

S Force - Control and Optimisation

ebm-papst St Georgen have developed the ultimate performer in compact fan technology - S Force.

The new technology from ebm-papst has developed compact fans with:

- Superior air flow
- Steep pressure curves
- Superb efficiency
- Silent commutation
- Sturdy design



With our compact fans a range of control possibilities are available. These are:

Speed signal



- The fans use a separate wire to output information about its speed and thus the speed of the rotor. The tacho output gives two outputs per revolution allowing feedback for a control loop.

Go - No Go Alarm



- The fans use a separate wire to output a static signal when it is stationary thus providing information about whether the rotor is turning. This allows a failure alarm for maintenance purposes.

Alarm with limit speed



- If the speed drops below a certain level defined in the fans electronics, the fan will give a static signal thus providing information about whether or not the rotor is turning. This can be used to ensure complete failure does not occur.

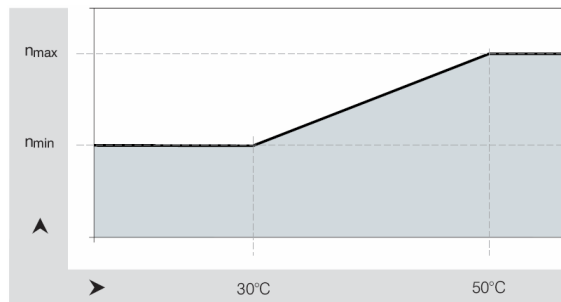
S Force - the Ultimate Performer

On our compact fans a range of control and optimisation variations are available. These are:

External and internal temperature sensor



- An NTC is connected to the fan via a separate wire and the fan changes its speed depending upon the temperature at the NTC. A simple temperature profile such as below can be achieved without the need for external controllers.



PWM control input



- The speed of the fan can be controlled via a pulse width modulation signal. The signal is applied to a specially provided wire.

Analogue control input



- The speed of the fan can be controlled via a control voltage. The signal is applied to a specially provided wire.

In summary, a range of control options can be applied to or received from the compact fans of ebmpapst; from PWM control to TACHO output.

All of the signals and controls enable design engineers to control and optimise the performance of the fan ensuring exact air delivery and well as optimisation of power and noise.

Do you have a question? Please contact us.

For further information contact:

sales@ebmpapst.com.au