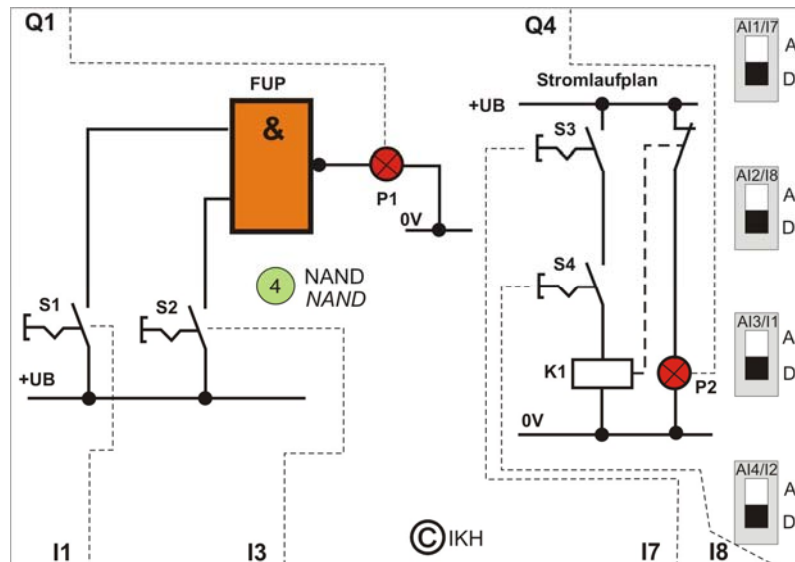


NAND - Function with LOGO!Learn

Learning card: NAND – Function



The learning card shows the NAND -Function as a function block diagram (FBD) and as a circuit diagram.

If an AND-Function and a NOT-Function are interconnected, all output states at output (Q) are reversed (negated). At output „Q“ of a NAND -Function state „H“ exists if state „H“ is not present on any of the inputs.

Correlation list 1

Symbol	absolute	Comment
S1	I1	Switch
S2	I3	Switch
P1	Q1	Status LED

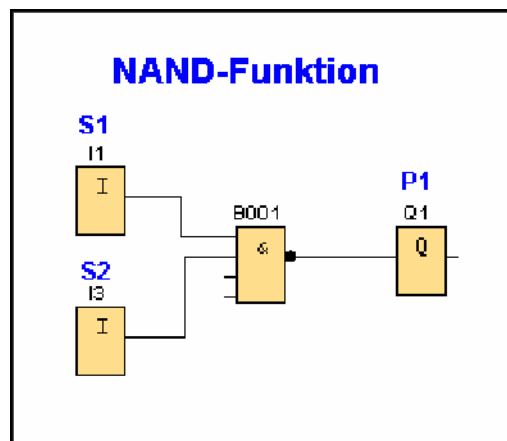
Correlation list 2

Symbol	absolute	Comment
S3	I7	Switch
S4	I8	Switch
P2	Q4	Status LED

Exercise with correlation list 1

- Enter program according to function block diagram (FBD) into the programming unit (i.e. PC or keyboard) and transfer into LOGO!
- Test circuit according to function table.
- Read-off signal states at the Status-LED of the exercise unit „LOGO!Learn“ and enter them into the right column of the function table.

Function table		
I1	I3	Q1
H	H	
H	L	
L	H	
L	L	

Solution field 1**Exercise with correlation list 2**

- Enter program according to ladder diagram (LAD) into the programming unit (i.e. PC or keyboard) and transfer into LOGO!
- Test circuit according to function table.
- Read-off signal states at the Status-LED of the exercise unit „LOGO!Learn“ and enter them into the right column of the function table.

Function table		
I7	I8	Q4
H	H	
H	L	
L	H	
L	L	

Solution field 2

