



Living with functions for comfort and well-being on the Vierwaldstätter See



Energy-saving building services engineering

The site of the former Hotel Belvédère in Hergiswil, Switzerland is now occupied by 14 new build flats and an attractive restaurant: the Seeresidenz Belvédère. The architecture reminiscent of a grand hotel and the lakeside location with a panoramic view of the Vierwaldstätter See demonstrates the exclusivity of the project. The building services engineering reflects the luxurious ambience. Constructed to low energy standards, all the flats have controlled ventilation. Heating is provided by a geothermal heat pump. Lighting, shading and air conditioning are all controlled via the KNX bus system and ThebenHTS.

„KNX was already a guideline for electrical consultants as that makes us flexible and and a residential standard also requires high-quality electrical engineering.“

Bruno Moserl
Schmid Immobilien AG



Panoramic view with living comfort - Mix KNX actuators contribute with light, blinds, and air conditioning control.

MIX range: Functions and benefits

- The MIX range from ThebenHTS consist of a basic and add on modules. The ability to connect up to two add on modules to one basic module makes it possible to achieve flexibility (add on different modules) and reasonable costs (lower channel price). All functions for lighting, blinds control and heating can be combined as required but only the basic modules with bus coupling unit has to be configured.
- MIX blinds actuators control slats, blinds and awnings
- MIX switch actuators operate lighting, ventilation and other consumers C-load actuators (16 A) are available for high lamp loads and they also have current detection.
- MIX dimming actuators for perfect light scenes or constant light control with incandescent, halogen or dimmable energy-saving lamps
- MIX heating actuators in combination with KNX room thermostats control thermal actuators

- The application is particularly energy-efficient in combination with a boiler with KNX interface. The percentage valve opening of the CHEOPS actuators can be transmitted to the boiler so that the feed temperature can be exactly adjusted to the current heating requirement

Lebensstil per Tastendruck Lifestyle at the push of a button

Lighting in the flats is operated by modern, inscribed push buttons. In addition, two light scenes can be programmed in the living and the dining rooms: You can set up the combination of different light sources appropriate to the particular living environment and stores them when the push button is held down. Briefly pressing the push button retrieves the light scene. A central off switch by the living-room door is practical for switching off all lights simultaneously. Thanks to the communication cable with multimedia connection in all rooms, there is nothing to stand in the way of a state-of-the-art home entertainment system. And the lakeside Belvédère restaurant offers KNX comfort and

ambience: A touch panel with easy to use interface enables members staff to control all the lights, blinds and awnings.

Flexible and reasonably-priced with MIX actuators

The switching and dimming actuators are sited in the distribution board. They are from Theben's KNX MIX range. Basic and upgrade modules can be combined as required, including different functions such as switching actuator, dimming actuator or heating actuator. The configuration of the basic modules with removable bus coupling unit and application software with preset standard parameters and copy function is remarkably easy. That has made automation flexible and affordable. LEDs on the actuators show the status per channel. Manual switches enable tests and set-up without bus power source. A reasonably-priced solution for push button operation is provided by the use of push button interfaces TA 6 with 6-way binary input. Property developers are convinced by the use of KNX bus-controlled building services engineering.



The building is constructed to low energy standard. All the flats have controlled ventilation. The building is heated via geothermal heat pump.

Client	Schmid Generalunternehmung AG Stans Switzerland
Project	Exclusive residential property with 14 flats and restaurant on the Vierwaldstättersee
Architect	ARGE Gret Loewensberg & Reinhard Architekten
Planning & Integration	Probus Technik AG Schötz CH Elektro Imholz AG Kriens CH