

3.6 SFC Program Instructions

SFC control instructions

■Checking the status of a step

Instruction symbol	Description	Reference
LD [S□/BL□\S□]	Outputs the status (active or inactive) of the specified step as the operation result. (Normally open contact instruction)	Page 956
LDI [S□/BL□\S□]	Outputs the status (active or inactive) of the specified step as the operation result. (Normally closed contact instruction)	
AND [S□/BL□\S□]	Performs an AND operation between the status (active or inactive) of the specified step and the previous operation result(s), and output the operation result. (Normally open contact series connection instruction)	
ANI [S□/BL□\S□]	Performs an AND operation between the status (active or inactive) of the specified step and the previous operation result(s), and output the operation result. (Normally closed contact series connection instruction)	
OR [S□/BL□\S□]	Performs an OR operation between the status (active or inactive) of the specified step and the previous operation result(s), and output the operation result. (Single normally open contact parallel connection instruction)	
ORI [S□/BL□\S□]	Performs an OR operation between the status (active or inactive) of the specified step and the previous operation result(s), and output the operation result. (Single normally closed contact parallel connection instruction)	

■Checking the status of a block

Instruction symbol	Description	Reference
LD [BL□]	Outputs the status (active or inactive) of the specified block as the operation result. (Normally open contact instruction)	Page 958
LDI [BL□]	Outputs the status (active or inactive) of the specified block as the operation result. (Normally closed contact instruction)	
AND [BL□]	Performs an AND operation between the status (active or inactive) of the specified block and the previous operation result(s), and output the operation result. (Normally open contact series connection instruction)	
ANI [BL□]	Performs an AND operation between the status (active or inactive) of the specified block and the previous operation result(s), and output the operation result. (Normally closed contact series connection instruction)	
OR [BL□]	Performs an OR operation between the status (active or inactive) of the specified block and the previous operation result(s), and output the operation result. (Single normally open contact parallel connection instruction)	
ORI [BL□]	Performs an OR operation between the status (active or inactive) of the specified block and the previous operation result(s), and output the operation result. (Single normally closed contact parallel connection instruction)	

■Batch-reading the status of steps

Instruction symbol	Description	Reference
MOV [KnS□/BL□\KnS□]	Batch-reads (in units of 16-bit binary data) the status (active or inactive) of steps in the specified block, and stores the read data in the specified device. (Kn: K1 to K4)	Page 960
MOVP [KnS□/BL□\KnS□]		
DMOV [KnS□/BL□\KnS□]	Batch-reads (in units of 32-bit binary data) the status (active or inactive) of steps in the specified block, and stores the read data in the specified device. (Kn: K1 to K8)	Page 963
DMOVP [KnS□/BL□\KnS□]		
BMOV [KnS□/BL□\KnS□]	Batch-reads (in units of the specified number of words starting from the specified step) the status (active or inactive) of steps in the specified block. (Kn: K1 to K4)	Page 966
BMOVP [KnS□/BL□\KnS□]		

■Starting a block

Instruction symbol	Description	Reference
SET [BL□]	Activates the specified block, and executes a step sequence starting from an initial step.	Page 970

■Ending a block

Instruction symbol	Description	Reference
RST [BL□]	Deactivates the specified block.	Page 971

■Pausing a block

Instruction symbol	Description	Reference
PAUSE [BL□]	Temporarily stops the step sequence in the specified block.	Page 972

■Restarting a block

Instruction symbol	Description	Reference
RSTART [BL□]	Releases the temporary stop, and restarts the sequence from the step where the sequence was stopped in the specified block.	Page 974

■Activating a step

Instruction symbol	Description	Reference
SET [S□/BL□\S□]	Activates the specified step.	Page 976

■Deactivating a step

Instruction symbol	Description	Reference
RST [S□/BL□\S□]	Deactivates the specified step.	Page 978

■Activating/deactivating a step

Instruction symbol	Description	Reference
OUT [S□/BL□\S□]	This instruction activates or deactivates the specified step.	Page 980

■Batch-deactivating a step

Instruction symbol	Description	Reference
ZRST [S□/BL□\S□]	Batch-deactivates the steps in the specified range.	Page 982
ZRSTP [S□/BL□\S□]		

SFC dedicated instruction

■Creating a dummy transition condition

Instruction symbol	Description	Reference
TRAN	A dummy output which satisfies a transition condition.	Page 984