

HEIDELBERG, APRIL 2021

Fan Coil Controller FCC/S and Control Element with RTC Slave

Practical Learning Session – Competence Center Europe – Smart Buildings

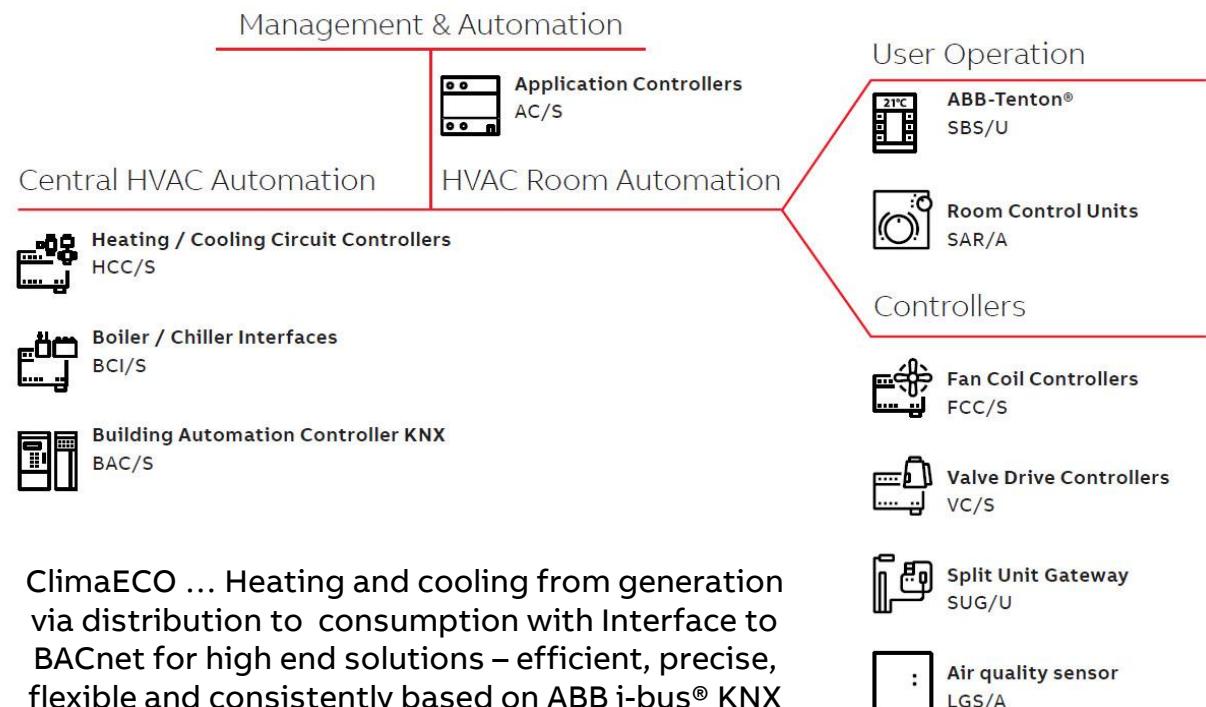
Juergen Schilder, Thorsten Reibel, Marc-Andre Hahn, Michael Rall, Stefan Grosse & Olaf Stutzenberger

Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.

