

EEE 442 PROGRAMMABLE LOGIC CONTROLLERS LABORATORY

EXPERIMENT 7

FUNCTIONS and FUNCTION BLOCKS (FC and FB)

Object: In this experiment, two block structures; Function Block (FB) and Function (FC) will be introduced. Functions (FCs) and function blocks (FBs) contain the program code that corresponds to specific tasks or combinations of parameters. Each FC or FB provides a set of input and output parameters for sharing data with the calling block. An FB also uses an associated data block (called an instance DB) to maintain state of values between execution that can be used by other blocks in the program.

PRELIMINARY WORK

P.1 Write a PLC program using FCs and FBs to control a motor as follows:

When a selection switch S1 is closed, the motor can be run or stop from two different locations; A and B. When the switch 1 (S1) is opened, the motor can be controlled from only one location, A.

Implement this system using bot FC and FB.

EXPERIMENTAL PROCEDURE

E.1 Verify the program which is written in P.1 using S7-1200 micro PLC.