

HEIDELBERG, MAY 2022

ClimaECO – Application Controller AC/S – Functions & Solutions

Online Learning Session – Building Academy Smart Buildings

Thorsten Reibel & Juergen Schilder

ClimaECO – Application Controller AC/S – Functions & Sol.

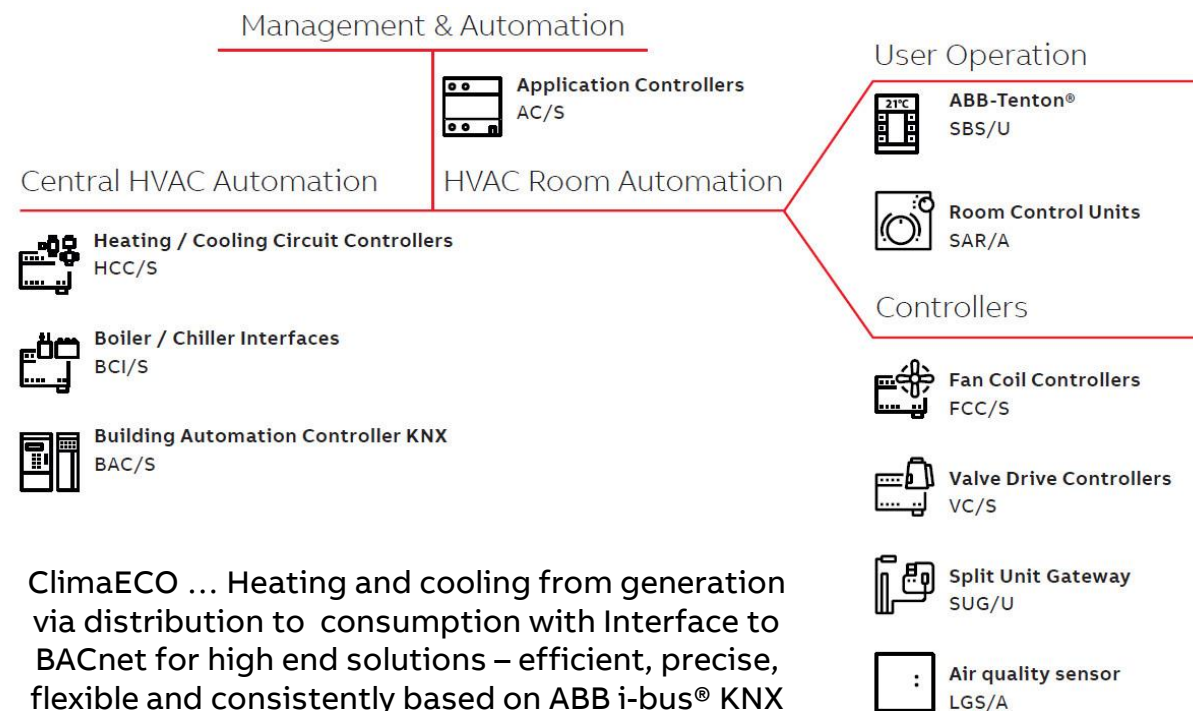
Introduction

ClimaECO – Application Controller AC/S – Functions & Solutions

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ClimaECO – Intelligent HVAC solutions with ABB i-bus® KNX

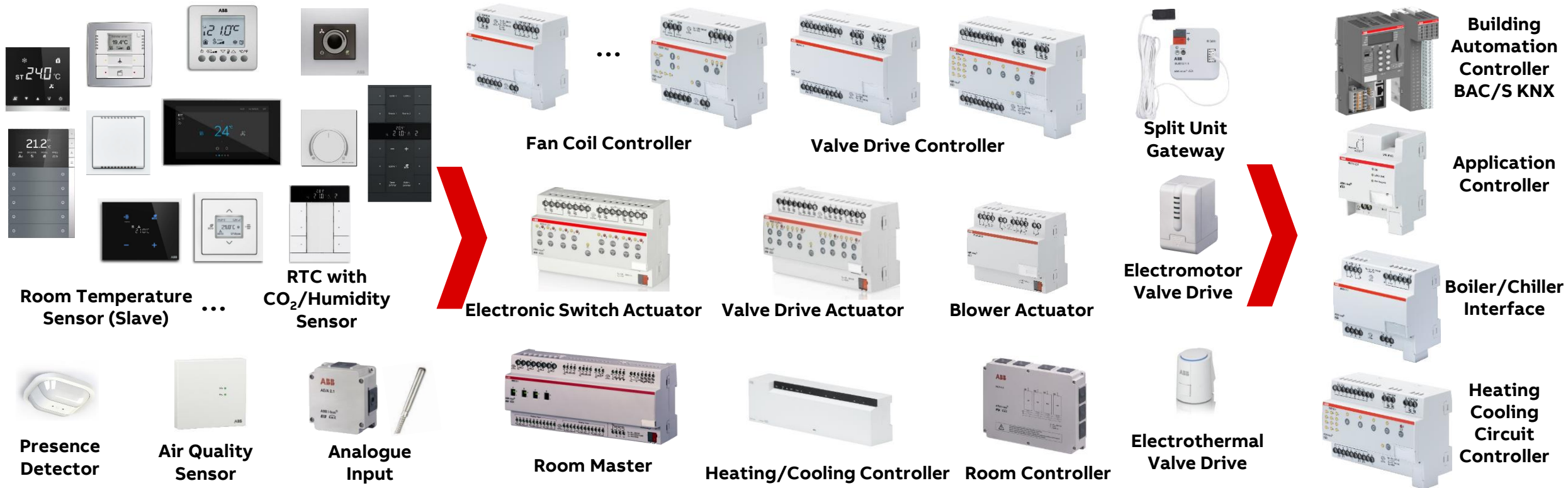
- ClimaECO is the holistic heating, ventilation and air-conditioning (HVAC) automation solution based on ABB i-bus® KNX
- A solution that seamlessly integrates room automation, distribution, central HVAC functions, management and automation into one system – a significant step towards increasing energy efficiency and reducing operational costs
- ABB's ClimaECO portfolio includes
 - ClimaECO® Sensors SBx/U and Room Control Units SAx/A
 - Valve Drive Controllers VC/S
 - Fan Coil Controller FCC/S
 - Heating/ Cooling Circuit Controllers HCC/S
 - Boiler/ Chiller Interface BCI/S
 - Application Controllers AC/S with Interface to BACnet
 - Building Automation Controller KNX BAC/S
- Slides & videos of Webinars, Learning Sessions → [T&Q Database](#)



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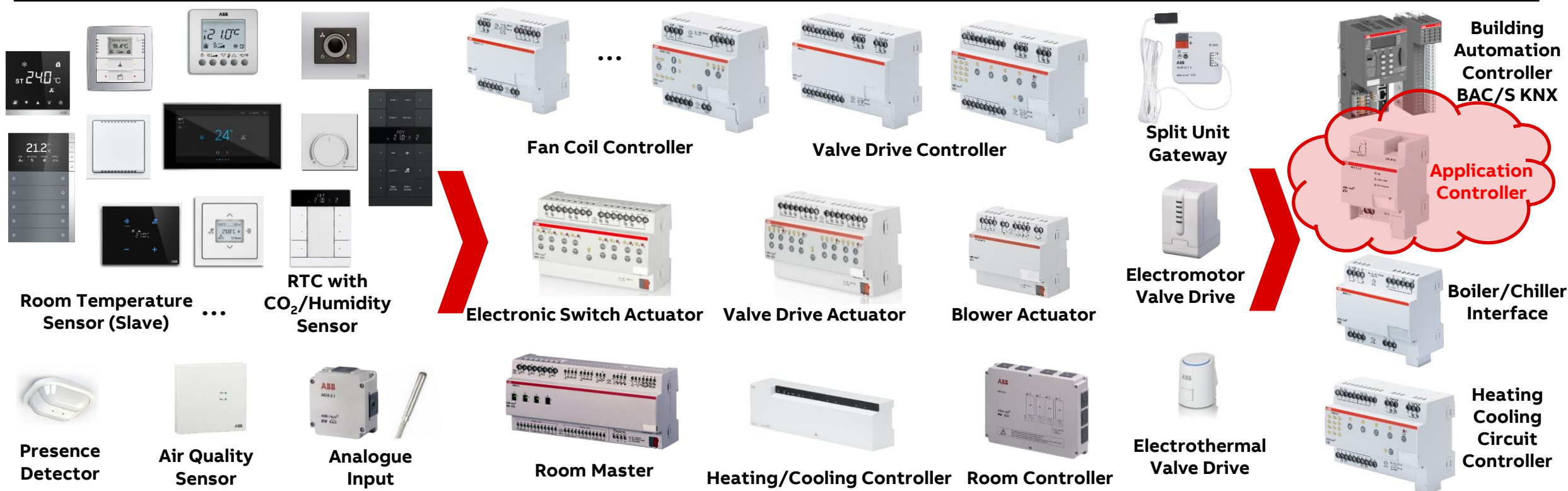
Overview ABB i-bus® KNX HVAC Range



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Overview ABB i-bus® KNX HVAC Range



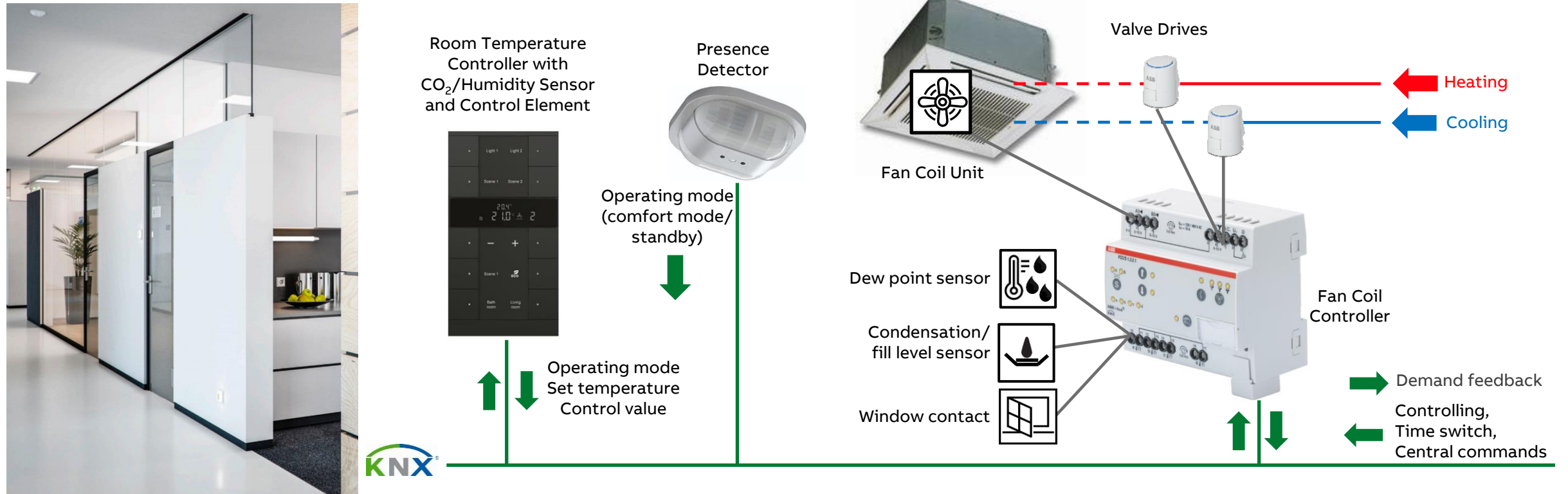
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Overview Application Controller AC/S

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ClimaECO: ABB i-bus® KNX and HVAC

Room automation solutions: Heating/cooling/ventilation on the room level



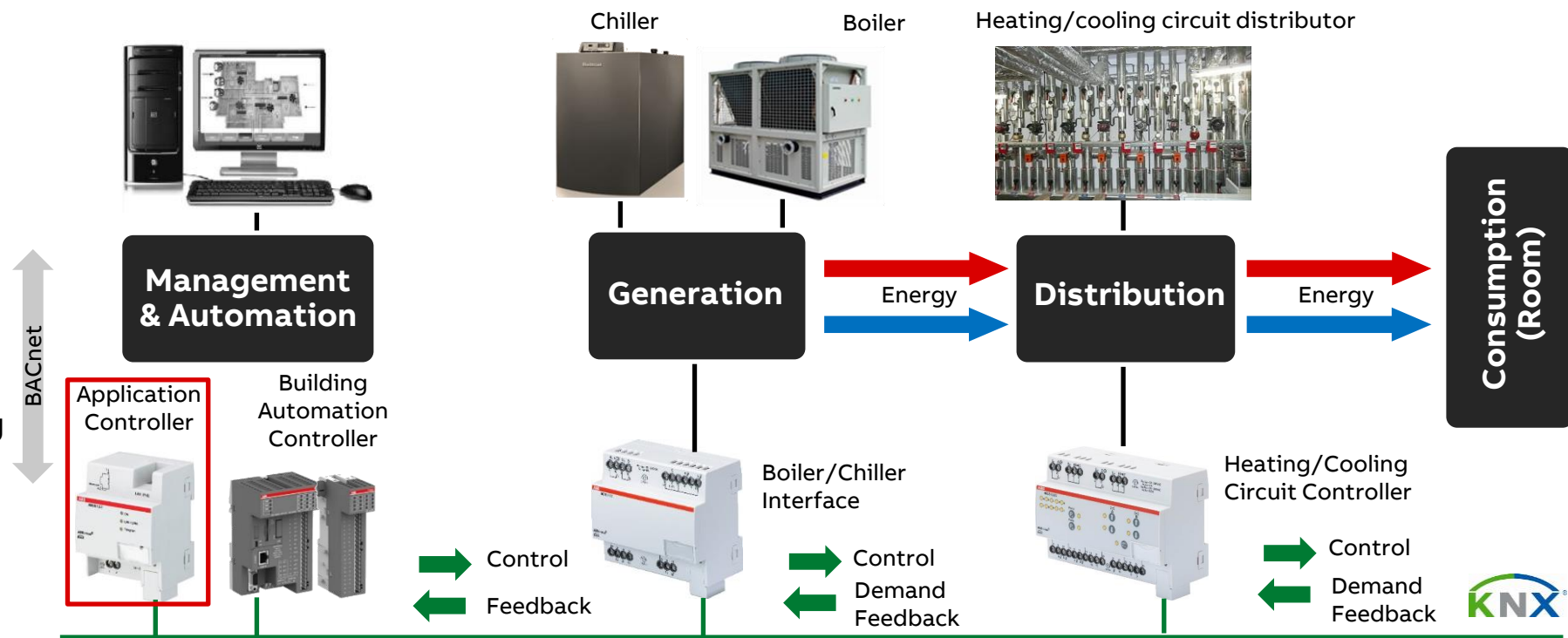
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ClimaECO: ABB i-bus® KNX and HVAC

