



FWF-BT/BF & FWC-BT/BF – F.A.Q.

This document purpose is to explain some of the most asked questions that might happen regarding FWF-BT/BF & FWC-BT/BF. For further assistance check the unit manuals or contact Service support at fqs.technicalservices@daikineurope.com.

Please, note that access to Daikin portal is required to open the links inside this document.

1. How does the auto operation work?

Please, check the annex I for the mode and fan operation during auto mode.

2. How to set a Modbus communication?

The EKFCMBCB optional Modbus PCB is required for a Modbus communication. When grouped (maximum 16 per group), the follower units don't require a controller neither a EKFCMBCB as long as the settings and wiring are correct.

- The full addresses can be found in the portal: [Open manual](#) (yes, it says McQuay but it works)
- EKFCMBCB installation manual: [Open manual](#)

Basically, there are two option of installing a modbus network (check annex V):

- Option 1: Using the EKFCMBC7 maximum 16 group addresses per line, the F1F2 is powered by the EKFCMBC7 with 16Vdc
- Option 2: Using the EKMBDXA for the RS485, a central control to power up the F1F2 line and up to 64 FCUS. There's no need for the EKFCMBC7

Also note, for both options:

- Combining the number of units in F1F2 and P1P2, maximum 128 units
- Don't combine FCUs with DX indoor units
- Maximum 16 units on a P1P2 line

3. Can I remove the Remote Controller after doing the settings?

On the main controller of a group is possible to use the remote to do the settings only and once the Modbus settings are done, you can just remove the remote. The unit will only work with the Modbus through the Modbus kit and, of course, if changes are required the remote will have to re-connected. Also, note that this method (without remotes) is not officially supported but there been positive cases reported by customers.

4. Can I use another BMS that is not Modbus?

The FCUs are not directly compatible with other BMS protocols, they are only compatible with MODBUS RTU protocol. However, it is possible to install a third party gateway to convert MODBUS RTU into other BMS systems, for example a KNX.

5. Which are the possible settings of the FWF & FWC?

Please, check the Annex II for the full list of possible settings. Default settings are highlighted within a red square.

6. How can I access the Drain Pump?

Please, check Annex III. Also, be careful when retiring the parts; wearing a helmet is advised if the unit is on the roof while working it out.

7. How to install the 3-way valve?

The installation manual can be found within the portal: [Open manual](#)

8. How to do the maintenance?

Please, check the Annex IV for the maintenance of the air filter and the grill. If more advanced maintenances is required please contact DENV.

9. How to solve Error Codes?

- **Blank display:** If the remote screen is blank; please check the power supply and wiring connections.
- **88 display:** Every time the remote gets switched on 88 is displayed. Please wait a few seconds until the remote starts working. The unit will be available to use once the 88 disappears.
- **Unit is not available:** A central control can block the unit remotely from being switched ON/OFF or other commands. Please, revise your Building Management System.
- **Error codes:** Check the following document in the portal [\(Open manual\)](#)

