

Automatic Changeover Switch for Three Phase AC Motor

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Abstract: Power uninterrupted is a common problem. It hampers the production of industry, construction work of new plants and buildings. It can be overcome by using an alternative power supply such as a generator. But it is costly and also time consuming as certain time is required to switch on the auxiliary supply manually. It is often noticed that power interruption in distribution system is about 70% for three phase supply while other power supply are in normal condition. Thus, in any commercial or domestic power supply system where main supply is available, an automatic changeover switch for three phase system is required for uninterrupted power to critical loads in the event of power failure in main power supply. Also there is no time consumption as the auxiliary supply is changed automatically within a few seconds. The main aim of this paper is to present the real idea of an automatic changeover switch for 220V to 240V alternating current. Although, there are many designs that can perform almost similar functions like, three phase change-over switches, two phase automatic transfer switch and three phase automatic change-over switch, but this model is about an automatic changeover switch which is designed for only three phase ac input power to three phase output applications.

Keywords: Automatic Changeover system, Carrying three phase supply, High efficiency, Relays, Resistance, Diode, LED.

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