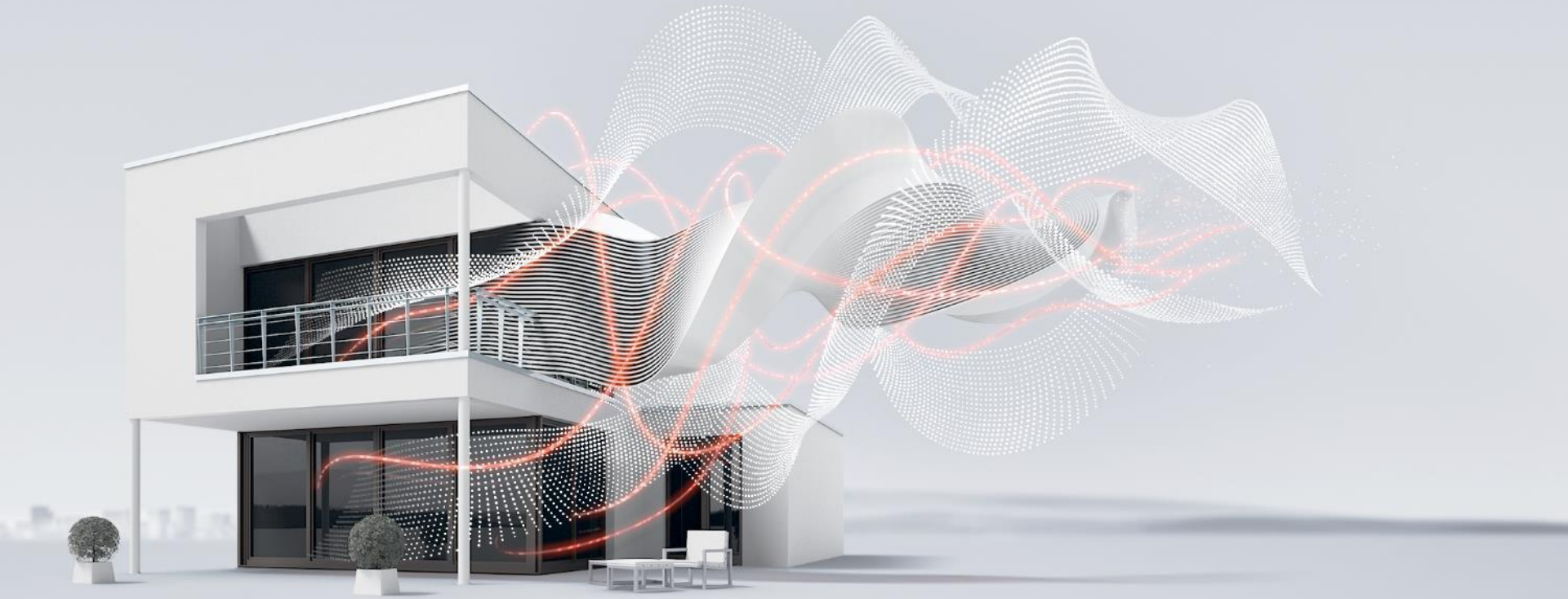


JANUARY 2017

# Webinar Logic Controller ABA/S Part 2

## BU EPBP GPG Building Automation

Carolina Bachenheimer-Schaefer, Thorsten Reibel, Jürgen Schilder & Ilija Zivadinovic
Global Application and Solution Team

# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## Agenda

Overview and features

i-bus Tool

ETS

- Introduction and principle handling
- Type of function elements
  - PID Controller
  - Calendar
  - …
- Function blocks
- Offline simulation and online monitoring
- WebUI

**Video on Youtube:**
**https://youtu.be/4K-fZ3ge4-c**

# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## ABA/S 1.2.1 - Logic Controller

