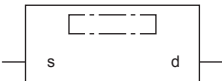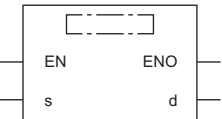# 20.45 Converting STRING to INT

STRING_TO_INT(_E)

| FX5S | FX5UJ | FX5U | FX5UC |

These functions convert STRING type data to INT type data.

Ladder diagram, FBD/LD		Structured text

[Without EN/ENO]
 	
s   d
	[With EN/ENO]
	
	EN ENO
	s d
		[Without EN/ENO]
		d:=STRING_TO_INT(s);
		[With EN/ENO]
		d:=STRING_TO_INT_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	STRING(6)
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(STRING_TO_INT(_E))	Output	Output variable	INT

Processing details

■Operation processing

• These functions convert the STRING type data input to (s) to INT type data and output from (d).

(s)

	High-order byte	Low-order byte
+0	ASCII code for ten-thousands place	Sign data
+1	ASCII code for hundreds place	ASCII code for thousands place
+2	ASCII code for ones place	ASCII code for tens place
+3	00H (Indicates the end of the character string.)	

(d) → INT
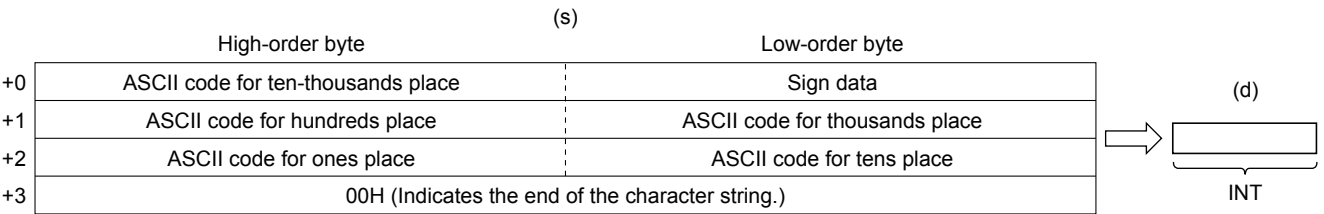
• A value input to (s) is the STRING type data value and within the following range.
• Within the range of "30H" to "39H", "20H", "2DH", and "00H" in ASCII code
• Within the range of "-32768" to "32767" as the STRING type data value

■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

Error code (SD0/SD8067)	Description
3401H	Invalid data which cannot be converted to (s) are input. • Values for each place of the ASCII code are other than "30H" to "39H", "20H", and "00H". • Values for the ASCII data are other than "-32768" to "32767" when STRING_TO_INT(_E) is used.