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EWW Exp ②

Aim:- To understand various components used household working.

Apparatus:- Electrical wire, switch, MCB, Optical, cable wire, etc.

Theory:-

1) Electrical wire and workings:-
Electricity require one electric path to flow. It is made up of materials like copper, aluminium and silver. As silver is expensive it is not used. It is further classified into 3parts to their properties.
a) Conductivity material:- (copper (good conductor of electricity) Aluminium (light wt)
b) Insulating material:- These are bad conductor of electricity stop. insulating material are very light.
c) Semiconductors material:- It is middle of conducting and insulating
i) Intrinsic ii) Extrinsic.

ii) Switch:-
It makes or breaks the electric circuit. It is for on/off. It types are, one-way, two-way, intermediate, main switch
It can be also used to control are ~~loop~~ lamp from two places: Intermediate switch.

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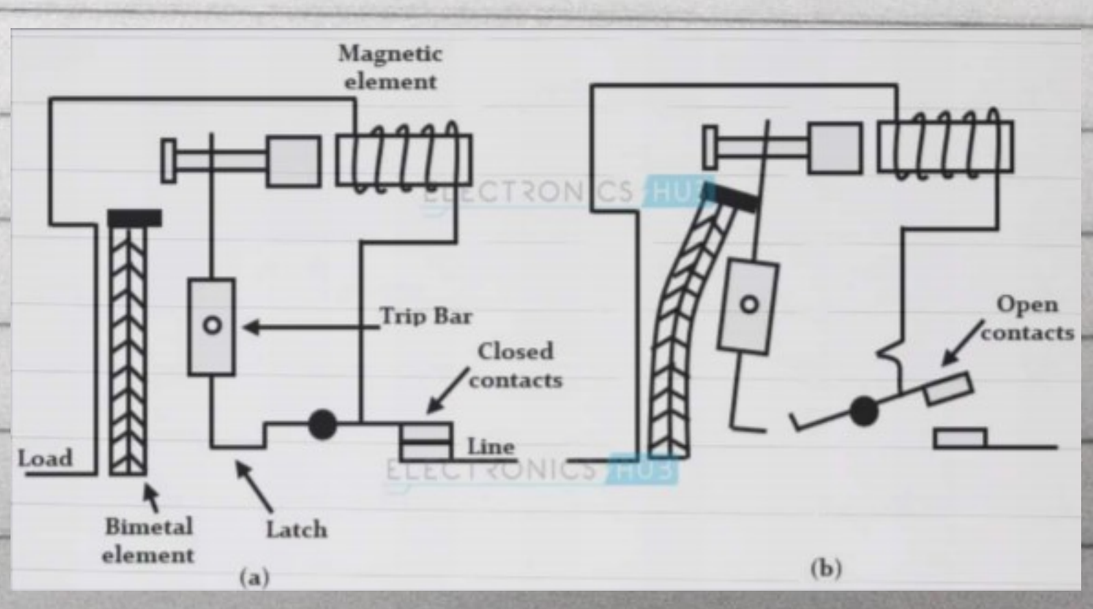
It conducts for more than two places.
Main switch: It is one of the parts of a control panel which has a large i/p or progressive a project of applies or disconnect the power of the control panel.

iii) Miniature Circuit Breaker (MCB):-
It is electromagnetic device. The primary function is to switch the current. This means automatically open the circuit.
This is a time-delaying tapping device. In these the operating time is controlled by magnitude of overcurrent passing through it. This means that device functions whenever there is overall existing for a long time. Hence this the circuit. the from overload short circuit, over currents.



