ABSTRACT

Induction motor 3 is the most widely used electric motor for industrial purposes. 3-phase induction motor commonly used to drive various purposes in the industry such as conveyors, stirrers and so forth. The motor start method is the main thing to do in a 3 phase induction motor.

The 3-phase induction motor starting system is very important, so to minimize the 3-phase induction motor starting surge so that the star-delta starting method is not used. Starting star-delta is a starting system for running a motor with a star configuration first then changing to a delta configuration. Configuration is done by using a timer that is set via mobile phone with the intermediary Arduino Mega 2560 using the C ++ language for programming.

The starting star-delta system can help users minimize the starting surge in an efficient and easy way. After the experiment the starting current has decreased three times smaller than originally in the R phase by 16.3 A after using the star-delta configuration to 5.5 A, in the S phase by 15.2 to 5 A and for the T phase by 15 , 7 A becomes 5.1 A. This star-delta configuration uses the Arduino Mega 2560 control which is equipped with an Internet of Things (IoT) system that can be accessed with an android application.

Keywords: Starting Motor, Arduino Mega 2560, Configuration, IoT (Internet of Things).