

Comparison output 32-bit binary data

DCMP(P)(_U)

FX5S

FX5UJ

FX5U

FX5UC

These instructions perform a comparison operation between the 32-bit binary data in the devices specified by (s1) and (s2).

Ladder diagram	Structured text	
	ENO:=DCMP(EN,s1,s2,d); ENO:=DCMPP(EN,s1,s2,d);	ENO:=DCMP_U(EN,s1,s2,d); ENO:=DCMPP_U(EN,s1,s2,d);

FBD/LD

Setting data

■Descriptions, ranges, and data types

Operand	Description	Range	Data type	Data type (label)
(s1)	DCMP(P)	-2147483648 to +2147483647	32-bit signed binary	ANY32_S
	DCMP(P)_U	0 to 4294967295	32-bit unsigned binary	ANY32_U
(s2)	DCMP(P)	-2147483648 to +2147483647	32-bit signed binary	ANY32_S
	DCMP(P)_U	0 to 4294967295	32-bit unsigned binary	ANY32_U
(d)	The starting bit device to which the comparison result is output	—	Bit	ANYBIT_ARRAY (Number of elements: 3)
EN	Execution condition	—	Bit	BOOL
ENO	Execution result	—	Bit	BOOL

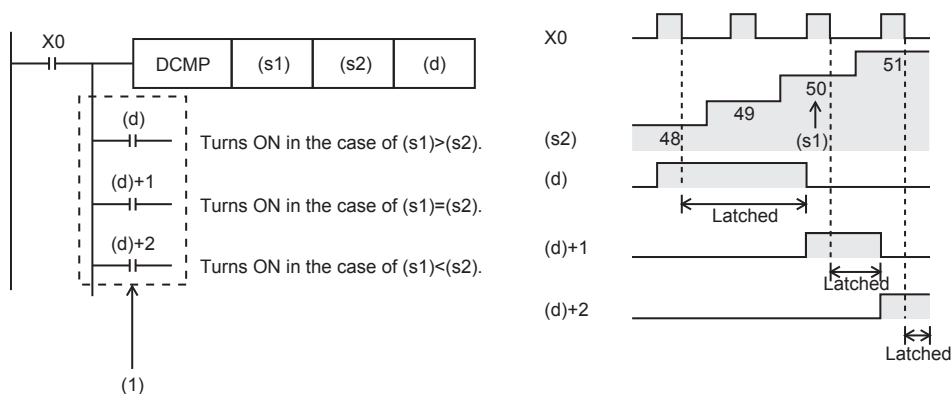
■Applicable devices

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	\$	
(s1)	○	○	○	○	○	○	○	○	—	—	—
(s2)	○	○	○	○	○	○	○	○	—	—	—
(d)	○	○*1	—	—	—	—	—	—	—	—	—

*1 T, ST, and C cannot be used.

Processing details

- These instructions perform a comparison operation between the 32-bit binary data in the device specified by (s1) and the 32-bit binary data in the device specified by (s2) and according to the result (small, equal, large), (d), (d) + 1, or (d) + 2 is turned ON.
- (s1) and (s2) are handled as binary values within the range of above data setting.
- Large and small comparison is executed algebraically.
 - With sign...-125400 (FFFE1628H) < 224566 (00036D36H)
 - Without sign...16776690 (00FFDF2H) < 4294967176 (FFFFFF88H)



(1): Even if the command input turns OFF and the DCMP instruction is not executed, (d) to (d)+2 latches the status just before the command input turns from ON to OFF.

Precautions

Three devices are occupied from the device specified in (d). Make sure that these devices are not used in other controls.

Operation error

Error code (SD0/SD8067)	Description
2820H	The range of 3 points of data starting from the device specified by (d) exceeds said device.