ABB

SMARTER HOME
New products and services –
for networking private residential space

SMARTER BUILDING
Building automation of the latest generation –
for trade, industry and functional buildings

SMARTER MOBILITY
Solutions for E-mobility –
for a sound shop infrastructure

SMARTER SUSTAINABILITY
Measures for sustainability –
for the maintenance of the environment
and the reversing of the climate change

2022
2023

Innomag
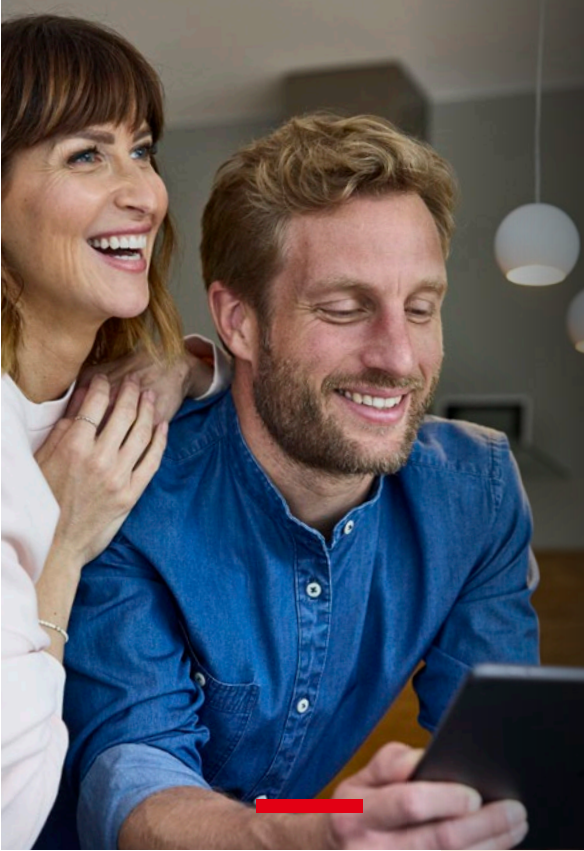
Celebrating the future, today

For us, sustainability is no longer an order. It has governed our daily activities at ABB already for a long time. Whether by means of innovations in the development of products, in the optimization of our working processes as well as in the redesign of our production locations.

Over the coming decades, the pressure on our environment will only increase: today's global population of 7.8 billion is expected to expand to 9.7 billion by 2050 (UN). Some 80 percent of people will live in cities, placing enormous burdens on already stretched water, food, energy and transport systems.

With our 2030 sustainability strategy, we are actively enabling a low-carbon society as well as working with our customers and suppliers to implement sustainable practices across our value chain and the lifecycle of our products and solutions. We are equally committed to driving social progress, along with our suppliers and in our communities.

Yet, it even goes a lot further. What does the ideal city of tomorrow look like? How will the supply of power function highly efficient and also environ-mentally friendly? How can we create an optimum infrastructure of energy for future generations? We are convinced that the answers to these questions are a real opportunity to change our lives positively. The change of thinking will amount to improvements in all areas of our lives and that is our objective. It could not be set higher, but our motivation is immense. Our visions are turning into definite projects. Key concepts are intelligence and effectiveness. As market leader for electronic installation technology we also want to remain permanently in the pioneering role of designing a sustainable future. Here we introduce to you our Mission to Zero™ in more detail.

Smarter Home, Smarter Building, Smarter Sustainability and Smarter Mobility – our areas in which a lot happens in matters of innovation and novelties. Discover our current products and solutions and allow yourself
to be inspired.

—
The cities of tomorrow are smart, intelligently networked and equipped with flexible energy management.

06 Smarter Home

84 Smarter Mobility

56 Smarter Building

92 Smarter Sustainability

Smarter Home

For a totally new feeling

What happens when you turn your home into Smarter Home? A whole lot. Because with the installation of sensors and actuators, which flow through all your rooms like a nervous system, your home reaches a new dimension. The connections bring it to life, make it approachable and make it possible to actively respond to external conditions. Always with regard to safety, energy efficiency and comfort.

You will personally also experience a change. The way of life in one's own four walls will expand because intelligent technology creates greater freedom. Sounds exaggerated? Absolutely not. Experience the advantages of the Smarter Home. Every day. Every minute.

ABB's systems and innovative products will impress you and make you feel more at home than ever.

For beginners: ABB flexTronics®

ABB flexTronics® makes the intelligent room control smarter than ever before. Perfect technical prerequisites around the ABB flexTronics® system range to expand a flexible room control version for beginners. A system with a guaranteed future with the option of upgrading.

Modern living
The flexible expansion stages of ABB flexTronics® individual control, ABB-free@home® flex individual control and ABB-free@home® flex room control are expandable at all times and are therefore perfectly suitable for new buildings and renovations.

Connection

Controlling ABB-free@home® flex with Bluetooth connection - directly from the smartphone or tablet. The additional wireless communication can also be used for networked room control and later offers the option of an upgrade to ABB-free@home® via the ABB-free@home® System Access Point.

Modularity

The flex inserts and control elements of ABB-flexTronics® and ABB-free@home® flex can be individually combined.

Individualisation

The settings of the ABB-free@home® flex devices can be adjusted via app to the individual requirements for light and blinds.

