ABSTRACT

Soft starters are used to adjust / refine the start of the electric motor. Principle works is to regulate the incoming voltage to the motor. First bike given only a low voltage so that current and torsipun also low. At this level the motor just moves slowly and does not cause surprise. Furthermore, the voltage will be increased gradually until the nominal voltage and the motor will rotate with a nominal RPM conditions.

The main component is the soft starter thyristors and thyristor trigger circuit set. As is known, the thyristor output pin can be set via its gate. The circuit controls the voltage level will be issued by the thyristor. A thyristor having a gate, do the setting angle and the time of interruption a variable based on the output voltage to be generated for menstarting motor.

Soft Starter method that is composed of components TRIAC thyristor types, capable of controlling the voltage and current into the motor gradually in accordance with the desired settings. The resulting output voltage value depending on size of the signal applied to the point of triggering a TRIAC. The process triggers the TRIAC is set using a microcontroller. By using this method, the induction motor speed control can be done efficiently and optimally.

Keywords: One-Phase Induction Motor, Soft Starter, Tyhristor, Microcontroller