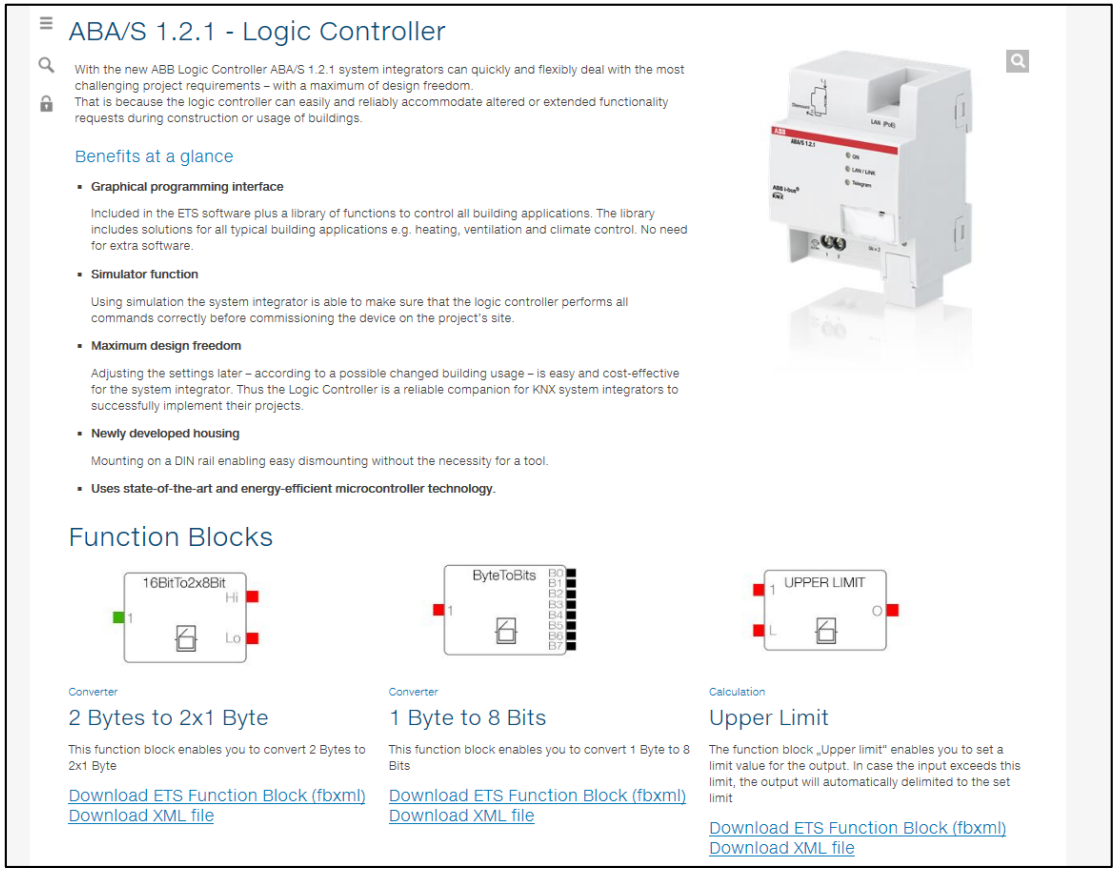
www.abb.com/knx > Highlights

Benefits at a glance

Download Function Blocks

– Single Function Block (fbxml)

– ETS XML file



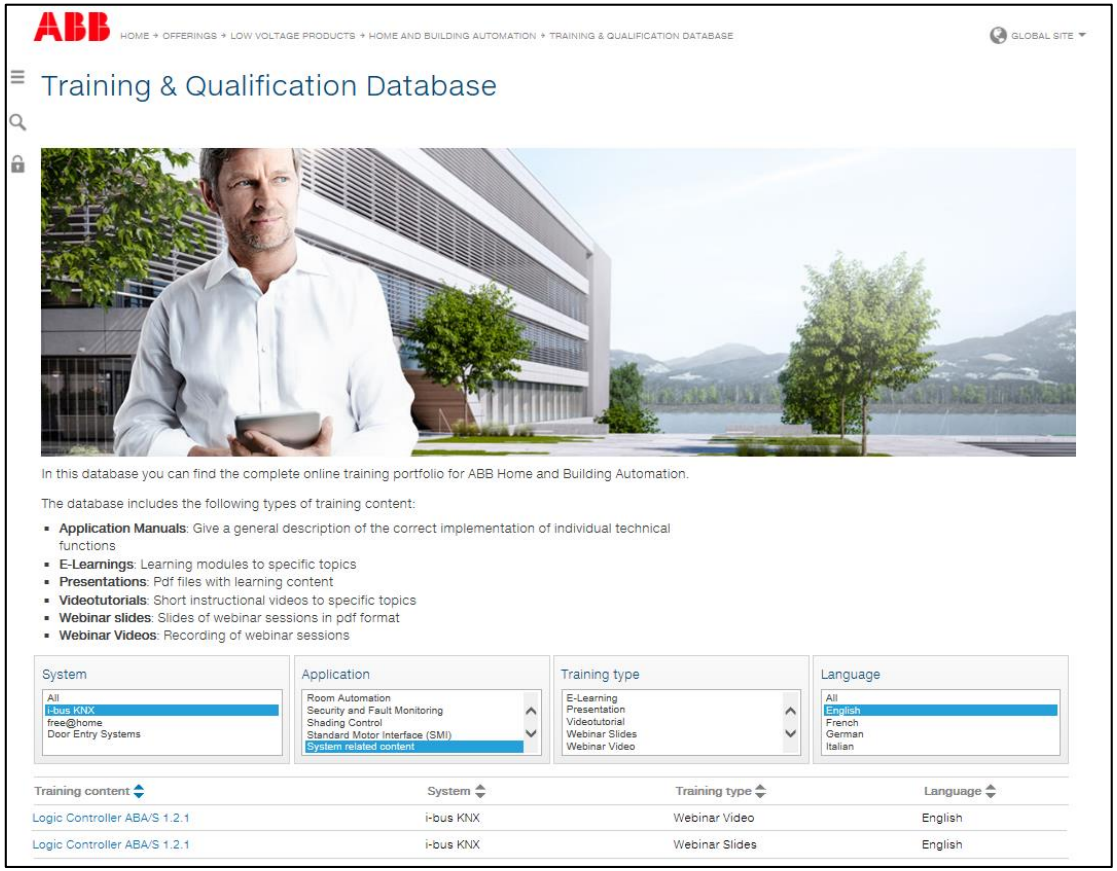
# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## ABA/S 1.2.1 - Logic Controller

