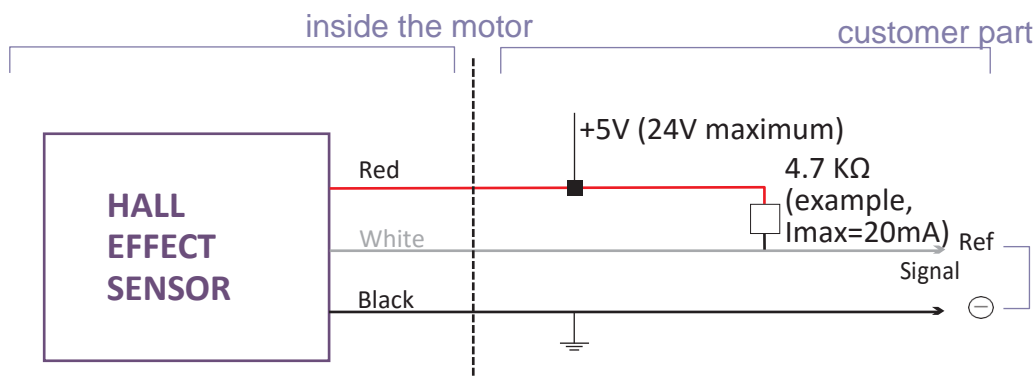


1. Rotation indicator

This system is used to control the rotation of the motor. It includes two parts :

- a permanent magnet inside the rotor
- a hall effect sensor inside the stator

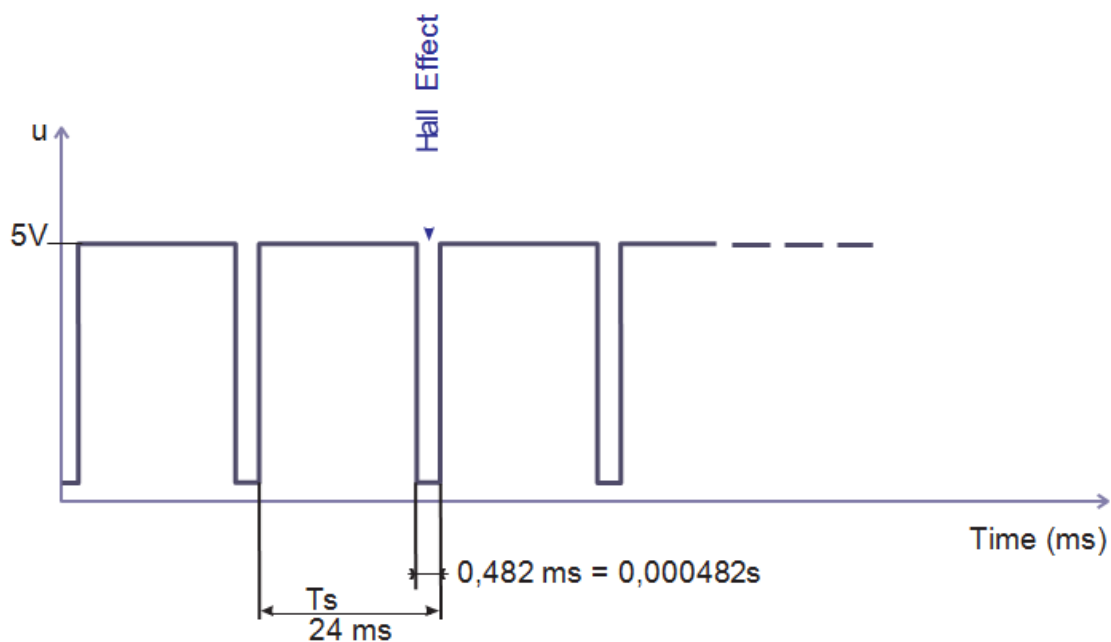
The electrical wiring is made according to the following drawing:



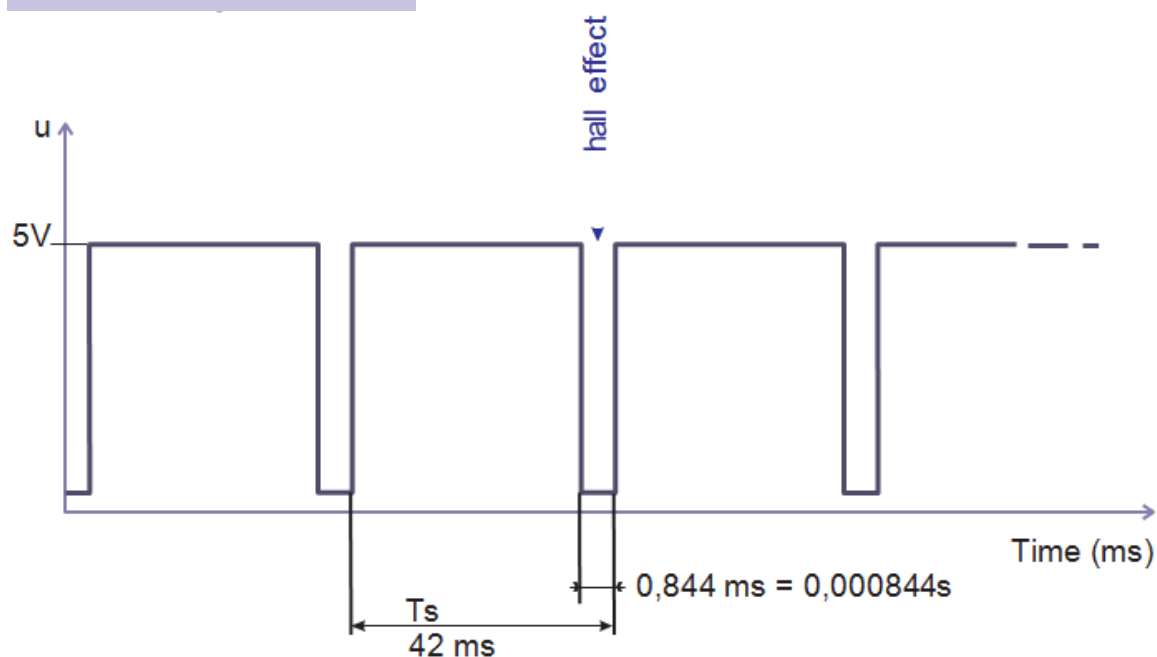
When the motor rotates, the sensor sends a signal to the points Ref and \ominus , with frequency and width T_s proportional to the rotation speed ($T_s = 60/n$). The amplitude of the square signal is the voltage (5VDC).

2. In details

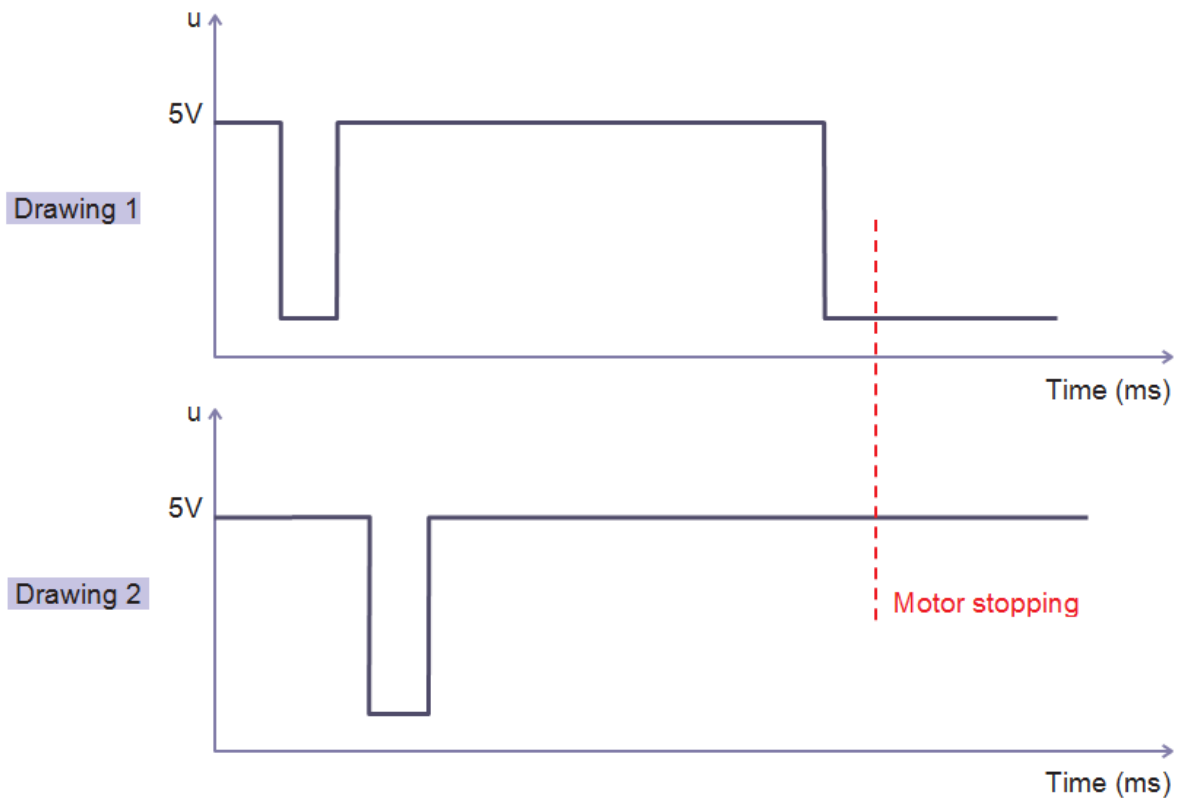
Motor 2 pole
Speed 2500 RPM
 $T_s = 60/2500 : 0.024$ second



Motor 4 pole
Speed 1400 RPM
 $T_s = 60/1400 : 0.042$ second



When the fan is stopped, the magnet can be **close to** the sensor (drawing 1)
or **far from** the sensor (drawing 2)



Through a necessary interface, the signal from the sensor allows to :

- Control the rotation of the motor, and give an acoustic, visual or another signal.
- Measure the motor rotation speed.

3. Precaution of using



The AC motor-fan contains electronic device which can be sensitive to electrostatic discharge. Take appropriate care especially when handling the low voltage cable.