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Our solution for the future. Install any number of flexible options.
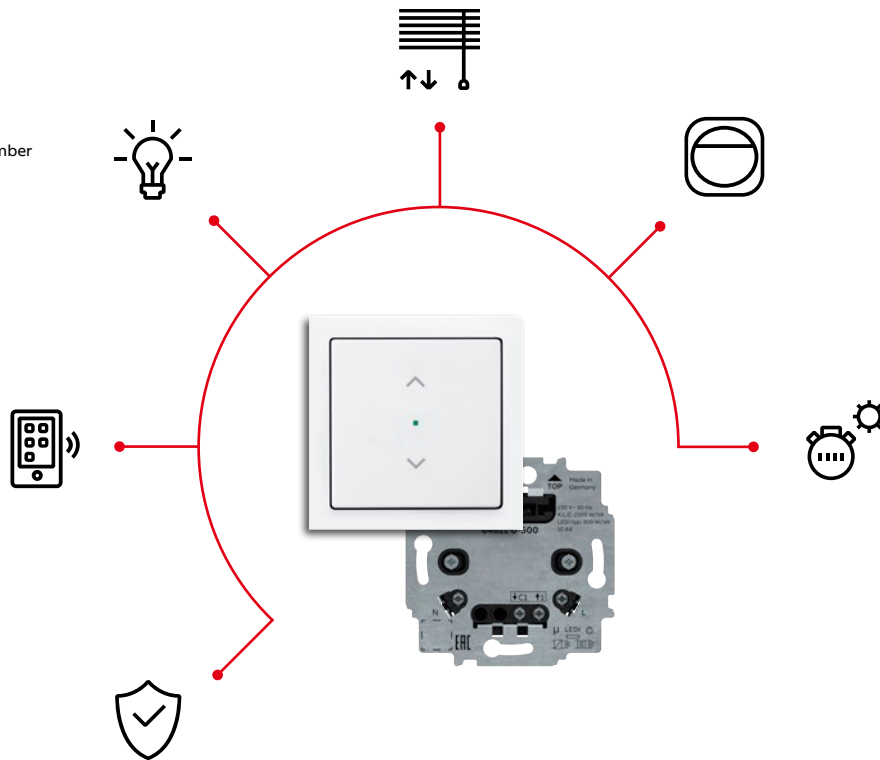
A system that makes an amazing number of applications possible with only a few modules and line wires - also for the future. The flat flex inserts are easily installed with measuring points that are accessible from the front enable perfect service.

The new freedom:
ABB flexTronics®

The applications of light and blind control in a single room are diverse. However, they require intensive planning prior to installation. This you can clearly simplify with ABB flexTronics®. Because with the buttons you have all the options for control and operation in the one insert. This means maximum flexibility and freedom for the future. With ABB-flexTronics® you not only prepare your perfect entry into the Smarter Home. You also meaningfully extend an existing ABB-free@home® system. The inserts can be fully integrated.

ABB flexTronics® is the future
ABB will, in the medium term, replace all electronic switches with ABB flexTronics®. A huge step and a road mark in the history of electrical installation.

We are making ABB flexTronics® the latest standard of home automation. A standard that, on the one hand, is a huge simplification for installations (fewer modules, fewer line cables), and, on the other hand, carries with it the potential of intelligent control. Simplification and intelligence - essential core values of the Smarter Home.

Features at a glance

Fine wire protection: Safer and faster connection of flexible and rigid wires

Adjustable support ring: Compensates for minor unevenness during mounting

Flat construction type: With only 25 mm a lot of space remains for the lines and connecting terminals

Uniform interface: Many flexible combinations are possible between sensor and actuator

PlusWire®: The modern extension unit operation with even more options

With PlusWire® on the right track

PlusWire® connects to several flex inserts via one wire and is easily taken along in the installation line. In comparison with a conventional extension unit, additional information can be exchanged between the inserts.

+ ABB flexTronics® control elements turn into an extension unit via the same wire
+ The combination of ABB flexTronics® buttons and ABB-free@home® flex control elements is possible

THE NEW ELECTRONIC RANGE

Light control

Relay insert flex

Light control

Series relay insert flex

Dimmer

LED touch dimmer insert flex

Blind control

Blind insert flex

Light control

E-contact insert flex

Extension unit insert flex

—
Optional extension
unit operation

Control element flex, 1gang

Control element flex, 2gang

ABB Watchdog 180 flex, basic and comfort sensor with select lens

ABB Watchdog 180 flex, multi sensor

Busch-Comfort switch flex

Presence detector flex Universal / Sky / Corridor flex

Relay insert flex/1-gang

Extension insert flex

—
The comfort sensor with multi-lens is ideal for use in stairwells

Extension insert flex

Blind insert flex/1-gang

Precisely the correct setting
Safety and atmosphere are only
two convincing arguments for
the new room control.

ABB-free@home® flex

ABB-free@home® turns your Smart Home into a
Smarter Home and with our new ABB-free@home®
flex range, we extend your advantages even further.
The possibilities are almost limitless. The intelli-
gent room control is easily set up and controlled via
the Bluetooth connection of the smartphone
or tablet.

Modern blind control with time function
adjustable via smartphone app
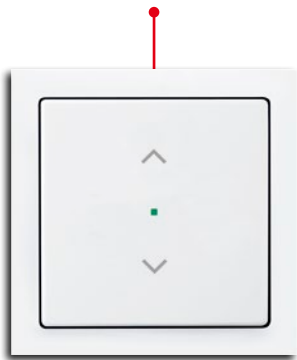

Blind control

Intuitive blind control: open, fully closed
or with different slanting angles of the
lamella - discover the possibilities.

+ Easy installation
+ Comfortable setting of the blind
  via smartphone or tablet
+ Practical timer
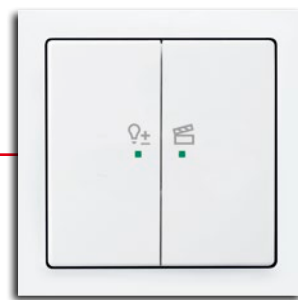
Garden lighting

A pleasant reception when the garden
has been set into the scene with a pleas-
ant atmosphere. ABB-free@home® flex
also guarantees here – thanks to differ-
ent illumination scenes and automatic
swich-on and switch-off - orientation and
safety.

+ Different lighting scenes
+ Integrated astro timer
+ Greater safety in the dark

The lighting is especially important in the stairway. Annoying activation of light is dropped thanks to the sensitive movement detector function with multi-lens.

+ Individual light settings including dimming function
+ Four detection levels cover the entire stairway
+ Energy-saving effect

ABB Watchdog 180 flex, sensor with multi-lens

MORE COMFORT FOR THE ENTIRE HOME

With ABB-free@home® flex you control things as comfortable as never before. And with the intelligent automation you save additional energy costs - day by day.

ABB Watchdog 180 flex, Comfort sensor with select lens

With a combination of movement detector and dimmer you create an individual light atmosphere and so support the natural biorhythm.