Room ↔ Distribution ↔ Generation ↔ Management & Automation

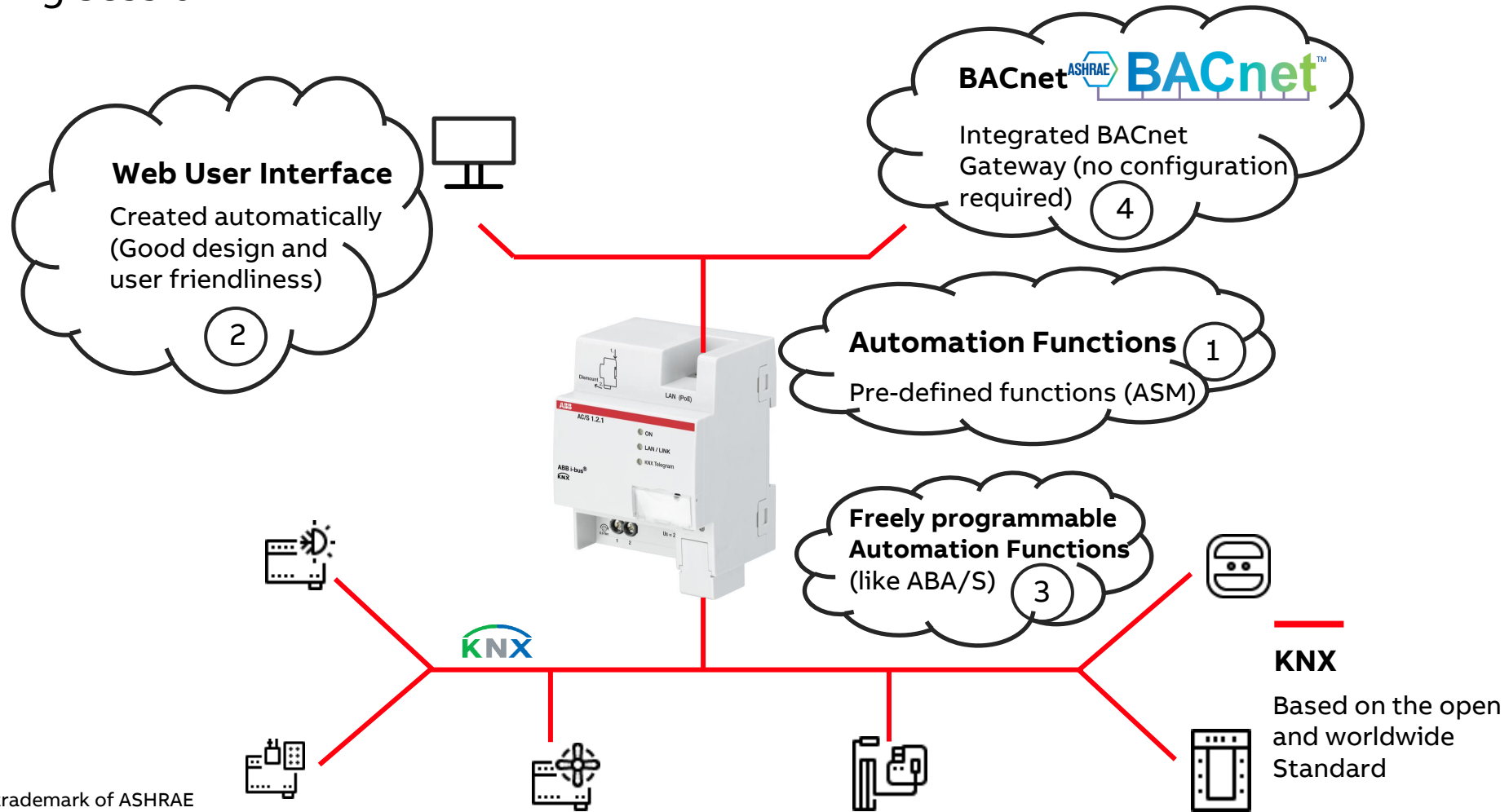
A consistent HVAC solution must cover all levels

- Management & Automation
- Generation
- Distribution
- Consumption (Room)
- Communication based on ABB i-bus® KNX
- Water based heating and cooling
- Small and medium size commercial projects
- Application Controller AC/S contains all software functions for this task and more



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1. Application Specific Automation Modules

Predefined Automation Modules

- ASM → **A**pplication **S**pecific Automation **M**odule
- Represent specific functionality, can execute function by itself or together with other ASM's e.g. room set points or heating/cooling circuit control
 - In- and/or outputs (sockets)
 - Parameters
 - Group objects
 - Linking view with sockets to be connected to KNX objects, WebUI, BACnet or other ASM's

The screenshot displays the ClimaECO software interface. At the top, a configuration window for 'Room (1)' shows two input fields: 'Present Room Temperature' and 'Actual Set Point Temperature'. These are connected via purple lines to two output fields labeled 'Value' under the heading 'Temperature' and 'Setpoint'. Below this, a table lists various parameters and their functions.

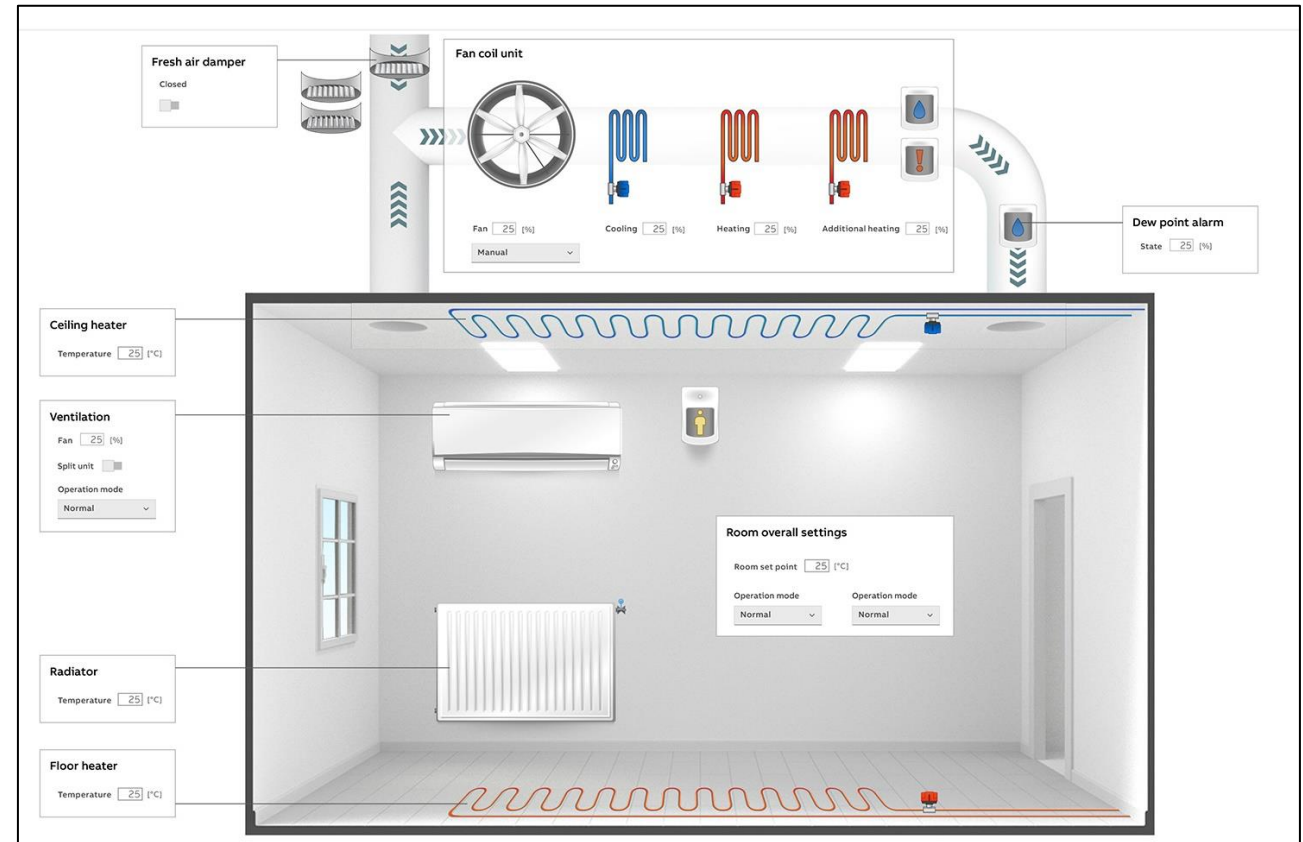
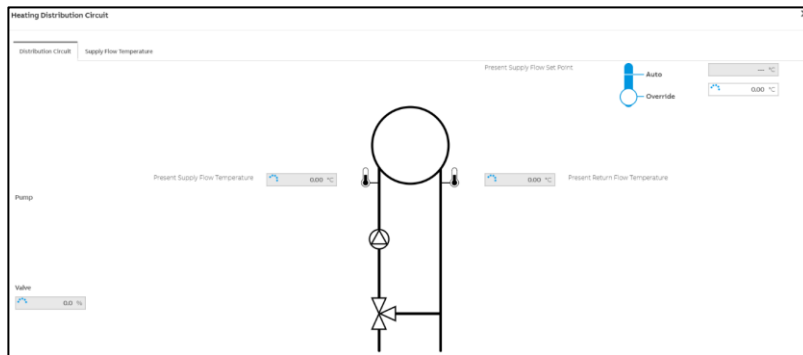
Number	Name	Object Function	Length
1	HVAC mode Scheduler WebUI	Output: State	1 byte
2	Temperature Scheduler WebUI	Output: State	2 bytes
3	Value	Input: Value	2 bytes
4	Room	Input: Present Room Temperature	2 bytes
5	Room	Input: Actual Set Point Temperature	2 bytes
6	Room Set Points	Output: Cooling Protection	2 bytes
7	Room Set Points	Output: Cooling Economy	2 bytes
8	Room Set Points	Output: Cooling Standby	2 bytes
9	Room Set Points	Output: Cooling Comfort	2 bytes
10	Room Set Points	Output: Heating Comfort	2 bytes
11	Room Set Points	Output: Heating Standby	2 bytes
12	Room Set Points	Output: Heating Economy	2 bytes
13	Room Set Points	Output: Heating Protection	2 bytes
14	Cooling Distribution Circuit	Input: Valve Actuating Value	1 byte
15	Cooling Distribution Circuit	Input: Supply Temperature	2 bytes
16	Cooling Distribution Circuit	Input: Return Flow Temperature	2 bytes
17	Cooling Distribution Circuit	Output: Supply Set Point Temperature	2 bytes
18	Room (1)	Input: Present Room Temperature	2 bytes
19	Room (1)	Input: Actual Set Point Temperature	2 bytes
20	Temperature	Output: Value	2 bytes
21	Setpoint	Output: Value	2 bytes
2001	Device clock	Request time	1 bit
2002	Device clock	Date	3 bytes
2003	Device clock	Time	3 bytes
2004	Device clock	Date/Time	8 bytes

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2. Web User Interface (WebUI)

- The WebUI is automatically created based on the selected Automation Modules
- Predefined in Layout and functions
- Simple but powerful user interface
- During commissioning and maintenance
- Small visualization for some projects
- Access via browser and IP address of AC/S