Practical Learning Session

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

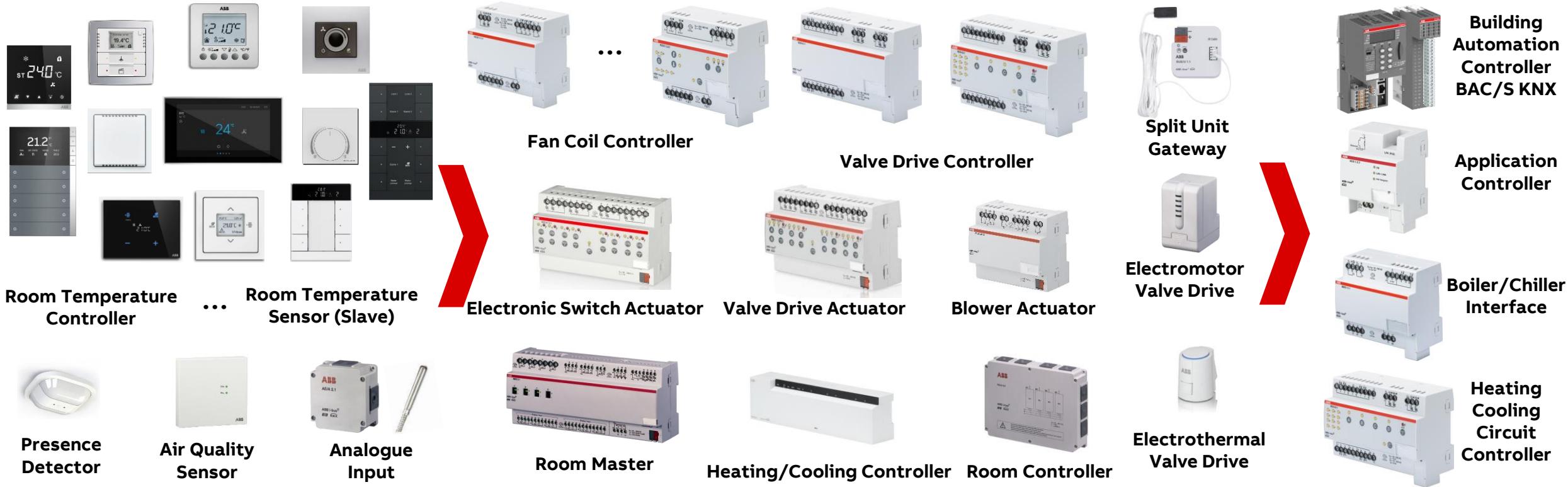
- ClimaECO is the holistic heating, ventilation and air-conditioning (HVAC) automation solution based on ABB i-bus® KNX
- A solution that seamlessly integrates room automation, distribution, central HVAC functions, management and automation into one system – a significant step towards increasing energy 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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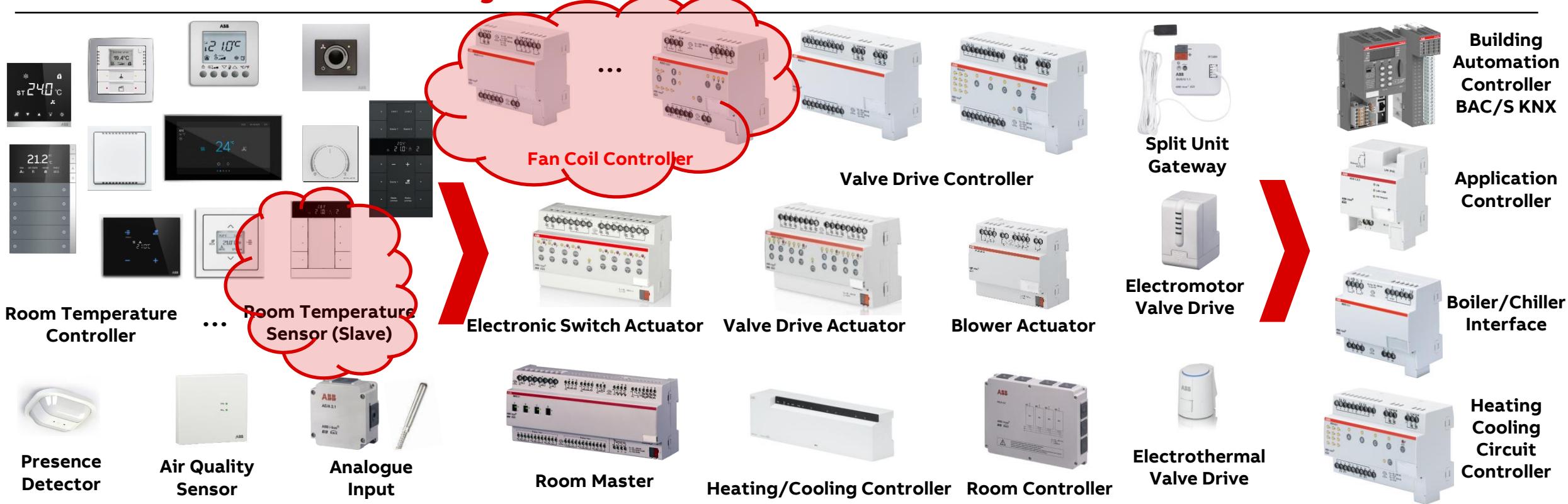
Overview ABB i-bus® KNX HVAC Range



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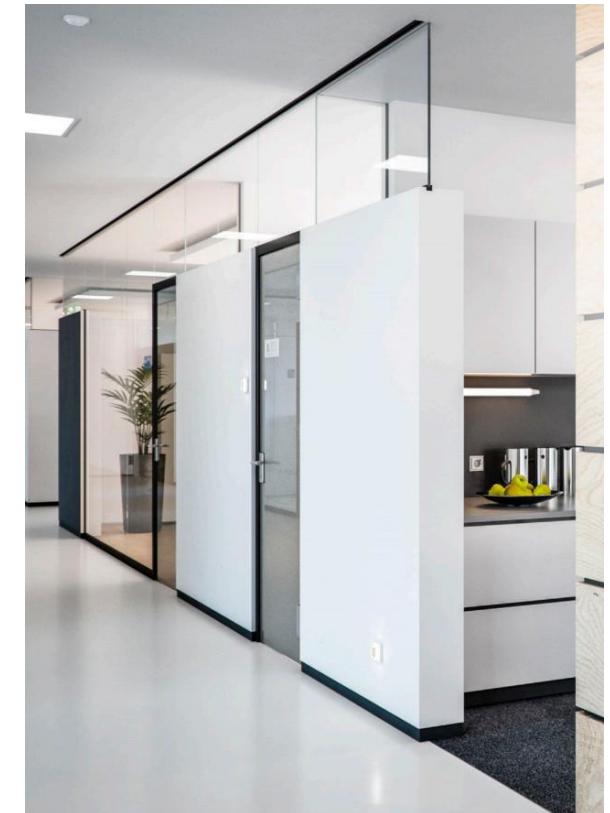
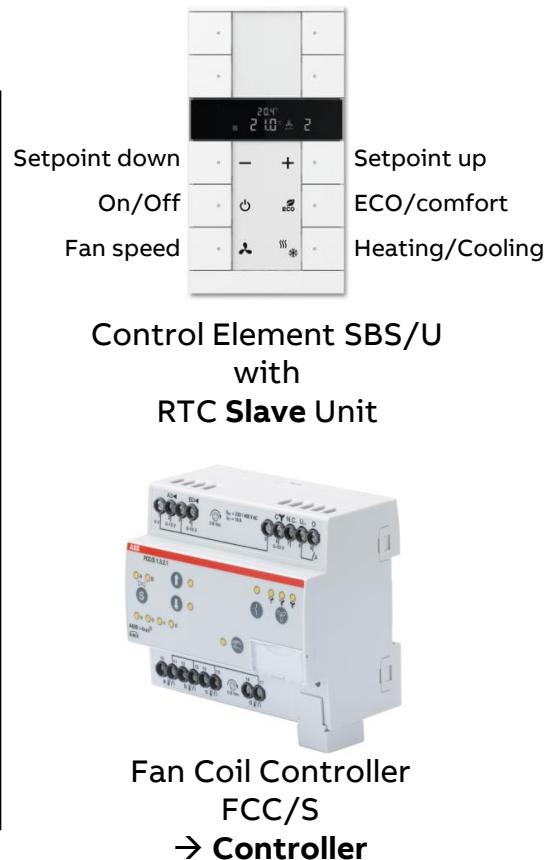
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Practical Learning Session