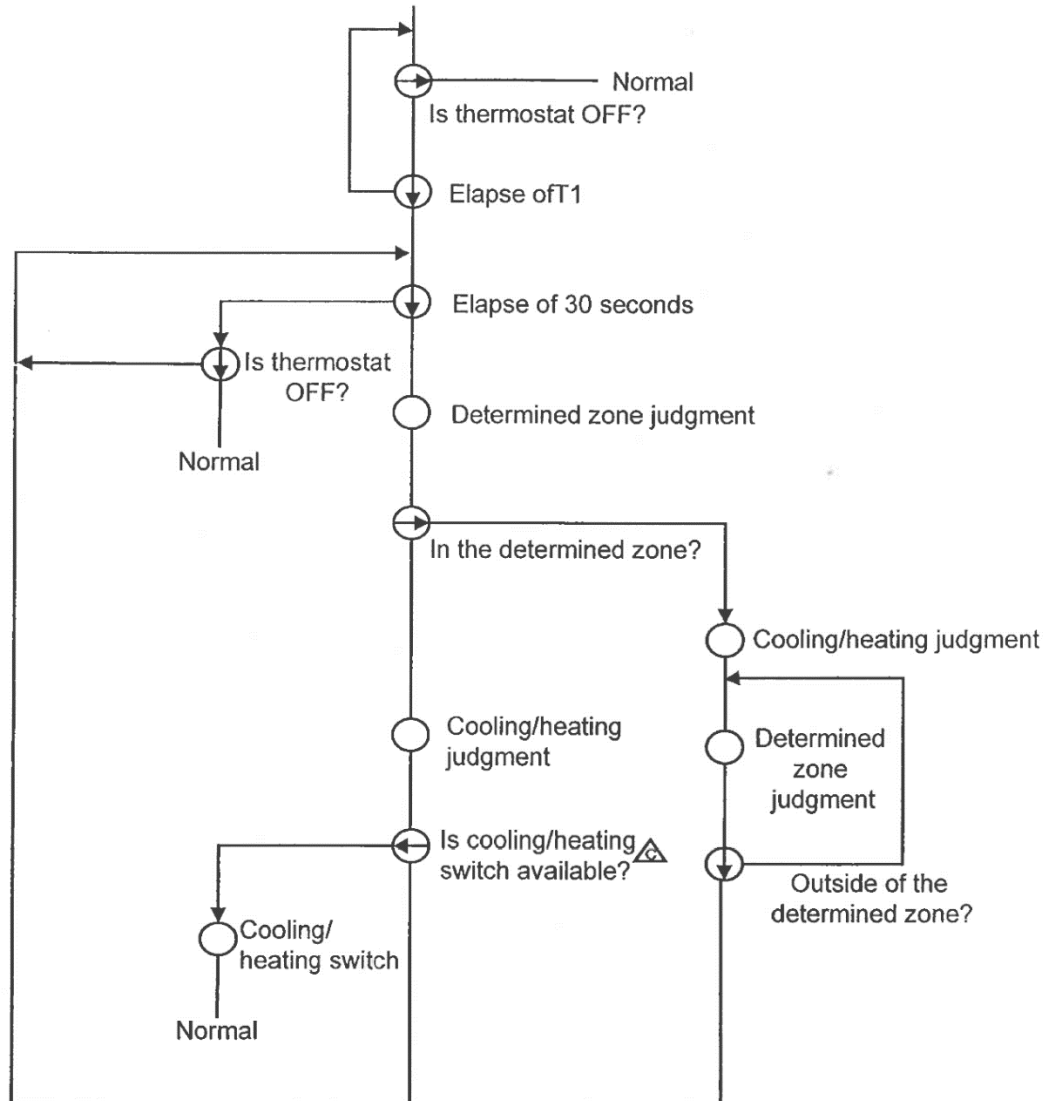
ANNEX I: AUTO OPERATION

Operation selection when operation mode is Auto:

(2) Thermostat ON

- After the elapse of T1 minute when the thermostat is ON

Continuous automatic operation in the operation mode



<Normal>

The thermostat condition is checked and
Jump to (2) Thermostat ON when
Thermostat ON; Jump to (3)
Thermostat OFF when Thermostat
OFF

