

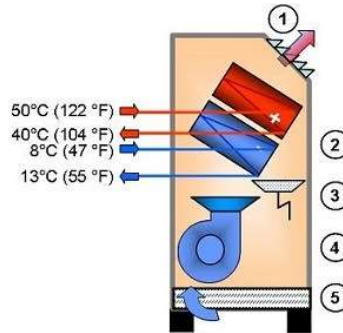
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HVAC Learning.com

# Exercise Booklet

Print this exercise booklet before studying the lesson on-line. It will enable you to write your answers to the HVAC learning exercises. You will thus be able to switch between reading or listening to the file on-line and writing in the booklet.



## FAN COIL UNITS TECHNOLOGY

English lesson

<https://hvac-learning.com/air-conditioning-cooling/fan-coils-units-cooling-floor-and-ceiling-chill-beam-training/fan-coil-units-technology/>

French version:

<https://formation.xpair.com/cours/ventilo-convecteurs.htm>

For each exercise, you will write your answer, then you will study its correction on-line before going to the next exercise.

If you cannot do an exercise, you will be able to study its correction directly, but **force yourself to write your answer** as often as possible.

Note that between 2 exercises, you will find it necessary to study the course. As a warning, in the booklet, you will sometimes find the following indication:

- “ **Study the course on-line before doing the next exercise**” or
- “ **Study the course on-line before going to the next paragraph**”

Only study the paragraphs or the exercises which have an equal or a lower level than the one your training requires.

NVQ Level = Vocational Certificate

A Level = High school Diploma

HND Level = Associate's Degree

MSC Level = Engineering Schools

Then, when you have completed a file, you will be able to assess your level on-line through a Multiple Choice Questionnaire in which you will only answer the questions related to the themes you have studied.

So now off you go and work well!

Good luck!

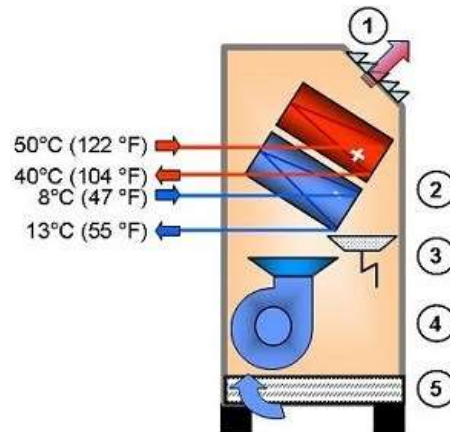
The Authors.

## N°1 – The different models of fan coils training – NVQ Level

**Study the course on-line.**

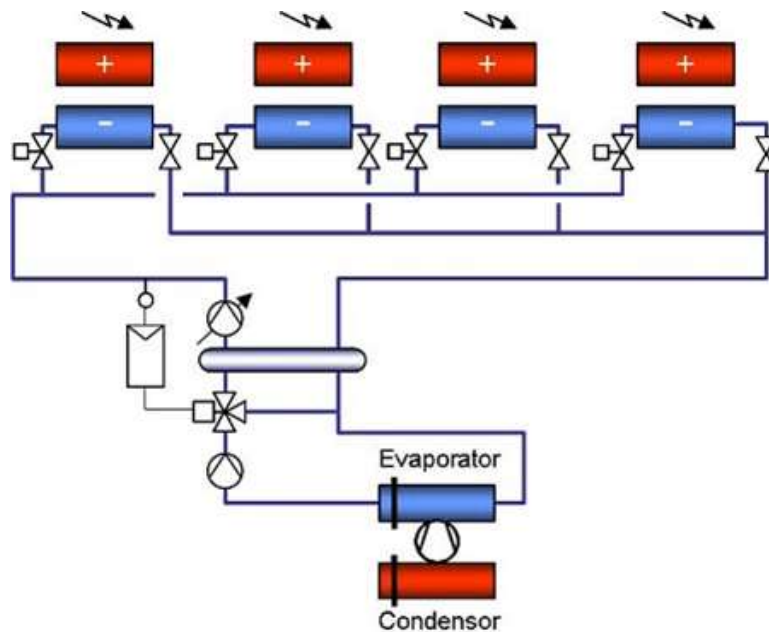
Fan coil units are convectors fitted with a fan and one or more heating and/air cooling coils, with at least one fed with hot and/or chilled water.

