



“EcoTrack Seasonal Set Back”

Generally, the fan coils on most installations will run at one speed at all times. This speed, the design speed, will have been calculated to maintain a comfortable environment on the hottest of summer days. However, the reality is that those conditions only exist for short periods and for the majority of the year that fan speed and the air volume it provides are not necessary.

Matrix units evaluate the demand at all times and subtly, seamlessly adjust the fan speed and therefore the air volume to suit. The permissible air volume reduction and all the other parameters surrounding this feature are completely user definable.

Fan Coils, flexible and efficient

While EC Fan Coil Units already reduce electrical consumption by half over their AC equivalents, this additional set back feature can further reduce that energy consumption by over half again. This puts Fan Coils, with all their flexibility benefits, alongside and possibly beyond the energy efficiency capability of other product systems.

Lower Speed, Less Noise

A reduced fan speed will mean that the noise level within any building will be at a lower level only rising to the design limit when, on the hottest of days, maximum thermal performance is required.

Occupancy Dependent Demand

Cooling demand is not just a function of solar gain as occupancy levels also play a part. This means that Matrix units are especially useful in rooms or areas with varying occupancy levels, such as meeting rooms, as the fan speed and the corresponding noise level will adjust to suit the number of people.

Reduced air volumes mean less dirt collecting in the filters and so filter and ductwork cleaning should be less frequent.

Supply Air Temperature Monitoring

All Matrix units incorporate an integral supply air temperature sensor. This ensures the controller will override any preset air volume reduction strategy if the design supply air temperature limits are being approached.

This feature has benefits beyond simply making sure effective air distribution is maintained. BMS alarms triggered by an unexpected difference between the return and supply air temperatures are a very useful indication of other problems within the system. These might be dirty filters or possibly a lack of water through the heat exchangers because of a sticking valve or similar.