

Forcibly terminating the FOR to NEXT instruction loop

BREAK(P)

FX5S FX5UJ FX5U FX5UC

This instruction forcibly terminates the FOR to NEXT instruction loop and shifts the program execution to the pointer specified by (P).

| Ladder diagram | Structured text |
|----------------|-----------------|
| | Not supported |

| FBD/LD |
|--------|
| |

Setting data

■ Descriptions, ranges, and data types

| Operand | Description | Range | Data type | Data type (label) |
|-------------------|---|-------|----------------------|-------------------|
| (d) | Device number storing the number of remaining loops | — | 16-bit signed binary | ANY16 |
| (P) ^{*1} | Pointer number of the branch destination when the loop is forcibly terminated | — | Device name | POINTER |
| EN | Execution condition | — | Bit | BOOL |
| ENO | Execution result | — | Bit | BOOL |

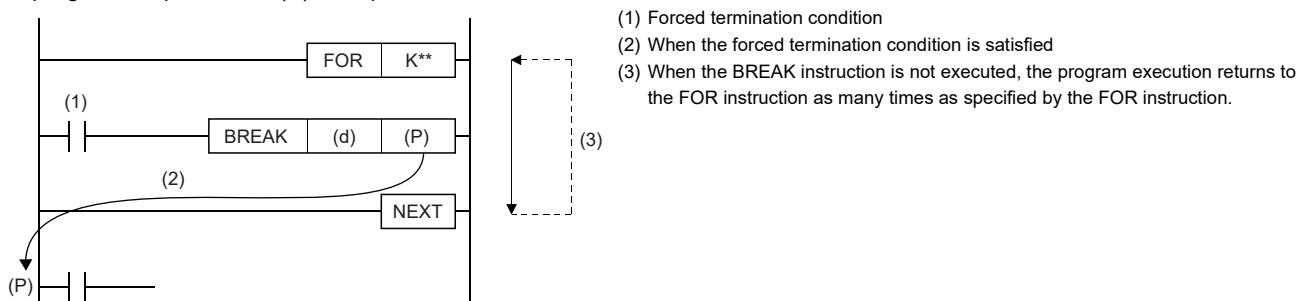
*1 In the case of the FBD/LD language, P displays as Pn.

■ Applicable devices

| Operand | Bit | Word | | | Double word | | Indirect specification | Constant | | | Others |
|---------|-----|--------------------------------|------------------------------|-------|-------------|----|------------------------|----------|---|----|--------|
| | | X, Y, M, L, SM, F, B, SB, S | T, ST, C, D, W, SD, SW, R | U□\G□ | Z | LC | | K, H | E | \$ | |
| (d) | ○ | ○ | ○ | ○ | — | — | ○ | — | — | — | — |
| (P) | — | — | — | — | — | — | — | — | — | — | ○ |

Processing details

- This instruction forcibly terminates the FOR to NEXT instruction loop and shifts the program execution to the pointer specified by (P). Only the pointer numbers within the same program file can be specified in (P). If a pointer in another program is specified in (P), an operation error occurs.



- In (d), the number of remaining FOR to NEXT instruction loops at the forced termination is stored. Note that the number includes the loop when the BREAK(P) instructions are executed.
- The BREAK(P) instructions can be used only between the FOR and NEXT instructions.

- The BREAK(P) instructions can be used for only one nesting level. To forcibly terminate multiple nesting levels, execute as many BREAK(P) instructions as the number of nesting levels.

Precuations

- If the branch pointer number of the BREAK instruction outside two nesting levels or more is specified, an operation error occurs and the program execution stops when the BREAK instruction is executed.

Operation error

| Error code (SD0/SD8067) | Description |
|----------------------------|---|
| 3340H | The branch pointer number outside two nesting levels or more is specified. |
| 3342H | The BREAK(P) instructions are used other than between the FOR and NEXT instructions. |
| 3380H | <p>The destination pointer specified by (P) does not exist.</p> <p>A pointer in other program file is specified in (P).</p> |