They are made up of:



## N°2 – Two pipe/two wire FCU feed supply training – A level

**Study the course on-line.**



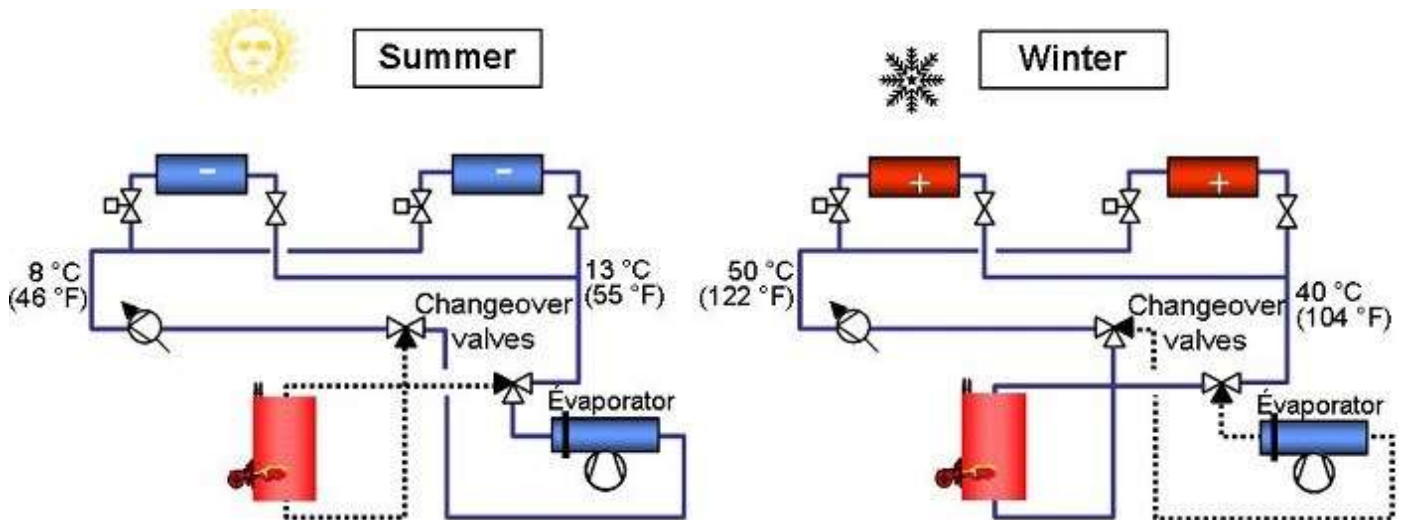
### N°3 – Two pipe FCU feed supply, network known as “Change Over” training – A to HND level

**Study the course on-line before treating the next exercise.**

#### Question 1

Indicate, with arrows, the circulation in the pipe work which is fed when all fan coils are in heating mode (cooling unit off).