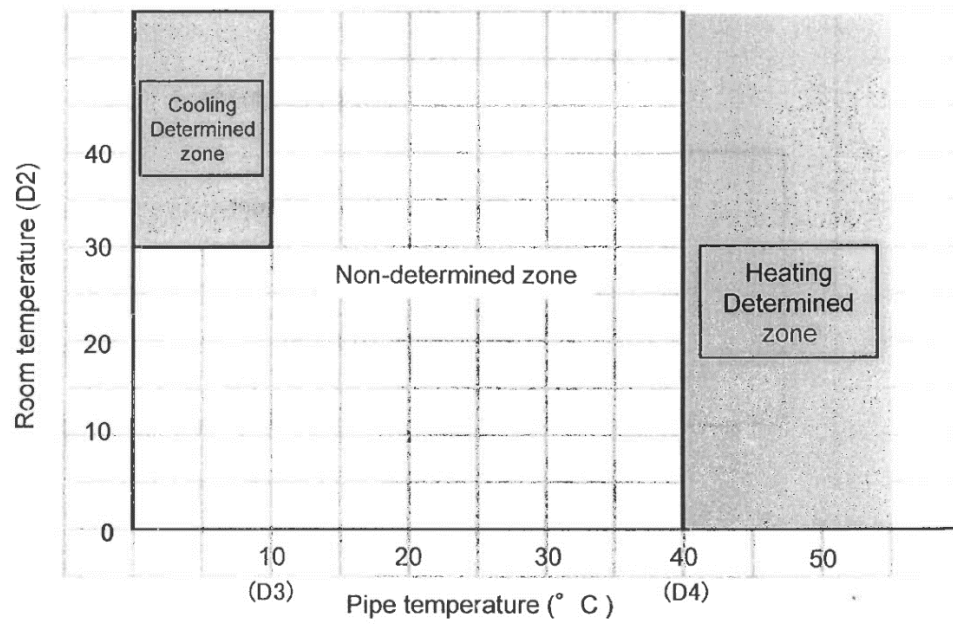
<Judgment of determined zone>

Heating: Pipe temperature $\geq$ Pipe temperature in the heating determined zone

<Cooling/heating judgment>

Heating - Cooling: Pipe temperature $\leq D1-2^{\circ} \text{ C}$
Cooling - Heating: Pipe temperature $\geq D1+2^{\circ} \text{ C}$

The thermostat will mandate when temperature is detected in a determined zone:
<Judgment of determined zone>



The following charts indicate the fan speed when Fan speed Auto is selected:

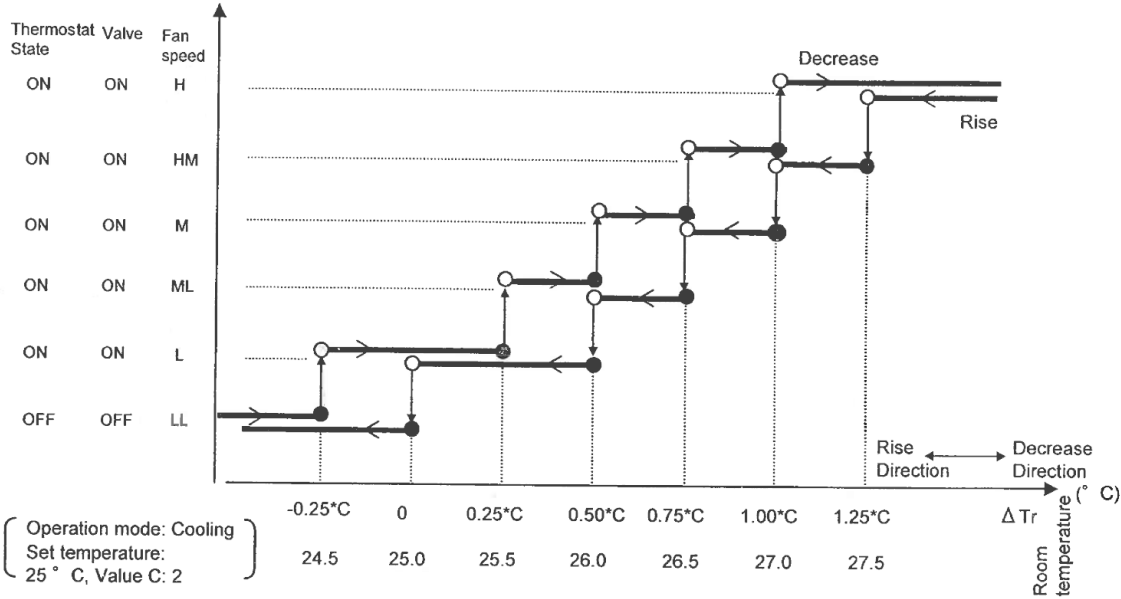
Fan speed - Valve control

$\Delta Tr = (\text{Room temperature} - \text{Set temperature})$ Cooling
 $\Delta Tr = (\text{Set temperature} - \text{Room temperature})$ Heating

In case of two pipe type 15(25)-5 = Two pipe type [01]
 In case of four pipe type 15(25)-5 = Four pipe type [02]
 Cooling indicates that the cool water valve is ON. (It is always OFF on the hot water side.)
 - Heating indicates that the hot water valve is ON. (It is always OFF on the cold water side.)

