

**BB-control**  
BUILDING AUTOMATION

**BB**

**B** BUILDING  
AUTOMATION  
SIMPLY  
DONE

## THE IMPORTANCE OF BUILDING AUTOMATION CONTINUES TO GROW – EnEV 2016.

When EnEV 2014 (Energy-Saving Regulation) took effect, this already made building automation a sustainable component of energy efficiency for non-residential buildings. Now, use of the new EnEV 2016 is indispensable, and it should be considered early in planning.

By implementing automation, building owners are protecting their investments, and the spaces with building automation guarantee reliable leasing and utilization.

## MODERN BUILDING AUTOMATION ALSO MEANS:

- Flexibility in space usage
- Reduced energy costs
- Automation that extends across different building engineering systems
- Protection of investments even when spaces are modified
- Sustainability of investments
- Enhanced comfort

As well as:

- Modernization in administrative buildings such as schools and kindergartens
- Easiest and most cost-effective integration in existing buildings
- Enormous reduction of heating/cooling costs by automation based on usage concepts

# IMPLEMENTING THE FUTURE TODAY

8 | BUILDING  
AUTOMATION  
SIMPLY  
DONE



# FULL POTENTIAL WITH A COORDINATED SOLUTION

## OUR EQUIPMENT CONCEPT

B-control BA consists of the POW 100 - the intelligent power supply, CUB 100 - the high-performance controller for distributed control, MIO 100 - the compact multi I/O system and PAT 100 - the flexible interface module.

In addition, dedicated input and output modules are available.

## WHAT MAKES THE CONCEPT SO UNIQUE?

Installation:

- Separation of devices into terminal module (mechanical) and functional module (electronics)
- Functional modules can be replaced without having to disconnect wiring, and they are easy to install and wire
- Simplified debugging based on the distribution of modules
- High-quality electronics are protected against theft, and are not contaminated during the construction phase
- Wiring is designed for start-up of the electronics by simply plugging it in
- Option of a recessed backplane bus (CAB bus) means decentralized installation and equipment and wiring cost savings
- Electronics design, manufacturing, interconnection technology and housing meet industrial standards; no consumer electronics. Electronics produced in-house, high-quality components are selected which fulfill IPC Class 3 (production standard)
- Tool-free wiring by use of spring-type terminals
- Form factor for DIN distributor: 45 mm front cutout size (height), 17.5 mm division unit (width)



**WELL-ENGINEERED TECHNOLOGY  
PRODUCES COMFORT**

# INTEGRATION OF DIFFERENT COMPONENTS QUICK AND COST-EFFECTIVE

Today, many different sensors and actuators are used in buildings. The real challenge in implementing the standard for building automation lies in integrating them in a coordinated way and achieving effective automation.

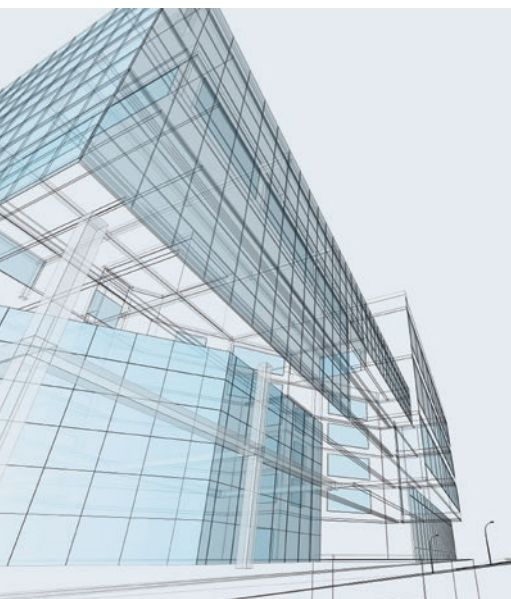
B-control BA can do this!

The necessary device drivers, gateways and power supplies are already integrated in the B-control BA hardware, or they can be easily added.

The high level of integration makes it easy to implement modern approaches quickly and cost-effectively.

## **B-CONTROL BA DEVICES ARE ABLE TO INTER-FACE TO:**

- KNX (Konnex bus, widely used, approx. 300 manufacturers offer products)
- DALI (optical bus, Digital Addressable Lighting Interface)
- EnOcean (radio standard, no battery, low energy required is stored from the environment)
- SMI (Standard Motor Interface, for drives, e.g. in shading systems)
- Universal I/O, (inputs and outputs, typical traditional wiring)
- Ethernet switch (extension of the Ethernet cable)
- Ethernet port (connection to Ethernet cable)
- M-Bus (e.g. typical counter bus)
- BACnet (over external gateway, e.g. to make select data available to higher-level instrumentation and control equipment)



## SOLVING CHALLENGES SAVING ENERGY



B-control Building Automation (referred to as BA in the following) is a new sustainable approach for solving challenges and fulfilling all requirements for significant energy efficiency and protection of investment.

B-control BA meets the documented requirements for building automation contained in VDI 3813 (Association of German Engineers standard) and is therefore the right system for fulfilling bid requirements and associated functionalities.

In evaluations based on EN 15231, B-control BA is rated as efficiency class A or B, depending on project planning content, and it can therefore be used for need-based automation of building spaces.

B-control BA will become an essential component of buildings when EnEV 2016 takes effect. Procurement, start-up and life cycle costs are affordable to investors.

**BECAUSE WE AUTOMATE  
AND DON'T JUST OPERATE**



## THE SOFTWARE CONCEPT UP TO 5 TIMES FASTER

The unique device concept is supplemented by a software concept. Together, the B-control BA hardware and software implement the functionality of VDI 3813.

The necessary software is free and is included as a product component. B-control differs significantly from the products of other suppliers in this regard. The standard software package can be supplemented by the optional graphic operating concept and data archiving.

Engineering is simplified considerably by the use of the ready-made software library. The software objects in this library represent real devices and functions (in accordance with VDI3813) in all of their aspects:

- Control logic
- Dynamic visual representations
- Interfacing and configuration, Single Line Engineering
- Simulation & testing
- Documentation

Projects implemented with B-Studio are cost-effective in setup and exhibit excellent flexible adaptability over the building life cycle.

### **Once again, the key benefits at a glance:**

- Preconfigured solution library
- Reduced complexity
- Cross-discipline communications
- Integrated engineering
- Data consistency
- Large-scale engineering

B-control is a brand of  
TQ-Systems GmbH and nxtControl GmbH

TQ-Systems GmbH | Mühlstr. 2 | 82229 Seefeld | Germany  
Tel.: +49 8153 9308-677 | Fax: +49 8153 4223 | [info@b-control.com](mailto:info@b-control.com)

[www.b-control.com](http://www.b-control.com)