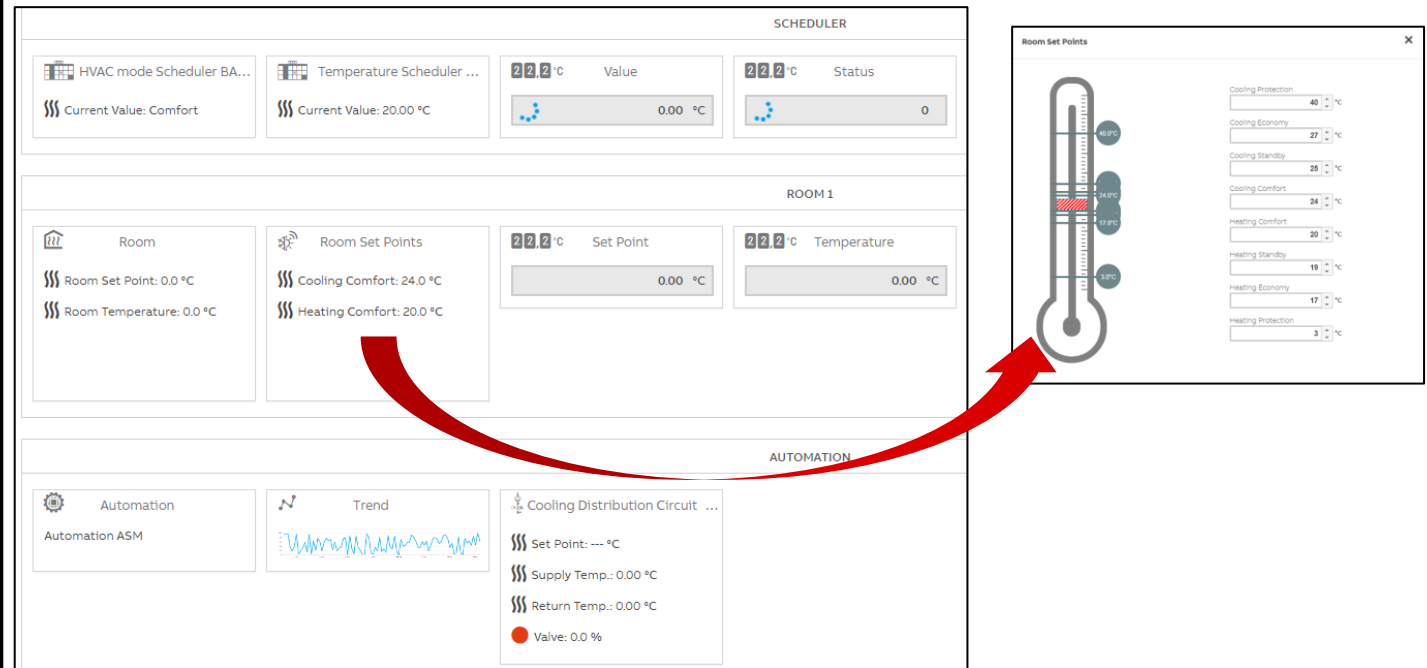


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2. Web User Interface (WebUI)

- All Application Specific Automation Modules (ASM) used and parametrized in the ETS project are displayed as a box to have an overview
- View according to structure in ETS
- Some values of the ASM (e.g. set point) are directly visible in the box
- Some ASM's can be opened by clicking on a box to have a detailed view with the option to adjust values

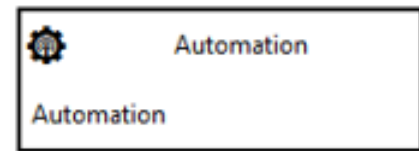


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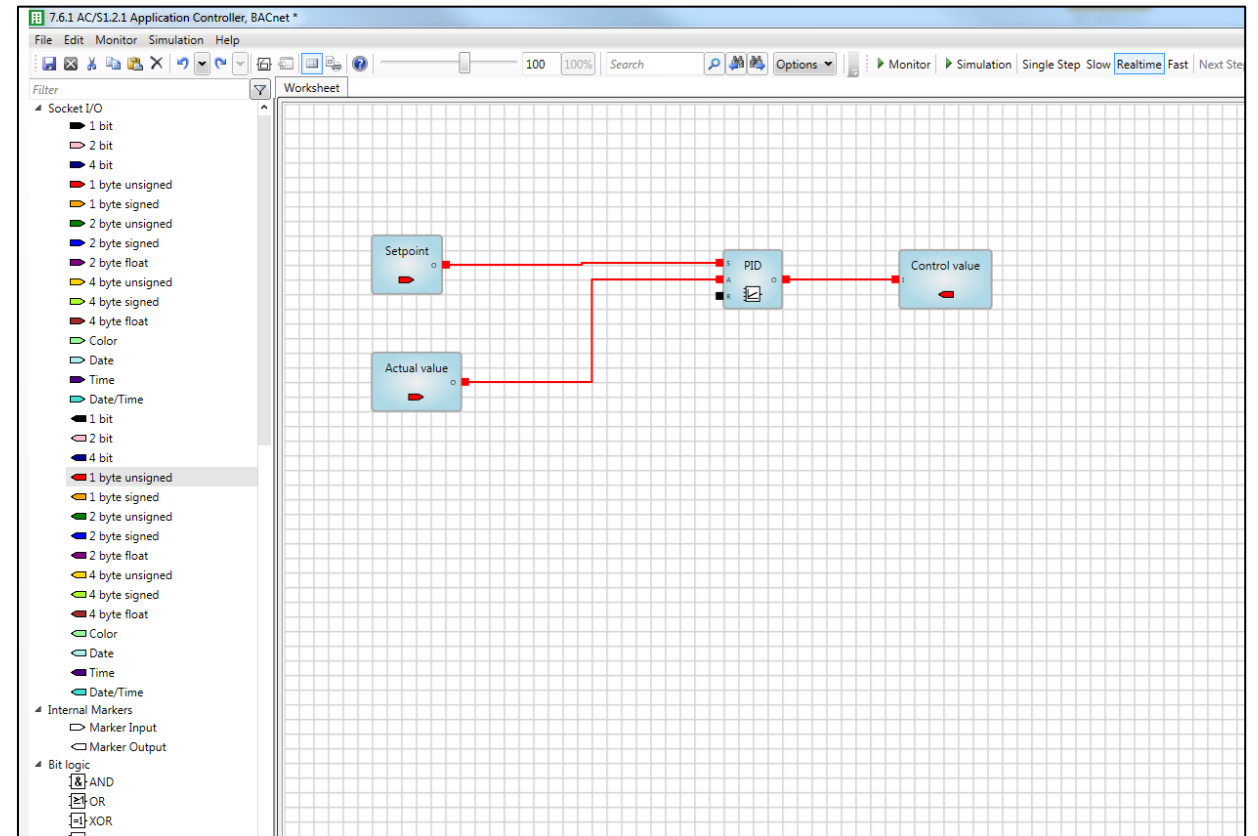
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3. Automation/Logic

ASM Automation: Freely programmable Logic like Logic Controller ABA/S 1.2.1



Parameters	
General	
Name	Automation
Description	
Reinstall	<input type="checkbox"/>
Interfaces	
Automation	Logic editor

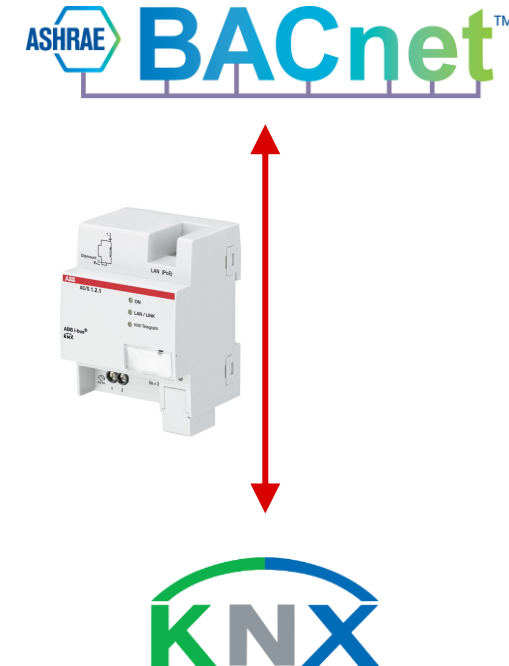


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4. BACnet

- Integrated KNX-BACnet Gateway to link the KNX System with the Building Management System (BMS)
- Bi-directional Data Exchange between KNX Twisted Pair (TP) and BACnet/IP (Ethernet)



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4. BACnet

- BACnet certified product
- BACnet Conformance Certificate
- BACnet Testing Laboratories Product Listing
- BACnet Protocol Implementation Conformance Statement

BTL BACnet Testing Laboratories

Product Listing

This product has been tested at a qualified (BTL) Testing Laboratory and found to comply with all the necessary interoperability requirements in place on the published test date. This listing represents the tested capability of the listed products. The information on additional functionality that was not covered in the test process, refer to the Manufacturer's PCS statement on the BACnet International website.

Listing Information (BTL-30330)

ABB Control Products Motorguard 20 Vasteras, 721 61	Listing Date 14th October 2020
Product Name AC/S 1.2.1	Software Version 1.0
Product Name AC/S 1.2.1	Software Version 1.0

Device Profiles

BACnet Advanced Operator Workstation (B-AOW)	Motor Systems No support
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BIBBs Supported

Date Sharing	Interoperability Building Block (BIBB)	Interoperability Building Block (BIBB)
	Interoperability Building Block (BIBB)	Interoperability Building Block (BIBB)
	Interoperability Building Block (BIBB)	Interoperability Building Block (BIBB)
	Interoperability Building Block (BIBB)	Interoperability Building Block (BIBB)
	Interoperability Building Block (BIBB)	Interoperability Building Block (BIBB)

Object Type Support

Alarm Value	Binary Value	Character Value
Device Address Value	Integer Value	String Value
Multi-Value Value	Notification Class	Position Integer Value

Data Link Layer Options

Link	Link
BACnet/IP (Modbus 2)	Register as Foreign Device

Character Set Support

ISO 10646 (UTF-8)

Page 1 of 1

BACnet CONFORMANCE CERTIFICATE

No. BTL-30330

WSPCert attests the conformance of the following BACnet implementation to the BACnet standard ISO 16484-5 protocol revision 1.14. The attested conformance refers to the BACnet Interoperability Building Blocks (BIBBs) listed on the BTL Listing bearing the above-mentioned BTL number.

The BACnet implementation has fulfilled the requirements according to the test standard ISO 16484-6, the BTL Test Plan 15.0 and the BTL Testing Policies, see Test Report number TC-100503 of DIAL.

Product name (B-AAC)

AC/S 1.2.1

Model(s) AC/S 1.2.1 Application Controller, BACnet

Software version

1.0

Vendor

ABB Control Products

Motorguard 20

Vasteras, 721 61, Sweden

This certificate is valid until **31-Mar-2024**.

11-Sep-2018
Date of Initial Certification

Dipl.-Ing. G. Weinmann
Head of Certification Body

Declaration by WSPCert:
Dr. rer. Tech. Wilfried
Regierungsamt 1, 10115 Stuttgart, Germany
Phone: +49 (0) 711 955225, email: info@wspcert.de

Issued on behalf of BACnet International
1037 Powers Ferry Road, Building 14, Suite 105,
Atlanta GA 30339, USA

BACnet Protocol Implementation Conformance Statement (NORMATIVE)
(This annex is part of this Standard and is required for its use.)

BACnet Protocol Implementation Conformance Statement

Date: 2017-07-07
Vendor Name: ABB
Product Name: AC/S 1.2.1 Application Controller, Premium, MDRB
Product Model Number:
Application Software Version: 1.0
Firmware Revision: 14.1.20
BACnet Protocol Revision: 1.0

Product Description:
Application controller for Falschheit family products.

BACnet Standard Device Profile (Annex K.1)

☐ BACnet Operator Workstation (B-OWS)
☐ BACnet Advanced Operator Workstation (B-AOW)
☐ BACnet Operator Display (B-OD)
☐ BACnet Building Controller (B-BC)
☒ BACnet Advanced Application Controller (B-AAC)
☐ BACnet Application Specific Controller (B-ASC)
☐ BACnet Smart Sensor (B-SS)
☐ BACnet Smart Actuator (B-SA)

List all BACnet Interoperability Building Blocks Supported (Annex K): DS-OP-B, DS-RPM-B, DS-WP-A, DS-WPM-A, DS-COV-B, DS-COV-P-B, AE-N-A-B, AE-ACK-B, AE-INFO-B, AE-ASUM-B, AE-EXTM-B, NCBED-B, DSM-DDB-A, DSM-DDB-B, DSM-DDB-C, DSM-UTC-B, DSM-RD-B.

Interoperability Capability:

☒ Able to transmit segmented messages Window Size 2
☒ Able to receive segmented messages Window Size 2

Standard Object Types Supported:

ANNEX A - PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (NORMATIVE)
(This annex is part of this Standard and is required for its use.)