3x3 (FWC)

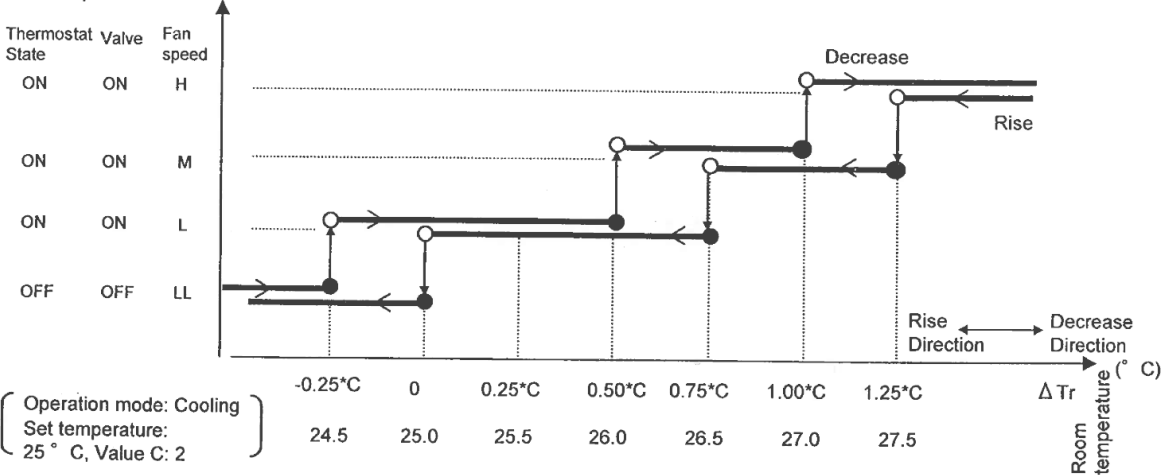
<Fan speed mode: Auto>



C: Hysteresis value
 According to the remote controller setting.

2x2 (FWF)

<Fan speed mode: Auto>



C: Hysteresis value
 According to the remote controller setting.

ANNEX II: SETTINGS LIST

FWC
Mode N° Code N°

		Description of the setting	possible settings							
			01	02	03	04	05	06	07	08
10(20)	D0	Filter sign display time	Low contamin	High contamin						
	D1	Filter type	LL filter		Std					
	D2	Thermistor to use for thermo control	remote controller	air return						
	D3									
	D4	Forced valve open time at operation start (minute)	3 minutes	5 minutes	10 minutes	15 minutes	20 minutes	30 minutes	45 minutes	60 minutes
	D5	Continuous valve time T2 under thermostat OFF condition A	10 minutes	20 minutes	30 minutes	40 minutes	50 minutes			
	D6	Difference in temperature under thermostat OFF condition A	2°C	3°C	4°C	5°C	7°C	8°C	9°C	10°C
	D7	Pipe temperature D4 in the heating determined zone	35°C	40°C	45°C	50°C				
	D8	Not used	-	-	-	-	-	-	-	-
	D9	Operation from central control	Not ignored	Ignored						

			01	02	03	04	05	06	07	08
11(21)	D0	Not used								
	D1	Not used								
	D2	Not used								
	D3	Not used								
	D4	Not used								
	D5	Room temperature D2 in cooling determined zone judgment	18°C	20°C	22°C	27°C	26°C	28°C	30°C	32°C
	D6	Pipe temperature D3 in cooling determined zone judgment	8°C	10°C	12°C	14°C	16°C	18°C	20°C	22°C
	D7	Pipe temperature D1 during cooling/heating judgment	22°C	24°C	26°C	28°C	30°C	32°C	34°C	36°C
	D8	Not used								
	D9	Not used								

			01	02	03	04	05	06	07	08
12(22)	D0	Not used								
	D1	Room temperature correction during body thermostat heating	0°C	-10°C	-2°C	-3°C	-4°C			
	D2	Fan when cooling/heating thermostat is OFF	LL	Fan stop	Set fan speed on remote ctrl					
	D3	Not used								
	D4	Not used								
	D5	Start/stop after power recovery	Stop	State before power recovery	Start					
	D6	Cold air prevention function	Not available	Available						
	D7	Fan setting in cooling/heating judgment (1) and (3)	L or LL	OFF						
	D8	External input/output switch	Forced stop	ON/OFF operation input	Protective equipment input					
	D9	Not used								

