## **Velbus Alarm functions implemented :**

- Delayed contacts
  - can be any potential-free contact (switch, magnetic contact, PIR ...)
  - standard 19 seconds entrance and exit delay before triggering
  - used to allow the owner to arm the alarm and to exit without triggering
  - used to allow the owner to disarm the alarm without triggering
  - typically used for the main entrance, garage, back door
- Direct contacts
  - can be any potential-free contact (switch, magnetic contact, PIR ...)
  - triggers the alarm immediately when activated
    - Siren during trigger + 2 minutes
    - Flash as from trigger until manual reset
- Activation / De-activation
  - any device used to activate / de-activate the alarm (activate only possible when no sensor activated)
  - exception process : enable / disable particular zones
  - if a keypad is used, then its potential-free contact is used
    - for security / tampering reasons it is best to invert this channel
  - if a glass panel button is used, then
    - it is recommended to use the OLED version
    - use the long-press feature
    - use a button on a page that needs scrolling
    - display a neutral message eg "Garden" (don't display anything that can be associated with "Alarm")
- Set all addresses of the Alarm modules together in a separate range
  - avoids being mixed up with the rest of the modules
  - once programmed and tested it should not be modified anymore
- Use the SDAUPSA redundant power supply with 2 PSUs and 2 VMBHBAT batteries, because when a BUS power-cut occurs, the alarm is de-activated, hence the need for the redundant PSU with battery

## Velbus Modules guidance :

- Name your modules in an easy-to-recognize manner (see examples)
  - VMB7IN = Alarm trigger / PIR
    - Delay 1 = CH1 (can be disabled if needed)
    - Delay 2 = CH2 (can be disabled if needed)
    - Delay 3 = CH3 (can be disabled if needed)
    - Direct 1 = CH4 (can be disabled if needed)
    - Direct 2 = CH5 (can be disabled if needed)
    - Direct 3 = CH6 (can be disabled if needed)
    - Keypad = CH7 (can be disabled if needed)
  - VMB4RYLD or VMB4RYNO = Alarm action (recommended VMB4RYLD with 12VDC feed from Alarm battery connected to SDAUPSA)
    - Buzzer = CH1 connect a "delayed entry / exit" buzzer
    - Siren = CH2 connect an alarm in-house siren
    - Direct = CH3 used for logic
    - Flash = CH4 connect an alarm flashlight
    - Armed = CH5 used for logic