Exercise: Individual Room Temperature Control in an office

In an office, the room temperature is controlled with KNX

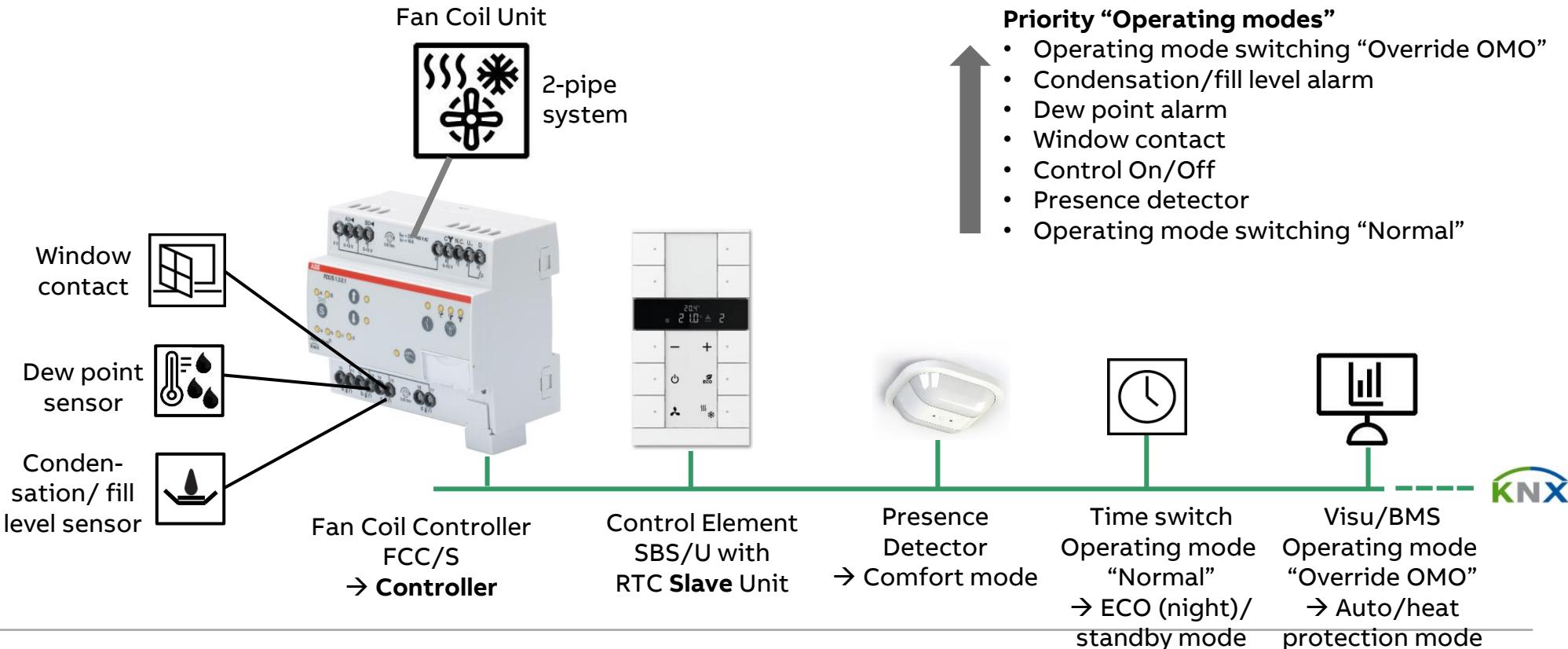
- A Fan Coil Controller FCC/S (internal controller function) controls a Fan Coil Unit (2-pipe system)
- The Control Element SBS/U with RTC Slave is used for
 - Measurement the actual room temperature
 - Setting the target temperature (setpoint)
 - Change fan speed, switching control on/off and heating/cooling mode
 - Displaying actual and setpoint temperature
- Operating mode switching with
 - Presence detector: Switching to comfort mode
 - Dew point alarm: Heat protection
 - Condensation/fill level alarm: Heat protection
 - Window contact: Frost/heat protection
 - Time switch: Switching between ECO (night)/standby mode
 - Visu/BMS: Switching between auto/frost protection mode