			01	02	03	04	05	06	07	08
13(23)	D0	High-ceiling application	< =2.7m	>2.7 >=3	>3 <=3.5					
	D1	Air discharge direction selection	Four directions	Three directions	Two directions					
	D2	Not used								
	D3	Not used								
	D4	Swing airflow direction	draft prevent	Standard	ceiling spoil prevent					
	D5	Not used								
	D6	Not used								
	D7	Swing when cooling thermostat is OFF	Swing	Not swing						
	D8	Not used								
	D9	Not used								

			01	02	03	04	05	06	07	08
14(24)	D0	Delay in power recovery	0 second	5 seconds	10 seconds	15 seconds				
	D1	Not used								
	D2	Not used								
	D3	Not used								
	D4	Not used								
	D5	Not used								
	D6	Not used								
	D7	Not used								
	D8	Not used								
	D9	Not used								

			01	02	03	04	05	06	07	08
15(25)	D0	Not used								
	D1	Not used								
	D2	Sampling cycle θ	30 seconds	45 seconds	60 seconds	90 seconds				
	D3	Hysteresis value 0 for fan staging	1	2	3	4				
	D4	Dead zone	±1°C	±1.5°C	±2°C	±2.5°C	±3°C			
	D5	Two pipe type / four pipe type	Two pipe type	Four pipe type						
	D6	ON/OFF valve	No valve	Valve						
	D7	Not used								
	D8	Not used								
	D9	Not used								

 "= default value"

FWF
Mode N° Code N°

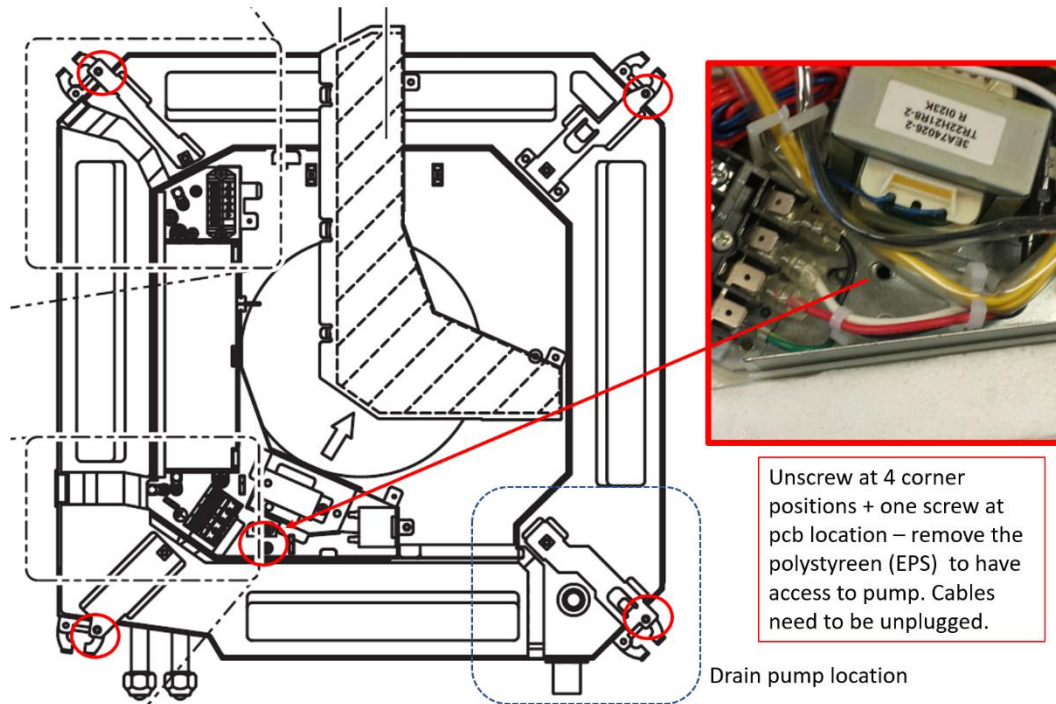
Field settings
Description of the setting

