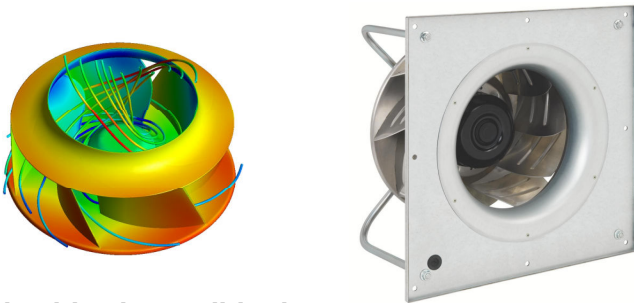


EC plug fans in air handling

EC, high efficiency is applicable within the refrigeration circuit in both the “cold” or supply and “hot” or heat rejection circuits.

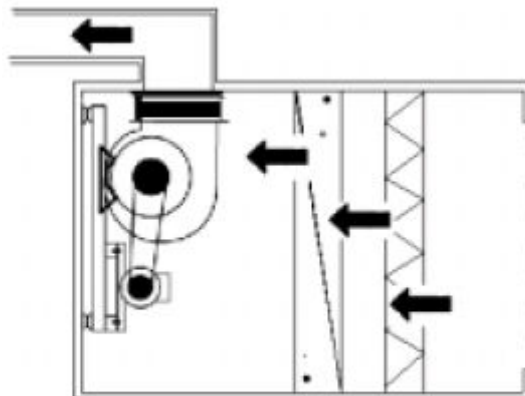
Best practice in supply systems can utilise a range of both axial and centrifugal fan technologies dependant upon the system requirements.

EC technology is widely used in evaporator circuits due to the double savings available due to the drop in heat rejected from the motor. The most widely used applied is in domestic or commercial refrigerators but double savings are evident in all supply side air handling application. The use of EC plug fans to replace belt driven forward curve fans is becoming more common.



Supply side air-conditioning

Some best practice examples in roof top (RTU) and air handling (AHU) packages as detailed by Lockwood (Lockwood G: Energy savings by improved application of fans in Air Handling unit: IMechE Events Publications, International Conference on Fans, 9-10 November 2004) are discussed here.

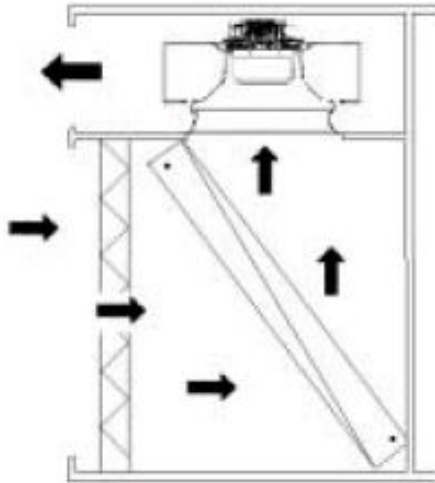


Sketch of original layout

For further information contact:
sales@ebmpapst.com.au

EC plug fans in air handling

By changing the 15inch by 15inch forward curve belt driven fan and applying the backward curved, plug fan EC technology as detailed, it was shown that the fan power reduced from 6.3kW to 2.78kW.



Sketch of revised layout

Although the improvement of COP has not been detailed publicly by the end user supermarket, it is anticipated that over the over 10 year life time of the plant, the improvements and savings were considerable.

For further information contact:
sales@ebmpapst.com.au