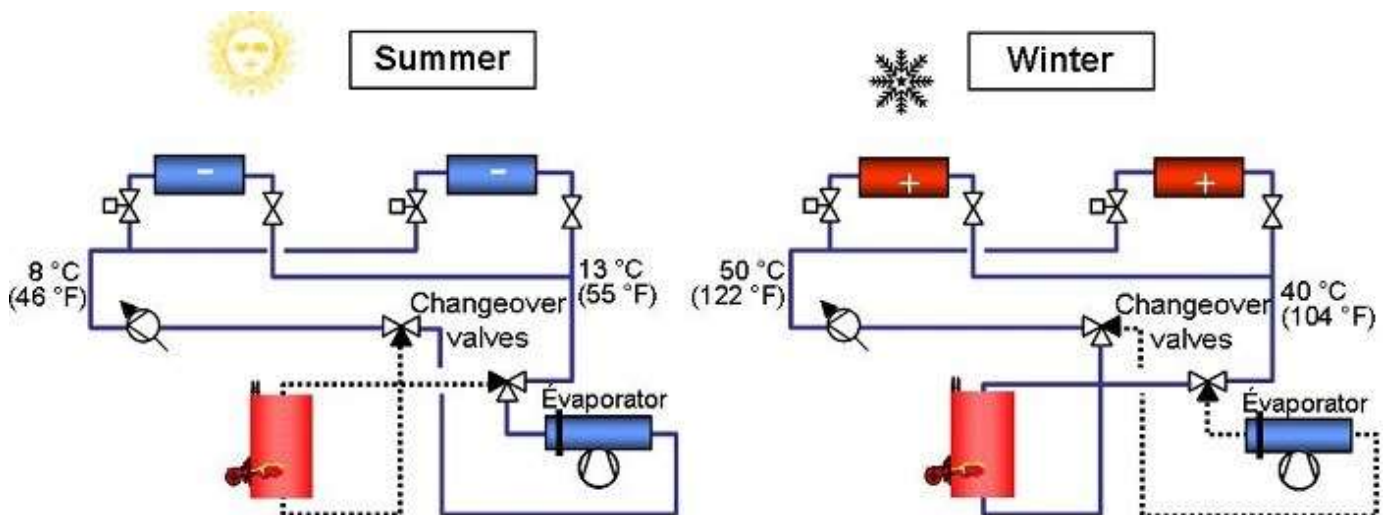
Specify on the 3WV the ports which are open and which are closed (C).



#### Question 2

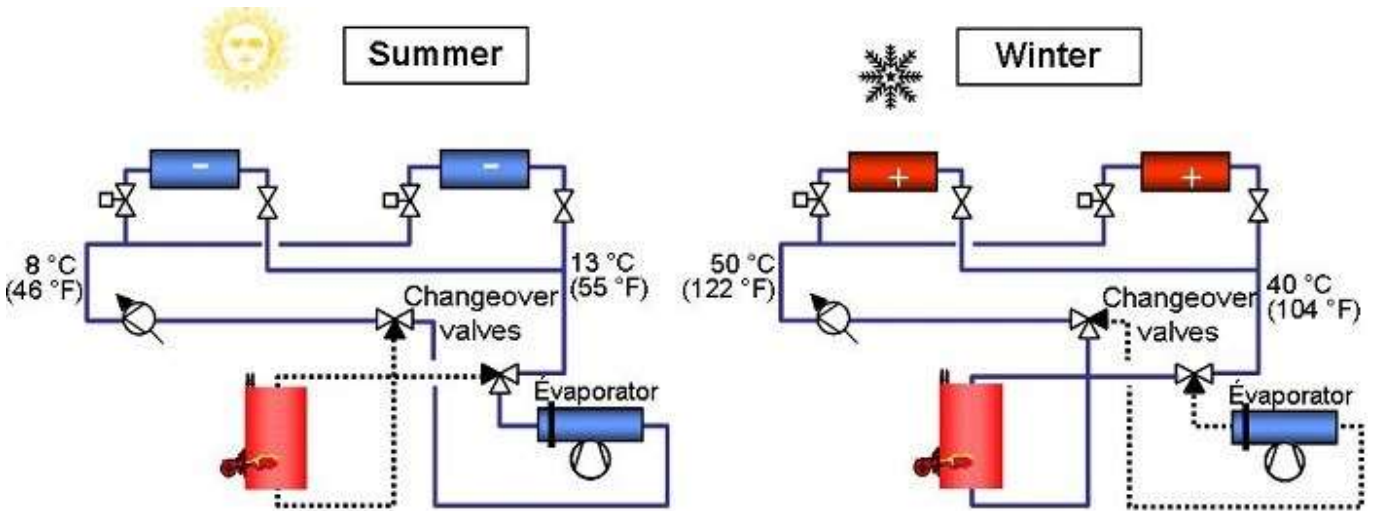
Indicate, with arrows, the circulation in the pipe work which is fed when all fan coils are in cooling mode (heating unit off).

Specify on the 3WV the ports which are closed (C).