BACnet Protocol Implementation Conformance Statement

Date: 2017-07-07
Vendor Name: ABB
Product Name: AC/S 1.2.1 Application Controller, Premium, MDRB
Product Model Number:
Application Software Version: 1.0
Firmware Revision: 14.1.20
BACnet Protocol Revision: 1.0

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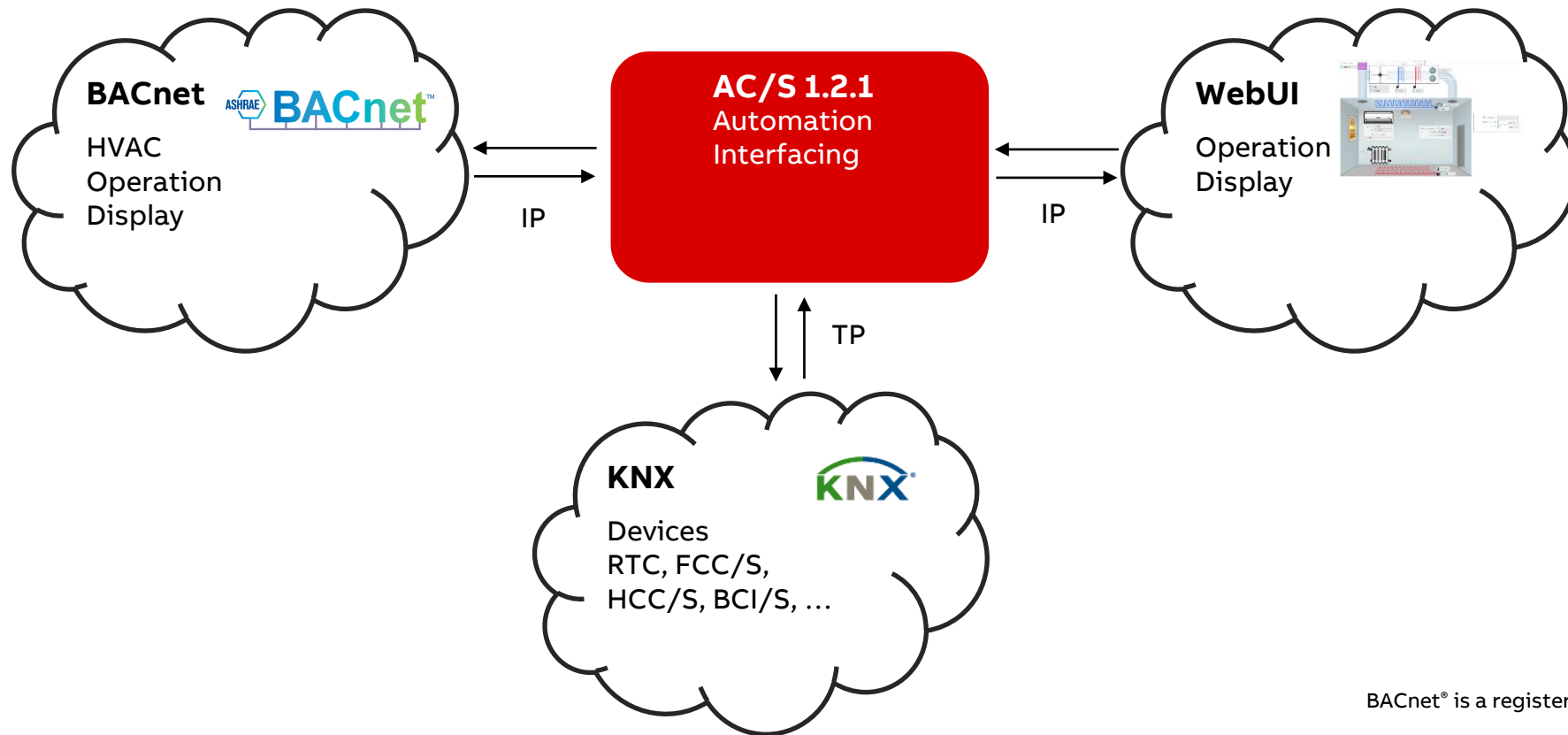
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Interoperability Capability:

☒ Able to transmit segmented messages Window Size 2
☒ Able to receive segmented messages Window Size 2

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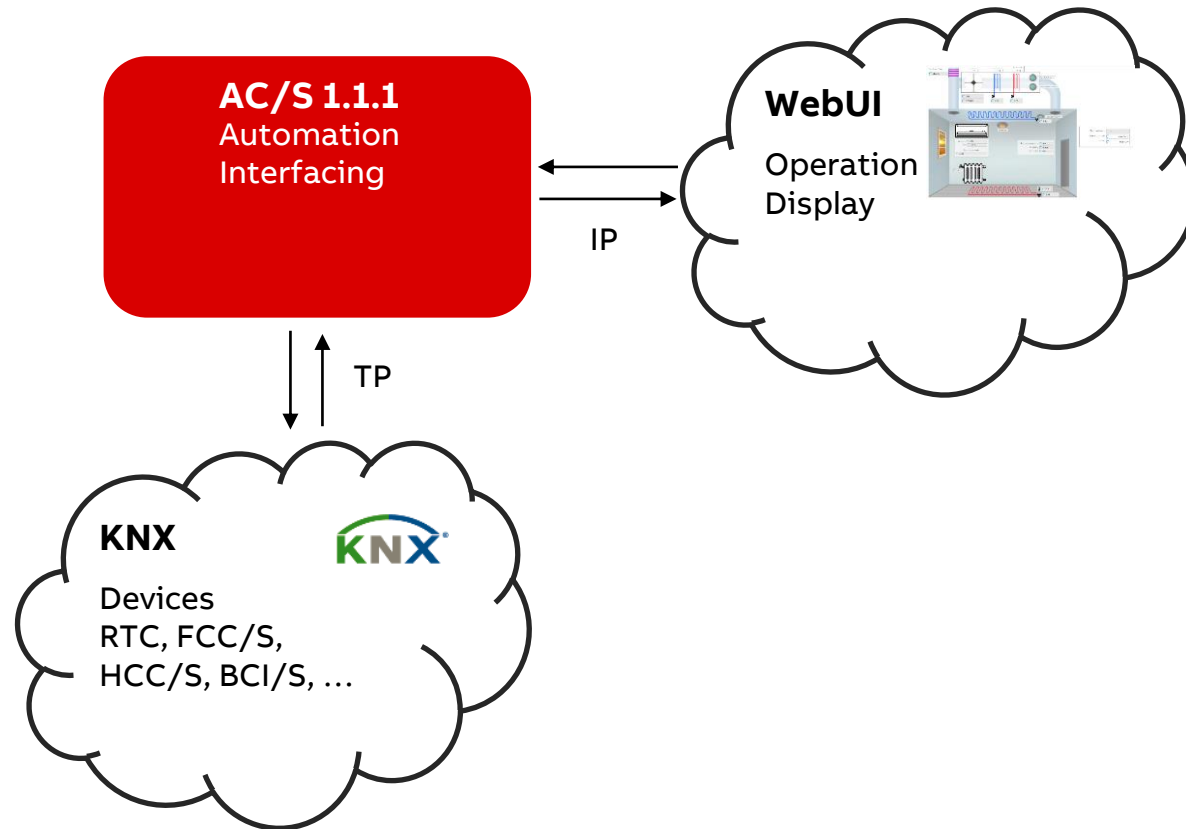
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Hardware

- Power supply
 - 24 V AC/DC or PoE (LAN connection)
- Bus connection terminal behind cover
- Reset button behind labelling cover
- LAN connection
 - PoE (Power supply), WebUI, BACnet, fast ETS Application Download, Monitor (Logic)
- LEDs (ON, LAN/Link, KNX telegram)
- Internal clock
- [Training package ClimaECO](#) in ABB Library including detailed Presentation Application Controller AC/S

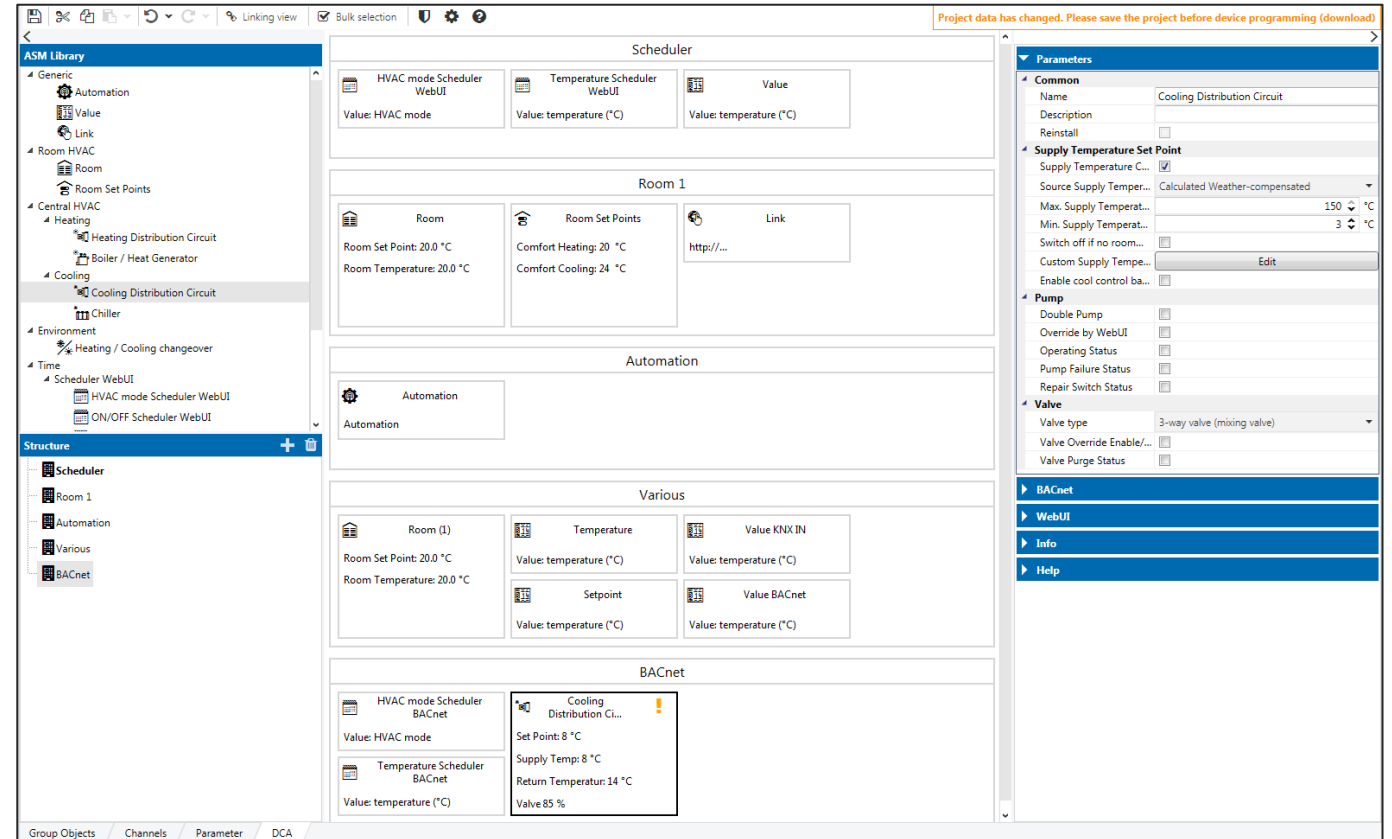


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ETS Application

- Fully integrated in ETS5 or ETS6
- Reliable KNX Twisted Pair (TP) Communication
- Fast ETS Download over Ethernet (IP)
- Time synchronization via
 - BACnet
 - KNX
 - NTP
- All Functions (ASM, Parameter, Linking view) integrated in DCA (Device Configuration App)
- The free of charge DCA has to be installed in the ETS and can be downloaded from the KNX Online Shop or ABB homepage at the product



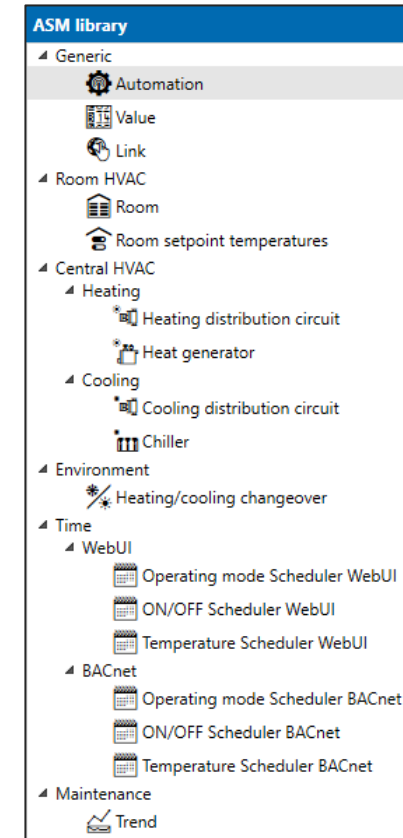
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Overview Application specific Modules (ASM)

Within the ETS Application (DCA) a library with 17 modules exists

- Automation
 - Logic like Logic Controller ABA/S
- Value
 - Communication to all interfaces in both directions
- Link
 - Connection to a URL, email or file accessible via WebUI
- Room
 - Representation of room HVAC functions in WebUI (graphical)
- Room setpoint
 - Change of setpoints in WebUI (graphical)
- Heating distribution circuit
 - ClimaECO embedded software functionality for Heating Cooling Circuit Controller HCC/S

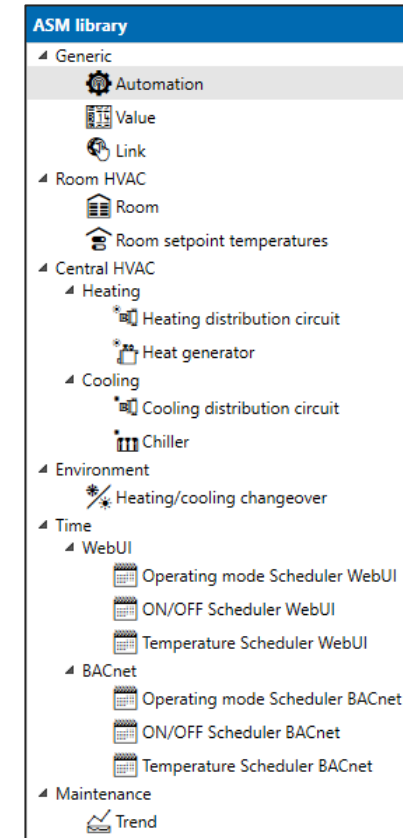


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Overview Application specific Modules (ASM)

- Heat generator
 - ClimaECO embedded software functionality for Heating with Boiler Chiller Interface BCI/S
- Cooling distribution circuit
 - ClimaECO embedded software functionality for Cooling in Heating Cooling Circuit Controller HCC/S
- Chiller
 - ClimaECO embedded software functionality for Cooling with Boiler Chiller Interface BCI/S
- Heating Cooling Changeover
 - Manual change between heating and cooling in WebUI
- WebUI Scheduler
 - Adjustment of time functions for HVAC mode (1 byte, DPT 20.102), ON/OFF (1 bit) and temperature (2 byte, DPT 9.001)