+ Personalised light settings
+ Dimming function for sustainable power consumption

Light dimmer for the suitable lighting, including scene control

—
Default lighting mode

ABB-free@home® flex offers default lighting scenes, e.g. the good-night mode, which dims the light in the children's room automatically. This guarantees that no one wakes up when You briefly check things in the evening.

+ 2gang control element with on and off function and configurable presets for the illumination
+ Atmospheric Illumination for pleasant sleep throughout the night

Step by step to the Smarter Home

Your guarantee for maximum flexibility and individuality. The steps build up logically on top of each other: individual features, rooms or the entire system can be extended and adjusted this way without any problem.

01

Individual operation

The manual individual operation already contains everything that is required for a later extension to a smart individual control.

+ Stand-alone operation
+ Familiar operation
+ Additional features

02

Individual control

The individual control app via Bluetooth makes possible the digital remote control of several inserts.

+ Remote control and parameter setting of the respective insert per app via Bluetooth
+ Several inserts can be combined in the app for a project

The insert

Simply wireless
During an upgrade only the control element is exchanged, since the respective insert already contains all the options for the wireless operation.

Claw protection
Reduces the risk of sustaining injuries

PlusWire®
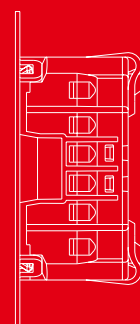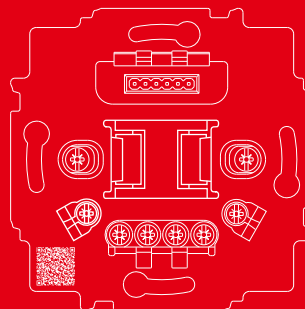Modern extension unit operation

Measuring points
Accessible from the front

DMC-Code
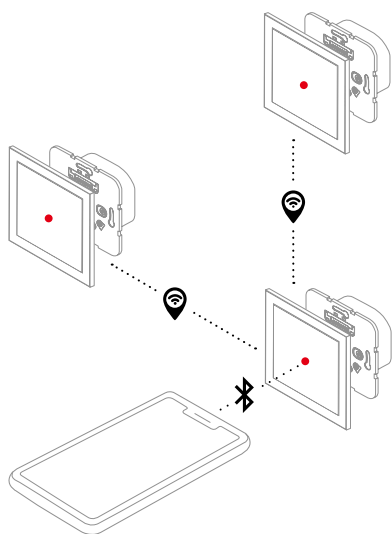You reach the product page by scanning the code

New mounting plate
Stable fixture for different bases and installation situations

Fine-wire fuse
Safe and fast connection of flexible and rigid wires with open clamps

Flat construction type - 25 mm
A lot of space for the lines and connecting terminals

03

—

Room control

The room control functions are wireless or cabled, and networks different inserts.

+ Networking via PlusWire® or ABB-free@home® wireless
+ System Access Point is not required
+ For wireless networking: easy myBuildings portal registration (virtual System Access Point)
+ Voice control, external access, etc.

04

—
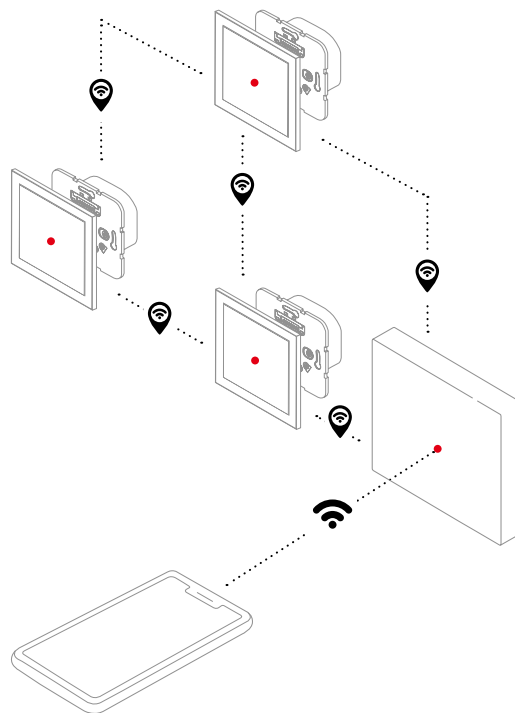
Home automation

ABB-free@home® controls the entire house and outdoor areas.

+ Networking of inserts via PlusWire® or ABB-free@home® wireless
+ Connection of the wireless control elements to the ABB-free@home® System Access Point
+ Fully networkable with complete functionality such as voice control, external access, etc.

ABB flexTronics®

The ABB flexTronics® control element is the classic attachment for individual operations and offers easy entry into the blind management and light control.

Back-up Battery
The settings are also stored in the event of a power failure

Status LED
Orientation light

Scenes
Saving and activating of presets and values

ABB-free@home® flex

The ABB-free@home® flex control element is ideal for complete room solutions or interconnected Smarter Home systems. Also operation per app is possible via Bluetooth.

Individual control with Bluetooth interface
Direct connection to the smartphone

Parameters
Easy setting per app via smartphone

Timer
Integrated: Astro function/ Timer

Remote control via remote control
Via the app ABB-free@home® Next and MyBuildings portal

Individual control with Bluetooth interface
Direct connection to the smartphone

Complete home automation via ABB-free@home® wireless
For the connection to a free@home System Access Point

