



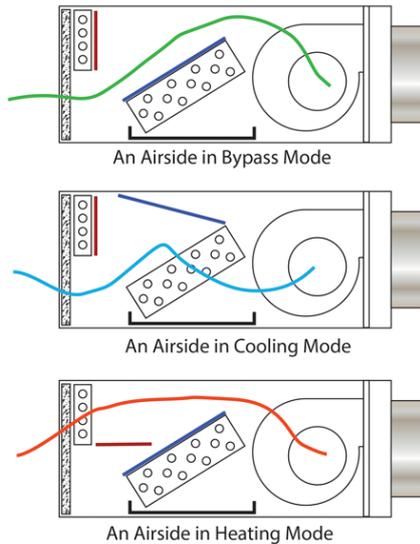
FCU Styles

Fan Coil Unit Configurations

There are two main types of Fan Coil Units each of which break down into a number of different 'sub styles'.

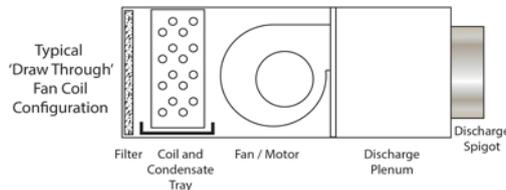
Type 1 Airside

This type of fan coil unit uses internal damper blades to direct the airflow going through the unit over either the heating coil, the cooling coil or a bypass channel. The idea is that the water flow to both the heating and cooling coils runs all the time and it is the modulating action of the damper blades that governs if the unit is heating, cooling or bypassing (in other words doing nothing).



Type 2 Waterside

This type of unit uses modulating water flow control valves to control the water flow to the cooling coil, the heating coil or neither. So the air direction through the unit is a constant, the output is simply governed by the amount of chilled water (holding cooling potential) or heating water (holding heating potential) that is allowed to flow to the unit. Obviously, if both the heating and chilled water are 'off' to the unit, the unit does no heating or cooling and simply circulates air.



Airside V Waterside

In the last few years the Airside unit has become unpopular for a number of technical reasons:- - With the heating water running through the unit even when the unit was trying to cool, there was always a carryover of heating energy into the cooling airstream. This 'heating leakage' was always claimed to be 7 or 8% of the cooling design output but in reality was probably many times that. In these energy efficient days, this wastage is unacceptable. - The dampers and the damper control linkages were complex and prone to jamming and failure. Also on longer units, the dampers tended to sag and leave bigger air gaps which led to even more energy leakage. - It was always difficult to get the airflow through the three air paths even. On the basis that airside fan coils have been discounted as inefficient and impractical for today's environment, the rest of our articles will only describe the features and actions of waterside fan coils.

The Sub Categories of Waterside Fan Coils

London Showroom Opens

Ability have opened a London Showroom. This will be used to showcase and demonstrate its ranges of Fan Coil Units, Heat Recovery Units and Twin / Single Fan Units. It will also be used for training and CPDs. The facility itself is 250Yds...

Read on...

World Projects

> View a selection



Contact Us

UK Head Office, The Fulcrum,
2-3 Vantage Way, Poole, Dorset,
United Kingdom BH12 4NU

T - +44 (0)1202 305800
F - +44 (0)1202 734470