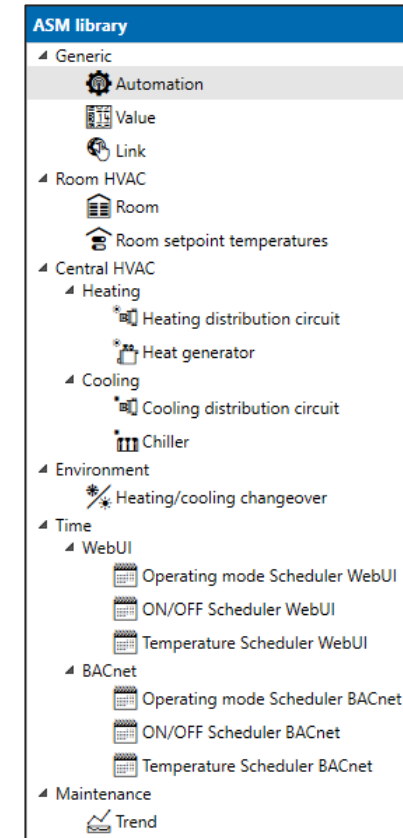


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Overview Application specific Modules (ASM)

- BACnet Scheduler
 - The same like WebUI scheduler but the switching times are parametrized in BACnet, the execution of the schedule is done reliably by the Application Controller AC/S. The switching times can be viewed only in the WebUI
- Trend
 - Recording of dynamic values over time to be displayed in WebUI in a graphical way (line or bar graph)
 - Each Trend ASM can record up to 5 values, in total 50 trends
 - Data type from 1 bit to 4 byte
 - Range: from value every 5 s of 24 hours (17280 values) to one hour of 3 years (26280 values)
 - For correct recording time has to be synchronized (BACnet, KNX or NTP)
 - Values can be exported, e.g. pdf or xls format



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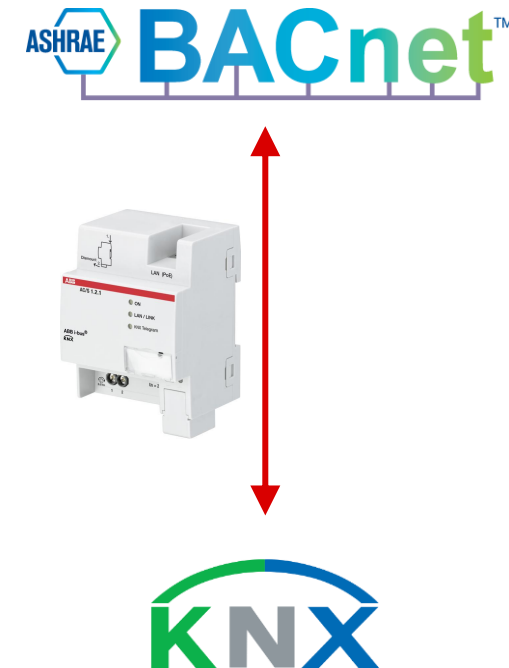
KNX – BACnet Interface

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KNX-BACnet Interface

- No BACnet Knowledge required, fully integrated in ETS
- No configuration: predefined BACnet Objects in the Automation Modules
- Generic BACnet Objects with wide range of supported data point types
- BACnet calendar and schedule: Set your schedule by BACnet. The execution of the schedule is done reliably by the Application Controller AC/S
- Each BACnet object value can be displayed and set by Web User Interface
- BACnet can write via AC/S into KNX
- Application Controller provides values (Server) to be processed by BACnet (Client)
- 500 datapoints between KNX and BACnet per device possible



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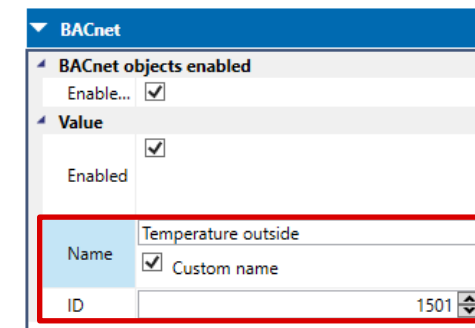
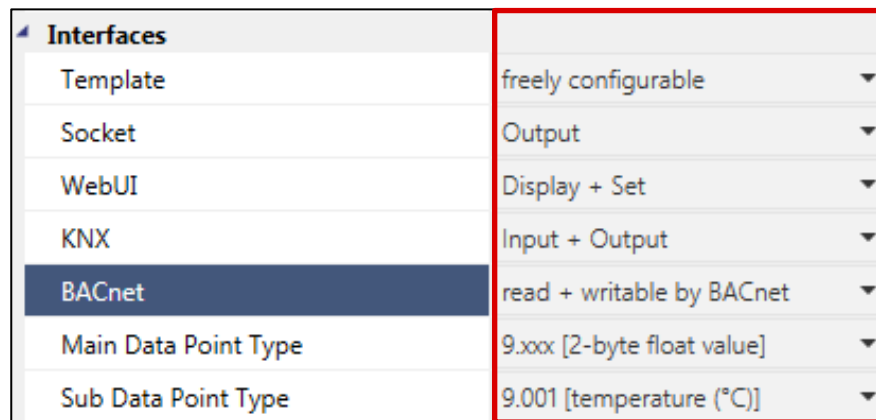
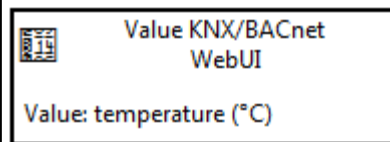
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KNX-BACnet Interface

- Selection in ETS/DCA of ASM Value with needed data point
- Communication direction of ASM, either via template or freely configurable, also to WebUI possible
- Access from BACnet, read or in addition write
- Name and ID of BACnet object
- Assignment of group address for KNX communication

ETS Adjustments



KNX Group address

Number ^	Object Function	Name	Description	Group Address	Length
1	In-/Output: Value	BACnet <--> KNX <--> WebUI		3/3/3	2 bytes

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KNX-BACnet Interface

- Communication in all Directions
- WebUI - BACnet - KNX

WebUI



The screenshot displays the ABB AC/S12.1 Application Controller WebUI. The top section shows the 'Value KNX /BACnet/WebUI: Value' with a red box around the value '2.24 °C'. The bottom section shows the 'Analog Value' configuration for 'Value KNX /BACnet/WebUI: Value' with a red box around the 'Present Value' field showing '2.24'. The bottom section also shows a table of objects with columns for Object Identifier, Object Name, and Object Type.

Obj. Type	Inst.-Nr	Objekt Name
NC	1	Notification Class 1
DEV	666	AC/S12.1 Application Controller, BACnet
AV	3001	Value KNX /BACnet/WebUI: Value

#	Time	Service	Flags	Prio	Source Add	Source Name	Destination	Destination Name	Rout Type	DPT	Info	
1	3/9/2018 10:21:08.236...	from bus		Low	7.6.20	AE/54.113 Analogue Input, 4-fol...	3/3/3	New group address	6	GroupValueW...	9.001 tem...	18.1C 2.24 °C

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ASM Trend (Data Logger)

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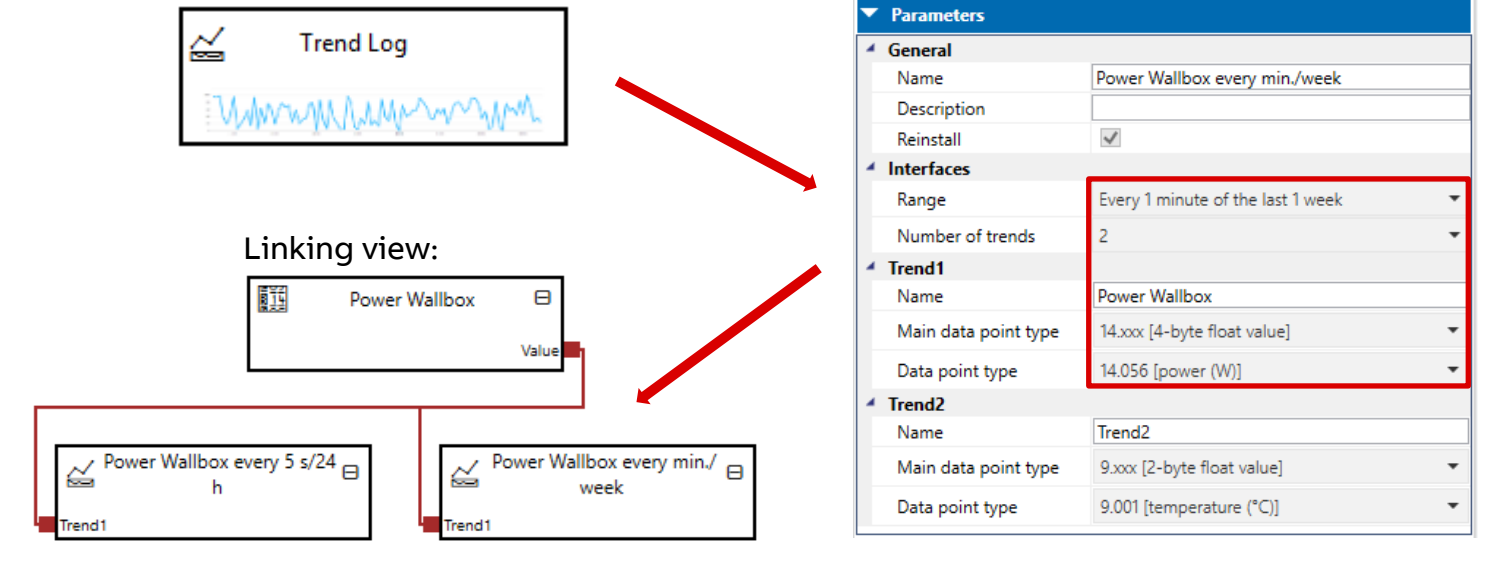
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ASM Trend

Recording of dynamic values over time to be displayed in WebUI in a graphical way (line or bar graph), stored in the device, data export possible

- Selection of ASM Trend
- Range: from value every 5 s of 24 hours (17280 values) to 1 hour of 3 years (26280 values)
- Adjust data point type
- Linking view: Connect sockets of assigned Value ASM with socket of Trend ASM
- Link group address of Value ASM
- Typical trends in HVAC applications:
 - Setpoint, Control value, Room/outside temperature, Fan speed, flow/return flow temperature