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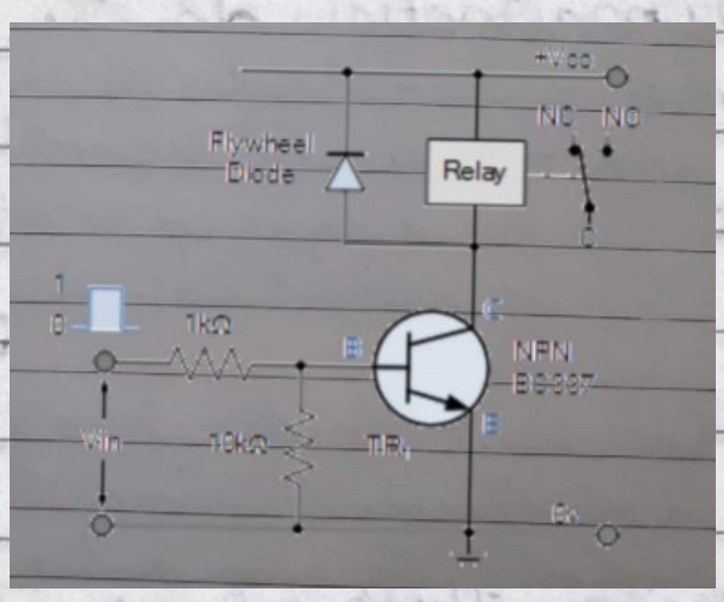
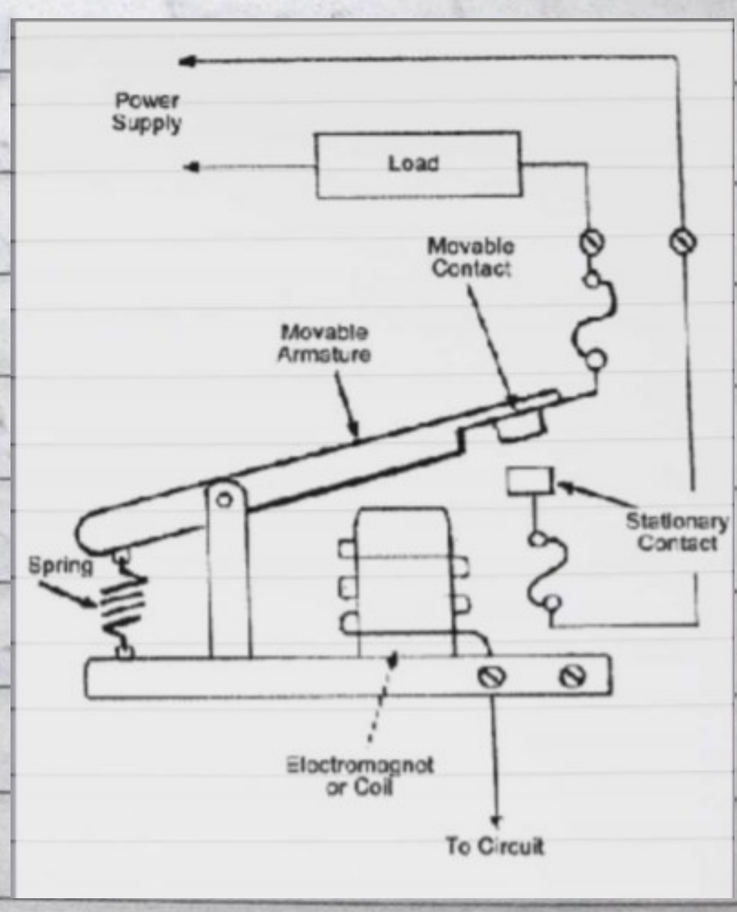
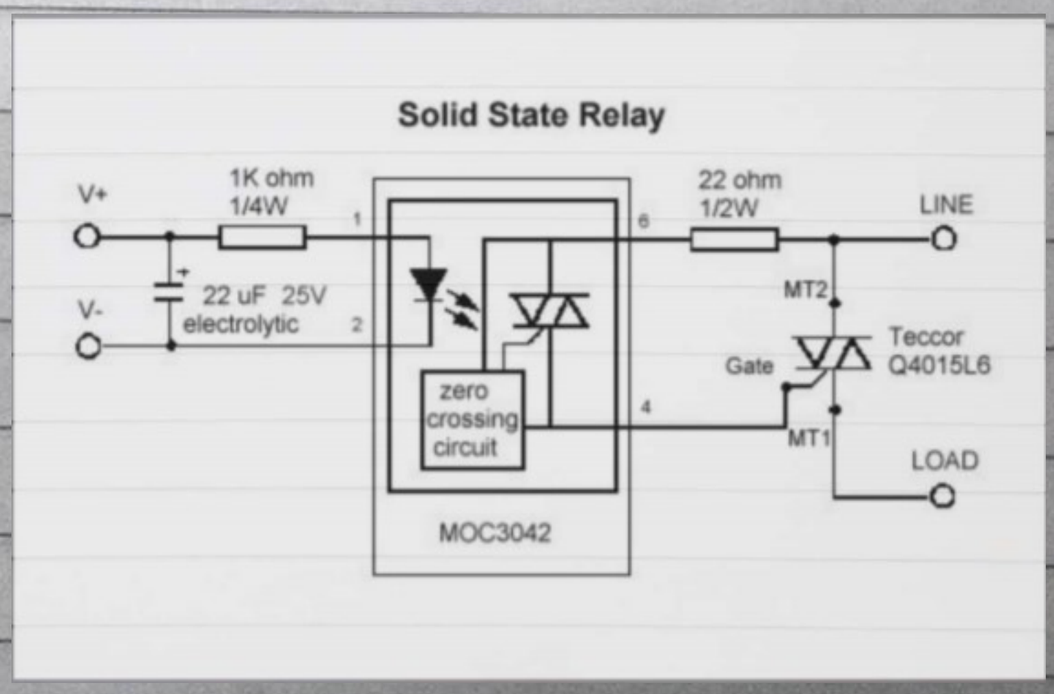
iv) Relay:-

It is switch that ON/OFF switch electronically. A relay diag shows when relay is open and normally closed there is a closed contact when the relay is not engaged. In either case, applying electrical current to the contacts will changes their state:







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v) Cables :-

That are used to trasmission and substitution of electrical paver is known as electrical paver cable. It is used for the trasmision of high voltages in places where overhead lines are impractical to use.

Types of cables :- a) Shielded cables
b) twisted pair cables.
c) Coaxial cables.