, SR, FR units)		
Exchanger de-icing (Only visible for units with cross/counter flow exchanger)	Yes ☒	Yes ☐ No ☐
By-pass active:	On ☒	On ☐ Off ☐
Stop deicing	On ☒	On ☐ Off ☐
Activation temp	<u>0.0</u>	____
Stop temp SAF	<u>-8° C</u>	____ ° C
Setp Press dev	<u>50 %</u>	____ %
Stop hyst	<u>60 %</u>	____ %

Function	Default settings	Set value
External set point knob		
External set point knob:	Off ☒	On ☐ Off ☐
Min. set point of knob	<u>12 °C</u>	____ °C
Max. set point of knob	<u>30 °C</u>	____ °C
HW heat pump		
Pump stop mode (EL unit off):	Off ☒	On ☐ Off ☐
Stop delay:	<u>5 min</u>	____ min
Pump stop at outdoor temp.	<u>10 °C</u>	____ °C
Hysteresis:	<u>1 °C</u>	____ °C
Hours for pump exercising:	<u>15 h</u>	____ h
Cooling, cold water pump		
Stop delay:	<u>5 min</u>	____ min
General		
Heat pump indication	Motor protection ☐	Motor protection ☐
	Run indication ☒	Run indication ☐
Cold pump indication	Motor protection ☐	Motor protection ☐
	Run indication ☒	Run indication ☐
Outdoor temp. related settings		
Full heat when outdoor temp is below:	<u>3 °C</u>	____ °C

1.2 Setting the weekly program

Factory setting of the normal and reduced fan speed are:

- Normal fan speed 07:00 to 16:00 Monday to Sunday and reduced fan speed remaining time Monday to Sunday.
- Settings of 00:00 to 00:00 stops the unit. E.g. changing reduced fan speed setting from 00:00–24:00 to 00:00–00:00 will stop the unit outside the time of normal fan speed.



Note:

Normal fan speed has priority over a reduced fan speed.

Weekday	Period	Normal fan speed	Reduced fan speed
Monday	1	_____ – _____	_____ – _____
	2	_____ – _____	_____ – _____
Tuesday	1	_____ – _____	_____ – _____
	2	_____ – _____	_____ – _____
Wednesday	1	_____ – _____	_____ – _____
	2	_____ – _____	_____ – _____
Thursday	1	_____ – _____	_____ – _____
	2	_____ – _____	_____ – _____
Friday	1	_____ – _____	_____ – _____
	2	_____ – _____	_____ – _____
Saturday	1	_____ – _____	_____ – _____
	2	_____ – _____	_____ – _____
Sunday	1	_____ – _____	_____ – _____
	2	_____ – _____	_____ – _____

Holiday (month. day)	Holiday (month. day)	Holiday (month. day)	Holiday (month. day)
1. ____ . ____ – ____ . ____	7. ____ . ____ – ____ . ____	13. ____ . ____ – ____ . ____	19. ____ . ____ – ____ . ____
2. ____ . ____ – ____ . ____	8. ____ . ____ – ____ . ____	14. ____ . ____ – ____ . ____	20. ____ . ____ – ____ . ____
3. ____ . ____ – ____ . ____	9. ____ . ____ – ____ . ____	15. ____ . ____ – ____ . ____	21. ____ . ____ – ____ . ____
4. ____ . ____ – ____ . ____	10. ____ . ____ – ____ . ____	16. ____ . ____ – ____ . ____	22. ____ . ____ – ____ . ____
5. ____ . ____ – ____ . ____	11. ____ . ____ – ____ . ____	17. ____ . ____ – ____ . ____	23. ____ . ____ – ____ . ____
6. ____ . ____ – ____ . ____	12. ____ . ____ – ____ . ____	18. ____ . ____ – ____ . ____	24. ____ . ____ – ____ . ____

1.3 Alarm configuration

Alarm settings	Def. settings	Set value	Alarm settings	Def.settings	Set value
1. Supply air fan is out of operation Class: Delay: Stop ventilation unit if alarm active: Alarm text:	A 300 s Yes Run error supply air fan	_____ _____ _____	36. Manual supply air control Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual support control	_____ _____ _____
2. Extract air fan is out of operation Class: Delay: Stop ventilation unit if alarm active: Alarm text:	A 300 s Yes Run error extract air fan	_____ _____ _____	37. Manual supply air fan mode Class: Delay: Stop ventilation unit if alarm active: Alarm text:	A 300 s Yes Run error supply air fan	_____ _____ _____
3. P1-heater is out of operation Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Run error P1-heater	_____ _____ _____	Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 0 s No Manual supply air fan freq. control	_____ _____ _____
4. P1-cooler is out of operation Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Run error P1-cooler	_____ _____ _____	39. Manual extract air fan mode Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual extract air fan mode	_____ _____ _____
6. Filter guard Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 300 s Yes Filter guard	_____ _____ _____	40. Manual extract air fan freq. control Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual extract air fan freq. control	_____ _____ _____
10. Fire alarm Class: Delay: Stop ventilation unit if alarm active: Alarm text:	A 0 s Yes Fire alarm	_____ _____ _____	41. Manual heater control Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual heater control	_____ _____ _____
11. External switch Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s Yes External switch	_____ _____ _____	42. Manual exchanger control Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual exchanger control	_____ _____ _____

