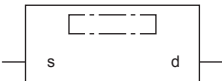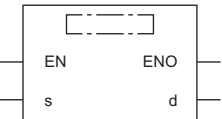# 20.8 Converting WORD to DWORD

WORD_TO_DWORD(_E)

| FX5S | FX5UJ | FX5U | FX5UC |

These functions convert WORD type data to DWORD type data.

Ladder diagram, FBD/LD		Structured text

[Without EN/ENO]
 	
s   d
	[With EN/ENO]
	
	EN ENO
	s d
		[Without EN/ENO]
		d:=WORD_TO_DWORD(s);
		[With EN/ENO]
		d:=WORD_TO_DWORD_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	WORD
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(WORD_TO_DWORD(_E))	Output	Output variable	DWORD

Processing details

■Operation processing

- These functions convert the WORD type data input to (s) to DWORD type data and output from (d).
- Each of high-order 16 bits becomes "0" after data conversion.

```
        (s)                              (d)
┌─────────────────┐          ┌─────────────────┐
│      5678H      │  ═════▷   │    00005678H    │
└─────────────────┘          └─────────────────┘
      WORD                          DWORD
```
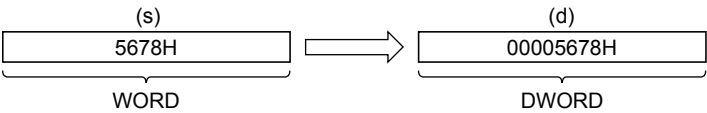
- A value input to (s) is the WORD type data value.

■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.