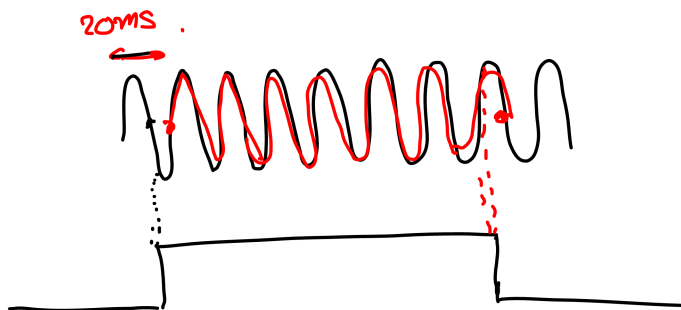
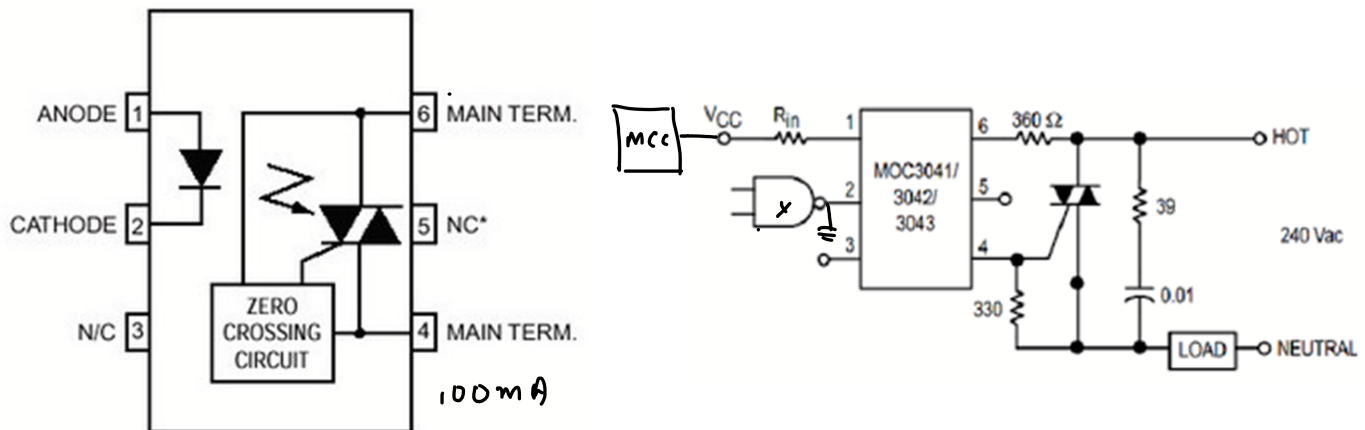
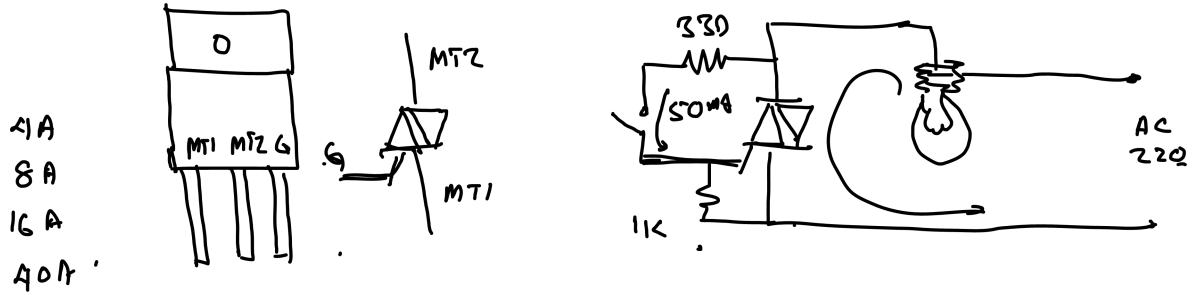
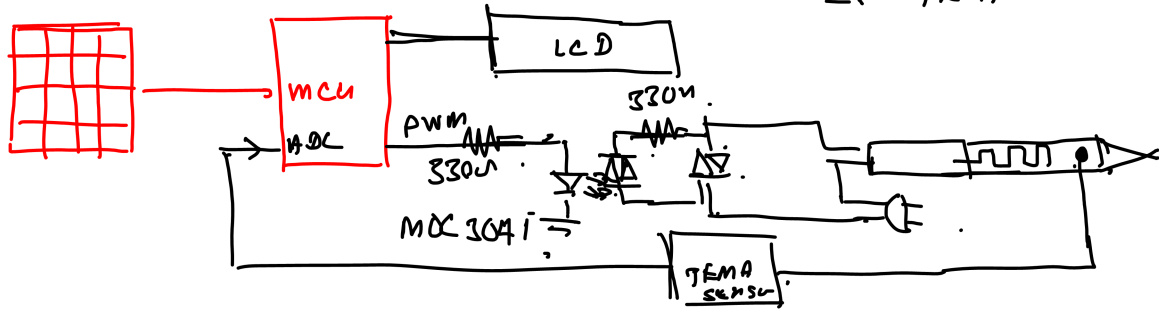


.. TRIAC



pulse = 1sec .. Zero Crossing 100.