ETS Adjustments

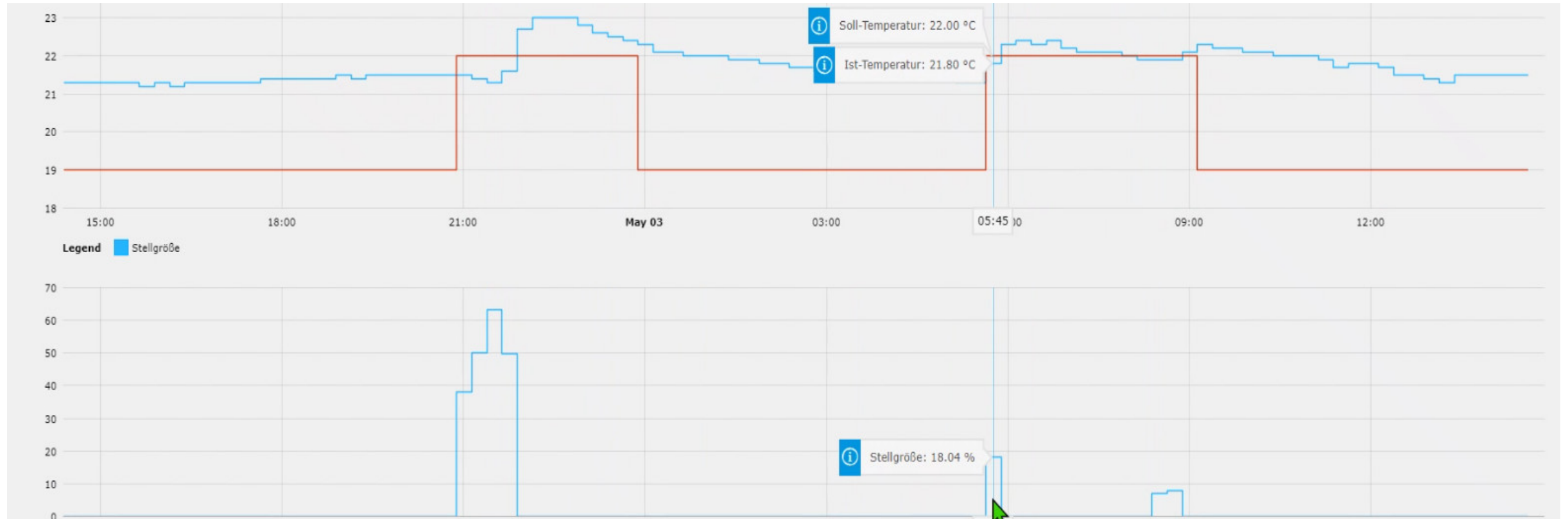


KNX Group address

0/4/37	Power Wallbox	4 bytes	Active Power total L1-L3
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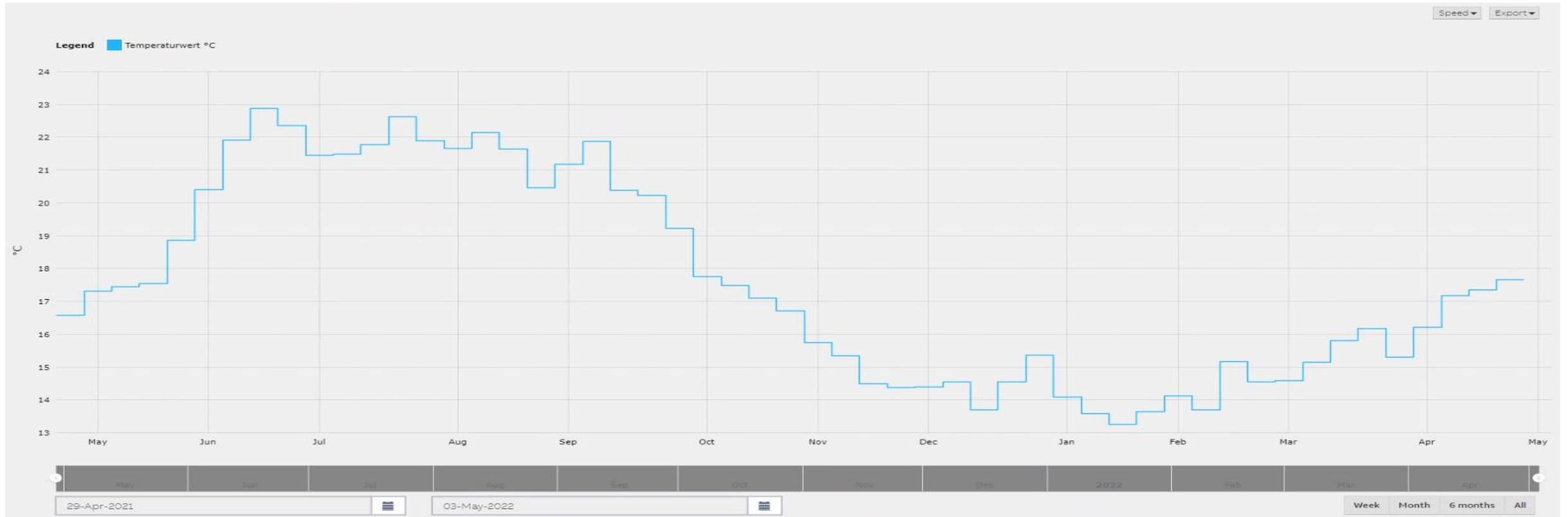
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Trend: Setpoint, room temperature and control value

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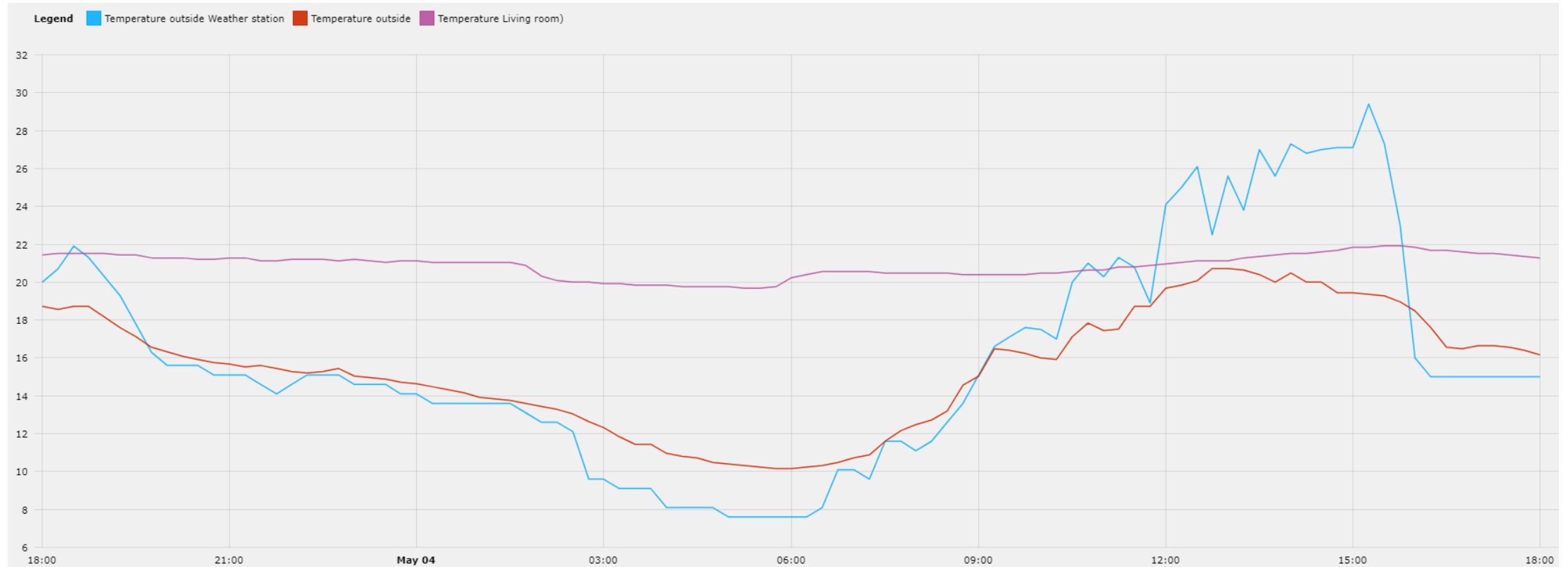
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Trend: Temperature one year

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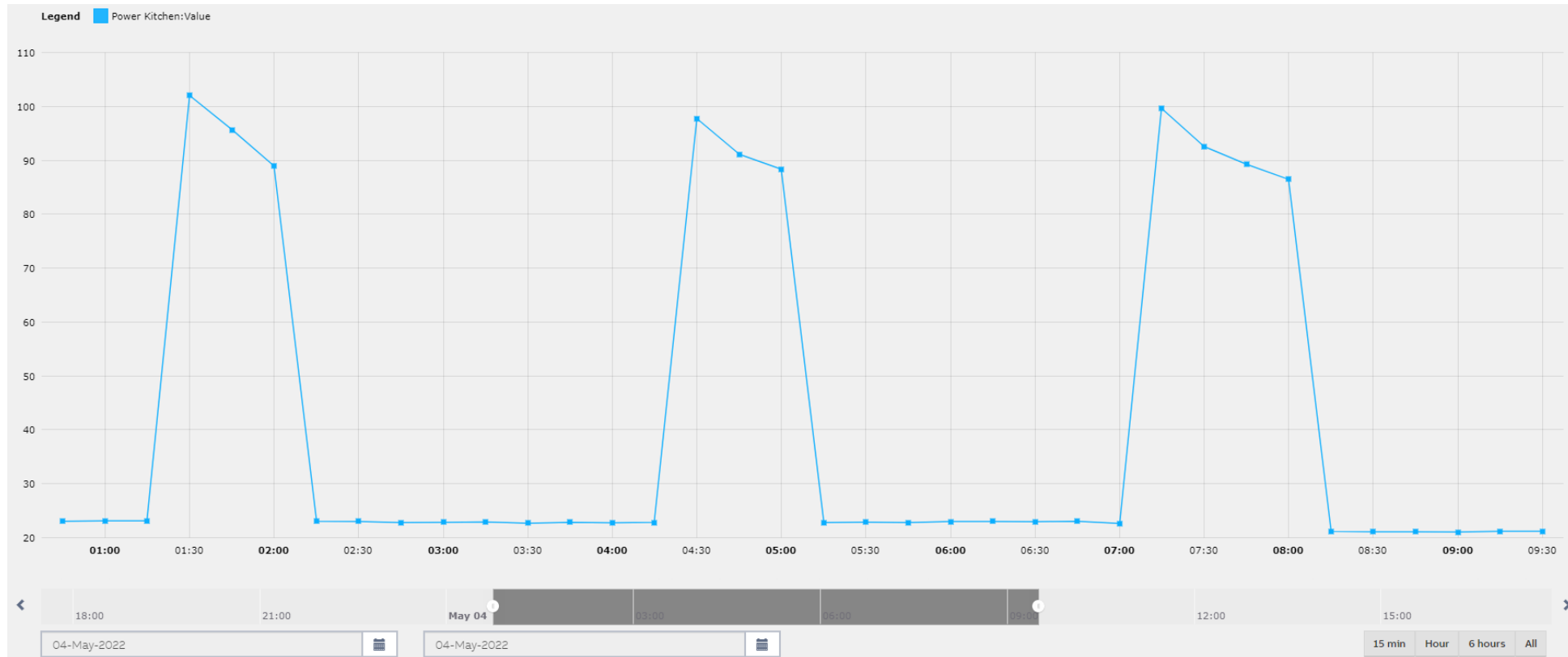
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Trend: Different Temperatures

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Trend: Power of a Refrigerator

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ASM Scheduler

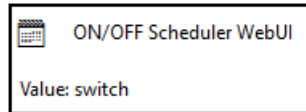
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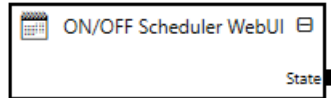
WebUI Scheduler

- Adjustment of time functions for
 - HVAC mode (1 byte, DPT 20.102, Comfort, Standby, Economy, Building Protection)
 - ON/OFF (1 bit)
 - Temperature (2 byte, DPT 9.001)
- No parameter adjustments, connections in linking view only when needed at further ASM
- Group address assignment to the related KNX function (socket state)
- Time functions (weekly timer) set in WebUI
 - Exceptions in WebUI: Definition of days with different time program (e.g. holiday)
 - Calendar in WebUI: Overview time program per day

ETS



Linking view:



Parameters	
General	
Name	ON/OFF Scheduler WebUI
Description	Temperature Control Floor 2
Reinstall	<input type="checkbox"/>

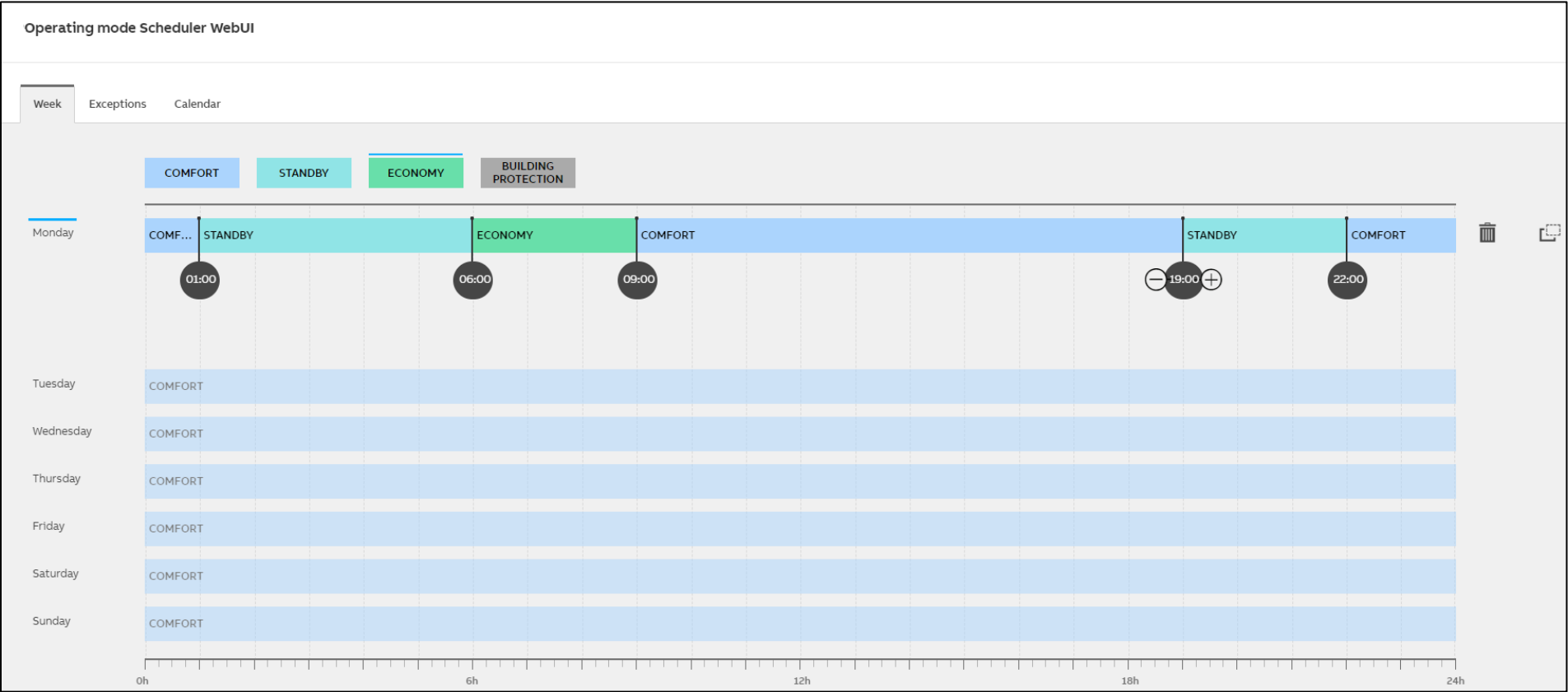
KNX Group address

ON/OFF Scheduler WebUI	Output: State	1 bit	Temperature Control Floor 2	9/2/33
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Exceptions

Definition of days with different time program (e.g. holiday)