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Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *

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Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *

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Presence Detector

Movement

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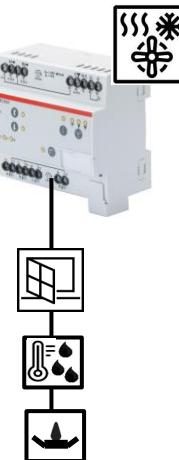
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Control Element with RTC Slave Unit

- RTC: Condensation/fill level alarm (Mast./Sla.)
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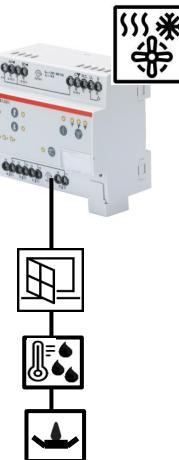
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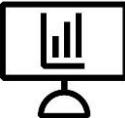
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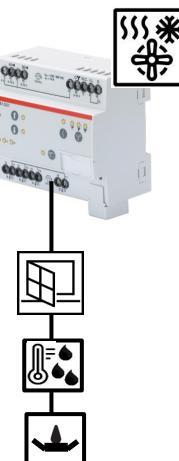
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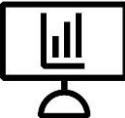
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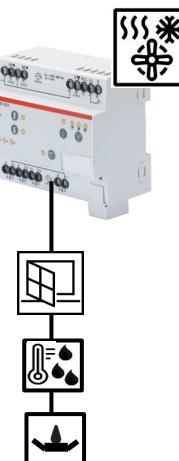
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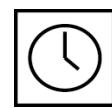
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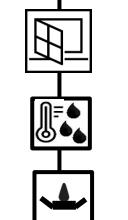
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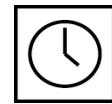
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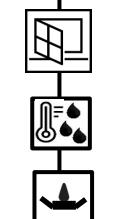
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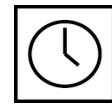
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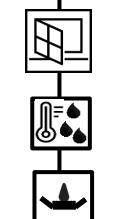
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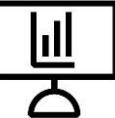
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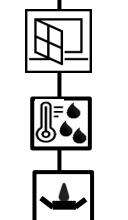
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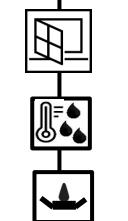
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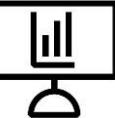
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...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *

...



Presence Detector

Movement

...

Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm

Ch. - Input d Window contact

Ch. - Contr. External temperature 1

Ch. - Contr. Operating mode normal (master)

Ch. - Contr. Operating mode override (master) OMO

Ch. - Contr. Presence detector (master/slave)

Ch. - Contr. Heating/cooling changeover

Ch. - Contr. Request On/Off (master)

Ch. - Contr. Confirm On/Off (master)

Ch. - Contr. Setpoint display (master)

Ch. - Contr. Request setpoint adjust.(master)

Ch. - Contr. Confirm setpoint adjust.(master)

Ch. - Contr. Request fan manually (master)

Ch. - Contr. Confirm fan manually (master)

Ch. - Contr. Request fan speed (master)

Ch. - Contr. Confirm fan speed (master)

Ch. - Contr. Status Controller HVAC (master)

Ch. - Contr./Fan/Valve status X

Ch. - ...

Control Element with RTC Slave Unit

RTC: Condensation/fill level alarm (Mast./Sla.)

RTC: Window contact

RTC: Actual temperature

RTC: Normal operating mode (slave)

RTC: Override operating mode (slave)

RTC: Presence detector (master/slave)

RTC: Heating/cooling request

RTC: On/Off request (slave)

RTC: On/Off confirmation (slave)

RTC: Setpoint display (slave)

RTC: Request setpoint (slave)

RTC: Confirm setpoint (slave)

RTC: Request fan speed level manual (slave)

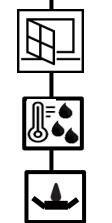
RTC: Fan coil manual confirmation (slave)

RTC: Request fan speed level (slave)

RTC: Confirm fan speed level (slave)

RTC: Controller status HVAC (slave)

...



* Data type 20.102: HVAC mode (0...4)

Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *
...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *
...



Presence Detector

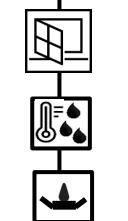
Movement
...

Fan Coil Controller FCC/S → Controller

- Ch. - Input b Fill level alarm
- Ch. - Input d Window contact
- Ch. - Contr. External temperature 1
- Ch. - Contr. Operating mode normal (master)
- Ch. - Contr. Operating mode override (master) OMO
- Ch. - Contr. Presence detector (master/slave)
- Ch. - Contr. Heating/cooling changeover
- Ch. - Contr. Request On/Off (master)
- Ch. - Contr. Confirm On/Off (master)
- Ch. - Contr. Setpoint display (master)
- Ch. - Contr. Request setpoint adjust.(master)
- Ch. - Contr. Confirm setpoint adjust.(master)
- Ch. - Contr. Request fan manually (master)
- Ch. - Contr. Confirm fan manually (master)
- Ch. - Contr. Request fan speed (master)
- Ch. - Contr. Confirm fan speed (master)
- Ch. - Contr. Status Controller HVAC (master)
- Ch. - Contr./Fan/Valve status X
- Ch. - ...

