



Automatic light for fast deployment



JMG 4 S KNX

Presence detectors have nothing to report when alarms go off. Their functions are blocked in emergencies. That happens automatically. In the same way as the command centre sends an ON command to lighting via KNX in when fire or rescue alarms sound. When the duty officer sets off alarm on the control desk, the bus system knows where the lights in the building have to go on quickly and continuously. Even the doors open automatically. The emergency workers rushing to the scene find brightly lit ways to quickly aid their assistance. The Geretsried volunteer fire brigade is proud that they only need three minutes from the alarm sounding to turn out.

When the new North fire station was built, the commander laid down clear demands: „The whole building has to be monitored and controlled from the command centre.“ It was obvious to the electrical planner Marcus Klingler that the requirements for the electrical installation could only be met with a bus system. The choice was KNX from Theben.

Function

- Control of building services technology directly from the control centre
- Automatic lighting of traffic routes
- Simple operation of lighting, heating and sun protection
- Energy efficiency
- Flexible electrical technology
- Reasonably-priced installation

Lösung

- KNX bus system
- KNX coupling and command centre
- Configurable light scenes
- Conventional push buttons with push button interfaces
- Automatic lighting control with presence detectors
- Individual room control with RAMSES 713 S KNX temperature controller
- Actuators from the Theben MIX range (switching actuators 4-12 channels, dimming actuators 2-6 channels, blinds actuators 4-12 channels, heating actuators 4-12 channels)
- Theben KNX weather station



The North fire brigade building: When the alarm sounds, KNX switches on the lighting on the traffic routes.

Easy-to-use high technology

The fire station built in 2007 has, in addition to the command centre and vehicle area, offices, social areas, a conference room and even a flat. The building is not just used in emergencies but also for day-to-day activities such as administration, maintenance, training and social activities. The high-tech electrical installation should not have an intimidating effect on the two full-time maintenance officers and the 100 or so volunteers. A version with conventional light switches fits the bill. Their operating signals are sent to the bus via push button interfaces TA 2/4/6 KNX or via free binary inputs on the RAMSES 713 S KNX temperature controller. And the actuators issues were solved in a flexible and cost-effective manner using the Theben MIX range. A basic module, for example an RMG 4 S KNX 4-way actuator, combined with 4-way extension modules or

even with dimming, heating or blinds modules – you can perform many functions with a single bus participant. That's also worth while with the channel price as well as the time spent on configuration and maintenance.

Efficient bus installation

Obviously, building automation should also support the efficient use of energy. In the day-to-day fire service, Theben KNX presence detectors automatically switch on lighting in passages, staircases and in outdoor areas. The RAMSES 713 S KNX temperature controllers provide comfortable warmth or the required standby temperature in the cooler months. And in the summer, automated sun protection via a KNX weather station protects against glare and heat. The specific lighting requirements in the conference room were provided with the help of

dimming actuators (DMG/DME 2 S KNX) with scene functions. Around 250 KNX components were installed; all from Theben – except visualisation. The functions of the building services technology are operated and controlled via interfaces on the central monitor.



Depending on the specific call out, the doors open for the emergency vehicles. KNX switches on the lighting on the traffic routes.

Customer	Geretsried Council District of Bad Tölz
Project	North fire station
Architect	Fink + Heil Architects Munich
Planning & Integration	Ingenieurbüro Klingler Benediktbeuren EAB Elektroanlagen Munich

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