

Separating the specified number of bits

NDIS(P)

FX5S FX5UJ FX5U FX5UC

These instructions separate each bit of the data in the device numbers specified by (s1) onwards into bit units specified by (s2), and store the separated data in the device number specified by (d) onwards.

Ladder diagram	Structured text
	ENO:=NDIS(EN,s1,s2,d); ENO:=NDISP(EN,s1,s2,d);

FBD/LD

Setting data

■ Descriptions, ranges, and data types

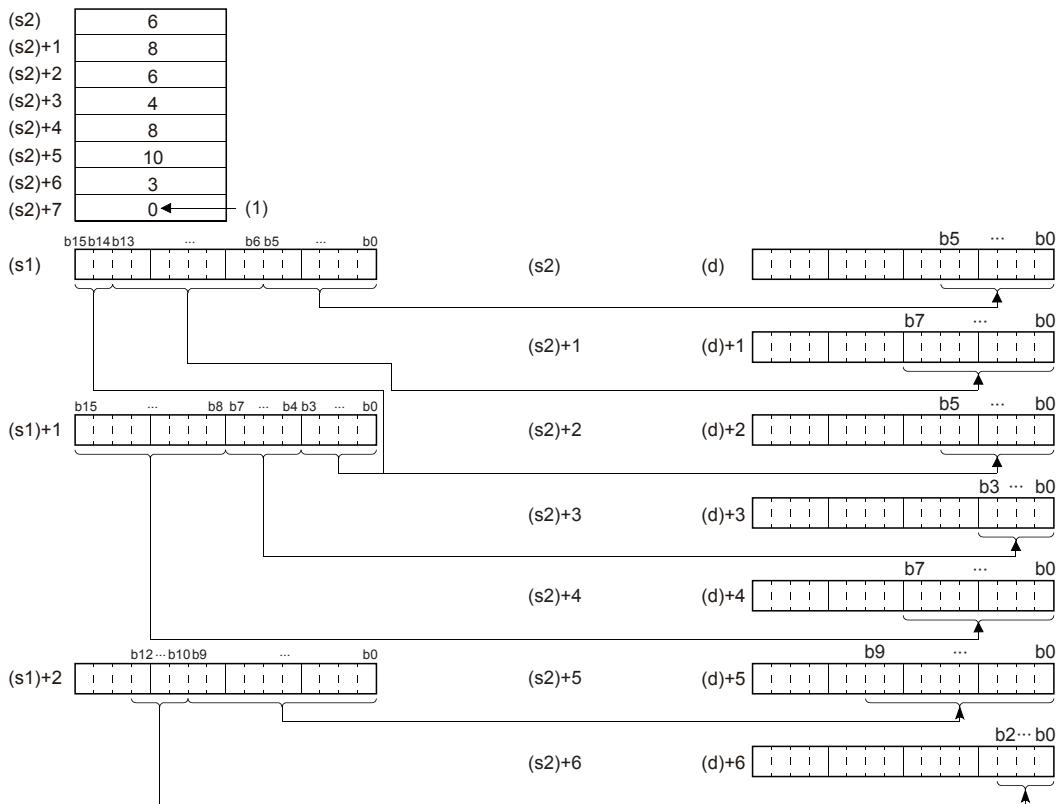
Operand	Description	Range	Data type	Data type (label)
(s1)	Head device for storing the data to be separated	—	16-bit signed binary	ANY16
(d)	Head device for storing the separated data	—	16-bit signed binary	ANY16
(s2)	Head device for storing the separation unit	—	16-bit signed binary	ANY16
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

■ Applicable devices

Operand	Bit	Word			Double word		Indirect specification	Constant			Others
		X, Y, M, L, SM, F, B, SB, S	T, ST, C, D, W, SD, SW, R	U□\G□	Z	LC		K, H	E	\$	
(s1)	—	○	—	—	—	—	○	—	—	—	—
(d)	—	○	—	—	—	—	○	—	—	—	—
(s2)	—	○	—	—	—	—	○	—	—	—	—

Processing details

- These instructions separate each bit of the data in the device numbers specified by (s1) and later into bit units specified by (s2), and store the separated data in the device numbers starting from the one specified by (d).



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- The number of separation bits specified by (s2) can be specified within the range of 1 to 16 bits.

- The number of bits specified in devices from the device number specified by (s2) up to the device number in which "0" is stored are processed as the number of separation bits.
- If the device numbers specified by (s1), (s2), (d) are partially overlapping, an operation error occurs.

Operation error

Error code (SD0/SD8067)	Description
2820H	The usage range of the device specified by (s1) or (d) exceeds the corresponding device range due to the specification of the number of separation bits specified by (s2).
2821H	The (s1), (s2) devices are overlapping. The (s1), (d) devices are overlapping. The (s2), (d) devices are overlapping.
3401H	The specification of the number of separation bits specified by (s2) is not set within the range of 1 to 16 bits. 0 is not set in the range between the device specified by (s2) up to the corresponding device range.