



Sense



Switch



Control

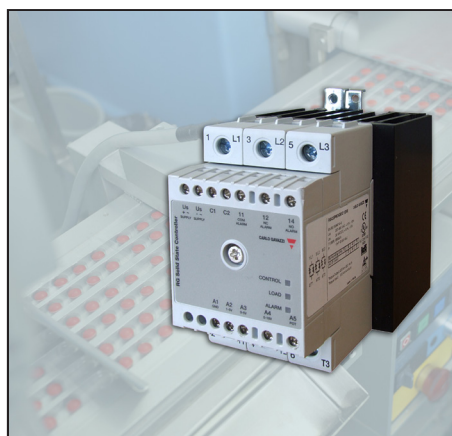


Fieldbus



EcoEnergy
equipment

Application notes



Application Note : September 2013

Market involved : Packaging & Wrapping

Product : RGC3P60V20EDP

Customer : Packaging machinery manufacturer

Subject : Speed control of ventilators

CUSTOMER ISSUE :

Fans located at the end of the shrinkage tunnel are used for the cooling process. Adjustment of the speed of the fan to the cooling requirements can help in energy consumption optimisation.

In this application, two fan motors connected in parallel need to be controlled. The nominal current of one motor is 0.61AAC at 400 VAC. Inrush current is maximum 2.4In.

OUR SOLUTION :

Speed control of the fans is possible through phase angle switching. Phase angle switching is possible only with 3-phase switching solutions.

The model utilised in this application is the RGC3P60V20EDP. The firing angle and hence output power is controlled by the 0-10V input signal. An external filter is used for conformance to the required EMC emission levels.

ACHIEVED BENEFITS :

- Cost saving; a more cost effective solution to frequency drives
- Energy optimisation;
- Compact solution with much better performance and speed control resolution as compared to 3x 1-phase phase angle control solutions