Webinar part 1 from November 2016

- Introduction
- Planning
- Installation
- Commissioning

Video and slides are available on Training & Qualification Database



# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## Device technology - Hardware

Modular installation device (MDRC)

Width: 4 MW

Power supply

– 24 V DC or

– PoE (LAN connection, IEEE 802.3af class 2)

Bus connection terminal behind cover

LAN connection

– PoE (Power supply)

– Fast download of the ETS application

– Monitor (online)

– WebUI

LEDs (ON, LAN/Link, KNX telegram)

# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## Device technology - Software

Application fully integrated in ETS, no separate software required

Integration in the i-bus® Tool

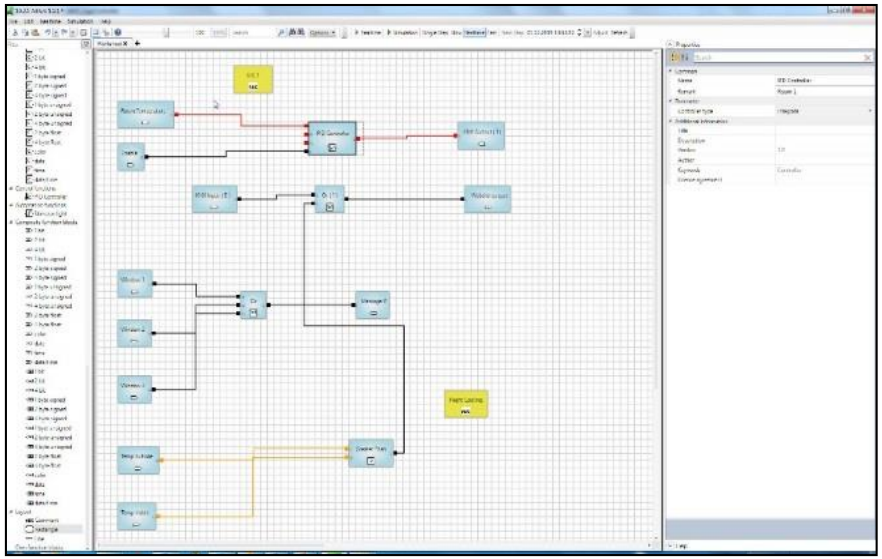
User friendly graphical environment in ETS

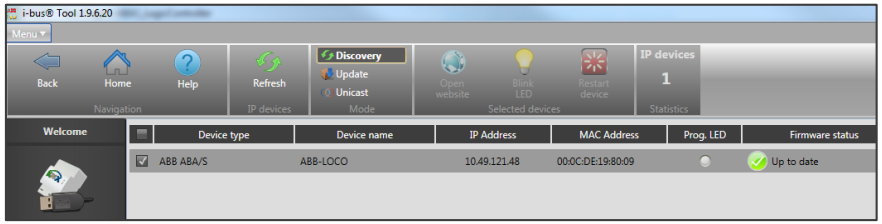
Online Manual on ABB homepage and via link in ETS application