Control Element with RTC Slave Unit

- RTC: Condensation/fill level alarm (Mast./Sla.)
- RTC: Window contact
- RTC: Actual temperature
- RTC: Normal operating mode (slave)
- RTC: Override operating mode (slave)
- RTC: Presence detector (master/slave)
- RTC: Heating/cooling request
- RTC: On/Off request (slave)
- RTC: On/Off confirmation (slave)
- RTC: Setpoint display (slave)
- RTC: Request setpoint (slave)
- RTC: Confirm setpoint (slave)
- RTC: Request fan speed level manual (slave)
- RTC: Fan coil manual confirmation (slave)
- RTC: Request fan speed level (slave)
- RTC: Confirm fan speed level (slave)
- RTC: Controller status HVAC (slave)
- ...



* Data type 20.102: HVAC mode (0...4)

Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *
...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *
...



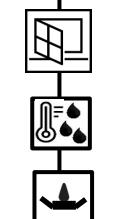
Presence Detector

Movement
...

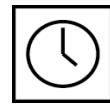
Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm	RTC: Condensation/fill level alarm (Mast./Sla.)
Ch. - Input d Window contact	RTC: Window contact
Ch. - Contr. External temperature 1	RTC: Actual temperature
Ch. - Contr. Operating mode normal (master)	RTC: Normal operating mode (slave)
Ch. - Contr. Operating mode override (master) OMO	RTC: Override operating mode (slave)
Ch. - Contr. Presence detector (master/slave)	RTC: Presence detector (master/slave)
Ch. - Contr. Heating/cooling changeover	RTC: Heating/cooling request
Ch. - Contr. Request On/Off (master)	RTC: On/Off request (slave)
Ch. - Contr. Confirm On/Off (master)	RTC: On/Off confirmation (slave)
Ch. - Contr. Setpoint display (master)	RTC: Setpoint display (slave)
Ch. - Contr. Request setpoint adjust.(master)	RTC: Request setpoint (slave)
Ch. - Contr. Confirm setpoint adjust.(master)	RTC: Confirm setpoint (slave)
Ch. - Contr. Request fan manually (master)	RTC: Request fan speed level manual (slave)
Ch. - Contr. Confirm fan manually (master)	RTC: Fan coil manual confirmation (slave)
Ch. - Contr. Request fan speed (master)	RTC: Request fan speed level (slave)
Ch. - Contr. Confirm fan speed (master)	RTC: Confirm fan speed level (slave)
Ch. - Contr. Status Controller HVAC (master)	RTC: Controller status HVAC (slave)
Ch. - Contr./Fan/Valve status X	...
Ch. - ...	

* Data type 20.102: HVAC mode (0...4)



Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *
...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *
...



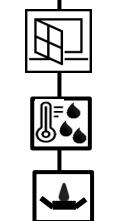
Presence Detector

Movement
...

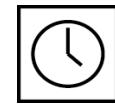
Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm	RTC: Condensation/fill level alarm (Mast./Sla.)
Ch. - Input d Window contact	RTC: Window contact
Ch. - Contr. External temperature 1	RTC: Actual temperature
Ch. - Contr. Operating mode normal (master)	RTC: Normal operating mode (slave)
Ch. - Contr. Operating mode override (master) OMO	RTC: Override operating mode (slave)
Ch. - Contr. Presence detector (master/slave)	RTC: Presence detector (master/slave)
Ch. - Contr. Heating/cooling changeover	RTC: Heating/cooling request
Ch. - Contr. Request On/Off (master)	RTC: On/Off request (slave)
Ch. - Contr. Confirm On/Off (master)	RTC: On/Off confirmation (slave)
Ch. - Contr. Setpoint display (master)	RTC: Setpoint display (slave)
Ch. - Contr. Request setpoint adjust.(master)	RTC: Request setpoint (slave)
Ch. - Contr. Confirm setpoint adjust.(master)	RTC: Confirm setpoint (slave)
Ch. - Contr. Request fan manually (master)	RTC: Request fan speed level manual (slave)
Ch. - Contr. Confirm fan manually (master)	RTC: Fan coil manual confirmation (slave)
Ch. - Contr. Request fan speed (master)	RTC: Request fan speed level (slave)
Ch. - Contr. Confirm fan speed (master)	RTC: Confirm fan speed level (slave)
Ch. - Contr. Status Controller HVAC (master)	RTC: Controller status HVAC (slave)
Ch. - Contr./Fan/Valve status X	...
Ch. - ...	

* Data type 20.102: HVAC mode (0...4)



Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *
...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *
...



Presence Detector

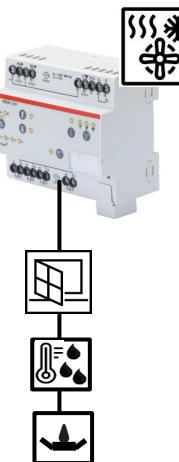
Movement
...