Easy access in the new look

My House

Welcome at home

1 on   1 up

NEXT TIMERS

| 19:32 Today | LIVING ROOM (A) | ⬤ |
| 19:32 Today | HALLWAY (A) | ⬤ |

FAVORITES

ON
Light
Living room

UP
Blinds
Living room
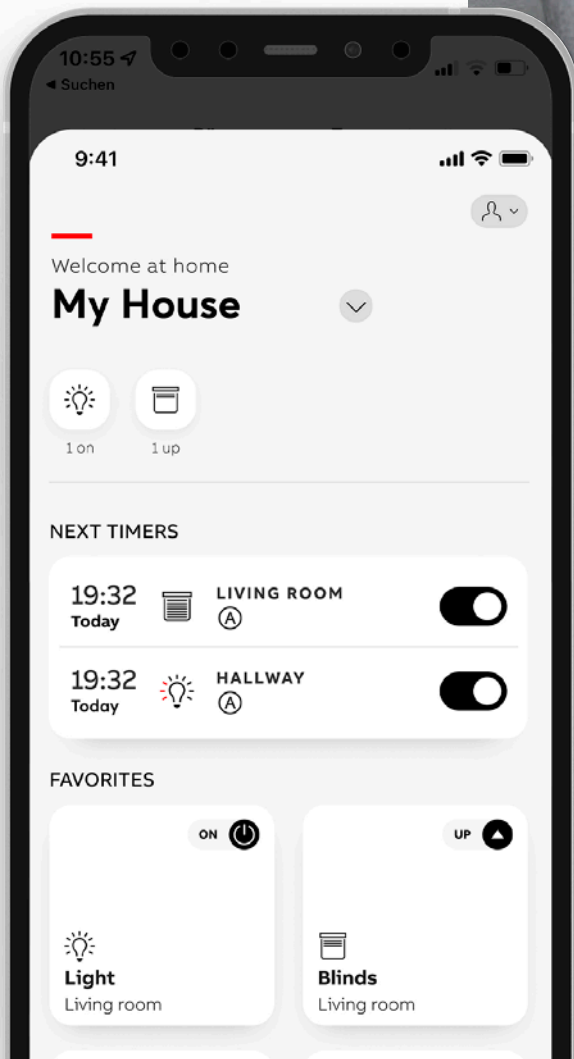
App ABB-free@home® Next functions:

+ Control of the Smarter Home
+ Configuration and setting
+ In future energy management will be possible with ABB-free@home® (→ P. 15)

Now also with integrated door communication for our ABB-Welcome system.
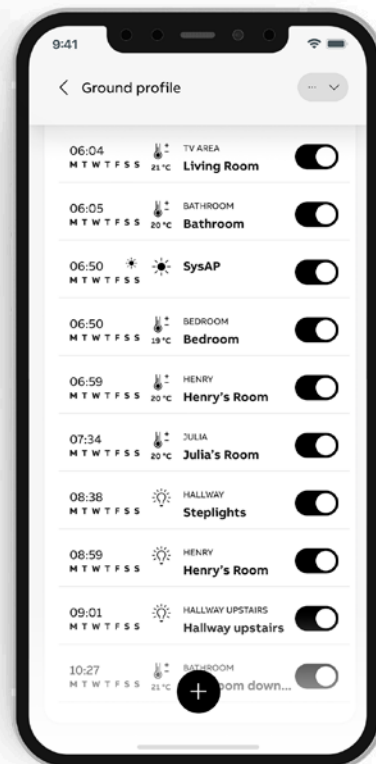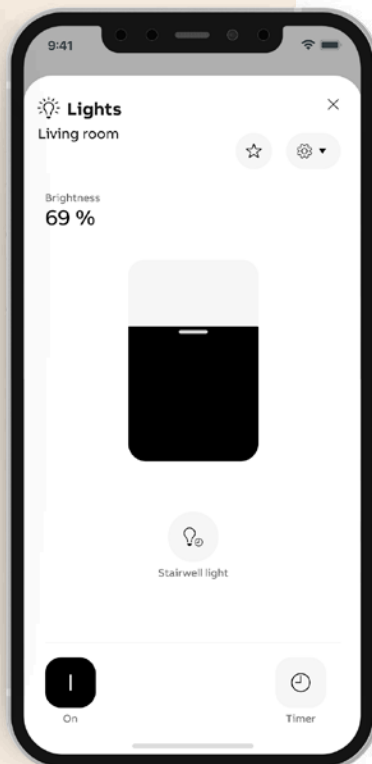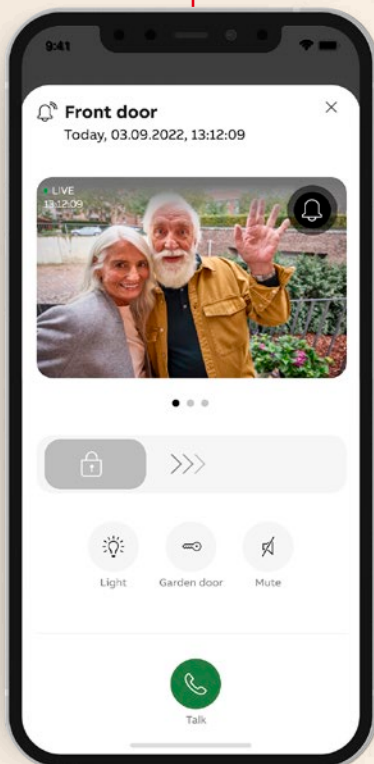
01
Under "New installations" a new device of an existing installation (here "My home") can be added or a new installation can be created..

APP
ABB-FREE@HOME® NEXT

—

Intelligent comfort, intuitive operation

Of course, we're also set up for the future. Digital installation, individual configuration, extending up to complete home automation - the potential of the app ABB-free@home® Next makes this all possible. From smart control of a room to control of the entire home, inside, outside - even when you're not at home.

This app contains everything. Because the same app is used for ABB-free@home® flex and ABB-free@home®, with a identical, self-explaining menu guide: "Set up new Bluetooth device" appears automatically, as soon as Bluetooth is activated on the mobile device, the device is in programming mode in the factory settings or when the app is open. The general settings for the installation can be set up in the installation area.

+ Location, that is important for the calculation of the Astro function
+ Project transfer, e.g. from the electrician's smartphone to the customers smartphone
+ Migration room control: networking several devices at a later point in time
+ Devices: overview of all devices in the installation
+ Firmware: update area

Download app now

New: Energy management with ABB-free@home®

An all-round concept that automates and optimizes the energy consumption in apartment buildings. Something that functions outstandingly in the industry and saves a lot of emissions and costs! With this in mind we are also developing a solution for private homes too.

Whoever uses photovoltaic systems to generate electricity, the energy that the energy supplies their home most efficiently. This requires an intelligent solution that knows exactly how much energy is being produced and what is required, where and when. Target: independence from power generators. And enjoying the benefits of energy self sufficiency.

