SECURE ALARM SYSTEM
WITH KNX IoT

Synergies by multiple usage

فراهوشمند انرژی
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Task

Measures for intrusion protection and barrier-free access are still better subsidised in Germany since November 2015. This draws the attention on the integration of alarm systems into the KNX installations. The bus system already controls the technical trades starting from lighting, via heating/climatisation up to sun protection and thus ensures comfort, safety and energy efficiency. A further application is evident. Dipl. Ing Holger Schult shows, how this can be realised.

Solution

From the technical point of view alarm systems can be realised by KNX – yet the requirements of the insurance companies are in contradiction to such a solution. Thus, not everything that is technically feasible can be realised. But there are synergies by multiple usage. Therefore it makes sense to realise e.g. a burglar alarm system according to the requirements of the insurance companies (VdS). When doing so attention has to be paid that KNX does not affect the alarm system. On the other side the signals of the sensors and/or alarm information can be used for further functions of the KNX system.

Realisation

The presentation shows, how to burglar alarm systems use the above mentioned possibilities. One burglar alarm system (Telenot) offers an RS232 interface to the building management system and an extension module RS232 to
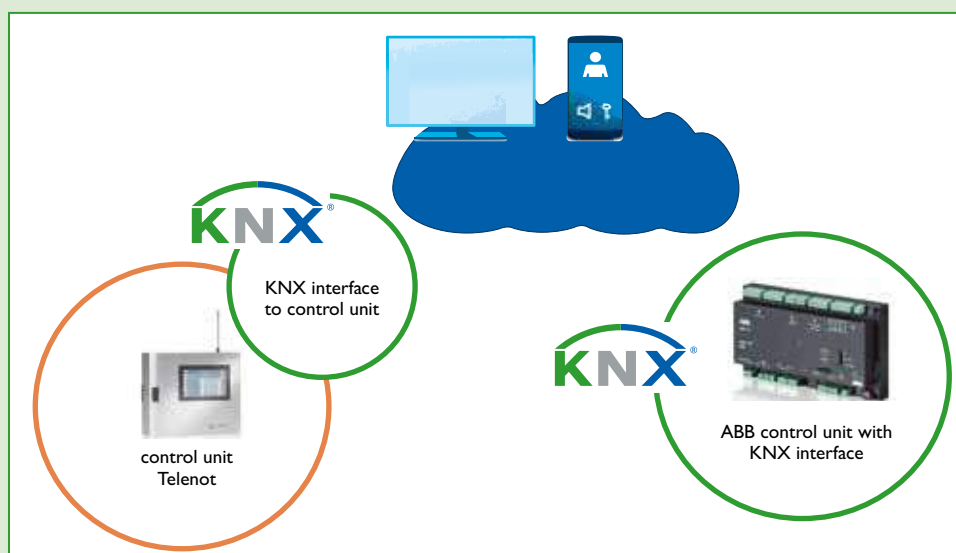
KNX. A further burglar alarm system (ABB) can directly communicate with KNX. It depends on the required safety classification of VdS what and how detailed information can be exchanged. Thus e.g. the existing window contacts can be used for further purposes. It is also possible to display alarms on mobile devices like smartphone or tablet via KNX Web Services and other applications.

Functions

All sensors required for the function "perimetric protection" of the burglar alarm system can also be used for KNX functions: Examples are: Setting the system switches centrally off the lighting or changes the heating from "comfort mode" to "standby". When open windows are detected, the heating valves are – with a time delay – automatically set to "frost protection". Motion detectors of the burglar alarm system provide simultaneously presence information for several kinds of KNX functions. Further technical alarms provided by smoke detectors, leakage detectors and gas detectors can easily be integrated.

Advantages

- Up-to-date information on the state of the house
- Increased sense of security
- Information on alarms
- Information can be selectively retrieved at any time

KNX interface to control unit

control unit Telenot

ABB control unit with KNX interface

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