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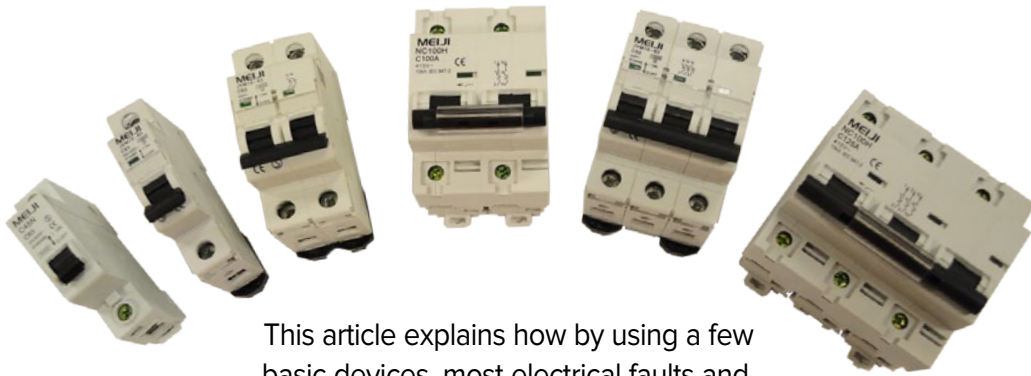
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# How To Prevent ELECTRICAL FAULTS



This article explains how by using a few basic devices, most electrical faults and, subsequently, mishaps can be avoided



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Every day we hear about fires that take place across the world due to short-circuit, which can damage properties, electrocute people, destroy electrical devices due to mains double-phasing faults, poor electricity supply and so on.

So, what is an electric fault?

In layman's terms, when something bad happens with the normal mains supply, it is termed as fault.

What can a fault do?

Well, it can burn wiring, damage electric devices, kill people and even burn down buildings, causing huge monetary losses.

What can we do to prevent electric faults?

Using proper fault protection electric devices at the mains board of our house we can prevent such faults to a great extent.

What are these devices?

Miniature circuit breaker (MCB), residual current circuit breaker (RCCB), over-voltage under-voltage protection breaker (OUVB) and surge protection device (SPD) are some of the things that can protect households from most electrical faults and prevent mishaps. Let us see what these devices do.

**MCB.** An MCB protects the house by turning off the electric supply automatically within a few micro-seconds when abnormal amount of current is drawn by an appliance, or due to a short-circuit, thus preventing wires and devices from

melting, catching fire or getting damaged.

**RCCB.** An RCCB prevents electric shocks even if a live wire is touched. It also trips the electric supply within a few micro-seconds when the live wire is touched.

**OUVB.** This is the most important protection device. It turns off the mains electric supply if voltage level exceeds the standard limit or goes below that limit, thus preventing damage to electric devices. Most electric devices in India work in the voltage range of 200V to 240V. An OUVB measures this input voltage continuously and if voltage exceeds the range or falls short in any way, it turns off the electric power supply within a few micro-seconds.

**SPD.** Sometimes electric surges come on the mains line due to lightning and cause a huge amount of voltage and current to rush to the house wiring. The surges cannot be prevented with a simple MCB. An SPD can protect household electric devices from damage from electric surges. Electric surges can cause insulation burnout of household transformers as well.

Most people do not use these devices and commonly take help from non-professional workers for wiring jobs, who do not know about these devices. To avoid mishaps, it is recommended to install RCCB, SPD, OUVB along with rated MCB (according to load). Electricity is not dangerous until you (ignore it and) make it so! **EFY**