Question 3

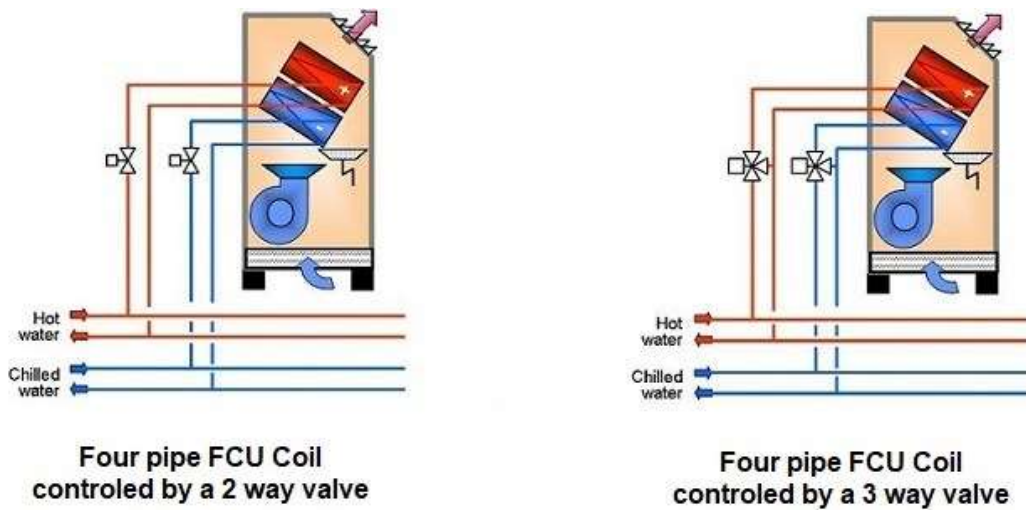
Indicate, with arrows, the circulation in the pipe work which is fed when all fan coils of the east façade are in cooling mode and those of the west in heating mode.  
Specify on the 3WV the ports which are closed (c).



**Study the course on-line before treating the next paragraph.**

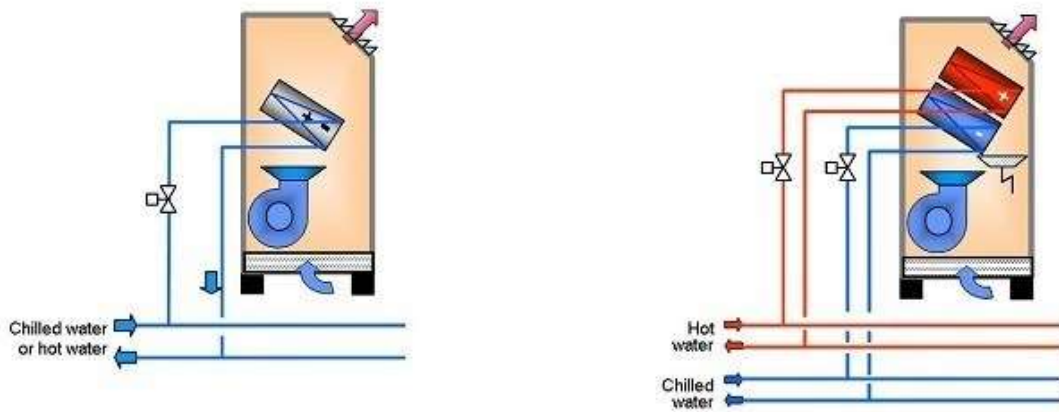
**N°4 – Four pipe FCU feed supply training – A level**

Two twin pipe networks, hot and cold, possibly Tichelmann system, will feed the coils, regulated by 2, 3 or 4 way valves.