+ Promoting and living in a sustainable way
+ Reducing high energy costs and saving money

Integrated into ABB-free@home® the scalable solution can be managed remotely. Home automation, energy distribution and charging of electric vehicles - under consideration of totally individual requirements.

An ABB SmartTouch® 10" panel on the wall can be your central control unit, or simply use the app via your smartphone. This flexibility gives you optimal control at all times. With energy@home you can view overviews and consumption data, even allowing you to set alarms to that let you know when certain limits are exceeded. This means: optimum control at all times and all locations. Energy management with ABB-free@home® represents not only overviews and consumption. You can also set alarm functions that activate themselves when certain limits are exceeded.

Power grid

Electronic Domestic Meters

EV Charger

Heat pump

PV system

Energy storage

My Buildings

SystemAccessPoint

System pro M® compact InSite

Light control

Temperature control

Blind control

Scene control

ENERGY

HOME AUTOMATION
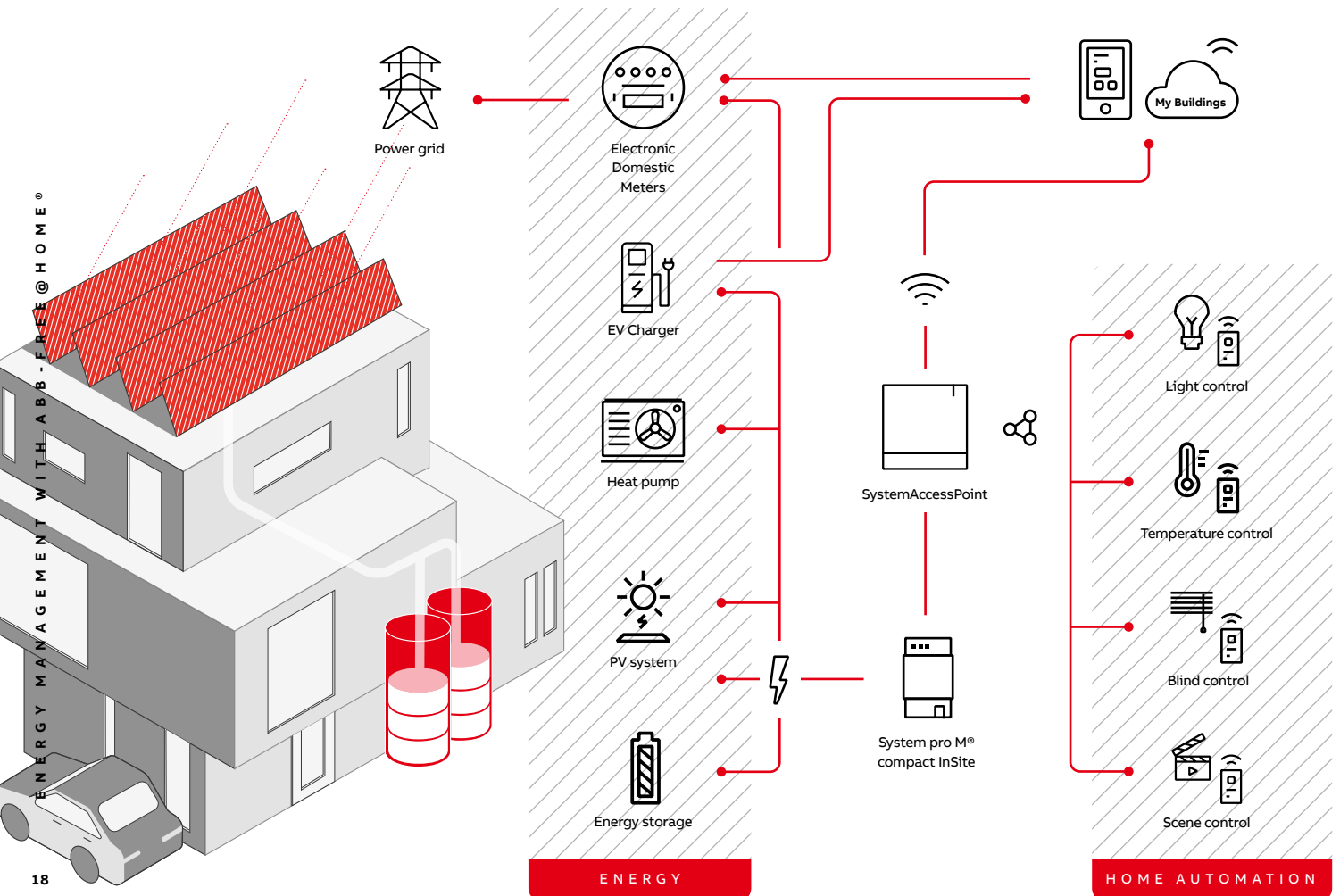
PROFESSIONAL ENERGY MANAGEMENT FOR THE HOME

Energy management with ABB-free@home® is no vision for the distant future. It is a currently running project at which we are working at high speed. For us, sustainability is the priority. We want to contribute to the safety of future living conditions every day.

"ALMOST ONE THIRD OF THE GLOBAL ENERGY CONSUMPTION AND ALMOST 40 PERCENT OF THE GLOBAL CO_2 EMISSION ARE CAUSED BY BUILDINGS. THE REDUCTION OF THIS INFLUENCE IS ONE OF THE LARGEST CLIMATE CHALLENGES OF OUR TIME AND ONE OF THE GREATEST OPPORTUNITIES FOR THE FUTURE."

