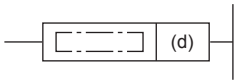
Incrementing 16-bit binary data

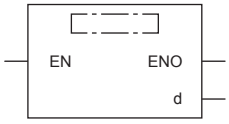
INC(P)(_U)

FX5S FX5UJ FX5U FX5UC

These instructions add 1 to the device (16-bit binary data) specified by (d).

Ladder diagram	Structured text	
	ENO:=INC(EN,d); ENO:=INCP(EN,d);	ENO:=INC_U(EN,d); ENO:=INCP_U(EN,d);

FBD/LD



Setting data

■Descriptions, ranges, and data types

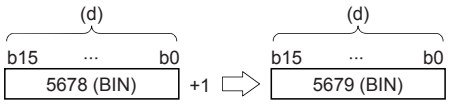
Operand		Description	Range	Data type	Data type (label)
(d)	INC(P)	Device to be incremented by +1	-32768 to +32767	16-bit signed binary	ANY16_S
	INC(P)_U		0 to 65535	16-bit unsigned binary	ANY16_U
EN		Execution condition	—	Bit	BOOL
ENO		Execution result	—	Bit	BOOL

■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	LZ		K, H	E	$	
(d)	○	○	○	○	—	—	○	—	—	—	—

Processing details

- These instructions add 1 to the device (16-bit binary data) specified by (d).

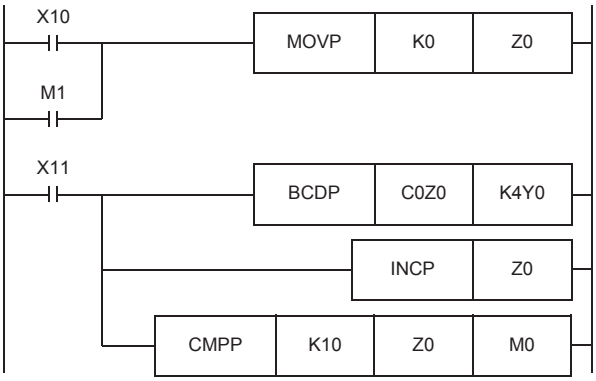


- If INC(P) instruction is executed when contents of device specified by (d) is 32767, -32768 is stored in the device specified by (d). (If signed is specified)
- If INC(P)_U instruction is executed when contents of device specified by (d) is 65535, 0 is stored in the device specified by (d). (If unsigned is specified)
- Flags (zero, carry and borrow) are not activated at this time.

Precautions

Note that data is incremented in every operation cycle in a continuous operation type (INC) instruction.

Program example



Z0 is cleared by the reset input X10.

The current values of counters C0 to C9 are converted into BCD format, and output to K4Y0.

Every time X11 is set to ON, the current values of C0, C1 ... C9 are output one at a time.

Operation error

There is no operation error.