

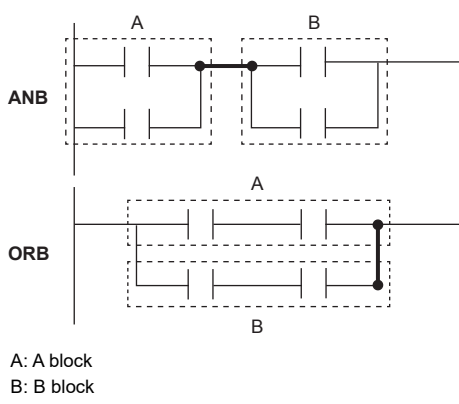
# 6.2 Association Instruction

## Ladder block series/parallel connection

ANB, ORB

FX5S FX5UJ FX5U FX5UC

These instructions AND or OR the A and B blocks, and use the result as the operation result.

Ladder diagram	Structured text
 <p>A: A block B: B block</p>	Not supported.
FBD/LD	Not supported.

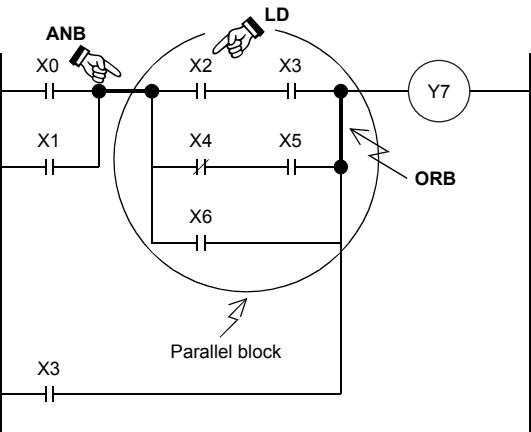
### Processing details

#### ■ANB

- This instruction ANDs the A and B blocks, and uses the result as the operation result.
- The symbol of this instruction is not NO contact symbol but a connection symbol.

Ex.

ANB instruction (series connection of ladder block)



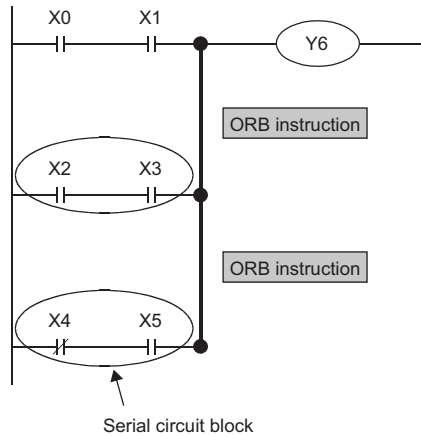
## ■ ORB

- This instruction ORs the A and B blocks, and uses the result as the operation result.
- This instruction connects the ladder blocks of two contacts or more in parallel. For parallel connection of only one contact, use the OR and ORI instructions; there is no need to use this instruction.
- The symbol of this instruction is not NO contact symbol but a connection symbol.

### Point

- The number of parallel circuits that can be connected by the ORB instruction is not limited. (when the recommended program is used)
- The ORB instruction can be used by one operation. However, note that the LD instruction and the LDI instruction can repeatedly be used 8 times or less. (when the recommended program is not used)

Circuit program



List program

Appropriate program

```
0 LD X0
1 AND X1
2 LD X2
3 AND X3
4 ORB
5 LDI X4
6 AND X5
7 ORB
8 OUT Y6
```

Inappropriate program

```
0 LD X0
1 AND X1
2 LD X2
3 AND X3
4 LDI X4
5 AND X5
6 ORB
7 ORB
8 OUT Y6
```

## Operation error

There is no operation error.