

A close-up photograph of several golden-brown muffins with chocolate chips, each in a white paper liner. A blue circuit board pattern with circular nodes is overlaid on the image, connecting various points on the muffins.

The  
power to  
control

## Custom-made controllers

### Fan regulator for bakery machines

#### Project description

The aim of the fan regulator that E.D.&A. developed is to regulate the speed of single-phase fans that are positioned above the condensers and evaporators. By setting the fan speed, the cooling process can be controlled.

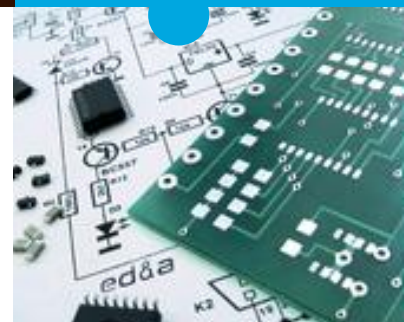
The controller is driven by a PWM signal with a feedback option. With this feedback, the main controller can be kept up to date on malfunctions.

For example, the controller is equipped with automatic short-circuit detection during the start-up of the fan. The fan controller will

detect any short circuit and then go into standby mode. This ensures that the module is not damaged and can be used again as soon as the short circuit has been resolved.

#### Customer

Global manufacturer of storage and freezing appliances for storing dough and finished products (bakery sector).



#### Characteristics

- motor speed regulator by means of phase control using a triac
- driven by PWM signal
- status feedback to controller: no load, overload, motor short, etc.
- soft-start prevents large start-up currents
- short-circuit resistant (with softstart of the motor)



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