EC is easy - when you know what questions to ask!



by Rachael Sparnon-Freeman, Victoria State Sales Manager and EC Enthusiast

As EC technology in our industry moves us towards a more efficient future and compliance requirements drive fan selections to EC, are you really getting the EC technology you need?

With any major technology shift, new products enter the market to compete with established products. Whilst this is, of course, entrepreneurship at its finest, there is also an opportunity for products to join the market that do not meet the exacting requirements of control specifications.

In its simplest form, EC fans will offer inbuilt open-loop analogue 0-10 volt control, often with built-in potentiometers, allowing for quick and efficient control without the need for external speed controllers or variable speed drives.

Fans with full on-board electronics can also offer closed-loop demand control, allowing for sensor/ feedback control via digital input. The number of digital inputs available will depend on the motor model. It is prudent to check, particularly if your controls protocol is dependent on the inputs available. Some models will also incorporate RS-485 supervisory control, allowing for remote connections via laptops, PCs and smartphones.

Special features such as power factor correction and integrated PID control are also available. Your supplier should always be able and willing to provide a complete capability list of the fan motor you are considering, as well as any potential alternatives. Unfortunately, it is not as simple as specifying an EC fan; consideration of the expectations of the product in conjunction with the controls protocol of the project is paramount.

Simply put, cheap fans with "EC" on the box and a price too good to be true are exactly that – too good to be true. It is highly likely your project and your customer will be unhappy with the result, and you'll be facing a revolving door of fan return/replacements.

Need to know more about EC fans and technology?

Easy! Join us for our on-line Q & A on EC fans and controls; our resident EC specialists will be online to answer any questions you may have.

> QR code not working? Go to pacvent.fans/ECisEasy



