

Vetrák

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#include <Servo.h>
int termistorPin = 0;
int Vout;
float R2 = 10000;
float logR2, logR1, R1, T, Tc, Tf;
float c1 = 1.009249522e-03, c2 = 2.378405444e-04, c3 =
2.019202697e-07;
int servoPin = 7;
int setTemp = 25;
int setTempRet=23;
Servo myservo;
int dcMotorPin=9;
int dcMotorSpeed=0;
void setup() {
  Serial.begin(9600);
  myservo.attach( servoPin );
  myservo.write( 0 );
  pinMode(dcMotorPin, OUTPUT);
}
void loop() {
  Vout = analogRead(termistorPin);
  R1 = R2 * (1023.0 / (float)Vout - 1.0);
  logR1 = log(R1);
  T = (1.0 / (c1 + c2*logR1 + c3*logR1*logR1*logR1));
  Tc = T - 273.15;
  Tf = (Tc * 9.0)/ 5.0 + 32.0;
  Serial.print("Teplota: ");
  Serial.print(Tf);
  Serial.print(" F; ");
  Serial.print(Tc);
  Serial.println(" C");
  delay(500);
  if(Tc > setTemp){
    myservo.write(180);

    dcMotorSpeed=map(T, setTemp, setTempRet, 32, 255);
    digitalWrite(dcMotorPin, dcMotorSpeed);
  }else if(Tc < setTempRet){
    myservo.write(0);

    digitalWrite(dcMotorPin,LOW);
  }
  delay(1000);
}
```