Mode N°		Code N°	Description of the setting	possible settings							
			available/not available	01	02	03	04	05	06	07	08
10(20)	D0	Filter sign display time	Available	Low contamin	High contamin						
	D1	Filter type	Available	LL filter		Std					
	D2	Thermistor to use for thermo control	Available	remote controller	air return						
	D3		Available								
	D4										
	D5										
	D6										
	D7	Pipe temperature D4 in the heating determined zone	Available	35°C	40°C	45°C	50°C				
	D8	Not used	Not available	-	-	-	-	-	-	-	-
	D9	Operation from central control	Available	Not ignored	Ignored						
11(21)	D0	Not used	Not available								
	D1	Not used	Not available								
	D2	Not used	Not available								
	D3	Not used	Not available								
	D4	Not used	Not available								
	D5										
	D6										
	D7										
	D8	Not used	Not available								
	D9	Not used	Not available								
12(22)	D0	Not used	Not available								
	D1	Room temperature correction during body thermostat heating	Available	0°C	-10°C	-2°C	-3°C	-4°C			
	D2	Fan when cooling/heating thermostat is OFF	Available	LL	Fan stop	Set fan speed on remote ctrl					
	D3	Not used	Not available								
	D4	Not used	Not available								
	D5	Start/stop after power recovery	Available	Stop	State before power recovery	Start					
	D6	Cold air prevention function	Available	Not available	Available						
	D7	Fan setting in cooling/heating judgment (1) and (3)	Available	L or LL	OFF						
	D8	External input/output switch	Available	Forced stop	ON/OFF operation input	Protective equipment input					
	D9	Not used	Not available								
13(23)	D0	High-ceiling application	Available	< =2,7m	>2,7 >=3	>3 <=3,5					
	D1	Air discharge direction selection	Available	Four directions	Three directions	Two directions					
	D2	Not used	Not available								
	D3	Not used	Available								
	D4	Swing airflow direction	Available	draft prevent	Standard	ceiling spoil prevent					
	D5	Not used	Not available								
	D6	Not used	Not available								
	D7	Swing when cooling thermostat is OFF	Available	Swing	Not swing						
	D8	Not used	Available								
	D9	Not used	Available								
14(24)	D0	Delay in power recovery	Available	0 second	5 seconds	10 seconds	15 seconds				
	D1	Not used	Not available								
	D2	Not used	Not available								
	D3	Not used	Not available								
	D4	Not used	Not available								
	D5	Not used	Not available								
	D6	Not used	Not available								
	D7	Not used	Not available								
	D8	Not used	Not available								
	D9	Not used	Not available								
15(25)	D0	Not used	Not available								
	D1	Not used	Not available								
	D2										
	D3										
	D4	Dead zone	Available	+1°C	+1,5°C	+2°C	+2,5°C	+3°C			
	D5	Two pipe type / four pipe type	Available	Two pipe type	Four pipe type						
	D6	ON/OFF valve	Available	No valve	Valve						
	D7	Not used	Not available								
	D8	Not used	Not available								
	D9	Not used	Not available								

 " = default value "

ANNEX III: ACCESS TO DRAIN PUMP

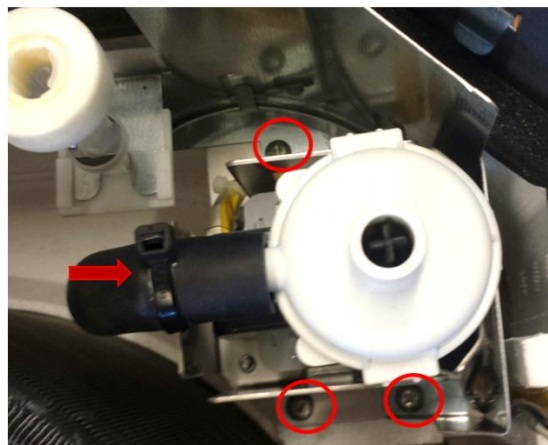
1. 5 screws have to be retired to access the drain pump location. Be careful if unit is still installed on the roof:



Warning
Falling objects

2. Retire the three indicate screws to retire the drain pump

Cut the strap around the rubber tube, replace by **new one** once new drain pump installed



Unscrew at 3 positions in order to remove pump

ANNEX IV: MAINTENANCE

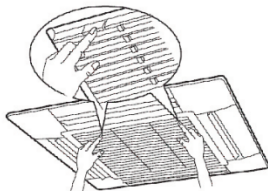
Cleaning the air filter

Clean the filter when necessary. Cleaning the filter at least once every six months. Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.