Definition of composite function blocks own KnowHow, can be used multiple

Offline simulation and online monitoring safe commissioning and operation

LAN and WebUser Interface
Access by customer, fast download





# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## Device technology - Software

5,000* function elements for all requirements

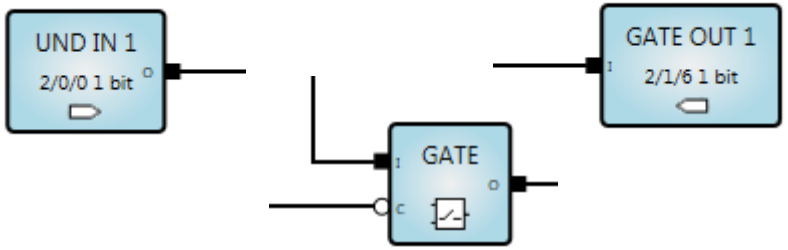
- Logic
- Mathematics
- Comparison
- Timers, Delay and Calendar
- Counters, Flip Flops
- PID Controller
- and many more

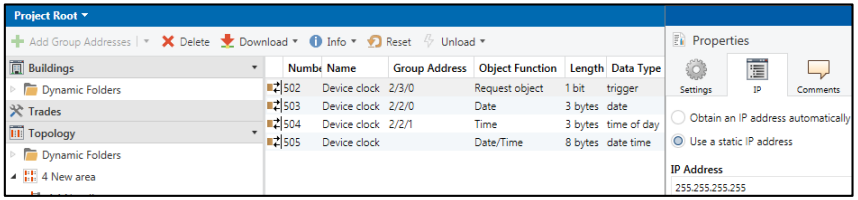
500 KNX In/Outputs (group objects)

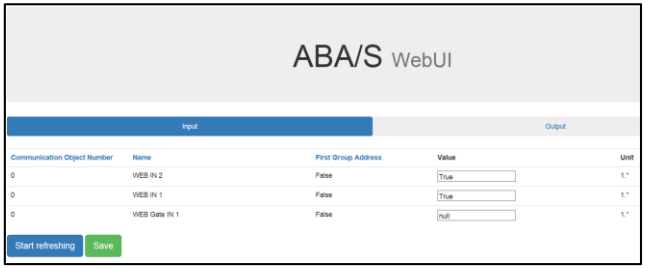
2,000 Group Addresses

60 WebUI In/Outputs

*Recommendation: Limitation to 3,000 (reserve for functional blocks)

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# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## First Steps

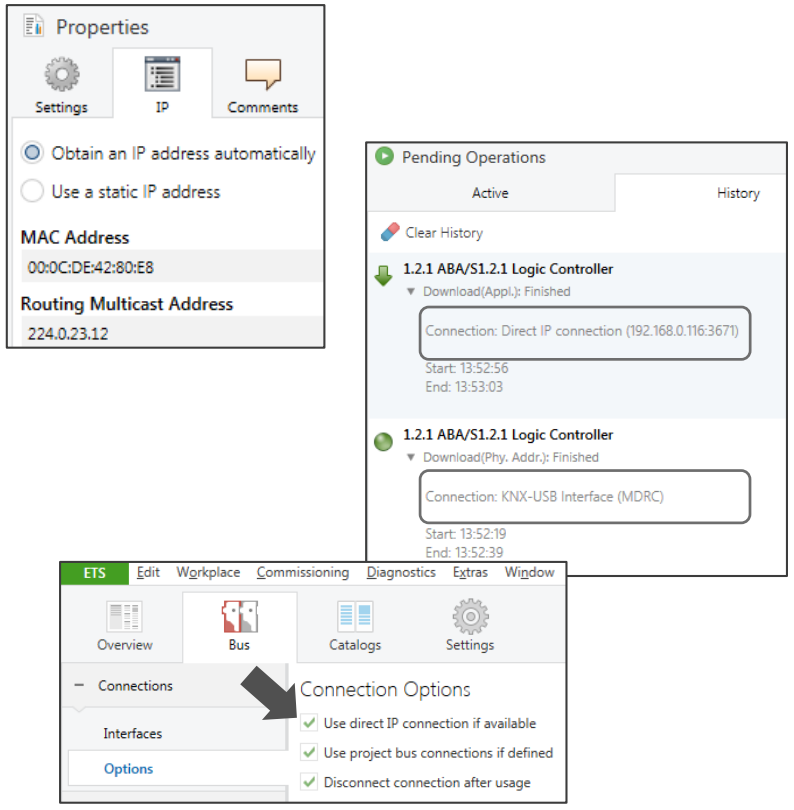
Connect the device to LAN, the KNX busline and auxiliary power (24 V DC or alternative PoE)

