ABSTRACT

Progress of technology these days have pushed development of control logic Programable (PLC) a are revolution engineer control technique. PLC also represent an special from of microprocessor basic exploiting program memory able to for instruction and for the implementation of function like logic, sequencing, and timing.

In this project work will be used by PLC type of OMRON Sysmac CJ1M – CPU22 functioned to automatic control speed of motor induce 3 phase using PID controller to be assisted with motor of driver with type of OMRON SYS DRIVE 3G3 of MV INVERTER 1,1 of KW this program will be assisted by its apereance constructively SCADA software to see animation from or real of controller of motor by using PLC.

From the results of experiments and analysis of data showed that asynkron 3phase motor rotation is constant when loaded and not loaded. Meanwhile, for analysis using matlab, theoretical calculations and in practice very different. So that it can be concluded that the project work has been able to run as expected.

Keyword: OMRON Sysmac CJ1M – CPU22, PID controller, OMRON SYS DRIVE 3G3 MV INVERTER 1,1 KW, software SCADA