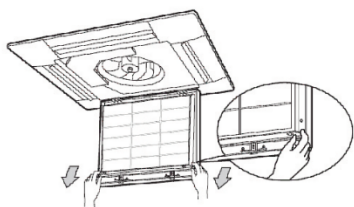
If dirt becomes impossible to clean, replace the air filter with an original spare part.

For cleaning the air filter proceed as follows:

- 1 Switch off the power supply.
- 2 Open the suction grill.
Push both knobs simultaneously and carefully lower the grill.



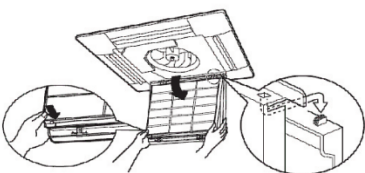
- 3 Detach the air filter.
Pull the hook of the air filter out diagonally downward and remove the filter.



- 4 Clean the air filter.
Use a vacuum cleaner or wash the air filter with water.
When the air filter is very dirty, use a soft brush and neutral detergent.



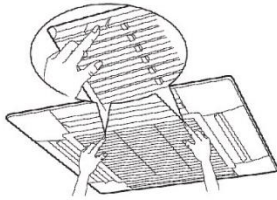
- 5 Fix the air filter.
Attach the air filter to the suction grill by hanging it to the projected portion above the suction grill. Press the bottom of the air filter against the projections on the bottom of the grill to snap the air filter into its place.



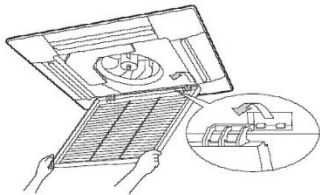
- 6 Close the suction grill.

Cleaning the suction grill

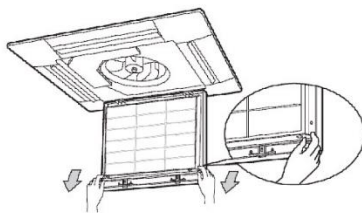
- 1 Switch off the power supply.
- 2 Open the suction grill.
Push both knobs simultaneously and carefully lower the grill.



- 3 Detach the suction grill.
Pull the hook of the air filter out diagonally downward and remove the filter.



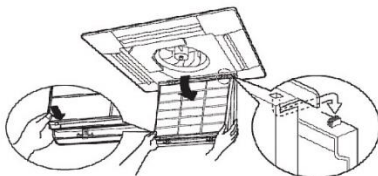
- 4 Detach the air filter
Pull the hook of the air filter out diagonally downward and remove the filter



- 5 Clean the suction filter.
Wash it with a soft brush and neutral detergent and dry thoroughly.



- 6 Fix the air filter.
Attach the air filter to the suction grill by hanging it to the projected portion above the suction grill. Press the bottom of the air filter against the projections on the bottom of the grill to snap the air filter into its place.

