27 CHARACTER STRING FUNCTIONS

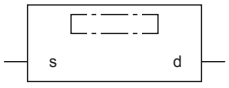
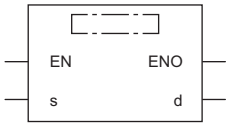
27.1 Character String Length Detection

LEN(_E)

FX5S FX5UJ FX5U FX5UC

These functions detect the length of an input character string and output the result.

Ladder diagram, FBD/LD		Structured text

[Without EN/ENO]
 
	[With EN/ENO]
	 
		[Without EN/ENO]
		d:=LEN(s);
		[With EN/ENO]
		d:=LEN _E(EN,ENO,s);

Setting data

■Descriptions, types, and data types

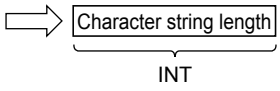
Argument	Description	Type	Data type
EN	Execution condition (TRUE: Execution, FALSE: Stop)	Input variable	BOOL
s(IN)	Input	Input variable	STRING(255)
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(LEN(_E))	Output	Output variable	INT

Processing details

■Operation processing

- These functions detect the length of a character string input to (s) and output the result from (d).

	High-order byte	Low-order byte
+0	ASCII code for 2nd character	ASCII code for 1st character
+1	ASCII code for 4th character	ASCII code for 3rd character
+2	ASCII code for 6th character	ASCII code for 5th character
+n	00H (Indicates the end of the character string.)	ASCII code for (n)th character



- A value input to (s) is the STRING type data value and within the range from 0 to 255 byte(s).

■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.