

Irrigation of Greenhouse Plants.....

1. Requirement

The irrigation system of greenhouse plants is to be controlled using FAB. There are 3 different kinds of plants. Type 1 is hydrophytes in a pool whose water level must be kept within a certain range. Type 2 must be watered each morning and evening for 4 minutes. Type 3 must be watered every other evening for 2 minutes.

2. FAB Solution

Watering for plant 1

The water level is always kept in the set range via the float switches for maximum and minimum value (I1 and I2);

Watering for plant 2

Via the time switch, the watering system is switched on for 4 minutes from AM5:30 to AM5:34 and from PM8:30 to PM8:34.

Watering for plant 3

Via the function of Current Impulse Relay, this plant is watered for 2 minutes every other evening when the photosensitive switch (I3) responds.

3. Components used

Input	Output
I1 float switch for maximum value(NC contact)	Q1 electromagnetic valve for type 1
I2 float switch for minimum value(NC contact)	Q2 electromagnetic valve for type 2
I3 switch for automatic watering	Q3 electromagnetic valve for type 3
I4 photosensitive switch(NO contact)	

4. Advantages and Specialties

The watering time can be changed in the morning and evening by your desired.

The lighting and ventilation in the greenhouse can also be controlled by FAB in addition to the watering plants.

5. Software Circuit Diagram