ETS:

- Settings of the IP address
- Parametrization
- Simulation (offline)
- Assignment of group addresses

Programming the individual address via the KNX bus line (USB Interface, IP Interface, …)

Download of application via the KNX bus line or faster via direct IP connection (recommended)



# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

**ETS: Current interface**
USB Interface – IP Router IPR/S – IP Interface IPS/S

Programming of the individual address via the KNX bus line
USB Interface, IP Interface or IP Router

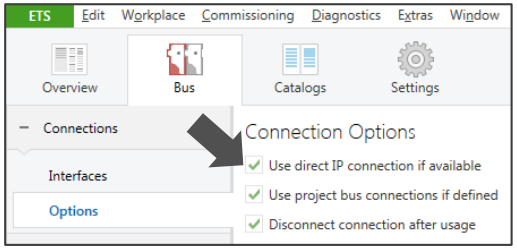
Download of application via the KNX bus line

Disable

Bus parameter “Use direct IP connection if available”

Enable and ABA/S is connected to IP

Download of application via the KNX bus line (USB Interface, IP Interface or IP Router)




Download of application via **faster** direct IP connection (recommended)

# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

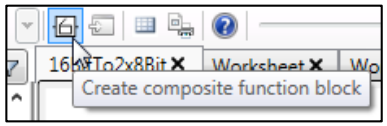
## Definition of a function block

A function block consists of

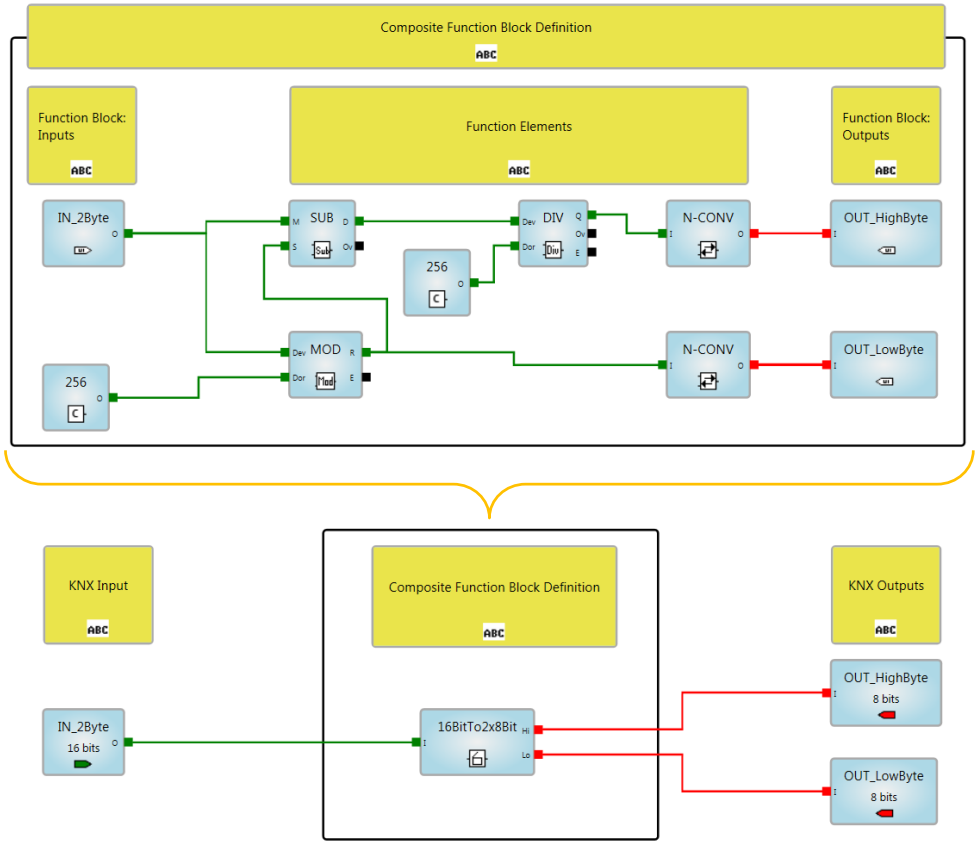
- FB Inputs
- Function elements
- FB Outputs