BENJAMIN WILMS,
PRODUCT MANAGEMENT AND DEVELOPMENT
AT BUSCH-JAEGER

ENERGY MANAGEMENT WITH ABB-FREE@HOME®
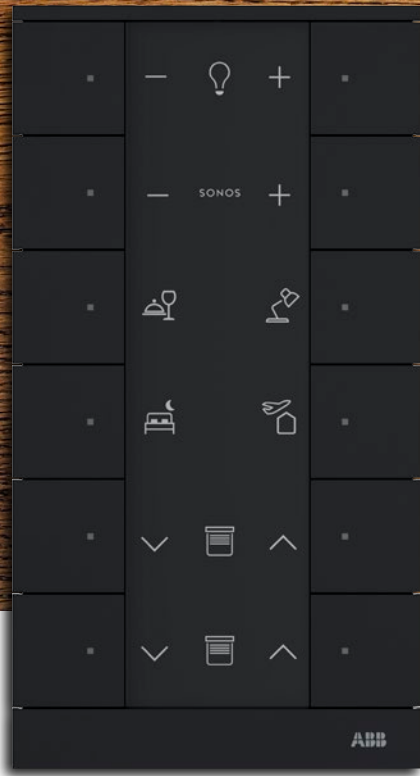
01
Control element 12gang
ABB Tenton®, black matt with
a labelling field that can be
ordered individually in black

Cockpit for your comfort

—

ABB Tenton®

Coming soon to the ABB-free@home® system:
the room temperature controller for the entire
home and the entire apartment. Heating, venti-
lation and climate control from a central loca-
tion. A genuine contribution for private energy
management, which makes definite savings
possible. Because the automation of individual
settings has a sustainable influence on your
consumption.

Costs are reduced and comfort is raised consid-
erably. Customize each rooms temperature to
suit its purpose via one central location for each
thermostat.

+ New: air quality sensor VOC, air humidity and
  CO_2 sensor IAQ for a perfect living climate
+ A uniform solution for automated heating,
  ventilation, cooling
+ Different designs, large selection of colours
+ Easy to install, individually markable

02
Control element 8gang
ABB Tenton®,
aluminium silver

Can be fitted with text and
ordered individually

03
Room temperature
controller extension unit
with operating function
10gang ABB Tenton®,
aluminium silver

04
Room temperature
controller with operating
function 6gang
ABB Tenton®, black matt

ABB TENTON®

Art. No.	SBR-F-10.0.1-84
Order No.	2CKA006220A0865
Available	

To the digital
product test
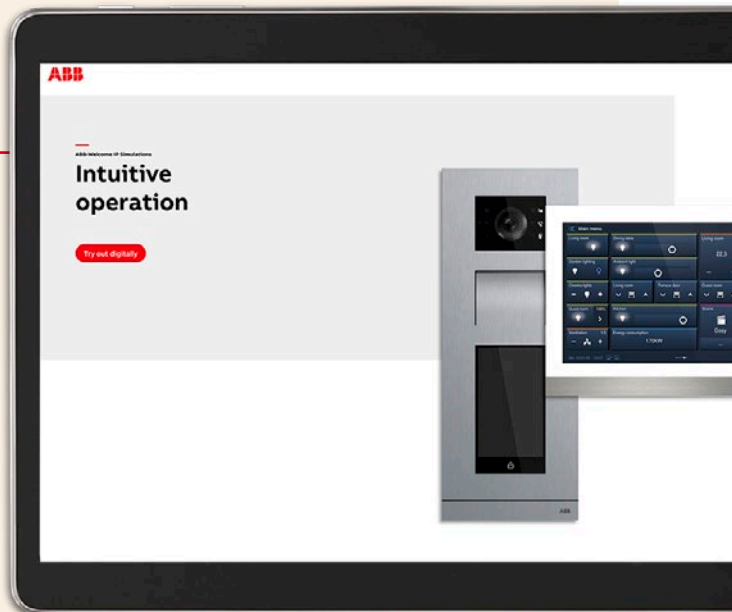
EXPERIENCING PRODUCTS IN ADVANCE

—

On our website for trying

If you want to try the selected offer of ABB beforehand, we will give you the opportunity on our website. Here you can discover virtually the advantages and get an idea about the kind of enjoyment you are preparing for the reality.

+ ABB-Welcome IP - the door communication with video or audio. We will show you what it looks like on the panel when someone rings your doorbell. How you talk to a person, how you open the door. And also the settings you can make. Just practice a little.

—
Directly to the virtual
door communication

01   02   03   04

Home control at its best

—

ABB-SmartTouch® 10"

Never has room control been a better experience. With regard to haptics and control technology the ABB SmartTouch® plays in a different league. The 10-inch and high-resolution IPS display made of glass permits a visibility angle of 75° from all directions. It responds highly sensitively to touch and swiping movements. Configure your user interface totally individually. The setup is made intuitive and totally simple.

The panel is perfect for connection to your door communication. A notification center informs you about all actions and missed visits. An optional memory card offers a selection of screen savers and bell sounds and also makes shorter video recordings possible of people that are standing in front of the door.

+ Supports ABB i-bus® KNX, ABB-Welcome (2-wire system) and ABB-free@home®
+ Integrated ABB-Welcome IP gateway for remote door communication
+ In future it can be integrated in Energy management with ABB-free@home®, see pages 106ff.
+ Elegant 14 mm flat, extremely small frame
+ In black or white, each with frame colours in black, satin gold, stainless steel or roségold

ABB SMARTTOUCH® 10"

Article no.	ST/U10.1.1-825
Order no.	2TMA310051B0001
Available	

01 BLACK
02 ROSÉGOLD
03 GOLD
04 STAINLESS STEEL

reddot winner 2022
interface design

UX DESIGN AWARDS
nominated 2022

≡ Family Smith   06:57 pm Th 07/14/2022   21.5 °C   🔒 ? 🔔 🔊

17 on   3 open   All Eco   2 Events   21.5 °C   4 bft
Lights   Blinds   RTCs   Notification center

Today   Tomorrow   Saturday
07:00 RTC Comfort   07:00 RTC Comfort   07:00 RTC Comfort
23:30 All off   23:30 All off   23:30 All off

Morning   OFF
Scene   Lights Corridor
Living room   Entrance   Camera 1
                                                   Front door
75 %   OFF   ECO

Side entrance   Blinds   Ceiling lights   RTC
Garden   East   Kitchen   Living room

KNX-System   ABB-free@home®   ABB-Welcome
                                  (2-Wire-System)

Smarter Home Developer Program

At ABB our aim is to offer you a holistic solution. Our ABB-free@home® system is therefore planned in such way that it can integrate a maximum number of third-party manufacturers. For greater selection, more possibilities and improved service.

