

## INSTRUCTIONS FOR CONTACT ARRANGEMENT DIAGRAM

### 1 Graphic symbol

Contact type	Symbol
Normal contact	
Close keep contact	
Continuous closing contact	
Overlapping contact	

Operation	Symbol
Manual return (rotating direction)	Not indicated
Manual return (axial direction)	
Auto return (to neutral position)	
Auto return (axial direction)	

### 2 Development representation method

Contact arrangement diagrams should be viewed from the panel surface with the handle positioned below. Vertical line shows notch positions, and horizontal line shows connected circuits with terminal numbers. To enter the contact symbols, follow the order of terminal numbers starting with the front stage.

Fig. 1 T2-1B1AT1BAL1TL

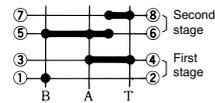
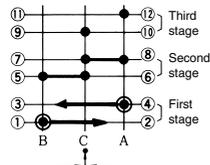


Fig. 1 shows the 45-degree, 3-stage switching type.

- Terminal 1-2 is closed at the B notch.
- Terminal 3-4 is continuously closed at the A and T notches.
- Terminals 5-6 and 7-8 are simultaneously closed (overlapping) in the middle between the A and T notches.

Fig. 2 SBZ3-1Y1Z1M1N1C1A



- Terminal 3-4 is closed at the A notch. Even if it returns to the central position, it remains closed. It is opened at the B notch.

Fig. 2 shows the automatic return type by pulling. The handle can be pulled at the central position, and it returns to the central position after releasing the handle.

- Terminal 1-2 is closed at the B notch. Even if it returns to the central position, it remains closed. It is opened at the A notch.
- Terminal 5-6 is opened at the A notch.
- Terminal 7-8 is opened at the B notch.
- Terminal 9-10 is closed at the C notch.
- Terminal 11-12 is closed at the A notch.

### 3 Notes on diagrammatic representation

#### 1. When the rotational angle of the handle is less than 180 degrees

(When the rotational angle of the notch is 45 degrees)

When the total number of contacts is even (number of units) =  $\frac{\text{(total number of contacts)}}{2}$

When the total number of contacts is odd (number of units) =  $\frac{\text{(total number of contacts)+1}}{2}$

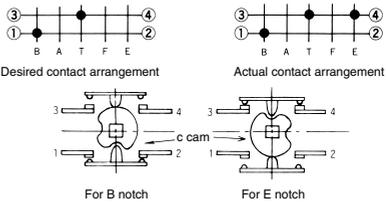
#### ■ Number of stages

Each unit has 2 contacts. This means that the number of units is half of the total number of contacts. However, if the handle is turned by 180 degrees or more, each unit may not be included 2 contacts.

#### 2. When the rotational angle of the handle is 180 degrees or more

(5 notches at 45 degrees, 3 notches at 90 degrees or more)

A single cam actuates 2 contacts, upper and lower side. Therefore, when the cam is rotated by 180 degrees or more, its concavity to close either contact may also close the other contact. In this case, the upper and lower contacts cannot be combined freely.



#### 3. Contact diagram of BY type arrangement (example)

F3-2B2AX2TX

