

## **Alarm system**

### **Task**

“easy” is required to control an alarm system for a detached and semi-detached private house.

Key switch S1 is used to switch the alarm system on and off. The alarm system is activated with a time delay in order to be able to leave the house within a certain time (default setting: 10 sec.) without tripping the alarm. When entering the house both the door contact and the motion sensor trip the alarm with a time delay (default setting: 10 sec.) in the entrance area.

This ensures that the alarm can be switched off before it trips. When the system is switched on, all window contacts and glass breakage sensors trip an alarm directly, i.e. without a time delay. In the event of an alarm, a hooter is switched on for a set time (default setting: 30 sec.). An alarm indicator is also permanently switched on. After the hooter is switched off, the outdoor lighting H3 starts to flash with a two second pulse. If required, the outdoor lighting can be switched on and off using the Panic button S2.

### **Wiring**

#### **Inputs:**

- I1 Key switch S1 (alarm system ON / OFF)
- I2 Panic button S2 (outdoor lighting)
- I3 Motion sensor S3 (entrance area)
- I4 Door contact S4
- I5 Door contact S5
- I6 Window contact S6
- I7 Window contact S7
- I8 Glass breakage sensor S8

#### **Outputs:**

- Q1 Indication H1 (alarm system ON)
- Q2 Hooter E1
- Q3 Alarm indicator light H2
- I4 Outdoor lighting H3

#### **Parameters:**

- T1 On-delay before tripping the alarm
- T2 Off-delay hooter
- T3 Pulse duration of outdoor lighting in the event of an alarm
- T6 On-delay on activation of the alarm system