We want you to enjoy overall comfort and that happens best when the entire system can be operated as single unit. This is what our Smarter Home Developer Program provides . It carries out research for practical supplements and integrates them into our system. The automated building control then becomes a delight.
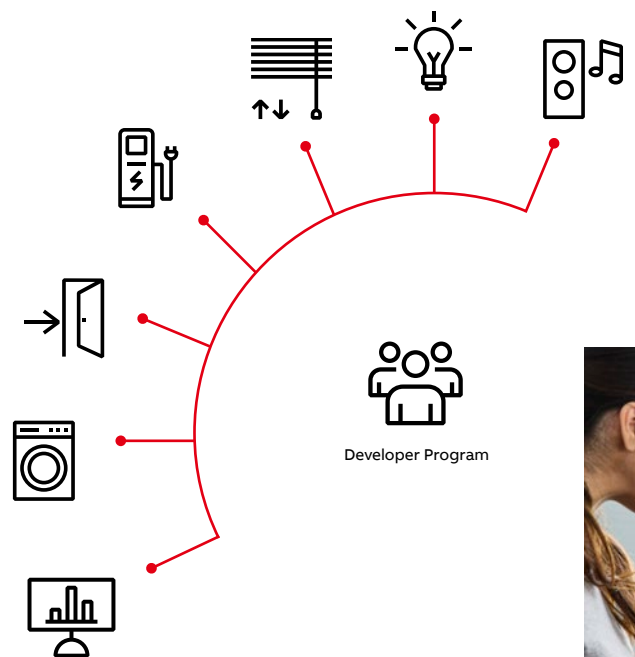
Developer Program

—
Discover the Developer Program!

ADD-ONS:
PARTNERS FOR LIFE

Smart elements

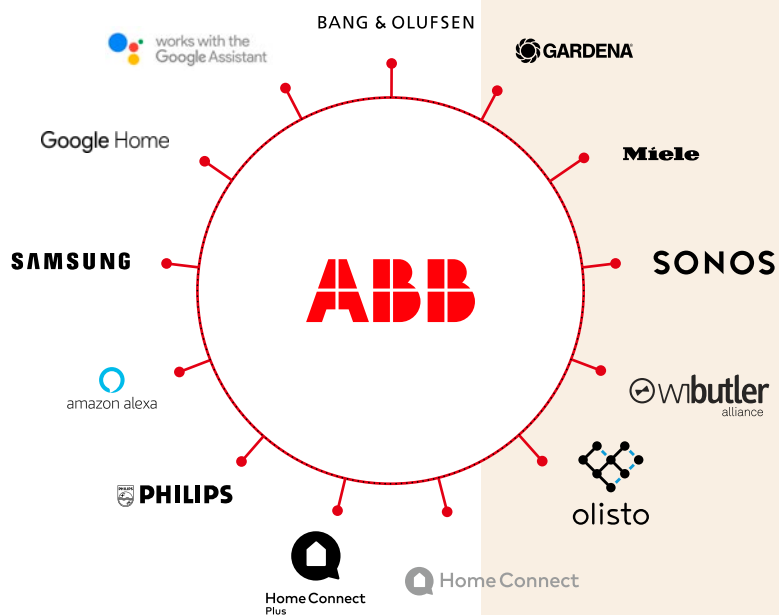Your Smarter Home is getting bigger as the range gets wider. And we're happy to take care of that. Partnerships as cloud-to-cloud connections or in direct integration into the local network. Make our inspirations your project.
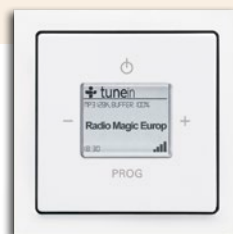
We don't just connect your home with smart components. We also connect ourselves. We do so with cooperation partners who expand your range. Smarter Home is a concept that lives. It pulsates every day. It wants to be changed, expanded. The installation is not a conclusion, it is a start! Because communication is boundless.

—
Integrating partners - extending the offer

Already we have numerous collaborations that present an offering that is not available anywhere else. As market leader of electrical installations we gladly surround ourselves with other pioneering companies so your experience with Smarter Home is always perfect.

Can be integrated into
ABB-free@home®

—
Add-ons – for example Busch-Radio iNet

Add-ons are software modules that, similar to apps on your mobile phone, you can install in your ABB-free@home® and make the special services available. Such as the integration of the Busch-Radio iNet. After the installation of the add-on, this is positioned in the floor plan and connected with the control elements. In this way you can switch the radio on and off on the light switch, regulate the volume or enable it to become part of a scene. For example, to switch on the heating in the bathroom in the morning, switch on the lights and play the radio.

Digital Campus

A virtual room that is accessible from everywhere and offers the possibility of an encounter. Communication is promoted, new forms of presentation and the workshop become possible. And on the side, travel costs are saved and additional organizational work is avoided. The Digital Campus is genuine contributions to our sustainable orientation. The architecture is already in a very advanced stage. So far, also the interior facilities of the individual buildings have been finished.

Many thoughts and ideas have been talked about and discussed, since the outside design should also reflect the DNA of the company and represent its values. Here, in the medium term, the first product presentations, conferences and workshops will take place, that are also to be visualized hybrid in a mixture of real people and virtual room. The navigation is carried out either via mouse or keypad or via augmented reality via smartphone and app or via virtual reality glasses.

—
Different buildings with different functions. But also different moods, colours, facilities. This is how the space perfectly fulfils its function. Also the free room that has been designed, as it were, garden-architecturally and exudes the genuine Campus flair.