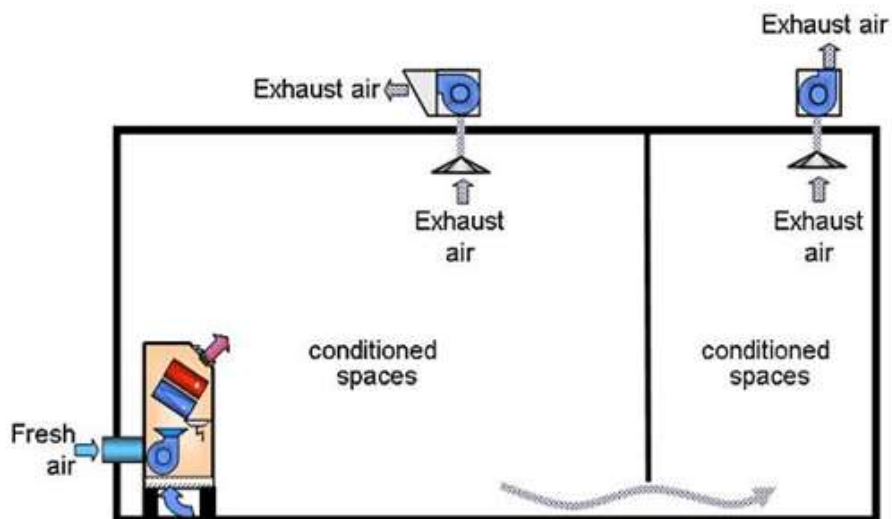
### Question 1

Compare the advantages and disadvantages of 4 pipe systems and 2 pipe systems fed by one single



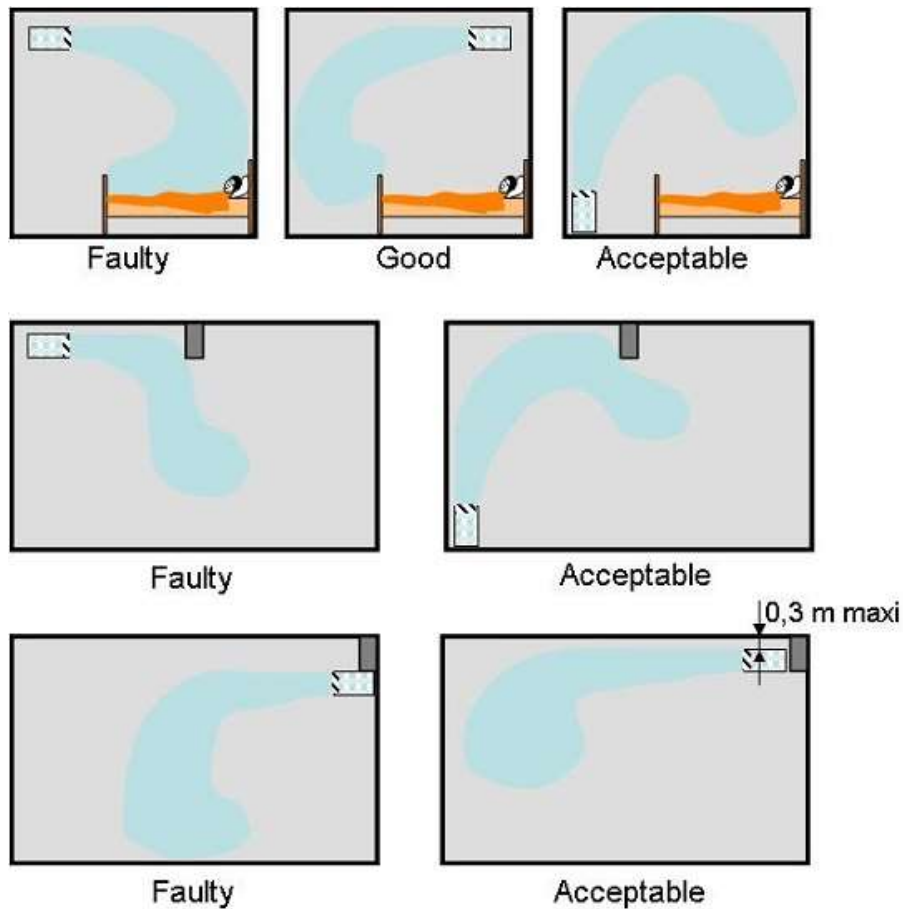
### N°5 – Ventilation of rooms fitted with fan coil units training – A Level

***Study the course on-line.***



## N°6 – Positioning, condensate disposal, air handling models training – NVQ level

**Study the course on-line.**



*English lesson*

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