* Data type 20.102: HVAC mode (0...4)

Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm	RTC: Condensation/fill level alarm (Mast./Sla.)
Ch. - Input d Window contact	RTC: Window contact
Ch. - Contr. External temperature 1	RTC: Actual temperature
Ch. - Contr. Operating mode normal (master)	RTC: Normal operating mode (slave)
Ch. - Contr. Operating mode override (master) OMO	RTC: Override operating mode (slave)
Ch. - Contr. Presence detector (master/slave)	RTC: Presence detector (master/slave)
Ch. - Contr. Heating/cooling changeover	RTC: Heating/cooling request
Ch. - Contr. Request On/Off (master)	RTC: On/Off request (slave)
Ch. - Contr. Confirm On/Off (master)	RTC: On/Off confirmation (slave)
Ch. - Contr. Setpoint display (master)	RTC: Setpoint display (slave)
Ch. - Contr. Request setpoint adjust.(master)	RTC: Request setpoint (slave)
Ch. - Contr. Confirm setpoint adjust.(master)	RTC: Confirm setpoint (slave)
Ch. - Contr. Request fan manually (master)	RTC: Request fan speed level manual (slave)
Ch. - Contr. Confirm fan manually (master)	RTC: Fan coil manual confirmation (slave)
Ch. - Contr. Request fan speed (master)	RTC: Request fan speed level (slave)
Ch. - Contr. Confirm fan speed (master)	RTC: Confirm fan speed level (slave)
Ch. - Contr. Status Controller HVAC (master)	RTC: Controller status HVAC (slave)
Ch. - Contr./Fan/Valve status X	...
Ch. - ...	

Control Element with RTC Slave Unit



Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *
...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *
...



Presence Detector

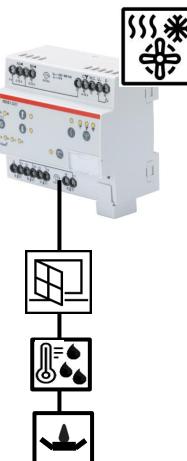
Movement
...

* Data type 20.102: HVAC mode (0...4)

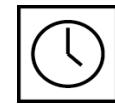
Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm	RTC: Condensation/fill level alarm (Mast./Sla.)
Ch. - Input d Window contact	RTC: Window contact
Ch. - Contr. External temperature 1	RTC: Actual temperature
Ch. - Contr. Operating mode normal (master)	RTC: Normal operating mode (slave)
Ch. - Contr. Operating mode override (master) OMO	RTC: Override operating mode (slave)
Ch. - Contr. Presence detector (master/slave)	RTC: Presence detector (master/slave)
Ch. - Contr. Heating/cooling changeover	RTC: Heating/cooling request
Ch. - Contr. Request On/Off (master)	RTC: On/Off request (slave)
Ch. - Contr. Confirm On/Off (master)	RTC: On/Off confirmation (slave)
Ch. - Contr. Setpoint display (master)	RTC: Setpoint display (slave)
Ch. - Contr. Request setpoint adjust.(master)	RTC: Request setpoint (slave)
Ch. - Contr. Confirm setpoint adjust.(master)	RTC: Confirm setpoint (slave)
Ch. - Contr. Request fan manually (master)	RTC: Request fan speed level manual (slave)
Ch. - Contr. Confirm fan manually (master)	RTC: Fan coil manual confirmation (slave)
Ch. - Contr. Request fan speed (master)	RTC: Request fan speed level (slave)
Ch. - Contr. Confirm fan speed (master)	RTC: Confirm fan speed level (slave)
Ch. - Contr. Status Controller HVAC (master)	RTC: Controller status HVAC (slave)
Ch. - Contr./Fan/Valve status X	...
Ch. - ...	

Control Element with RTC Slave Unit



Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *
...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *
...



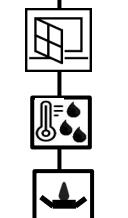
Presence Detector

Movement
...

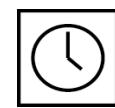
Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm	RTC: Condensation/fill level alarm (Mast./Sla.)
Ch. - Input d Window contact	RTC: Window contact
Ch. - Contr. External temperature 1	RTC: Actual temperature
Ch. - Contr. Operating mode normal (master)	RTC: Normal operating mode (slave)
Ch. - Contr. Operating mode override (master) OMO	RTC: Override operating mode (slave)
Ch. - Contr. Presence detector (master/slave)	RTC: Presence detector (master/slave)
Ch. - Contr. Heating/cooling changeover	RTC: Heating/cooling request
Ch. - Contr. Request On/Off (master)	RTC: On/Off request (slave)
Ch. - Contr. Confirm On/Off (master)	RTC: On/Off confirmation (slave)
Ch. - Contr. Setpoint display (master)	RTC: Setpoint display (slave)
Ch. - Contr. Request setpoint adjust.(master)	RTC: Request setpoint (slave)
Ch. - Contr. Confirm setpoint adjust.(master)	RTC: Confirm setpoint (slave)
Ch. - Contr. Request fan manually (master)	RTC: Request fan speed level manual (slave)
Ch. - Contr. Confirm fan manually (master)	RTC: Fan coil manual confirmation (slave)
Ch. - Contr. Request fan speed (master)	RTC: Request fan speed level (slave)
Ch. - Contr. Confirm fan speed (master)	RTC: Confirm fan speed level (slave)
Ch. - Contr. Status Controller HVAC (master)	RTC: Controller status HVAC (slave)
Ch. - Contr./Fan/Valve status X	...
Ch. - ...	

