AUTOMATIC WASHING MACHINE EXPERIMENTS MODULE

PLC-EM01

Experiment purpose:

1. To understand and capable of utilizing programmable logic controller to perform control system.
2. To understand the working principle of automatic washing machine.

Experiments Procedure:

1. Set both I/O port polarities to positive (+).
2. Operate in following steps:
   1) Press 'start' button to start the process.
   2) Press 'Upper limit' to stimulate that water level reach to maximum level.
   3) When stirring wheel stop and 'drain' L.E.D light up, press 'lower limit' to stimulate that water level reach to minimum level.
   4) Press 'Upper limit' again to stimulate that water level once again, reaches to maximum level.
   5) Extra notes: When stirring wheel is on rotating, press 'stop' will stop it process. When press 'manual drain', it wills automatic open the valve and let the water flow out.

Experiments Observations:

When 'start' button been pressed and release, intake valve will start let water to flow inside the washing machine, as the upper limit sensor detected water level reach the maximum water level, intake valve will close and stirring wheel will start rotate clockwise and counter-clockwise for ten times.

After that, the drain valve will be open and allow water to flow out from the washing machine. Once the water level reaches to minimum water level, the intake valve once again re-opens and allows water to flow in. Once it reached maximum water level, stirring wheel again will rotate. After that, drain valve will open and allow water to flow out. Once the water level reached minimum, drying barrel will be operate for 5 seconds.

Finally, the buzzer will sound and the whole process will be stop.

When press 'stop' button while the washing machine operating, it will stop the washing machine process but maintaining the current state. After that, when press 'manual drain' button, the water will start flow out regarding the stirring wheel is been stop in the middle of it operation. Then, the process will continue it next sequence of it instructions.

Note: Specification, Layout, Design etc. May Change Without Prior Notice For Products Continuous Development Process.