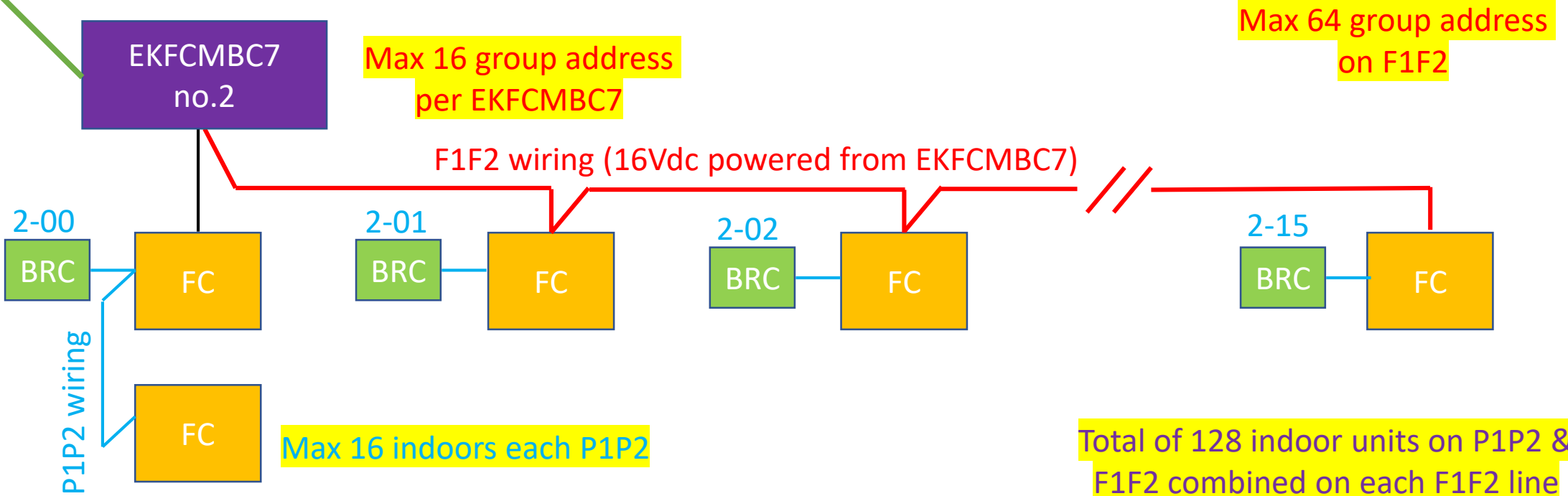
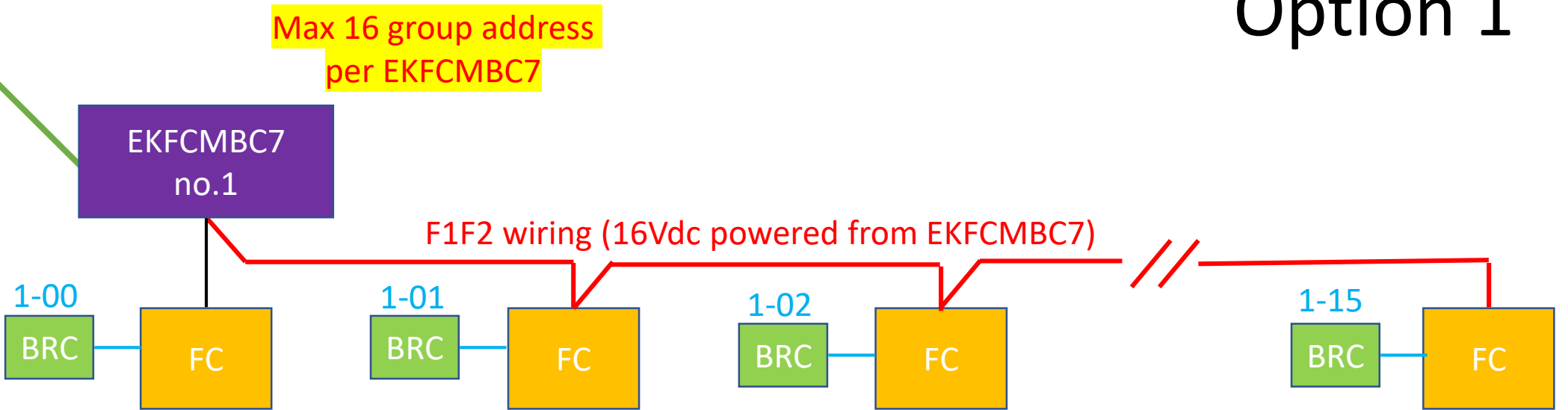


- 7 Close the suction grill.

ANNEX V: MODBUS OPTIONS

Option 1

RS485 wiring



Option 2

Don't combine FCUs with VRV indoor units on F1F2 line, only FCUs