* Data type 20.102: HVAC mode (0...4)



Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.



Time switch

Time program: ECO (3) – standby (2) *
...



Visu/BMS

Routine: Auto (0) – Frost/heat protection (4) *
...



Presence Detector

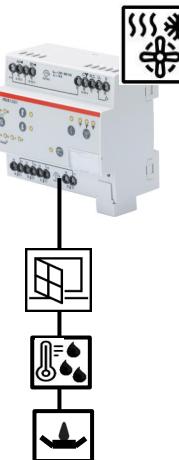
Movement
...

* Data type 20.102: HVAC mode (0...4)

Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm	RTC: Condensation/fill level alarm (Mast./Sla.)
Ch. - Input d Window contact	RTC: Window contact
Ch. - Contr. External temperature 1	RTC: Actual temperature
Ch. - Contr. Operating mode normal (master)	RTC: Normal operating mode (slave)
Ch. - Contr. Operating mode override (master) OMO	RTC: Override operating mode (slave)
Ch. - Contr. Presence detector (master/slave)	RTC: Presence detector (master/slave)
Ch. - Contr. Heating/cooling changeover	RTC: Heating/cooling request
Ch. - Contr. Request On/Off (master)	RTC: On/Off request (slave)
Ch. - Contr. Confirm On/Off (master)	RTC: On/Off confirmation (slave)
Ch. - Contr. Setpoint display (master)	RTC: Setpoint display (slave)
Ch. - Contr. Request setpoint adjust.(master)	RTC: Request setpoint (slave)
Ch. - Contr. Confirm setpoint adjust.(master)	RTC: Confirm setpoint (slave)
Ch. - Contr. Request fan manually (master)	RTC: Request fan speed level manual (slave)
Ch. - Contr. Confirm fan manually (master)	RTC: Fan coil manual confirmation (slave)
Ch. - Contr. Request fan speed (master)	RTC: Request fan speed level (slave)
Ch. - Contr. Confirm fan speed (master)	RTC: Confirm fan speed level (slave)
Ch. - Contr. Status Controller HVAC (master)	RTC: Controller status HVAC (slave)
Ch. - Contr./Fan/Valve status X	...
Ch. -

Control Element with RTC Slave Unit



Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.

Fan Coil Controller FCC/S → Controller

Ch. - Input b Fill level alarm	•	RTC: Condensation/fill level alarm (Mast./Sla.)
Ch. - Input d Window contact	•	RTC: Window contact
Ch. - Contr. External temperature 1	•	RTC: Actual temperature
Ch. - Contr. Operating mode normal (master)	•	RTC: Normal operating mode (slave)
Ch. - Contr. Operating mode override (master) OMO	•	RTC: Override operating mode (slave)
Ch. - Contr. Presence detector (master/slave)	•	RTC: Presence detector (master/slave)
Ch. - Contr. Heating/cooling changeover	•	RTC: Heating/cooling request
Ch. - Contr. Request On/Off (master)	•	RTC: On/Off request (slave)
Ch. - Contr. Confirm On/Off (master)	•	RTC: On/Off confirmation (slave)
Ch. - Contr. Setpoint display (master)	•	RTC: Setpoint display (slave)
Ch. - Contr. Request setpoint adjust.(master)	•	RTC: Request setpoint (slave)
Ch. - Contr. Confirm setpoint adjust.(master)	•	RTC: Confirm setpoint (slave)
Ch. - Contr. Request fan manually (master)	•	RTC: Request fan speed level manual (slave)
Ch. - Contr. Confirm fan manually (master)	•	RTC: Fan coil manual confirmation (slave)
Ch. - Contr. Request fan speed (master)	•	RTC: Request fan speed level (slave)
Ch. - Contr. Confirm fan speed (master)	•	RTC: Confirm fan speed level (slave)
Ch. - Contr. Status Controller HVAC (master)	•	RTC: Controller status HVAC (slave)
Ch. - Contr./Fan/Valve status X	→	...
Ch. - Contr. External temperature 2	•	...

Control Element with RTC Slave Unit 1

RTC: Condensation/fill level alarm (Mast./Sla.)	•	RTC: Condensation/fill level alarm (Mast./Sla.)
RTC: Window contact	•	RTC: Window contact
RTC: Actual temperature	•	RTC: Actual temperature
RTC: Normal operating mode (slave)	•	RTC: Normal operating mode (slave)
RTC: Override operating mode (slave)	•	RTC: Override operating mode (slave)
RTC: Presence detector (master/slave)	•	RTC: Presence detector (master/slave)
RTC: Heating/cooling request	•	RTC: Heating/cooling request
RTC: On/Off request (slave)	•	RTC: On/Off request (slave)
RTC: On/Off confirmation (slave)	•	RTC: On/Off confirmation (slave)
RTC: Setpoint display (slave)	•	RTC: Setpoint display (slave)
RTC: Request setpoint (slave)	•	RTC: Request setpoint (slave)
RTC: Confirm setpoint (slave)	•	RTC: Confirm setpoint (slave)
RTC: Request fan speed level manual (slave)	•	RTC: Request fan speed level manual (slave)
RTC: Fan coil manual confirmation (slave)	•	RTC: Fan coil manual confirmation (slave)
RTC: Request fan speed level (slave)	•	RTC: Request fan speed level (slave)
RTC: Confirm fan speed level (slave)	•	RTC: Confirm fan speed level (slave)
RTC: Controller status HVAC (slave)	•	RTC: Controller status HVAC (slave)
...		...

