

32-bit data interrupt positioning

DDVIT [For the FX3 compatible operand specification]

FX5S FX5UJ FX5U FX5UC

This instruction executes interrupt 1-speed constant quantity feed. Only CPU module is supported.

| Ladder diagram | Structured text |
|----------------|-----------------------------|
| | ENO:=DDVIT(EN,s1,s2,d1,d2); |
| FBD/LD | |
| | |

Setting data

■Descriptions, ranges, and data types

| Operand | Description | Range | Data type | Data type (label) |
|---------|---|--|----------------------|-----------------------|
| (s1) | Positioning address after an interrupt input | -2147483648 to +2147483647 | 32-bit signed binary | ANY32 |
| (s2) | Command speed | 1 to 2147483647 | 32-bit signed binary | ANY32 |
| (d1) | Bit device number (Y) from which pulses are output | ■FX5S/FX5UJ CPU module 0 to 2 ■FX5U/FX5UC CPU module 0 to 3 | Bit | ANY_ELEMENTARY (BOOL) |
| (d2) | Bit device number from which the rotation direction is output | — | Bit | ANY_BOOL |
| EN | Execution condition | — | Bit | BOOL |
| ENO | Execution result | — | Bit | BOOL |

■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 | \$ | |
| (s1) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (s2) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (d1) | ○*1 | — | — | — | — | — | — | — | — | — | — |
| (d2) | ○*2 | ○*3 | — | — | — | — | — | — | — | — | — |

*1 Only Y can be used.

*2 When the output mode is CW/CCW, specify the CCW axis. When the output mode is PULSE/SIGN and using Y, only the SIGN output or general-purpose output of the self-axis can be specified.

*3 T, ST, and C cannot be used.

Processing details

This instruction executes interrupt 1-speed constant quantity feed.

- For (s1), specify the transfer distance that is output after an interrupt, in user units. (The distance must be within the range of -2147483648 to +2147483647 in the number of pulses.)
- For (s2), specify the speed in user units. (The speed must be 200 kpps or lower in frequency.)
- For (d1), specify the device from which pulses are output. Only the output devices (Y) having positioning parameters can be specified.
- For (d2), specify the bit device from which the rotation direction signal is output. Only the device specified with a parameter or general-purpose outputs can be specified. When the output devices (Y) is executed by another function (PWM, positioning PULSE axis, or CW/CCW axis etc.), the device does not function and causes an error.

For details on the function, precautions, and error code, refer to  MELSEC iQ-F FX5 User's Manual (Application).

DDVIT [For the FX5 operand specification]

FX5S FX5UJ FX5U FX5UC

This instruction executes interrupt 1-speed constant quantity feed.

| Ladder diagram | Structured text |
|----------------|-----------------------------|
| | ENO:=DDVIT(EN,s1,s2,d1,d2); |
| FBD/LD | |
| | |

Setting data

■Descriptions, ranges, and data types

| Operand | Description | Range | Data type | Data type (label) |
|---------|---|--|------------------------|-------------------------------------|
| (s1) | Positioning address after an interrupt input | -2147483648 to +2147483647 | 32-bit signed binary | ANY32 |
| (s2) | Command speed | 1 to 2147483647 | 32-bit signed binary | ANY32 |
| (d1) | Specify the axis number from which pulses are to be output | ■FX5S/FX5UJ CPU module K1 to K3, K5 to K12 ■FX5U/FX5UC CPU module K1 to K12 | 16-bit unsigned binary | ANY_ELEMENTARY (WORD) ^{*1} |
| (d2) | Bit device number of the positioning complete flag or abnormal end flag | — | Bit | ANY_BOOL |
| EN | Execution condition | — | Bit | BOOL |
| ENO | Execution result | — | Bit | BOOL |

*1 Digit specified bit type label cannot be used.

■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 | \$ | |
| (s1) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (s2) | ○ | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (d1) | — | ○ | ○ | ○ | — | — | ○ | ○ | — | — | — |
| (d2) | ○ | ○ ^{*1} | — | — | — | — | — | — | — | — | — |

*1 T, ST, and C cannot be used.

Processing details

This instruction executes interrupt 1-speed constant quantity feed.

- For (s1), specify the transfer distance that is output after an interrupt, in user units. (The distance must be within the range of -2147483648 to +2147483647 in the number of pulses.)
- For (s2), specify the speed in user units. (The speed must be 200 kpps or lower in frequency.)
- For (d1), specify the axis number from which pulses are output.
- For (d2), specify the bit device of the normal complete flag or abnormal end flag for the DDVIT instruction.

For details on the function and error code, refer to MELSEC iQ-F FX5 User's Manual (Application).

Precautions

Two devices are occupied from the device specified in (d2). Make sure that these devices are not used in other controls.

For other precautions, refer to MELSEC iQ-F FX5 User's Manual (Application).