0 to 100 %.

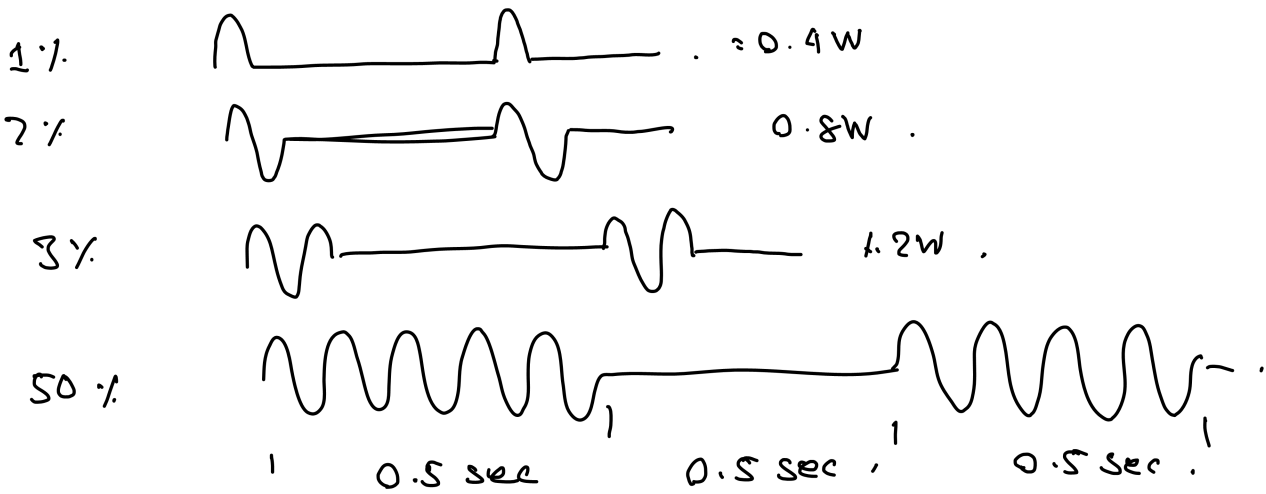
0 : OFF

1



40W .

$$40/100 = 0.4W$$



Sensor  $\rightarrow$  Voltage  $\rightarrow$  Temperature  $\therefore T_{OUT}$  .

Keypad  $\rightarrow$  Temperature  $\therefore T_{REF}$

char Duty = 0 .

```

if (TOUT < TREF)
{
    Duty += 1; if (Duty > 100) Duty = 100;
}
else if (TOUT > TREF)
{
    if (Duty > 0)
        Duty -= 1;
}

```

Duty  $\rightarrow$  CCR1

ARR = 100 ... 1 sec .

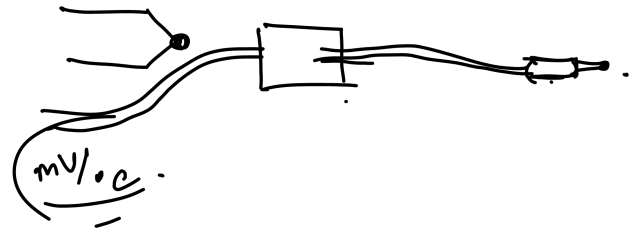
TIMER ... Presc . ?

Clock 72 MHz

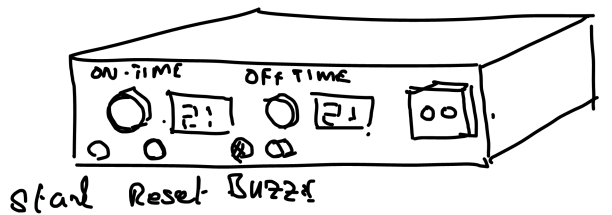
$T_{psc} = \frac{1}{72} \mu s \rightarrow \boxed{PSC} \rightarrow T_{clk} = 10ms$  .

$$(PSC + 1) \frac{10ms}{72 \mu s} = \frac{10 \times 10^{-3}}{72 \times 10^{-6}} = \frac{10000}{72} \approx 139$$

Temperature Sensor - RTD & Thermocouple - module



Timer



- ① ON DELAY ... start ... timer 'ON'
- ② OFF Delay start timer 'OFF'
- ③ ON/OFF - Ton min ... 0 to 1 Hr. } (start: 3 min)  
 - Toff min ... 0 to 15 min. } (start: 0 to 15 min)

④ Watch Dog Timer

start ... T<sub>1</sub> (min) Alarm (off) - Reset (on) start (off)  
 Reset (on) 'ON'

⑤

u

Reset (off) 'OFF'

⑥ Half-Biased - Timer

⑦ Memory 10 s - MODE, ON, OFF time