

# Couple path distribution system.....

## 1. Requirements

There are two inlet-line breakers and liaison breaker on this distribution system, the three breakers is controlled by using SR, which performs that both of them can be for standby and implements protective function when exchanging automatically.

## 2. SR Solution

Power supply provides each distribution system for voltage. When one is shut up, the other distribution system starts working. For example, when #1 system working, if the power of #1 system is stopped, #1 inlet-line breaker is severed and the liaison breaker is turned on. Via the liaison breaker power supply is provided by #2 distribution system. After the power of #1 system is recovered, the liaison breaker is turned off and #1 inlet-line breaker is turned on, power supply is provided by #1 distribution system again. The couple path distribution system is exchange by manual operation, when IA2 is on it represents manual operation; when IA2 is off it represents automatic operation.

## 3. Components used

Input	Output
IA0 Detector 1	QA0 #1 inlet-line breaker
IA1 Detector 2	QA1 #2 inlet-line breaker
IA2 Manual/Automatic switch	QA2 Liaison breaker
IA3 Reset switch	

IA0—detect power of #1 system, if having, turn on #1 inlet-line breaker.  
IA1—detect power of #2 system, if not having, turn on #2 inlet-line breaker.

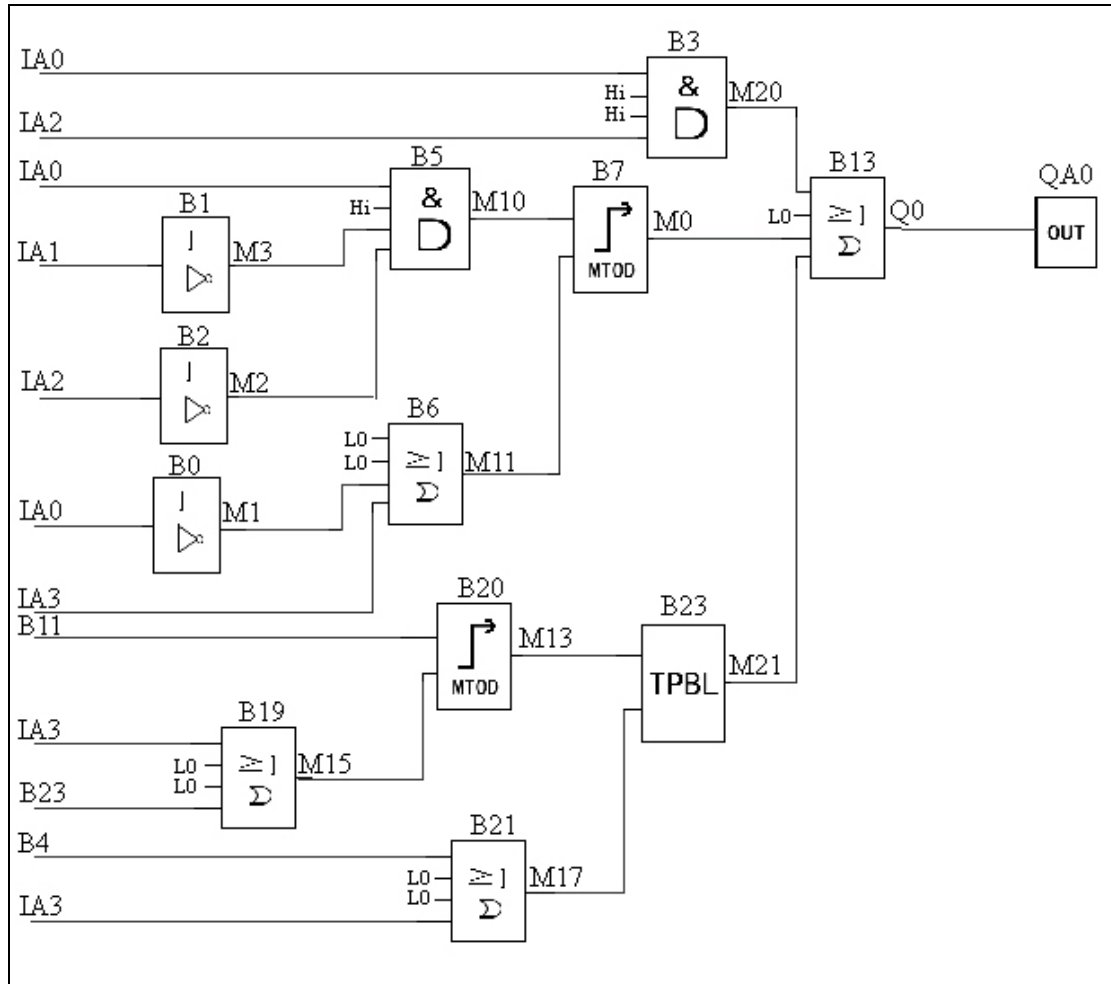
## 4. Advantages and Specialties

Delay time for automatic exchange can be adjusted easily by user.

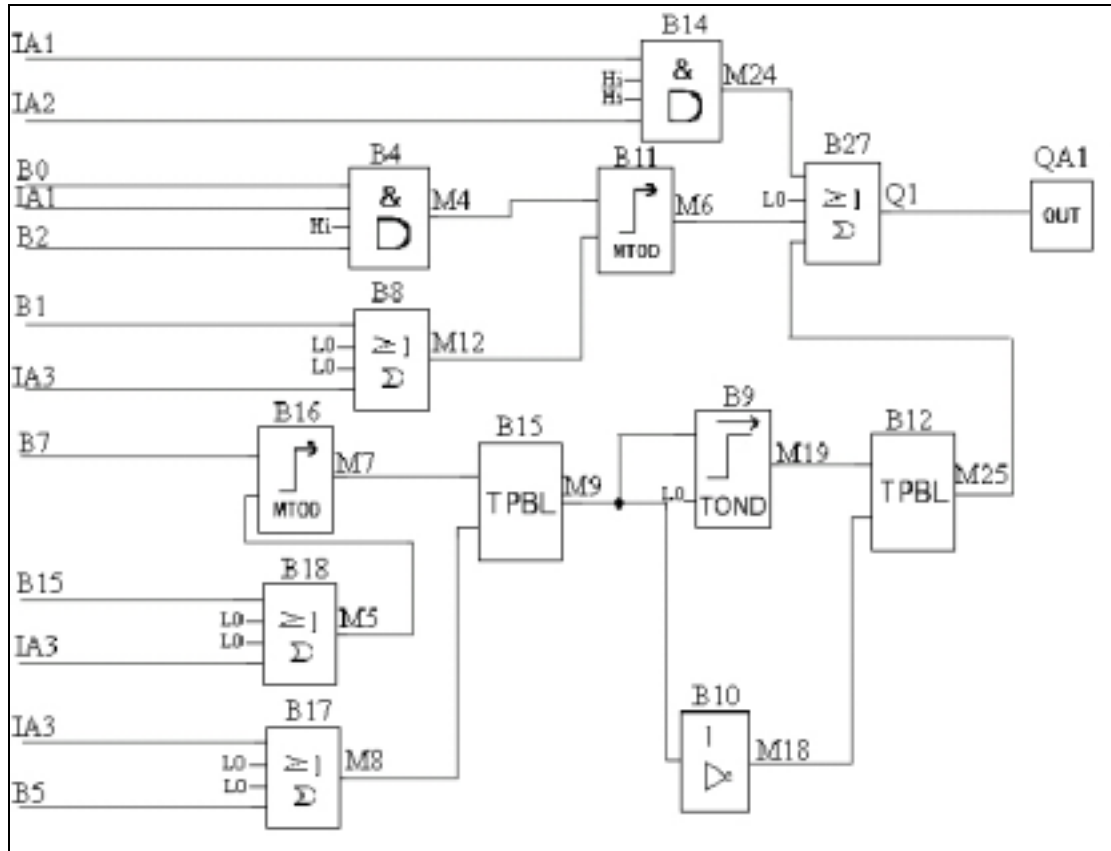
Fewer components are necessary than the traditional solutions.

## 5. Software Circuit Diagram

Part I .....



Part II.....



Part III.....