Test FB via “simulation mode”

Click on button “create a function block”




Function block listed in “own function blocks” and can be exported



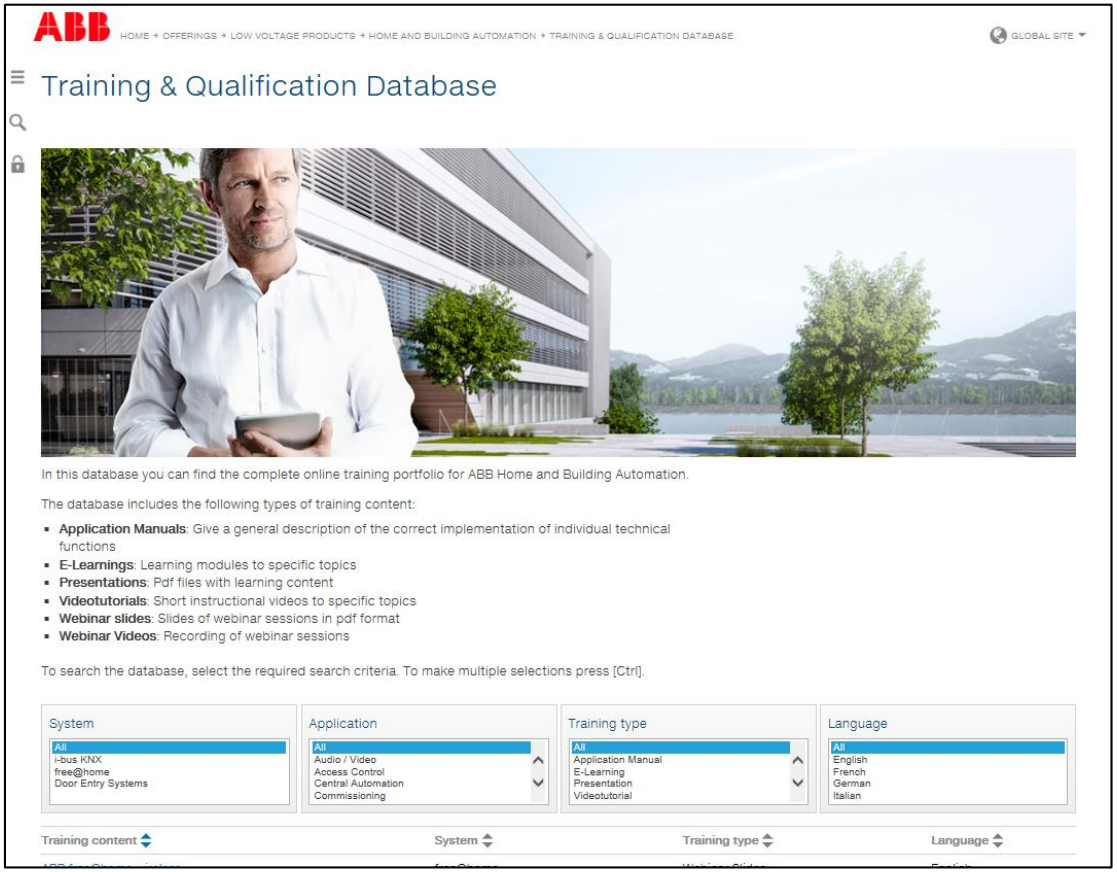
# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## T&Q Database

In this database you can find the complete online training portfolio for ABB Home and Building Automation

The database includes the following types of training content:

- Application Manuals
- E-Learnings
- Presentations
- Video tutorials
- Webinar slides and videos



# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

## KNX Certified Training

Certified KNX Courses in Heidelberg

- Basic Course 03rd to 07th April
- Advanced Course 17th to 21st July
- Tutor Course 09th to 13th October

And many more training courses in the calendar “International Training Dates 2017”

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# Webinar “Logic Controller ABA/S 1.2.1 - Part 2”

Next Webinar

## Busch-Presence detector KNX

Wednesday 22nd of February 2017

- Morning  09:00 am Europe Time (Berlin, UTC + 1h)
- Afternoon 03:00 pm Europe Time  (Berlin, UTC + 1h)

Range overview incl. new KNX presence detector corridor

Application and benefits

ETS parametrization

…

* Topic is subjected to change

# Disclaimer

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