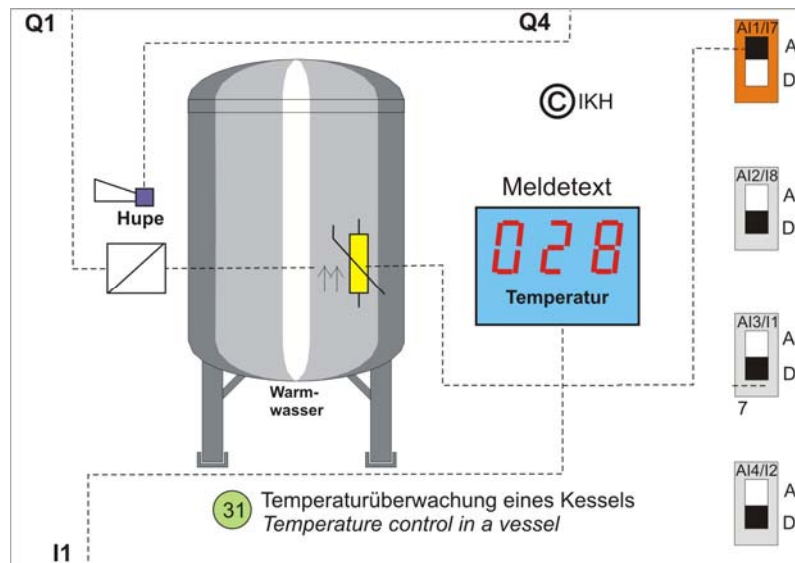


Monitoring of temperature in a vessel with LOGO!Learn

Learning card: Monitoring of temperature in a vessel



Operating description

The temperature in a vessel filled with liquid has to be controlled with pilot lamp (P1). For this reason a temperature sensor is built-in. The source of the heat is not taken into account. Analog to the temperature 0...100 °C the sensor supplies a voltage of 0...10V. The digital display of the LOGO! is used to read-off the temperature. A pilot lamp P1 is used to signal the temperature values.

At a temperature of under 60 °C (59 °C) the pilot lamp P1 is continuously on.
 At temperatures between 61 °C and 85 °C the pilot lamp flashes slowly
 At temperatures between 86 °C and 90 °C the pilot lamp flashes rapidly.
 At a temperature of 90 °C or more the pilot lamp P1 goes out and a siren starts to sound.

Correlation list		
Symbol	absolute	Comment
I7	R1	Analog input 0..10V
Q1	P1	Pilot lamp
Q2	P2	Siren

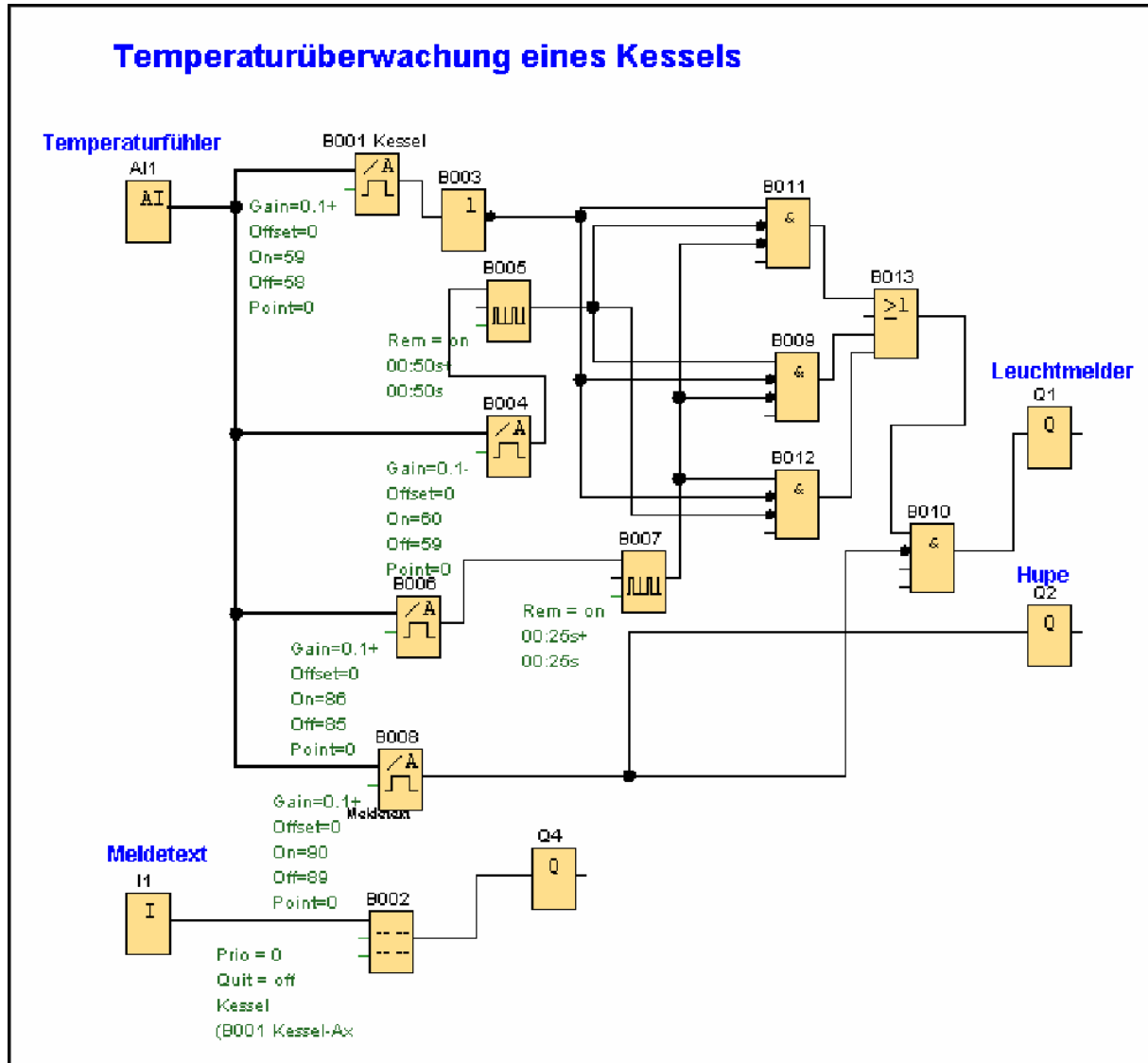
Exercise

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!

- o Test program

Solution field 1 (suggested solution)



Solution field 2 (ladder diagram)

