```
#include <Wire.h>
#include <Rtc_Pcf8563.h>
#include <Stepper.h>
#define STEPS 2048


Stepper stepper(STEPS, 8, 9, 10, 11);


float prev = 0;

//init the real time clock
Rtc_Pcf8563 rtc;

void setup()
{
  Serial.begin(9600);
  stepper.setSpeed(30);

}

void loop()
{
  Serial.println(rtc.formatTime());
  float val = ((rtc.getMinute()+(rtc.getHour()*60))*1.4222222222);

  //float val = map((rtc.getMinute()+(rtc.getHour()*60)),0,1140,0,2048);
  //(map funktioniert nicht so gut, da es mit intager math arbeitet)

  //minutes of the day passed (total 1048) are mapped uppon all of the steps the
stepper can do

  if(val - prev >= 0){
  stepper.step(val - prev);
   prev = val;
  //stepper is rotated by the difference of previos and current value

  }else{        //otherwise at 23:59 to 00:00 full rotation cause big negative
number
  stepper.step(1);
  prev = 0;}

    Serial.println(val);
  delay(1000);
}
```