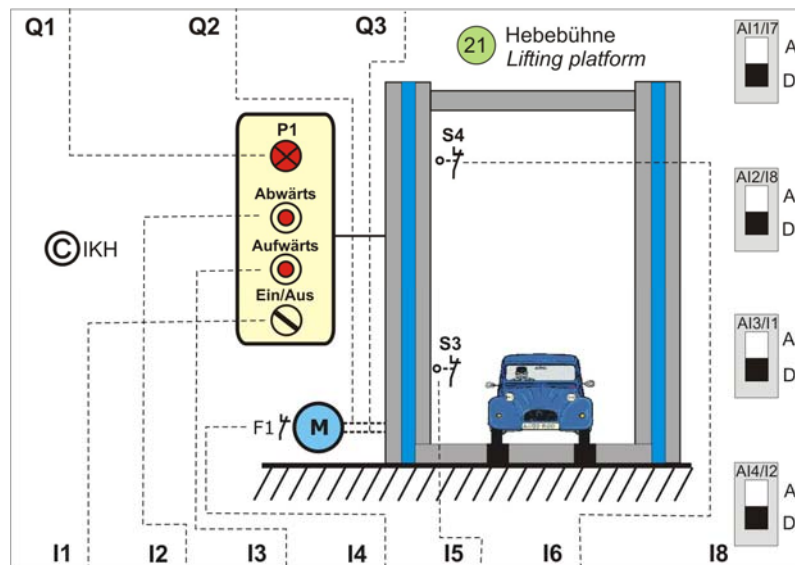


## Lifting platform with LOGO!Learn

Learning card: Lifting platform

**Operating description**

A lifting platform in a motor car workshop has to be controlled with a LOGO! The lifting platform is operated by a three phase motor (with attached brake) via a gearbox. The system is operated by an on/off switch (S0). If button S1 (down) is pressed, the motor runs anti-clockwise. The lifting platform moves downwards until it reaches the limit switch S3. The motor switches off. The motor runs clockwise for as long as button S2 (up) is pressed. The lifting platform moves upwards until it reaches the limit switch S4. The motor switches off. By releasing button S1 or S2 any intermediate position is possible. If buttons S1 and S2 are pressed simultaneously the motor should not start or has to stop immediately. The motor is protected by the contactor F1. The operating state of the system is indicated by the pilot lamp P1.

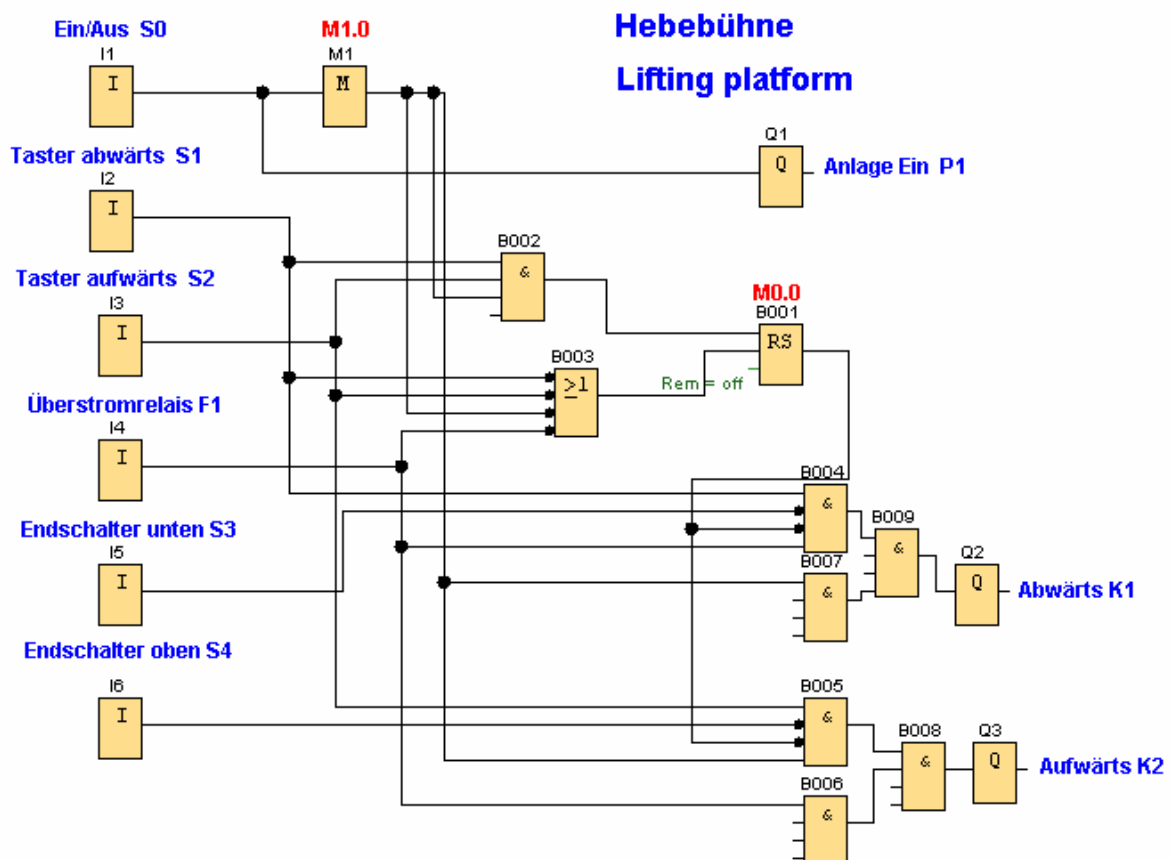
Correlation list		
Symbol	absolute	Comment
S0	I1	Switch on/off
S1	I2	Button down
S2	I3	Button up
S3	I5	Limit switch bottom
S4	I6	Limit switch top
F1	I4	Switch (contactor)
K1	Q2	Motor down (Status LED)
K2	Q3	Motor up (Status LED)
P1	Q1	Pilot lamp System on

## Exercise

Solution field 1 shows a suggested solution.

- Enter program according to function block diagram (solution field 1) into the programming unit (i.e. PC or keyboard) and transfer into LOGO!
- Test program
- Transfer the solution „FBD“ as „LAD“ (ladder diagram) into solution field 2.
- Enter program according to LAD (solution field 2) into the programming unit (i.e. PC or keyboard) and transfer into LOGO!
- Test program

### Solution field 1 (suggested solution)



Solution field 2 (ladder diagram)