Operating mode Scheduler WebUI

Week Exceptions Calendar

Add exception +

Name

COMFORT STANDBY ECONOMY BUILDING PROTECTION

COMFORT STANDBY BUILDING PROTECTION ECONOMY BUILDING PROTECTION

01:45 03:35 08:00 18:30

0h 6h 12h 18h 24h

Date Yearly Monthly Weekly

05/05/2022 11/05/2022

< May 2022 >

w	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
17	25	26	27	28	29	30	1
18	2	3	4	5	6	7	8
19	9	10	11	12	13	14	15
20	16	17	18	19	20	21	22
21	23	24	25	26	27	28	29
22	30	31	1	2	3	4	5

< June 2022 >

w	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
22	30	31	1	2	3	4	5
23	6	7	8	9	10	11	12
24	13	14	15	16	17	18	19
25	20	21	22	23	24	25	26
26	27	28	29	30	1	2	3
27	4	5	6	7	8	9	10

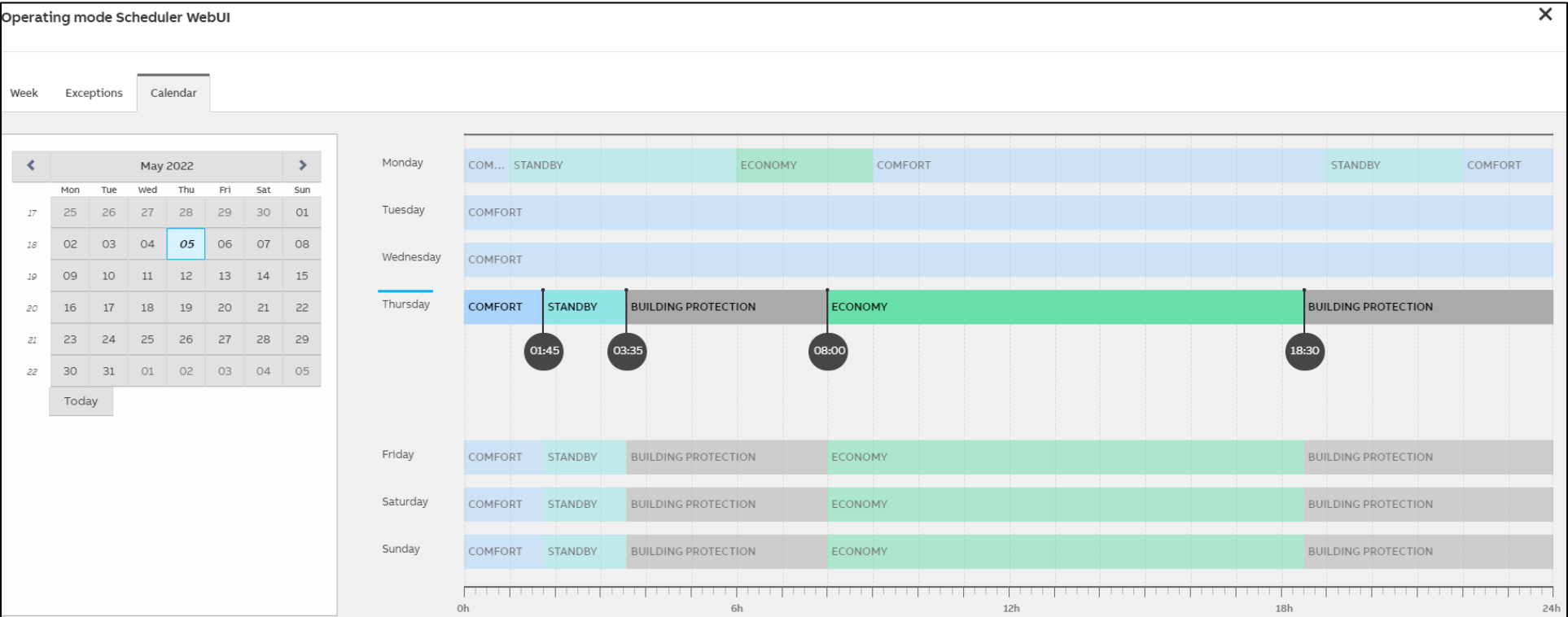
Cancel Create exception

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Calendar

Overview time program
per day



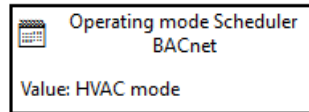
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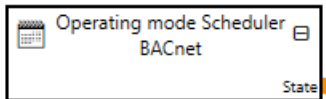
BACnet Scheduler

- Switching times are parametrized in BACnet
- Execution of the schedule is done by Application Controller AC/S
- Switching times can be viewed in WebUI but not changed
- Parameter initial value
- Connections in linking view only when needed at further ASM
- Group address assignment to the related KNX function (socket State)

ETS



Linking view:



Parameters	
▼ General	
Name	Operating mode Scheduler BACnet
Description	Room 5 Floor 3
Reinstall	<input checked="" type="checkbox"/>
▼ Initial values	
Initial value	Comfort

KNX Group address

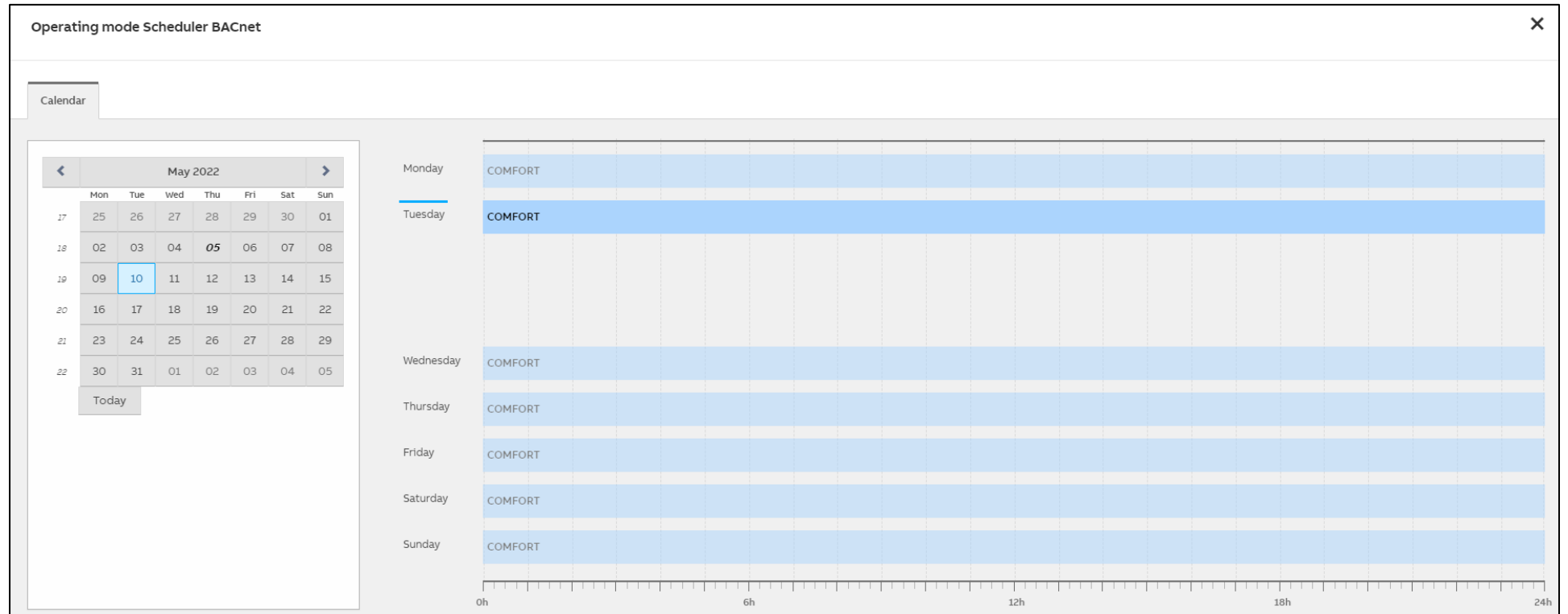
Operating mode Scheduler BACnet	Output: State	1 byte	Room 5 Floor 3	9/3/70
---------------------------------	---------------	--------	----------------	--------

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Calendar

Overview time program
per day, no adaptations
feasible (only from
BACnet)



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ASM Heating/Cooling Distribution Control

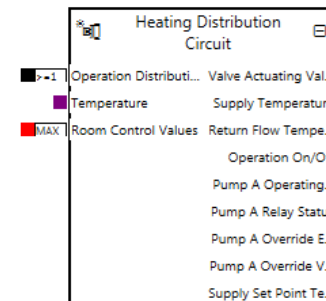
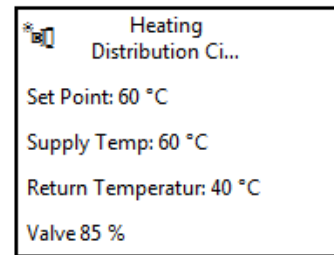
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Example: ASM Heating Distribution Circuit

ASM with adjustable parameters works together with Heating Cooling Circuit Controller HCC/S

- Control of flow temperature of a heating circuit depending on outside temperature and optional depending on room demands (Position of valve in each room)
- Curve (Flow temperature depending on outside temperature) can be adjusted
- For room demand evaluation the valve with the most open position is relevant
- ETS Application HCC/C itself is related to device functions only, e.g. internal controller
- Other ASM for cooling circuits and boiler or chiller work the same principle

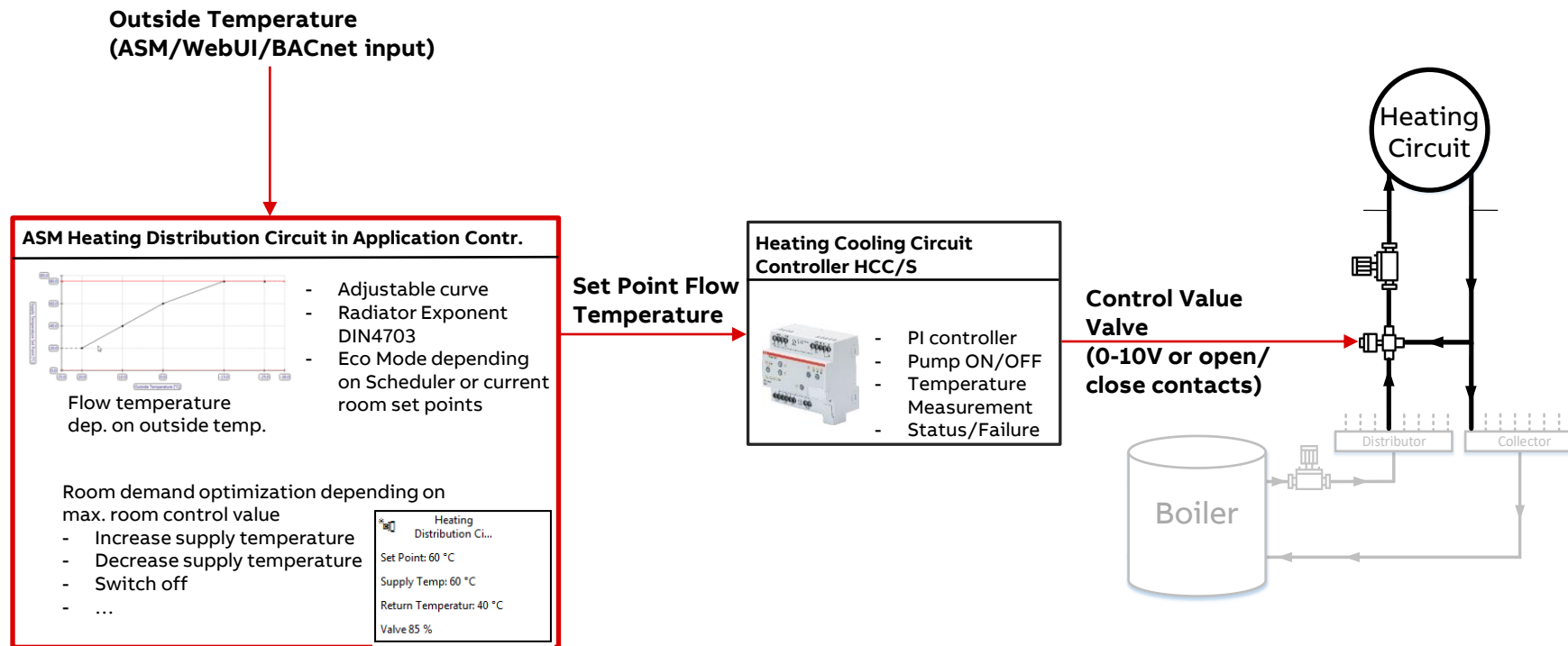


Parameters	
Common	
Name	Heating Distribution Circuit
Description	
Reinstall	<input type="checkbox"/>
Supply Temperature Set Point	
Supply Temperature Control	<input checked="" type="checkbox"/>
Source Supply Temperatur Set point	Calculated Weather-com...
Calculation formula	Supply Temperature Set...
Nominal Outside Temperature	-14 °C
Nominal Room Temperature	20 °C
Nominal Supply Temperature	80 °C
Nominal Return Temperature	60 °C
Max. Supply Temperature	80 °C
Min. Supply Temperature	0 °C
Radiator Exponent	Radiators to DIN 4703 (1...
Start Supply Curve at Outside Temp...	19 °C
Economy mode	Disabled
Room Demand Optimization	<input type="checkbox"/>
Switch off if no room demand	<input checked="" type="checkbox"/>
Switch On if a Room Demand is high...	10 %
Switch Off if all Room Demands are L...	0 %
Enable heat control based on ASM L...	<input checked="" type="checkbox"/>
Pump	
Double Pump	<input type="checkbox"/>
Override by WebUI	<input checked="" type="checkbox"/>
Operating Status	<input checked="" type="checkbox"/>
Pump Failure Status	<input type="checkbox"/>
Repair Switch Status	<input type="checkbox"/>
Valve	
Valve type	3-way valve (mixing valve)
Valve Override Enable/Disable	<input type="checkbox"/>
Valve Purge Status	<input type="checkbox"/>

