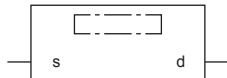
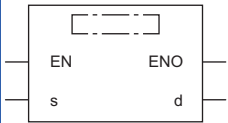


24.2 Logical Negation

NOT(_E)

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

These functions output the logical negation of input values.

Ladder diagram, FBD/LD		Structured text
[Without EN/ENO]	[With EN/ENO]	[Without EN/ENO] d:=NOT(s); [With EN/ENO] d:=NOT_E(EN,ENO,s);
		

Setting data

■Descriptions, types, and data types

Argument	Description	Type	Data type
EN	Execution condition (TRUE: Execution, FALSE: Stop)	Input variable	BOOL
s(IN)	Input	Input variable	ANY_BIT
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(NOT(_E))	Output	Output variable	ANY_BIT

Processing details

■Operation processing

- These functions calculate the logical negation for each bit of the BOOL, WORD, or DWORD type data input in (s), and output the operation result from (d) in the same data type as (s).

Ex.

When the data type is WORD

(s)	0	1	1	0	1	0	1	1	0	0	0	0	1	1	1	1
	NOT															
(d)	1	0	0	1	0	1	0	0	1	1	1	1	0	0	0	0

- A value input to (s) is the BOOL, WORD, or DWORD type data value.

■Operation result

1. Function without EN/ENO

The operation processing is executed. The operation output value is output from (d).

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 output 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

There is no operation error.