Control Element with RTC Slave Unit 2

RTC: Condensation/fill level alarm (Mast./Sla.)	•	RTC: Condensation/fill level alarm (Mast./Sla.)
RTC: Window contact	•	RTC: Window contact
RTC: Actual temperature	•	RTC: Actual temperature
RTC: Normal operating mode (slave)	•	RTC: Normal operating mode (slave)
RTC: Override operating mode (slave)	•	RTC: Override operating mode (slave)
RTC: Presence detector (master/slave)	•	RTC: Presence detector (master/slave)
RTC: Heating/cooling request	•	RTC: Heating/cooling request
RTC: On/Off request (slave)	•	RTC: On/Off request (slave)
RTC: On/Off confirmation (slave)	•	RTC: On/Off confirmation (slave)
RTC: Setpoint display (slave)	•	RTC: Setpoint display (slave)
RTC: Request setpoint (slave)	•	RTC: Request setpoint (slave)
RTC: Confirm setpoint (slave)	•	RTC: Confirm setpoint (slave)
RTC: Request fan speed level manual (slave)	•	RTC: Request fan speed level manual (slave)
RTC: Fan coil manual confirmation (slave)	•	RTC: Fan coil manual confirmation (slave)
RTC: Request fan speed level (slave)	•	RTC: Request fan speed level (slave)
RTC: Confirm fan speed level (slave)	•	RTC: Confirm fan speed level (slave)
RTC: Controller status HVAC (slave)	•	RTC: Controller status HVAC (slave)
...		...

Fan Coil Controller FCC/S and Control Element with RTC Slave

Practical Learning Session

Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.

Practical Learning Session

Homepage

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- ETS Application
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- 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

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Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.

Practical Learning Session

Training Material

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 - Presentations
 - Video tutorials
 - and more ...
 - <https://go.abb/ba-training>
 - [ww.abb.com/knx](http://www.abb.com/knx) (→ Services & Tools → Training and Qualification → Training Database)

YouTube

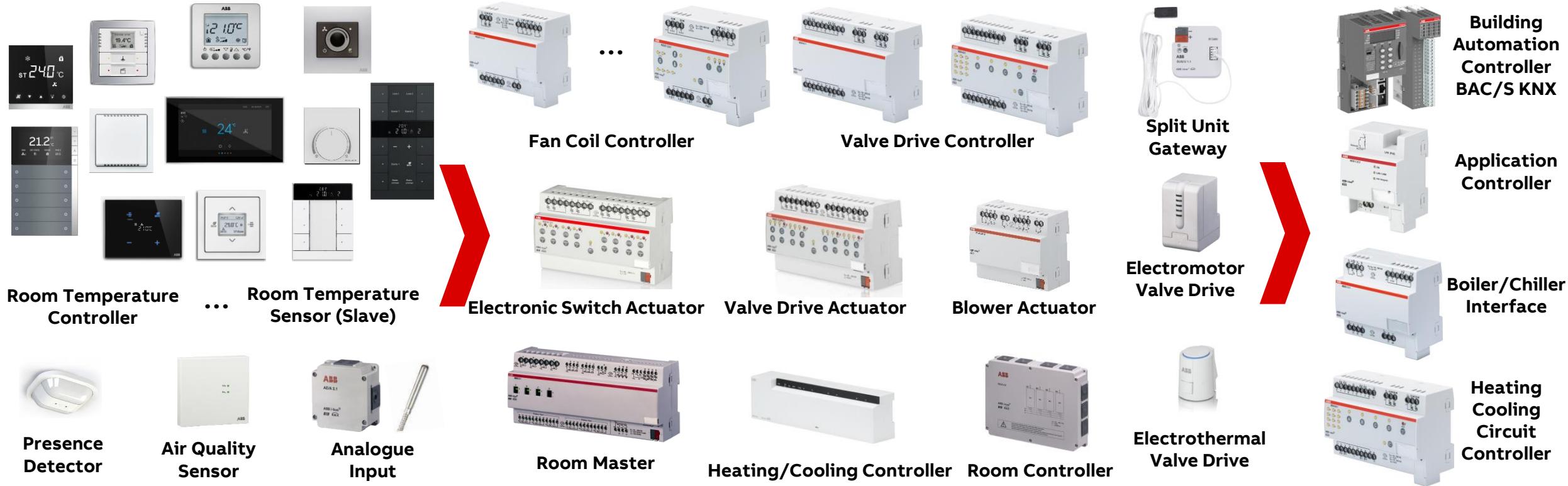
- Channel “ABB Home and Building Automation”
 - <https://www.youtube.com/user/ABBibusKNX>



Fan Coil Controller FCC/S and Control Element with RTC Slave – Heat. & Cool.

Practical Learning Session

Questions ???



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