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Function ASM Heating Distribution Circuit in context



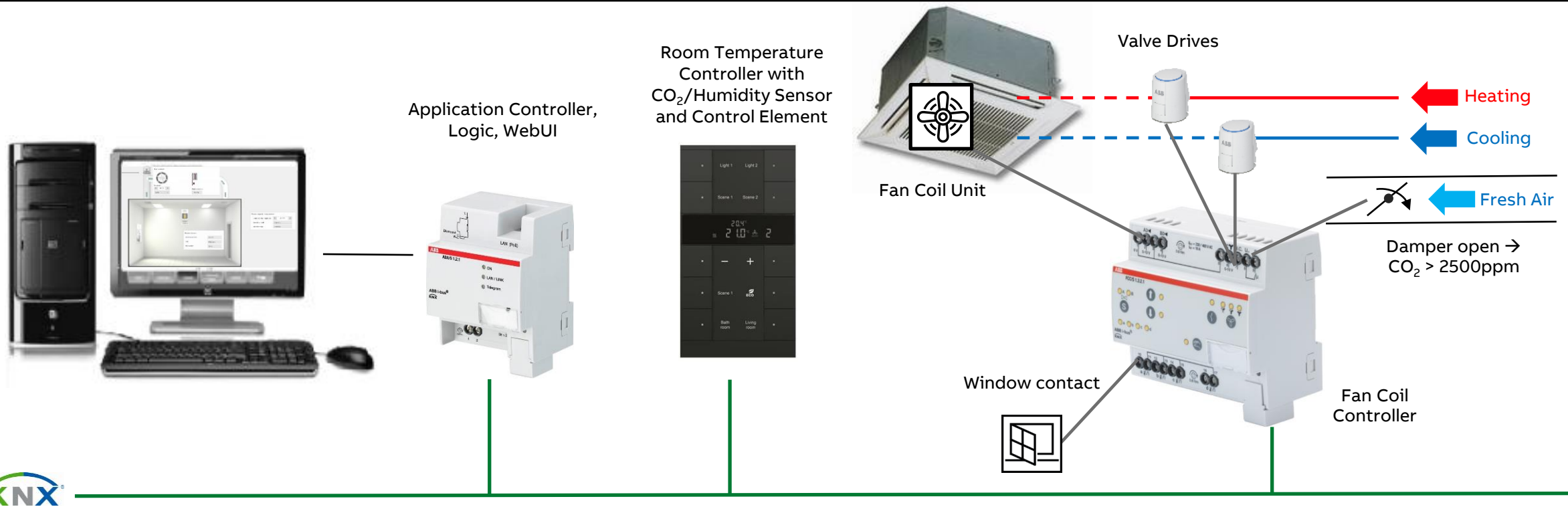
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FanCoil Control with WebUI and additional Logic for Fresh Air Damper

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FanCoil Control with WebUI and additional Logic for Fresh Air Damper

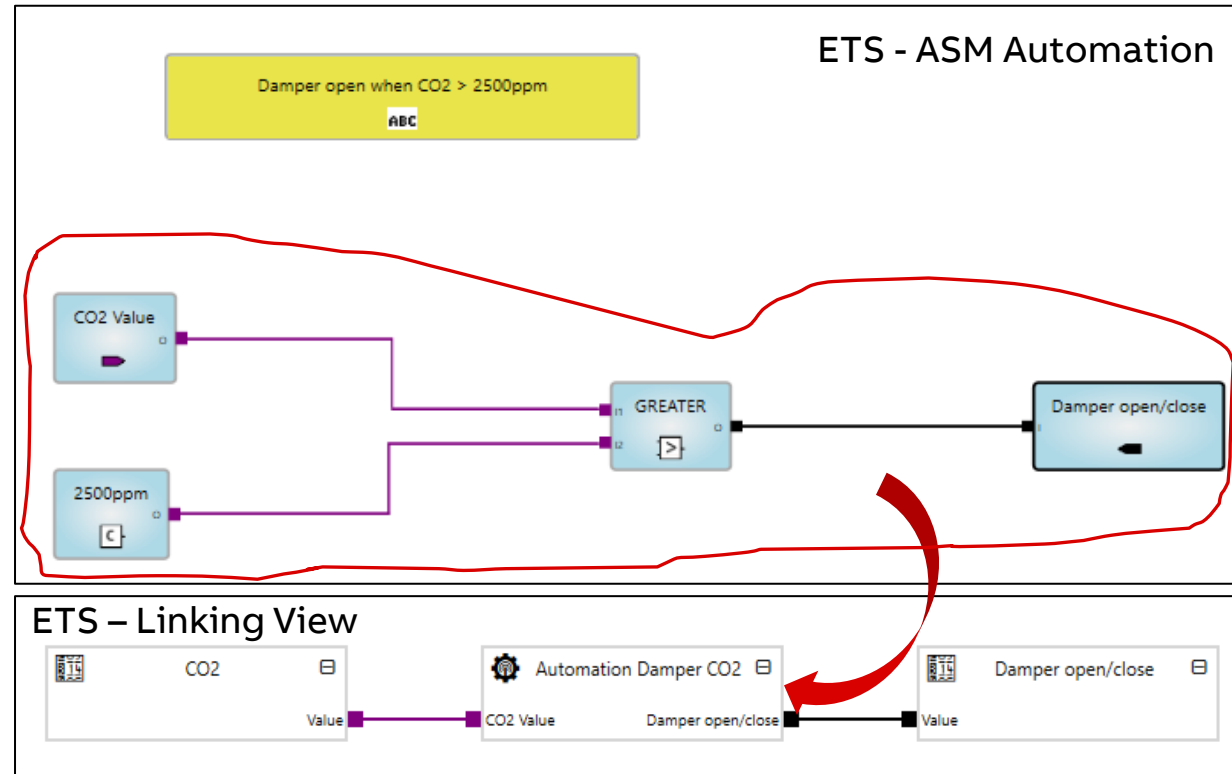


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Logic in AC/S

- ASM Automation
- Creation of the logic to compare fixed value CO₂ of 2500 ppm with measured value in ABB Tenton®
- Damper open when CO₂ > 2500 ppm, damper closed when < 2500ppm
- ASM Value for Damper open/close and CO₂
- Control of Damper open/close via additional switching relay of FanCoil Controller FCC/S
- Possible options:
 - Hysteresis for damper control, CO₂ < 2000 ppm closed, > 2500 open
 - Threshold changeable via WebUI
 - Continuous damper control 0-10V (analogue output), controller in AC/S or ABB Tenton®



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FanCoil Control with WebUI and additional Logic for Fresh Air Damper



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Application Controller AC/S	
Damper open/close	
Damper Status	
...	



FanCoil Controller FCC/S	
Switch Relay: Damper open/close	
Status Relay: Damper Status	
...	



Control Element ABB Tenton®	
CO ₂ Value	
...	



Application Controller AC/S	
Input: CO ₂ Value – CO ₂ Tenton	
...	



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Homepage

www.abb.com/KNX

→ Products and Downloads

→ Heating, Ventilation and Air Conditioning

- ETS Application
- ABB i-bus® Tool
- Product Manual
- Engineering Guides
- Installation and Operating Instructions
- Specification Text
- ...

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Heating, Ventilation and Air Conditioning

The perfect climate

ABB i-bus® KNX intelligent building control integrates the heating, air-conditioning and ventilation to a coherent and efficient climate control. Measured temperature values in the rooms are recorded and supplied to the heating and cooling control to generate the optimum temperature and air quality.

Main benefits

- More efficient and precise room climate control
- Increases potential savings in energy consumption through the combination of room climate control and central HVAC control
- Quick, efficient and detailed device analysis without ETS software, even remotely, thanks to the ABB i-bus® tool

Main features

- From individual room control right up to full control of the entire building
- Control of valve drives, fan coil units, blowers and heating and cooling circuits
- Accurate measurement of CO₂ concentration, air temperature and humidity

Products and Downloads

All products	Valve Drive Actuators	Blower Actuators	Fan Coil Controller	Split Unit Interfaces	Central HVAC Controllers
Application Controllers	Thermostats	Environmental Sensors	Thermoelectric Valve Drives	Electromotor Valve Drives	

Filters Search options

46 Results Sort By Product Page Size 10 List Grid

Quick View Product Information

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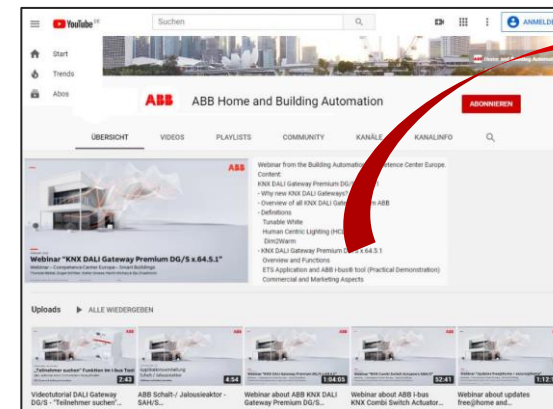
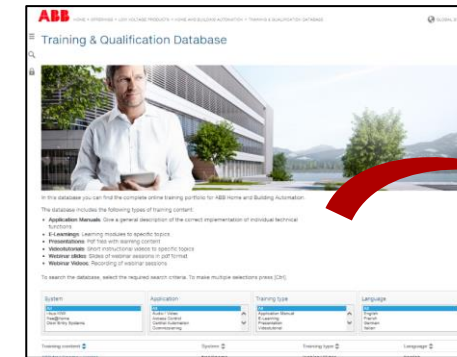
Training Material

Training & Qualification Database

- The database contains extensive training content
 - Webinar, Learning Sessions, ... slides and videos
 - Presentations
 - Video tutorials
 - and more ...
 - <https://go.abb/ba-training>
 - www.abb.com/knx (→ Services & Tools → Training and Qualification → Training Database)

YouTube

- Channel “ABB Home and Building Automation”
 - <https://www.youtube.com/user/ABBibusKNX>



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Software Repository

- Excel list in German and English
- Link to general product information
- Search for a KNX product and the corresponding software (firmware, ETS application) will be displayed
- Current firmware of Welcome IP and free@home devices
- A direct download of this software is possible via a link
- Historical ETS applications can also be downloaded (database for ETS App “Reconstruction Tool”)

- www.abb.com/KNX
 - Additional materials
 - Downloads for KNX
 - Software Repository



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Software Repository

Are you looking for a particular piece of software for your product? We have a structured list of all current and older software versions.

We recommend ensuring that devices are always installed and operating using the latest firmware and software versions. Claims for defects or damages due to the use of software or firmware versions that have not been kept up to date will not be accepted. All information in this repository is supplied without guarantee.

Find a product
Search

Product Search
Enter either product type, product ID or device type of the product you are searching for.
Search Criterion: DG/SL1
Search Cancel

Select your language: English

are searching for. You will immediately receive a download the individual software files.

Complete ETS Databases
[ABB ETS5 Application Database](#)
[Busch-Jaeger ETS5 Application Database](#)

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General Product Information					
Product ID	Product Type	Product Name	Device Type	History	Website
2CDG110026R0011	DG/SL1	DG/SL1 DALI Gateway, 1-fold, MDRC	A019	Release Note	Link

Current Software Versions				
Software	Version	Application Name	Release Date	Download
ETS3	1.1c	Dim Slave Light Scenes Dynamic 1f/1.1c	01.01.2014	Link
ETS4 / ETS5	1.1c	Dim Slave Light Scenes Dynamic 1f/1.1c	01.01.2014	Link
Firmware	1.3	Software Tool	29.06.2009	Link
I-bus® Tool	1.9.45.0	ABB I-bus® Tool	01.06.2021	Link

Obsolete Software Versions				
Software	Version	Application Name	Release Date	Download
ETS3	1.0	Dim Slave Light Scenes Dynamic 1f	04.07.2006	Link
ETS3	1.0a	Dim Slave Light Scenes Dynamic 1f	01.05.2007	Link
ETS4 / ETS5	1.0a	Dim Slave Light Scenes Dynamic 1f	01.05.2007	Link
ETS3	1.1	Dim Slave Light Scenes Dynamic 1f	16.03.2011	Link
ETS4 / ETS5	1.1	Dim Slave Light Scenes Dynamic 1f	16.03.2011	Link
ETS3	1.1a	Dim Slave Light Scenes Dynamic 1f	08.06.2011	Link
ETS4 / ETS5	1.1a	Dim Slave Light Scenes Dynamic 1f	08.06.2011	Link
ETS3	1.1b	Dim Slave Light Scenes Dynamic 1f	01.03.2013	Link
ETS4 / ETS5	1.1b	Dim Slave Light Scenes Dynamic 1f	01.03.2013	Link

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Light + Building Autumn Edition in October 2022

Onsite + digital: here we go

- At Light + Building the industry presents every two years the latest products for the fields of lighting, electrical engineering and home and building automation
- Light + Building opens in Frankfurt from 2nd to 6th October 2022
- The new Light + Building Digital Extension will also be available at the same time and beyond
- We plan our participation in general as a hybrid event, so that customers can join remotely
- You will find ABB and BUSCH-JAEGER booth in the NEW hall 12.0



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