

27.4 Link Character Strings

CONCAT(_E)

FX5S FX5UJ FX5U FX5UC

These functions concatenate character strings and output the result.

Ladder diagram, FBD/LD*1		Structured text*1
[Without EN/ENO]	[With EN/ENO]	[Without EN/ENO] d:=CONCAT(s1,s2); [With EN/ENO] d:=CONCAT_E(EN,ENO,s1,s2);

*1 The input variable "s" can be changed in the range of 2 to 28.

Setting data

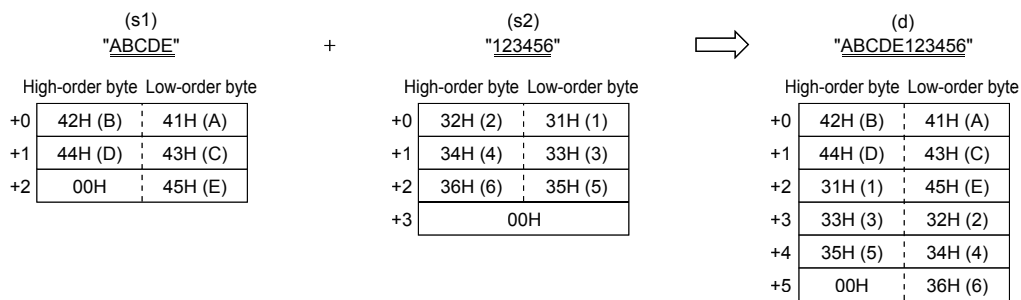
■Descriptions, types, and data types

Argument	Description	Type	Data type
EN	Execution condition (TRUE: Execution, FALSE: Stop)	Input variable	BOOL
s1(IN1) to s28(IN28)	Input	Input variable	STRING(255)
ENO	Output status (TRUE: Normal, FALSE: Abnormal)	Output variable	BOOL
d(CONCAT(_E))	Output	Output variable	STRING(255)

Processing details

■Operation processing

- These functions concatenate the character string input to the input variables (s2) to (s28) after the one input to (s1) and output the result from (d).
- When character strings are concatenated, 00H indicating an end of the character string specified by (s1) is ignored and the character string specified by (s2) to (s28) is concatenated.
- When the concatenated character string exceeds 255 bytes, these functions output a character string within 255 bytes.



- A value input to the input variables (s1) and (s2) to (s28) is the STRING type data value and within the range from 0 to 255 byte(s).

■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
2820H	In the corresponding device range of the device specified by (s1) to (s28) and later, "00H" does not exist.
3406H	The whole concatenated character string cannot be stored in the devices from the device specified by (d) to the last device in the corresponding device range.