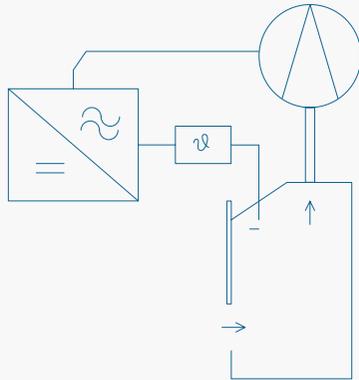


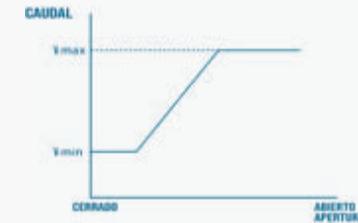
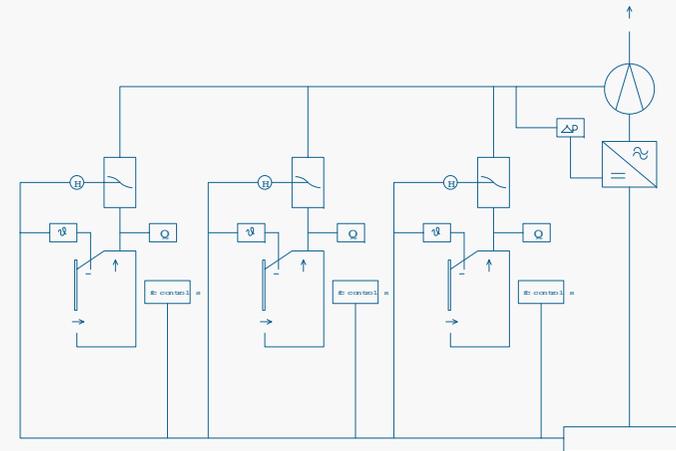
## VAV Easy Control



### Application

The EASY variable flow control depending on the sash opening is based on a control system by means of a frequency variator, which controls the speed of the motor while keeping the air speed at the front of the work area within the set values. This type of control is applicable to fume cupboards with individual ventilation installations. The application developed by Burdinola makes it possible to control the fan that extracts the air, depending on the measurements made by the BSVa velocity sensor, instantly and precisely adjusting the flow rate that the fume cupboard requires based on the opening of the sash. This system can communicate with room compensation controllers, as it has an analogue output that can give an output signal proportional to the power delivered to the fan. For this technique, the signal from the air velocity sensor is put into an inverter, which has an internal PID controller, so that it increases or decreases the fan speed and, therefore, the flow depending on the set point. The minimum operating flow is set in the inverter itself.

## HAKA Control



### Application

The flow control systems for associated fume cupboards require a number of successive automatic adjustments. Every fume cupboard must have a control system; at the same time, the set of associated fume cupboards needs a control for the pressure in the common duct; this control can take many forms: In turn, every individual fume cupboard has a proportional valve and a controller. This is the system that we call HAKA. The on-screen speed sensor measures in real time and sends the value to the controller, which will command the valve actuator to open or close based on the reference value. In this way, a constant speed is maintained in the work area, always within maximum and minimum margins.

The VAV system combined with the motorised sash can achieve energy savings of up to 75%.