

26.2 Compare

NE(_E)

FX5S **FX5UJ** **FX5U** **FX5UC**

These functions output the data comparison result of input values.

| Ladder diagram, FBD/LD | Structured text |
|--|---|
| <p>[Without EN/ENO]</p> <p>[With EN/ENO]</p> | <p>[Without EN/ENO]¹ d:=NE(s1,s2);</p> <p>[With EN/ENO] d:=NE_E(EN,ENO,s1,s2);</p> |

*1 Supported by engineering tool version "1.035M" and later. In earlier versions, write in operator form. (MELSEC iQ-F FX5 Programming Manual (Program Design))

Setting data

■Descriptions, types, and data types

| Argument | Description | Type | Data type |
|------------------|--|-----------------|----------------|
| EN | Execution condition (TRUE: Execution, FALSE: Stop) | Input variable | BOOL |
| s1(IN1), s2(IN2) | Input | Input variable | ANY_ELEMENTARY |
| ENO | Output status (TRUE: Normal, FALSE: Abnormal) | Output variable | BOOL |
| d(NE(_E)) | Output (TRUE: True value, FALSE: False value) | Output variable | BOOL |

Processing details

■Operation processing

- These functions perform a comparison operation of input values of (s) and output operation results from (d) in the BOOL type.
 - NE(_E): These functions compare [(s1)≠(s2)].
 - When (s1)≠(s2), these functions output TRUE.
 - These functions output FALSE when (s1)=(s2).
- A data value of the INT, DINT, REAL, BOOL, WORD, DWORD, TIME, or STRING type can be input to (s).

■Operation result

1. Function without EN/ENO

The following table lists the operation results.

| Operation result | (d) |
|-----------------------------|------------------------|
| No operation error occurred | Operation output value |
| An operation error occurred | Indefinite value |

2. Function with EN/ENO

The following table lists the execution conditions and operation results.

| Execution condition | Operation result | |
|---------------------------|---|------------------------|
| EN | ENO | (d) |
| TRUE (Executes operation) | TRUE (Operation error did not occur) | Operation output value |
| | FALSE (Operation error occurred) ¹ | Indefinite value |
| FALSE (Stops operation) | FALSE ¹ | Indefinite value |

*1 When FALSE is output from ENO, data output from (d) is undefined. In that case, modify a program so that the data output from (d) is not used.

Operation error

- (s1) and (s2) are the STRING type

| Error code (SD0/SD8067) | Description |
|----------------------------|---|
| 2820H | In the corresponding device range of the device specified by (s) and later, "00H" does not exist. |
| 3405H | The character string specified by (s) has more than 16383 characters. |
| 3406H | The whole specified character string cannot be stored in the devices from the device specified by (d) to the last device in the corresponding device range. |