

25 SELECTION FUNCTIONS

25.1 Selection

SEL(_E)

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

These functions output a selected input value.

Ladder diagram, FBD/LD	Structured text
<p>[Without EN/ENO]</p> <p>[With EN/ENO]</p>	<p>[Without EN/ENO] d:=SEL(s1,s2,s3);</p> <p>[With EN/ENO] d:=SEL_E(EN,ENO,s1,s2,s3);</p>

Setting data

■ Descriptions, types, and data types

Argument	Description	Type	Data type
EN	Execution condition (TRUE: Execution, FALSE: Stop)	Input variable	BOOL
s1(G)	Output condition (TRUE: Output s3, FALSE: Output s2)	Input variable	BOOL
s2(IN0)	Input	Input variable	ANY
s3(IN1)			
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(SEL(_E))	Output	Output variable	ANY

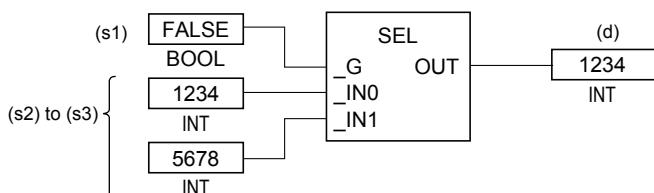
Processing details

■ Operation processing

- These functions output a value input to (s2) and (s3) according to a value input to (s1) in the same data type as (s2) and (s3) from (d).
- When FALSE(=0) is input to (s1), these functions output an input value of (s2) from (d).
- When TRUE(=1) is input to (s1), these functions output an input value of (s3) from (d).

Ex

The data type of (s2) and (s3) is the INT type ((s2) and (s3) of an argument correspond to the bit value of (s1) (0 or 1).)



- A value input to (s1) is the BOOL type data value.
- A data value of the BOOL, INT, DINT, WORD, DWORD, REAL, STRING, TIME, structure, or array type can be input to (s2) and (s3).

■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

- (s2) and (s3) are the STRING type

Error code (SD0/SD8067)	Description
2820H	"00H" is not set to a label specified by (s2) or devices from the device number to end device number of corresponding device.
	"00H" is not set to a label specified by (s3) or devices from the device number to the end device number of corresponding device.
3406H	The specified character string cannot be stored in a label specified by (d) or devices from the device number to the end device number of corresponding device.