Alarm settings	Def. settings	Set value	Alarm settings	Def.settings	Set value
12. External alarm Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 0 s No External alarm	_____ _____ _____ _____	43. Manual cooler control Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual cooler control	_____ _____ _____ _____
15. High supply air temp Class: Delay: Stop ventilation unit if alarm active: Alarm text: High supply temp.	B 30 min No High supply air temp 35° C	_____ _____ _____ _____ _____	44. Manual P1-heater Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual P1-heater	_____ _____ _____ _____ _____
16. Low supply air temp Class: Delay: Stop ventilation unit if alarm active: Alarm text: Low supply air temp.:	B 30 min No Low supply air temp 10° C	_____ _____ _____ _____ _____	46. Manual P1-Cooler Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual P1-cooler	_____ _____ _____ _____ _____
19. High room temp Class: Delay: Stop ventilation unit if alarm active: Alarm text: High room temp.	B 30 min No High room temp. 30° C	_____ _____ _____ _____ _____	48. Internal battery error Class: Delay: Internal battery error: Alarm text:	B 5 s No Sensor error supply air temp.	_____ _____ _____ _____ _____
20. Low room temp. Class: Delay: Stop ventilation unit if alarm active: Alarm text: Low room temp.:	B 30 min No Low room temp. 10° C	_____ _____ _____ _____ _____	49. Sensor error supply air temp. Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Sensor error supply air temp.	_____ _____ _____ _____ _____
21. High extract air temp. Class: Delay: Stop ventilation unit if alarm active: Alarm text: High extract temp.:	B 30 min No High extract temp.: 30° C	_____ _____ _____ _____ _____	50. Sensor error extract air temp Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Sensor error extract air temp.:	_____ _____ _____ _____ _____

Alarm settings	Def. settings	Set value	Alarm settings	Def.settings	Set value
22. Low extract air temp. Class: Delay: Stop ventilation unit if alarm active: Alarm text: High extract temp.:	B 30 min No Low extract temp.: 10° C	_____ _____ _____ _____ _____	53. Sensor error exhaust air temp. Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Sensor error exhaust air temp.:	_____ _____ _____ _____
23. Electric heating is overheated (EL unit) Class: Delay: Stop ventilation unit if alarm active: Alarm text:	a 0 S Yes Electric heating is overheated	_____ _____ _____ _____	55. Sensor error SAF pressure Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Sensor error SAF pressure:	_____ _____ _____ _____
24. Frost risk (HW units) Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 60 S No Frost risk	_____ _____ _____ _____	56. Sensor error EAF pressure Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Sensor error SAF pressure:	_____ _____ _____ _____
25. Low frost guard temp. Class: Delay: Stop ventilation unit if alarm active: Alarm text: Frost limit:	B 60 S No Frost risk 7° C	_____ _____ _____ _____ _____	77. Alarm frequency converter SAF Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 5 s No Alarm frequency converter SAF	_____ _____ _____ _____
27. Sensor error outdoor temp. Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 60 S No Sensor error outdoor temp.	_____ _____ _____ _____	78. Alarm frequency converter EAF Class: Delay: Stop ventilation unit if alarm active: Alarm text:	A 0 s No Alarm frequency converter EAF	_____ _____ _____ _____
29. Rotation guard exchanger (TR, SR, FR units) Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 60 S No Rotation guard exchanger	_____ _____ _____ _____	85. Output in manual mode Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Output in manual mode	_____ _____ _____ _____

Alarm settings	Def. settings	Set value	Alarm settings	Def.settings	Set value
31. Supply air fan control error Class: Delay: Stop ventilation unit if alarm active: Alarm text: Max. diff. between setpoint and actual pressure:	B 60 S No Rotation guard exchanger VAV units – 50 Pa CAV size 03, 04 – 80 m ³ /h CAV size 06, 08, 09 – 160 m ³ /h CAV size 11, 12, 15 – 250 m ³ /h	_____ _____ _____ _____ _____ _____ _____	86. Time for service Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Output in manual mode	_____ _____ _____ _____
32. Extract air fan pressure control error Class: Delay: Stop ventilation unit if alarm active: Alarm text: Max. diff. between setpoint and actual pressure:	B 4 min No Extract air fan control error VAV units – 50 Pa CAV size 03, 04 – 80 m ³ /h CAV size 06, 08, 09 – 160 m ³ /h CAV size 11, 12, 15 – 250 m ³ /h	_____ _____ _____ _____ _____ _____ _____	87. Manual extra sequence Y4 Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Manual Y4-extra sequence control	_____ _____ _____ _____
35. Ventilation stopped Class: Delay: Stop ventilation unit if alarm active: Alarm text:	C 0 s No Ventilation manual mode	_____ _____ _____ _____	88. Restart blocked after power on Class: Delay: Stop ventilation unit if alarm active: Alarm text:	B 0 s Yes Restart blocked after power on	_____ _____ _____ _____

1.4 Notes and signatures

[illegible]

Signature: _____

Location: _____

Date: _____

Phone no.: _____



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