OPPORTUNITIES FOR THE FUTURE

As part of the ABB world, with this project we are on a journey with the future as the destination. Because what is developed here, turns into much more in the long term and ultimately, a universe is created here in which everything is possible. Boundless communication, not merely on a business level, but also social networking. You may be able to shop, engage in scientific interchange, experience recreation … We too are excitedly looking forward to where the path will lead us. We would be happy if you would accompany us.
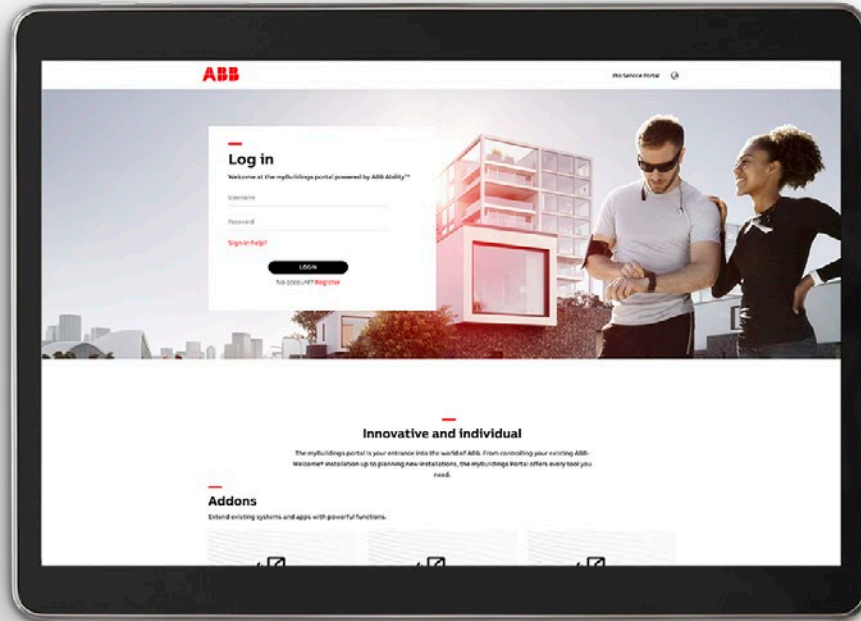
Quick Assistance

Benefiting
Installers
and customers

ABB-free@home®

ProService
Portal

myBuildings portal

ProService Portal

Your platform as electrical installer to perform remote maintenance and rectify errors without having to be onsite by the customer. A huge advantage that saves a lot of time and energy and also greatly favours your customer.

You simply click into the System Access Point of your customer and render them quick assistance:

+ The intervention happens only after his express permission and ends automatically after 24 hours.
+ Every access to the System Access Point is recorded in a history log and is displayed in the myBuildings portal, giving the customer total transparency.

A win-win situation for all participants because no appointment needs to be made, nor is presence required, and the service is performed in totally relaxed state and the environment is also happy.
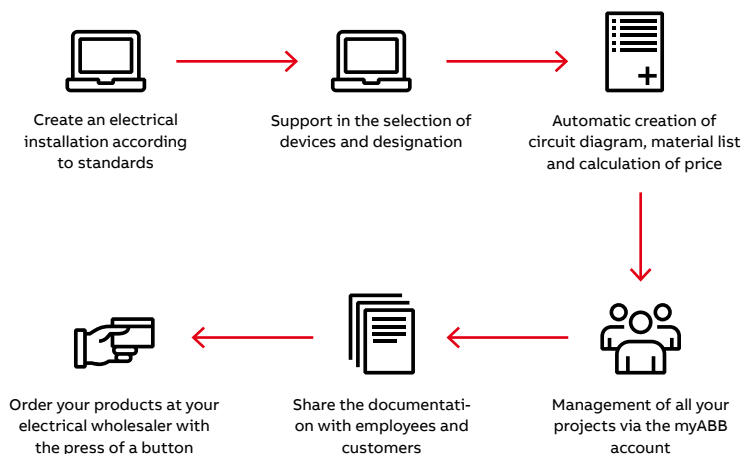

Register now and stay up to date:
https://eu.mybuildings.abb.com/en/user/login/

Easy Pro™ – exclusive for electrical installers

—

Planning professional projects

The web-based configurator Easy Pro™ makes the planning of subdivisions in apartment buildings easier. It assists you in the selection of devices, the planning according to standards, as well as the text. In the end you receive a complete documentation that makes the implementation at your customer easier. Discover the latest tool for electrical installers.

Create an electrical installation according to standards

Support in the selection of devices and designation

Automatic creation of circuit diagram, material list and calculation of price

Order your products at your electrical wholesaler with the press of a button

Share the documentation with employees and customers

Management of all your projects via the myABB account

ABB Easy Pro™

—

Configure and manage your daily projects in just a few minutes with Easy Pro™.

"Smart Home is my new way of living!"

When I talk about my Smart Home with my neighbours or my girlfriends, I can't stop grinning. Have you felt that way? When you are proud of something that you stand there grinning honey cake horse or like a Cheshire cat?

Yet, in the beginning I was skeptical. I like to understand the things that surround me. And this Smart Home world seemed very complex to me. Although as an architect I am a technophile, I thought: "Hmm, here you have to dig a little deeper." I really have reduced my expectations and allowed the electrical installer to do his job. But, on various occasions I watched him over his shoulder and asked him many questions.

Did I get on his nerves? I honestly believe that it was not so. He really enjoyed talking about his work. We found him very close to us via the ABB page. We gained the best impression about ABB, while scanning the suppliers.

We started with the door communication and with light and blind control - I was immediately bubbling over with enthusiasm! Even more than my husband. Because of the children I only work part-time, and I therefore have twice the enjoyment with the home. What can I say? The installation has given our rooms an entirely new dimension. To me it seems that a nervous system flows through the walls and ceilings that breathes life into the entire house. It simply thinks actively along.
I really have the feeling that the house has connected itself to me in a totally new way. I really feel comfortable. And it is a lot of fun! In the meantime we have connected the heating, a few windows and a new photovoltaic system with the Smart Home system.

"I REALLY FEEL COMFORTABLE. AND IT IS A LOT OF FUN."

EVA KOWALCZYK, 42
ARCHITECT,
HAMBURG

Next year an E-car and charging station will be added. Our future project. The synapses are widening out. I am really enjoying it!

The best for me is to create scenes. With one click the light dims down, the blinds close and the music starts. End-of-workday mode. And I still have an additional five choreographies!

I have not yet said anything about the fact that we pay a lot less for electricity and heating, and also nothing about how the safety and the associated excellent feeling have raised our quality of life. And nothing about comfort. This new comfort! My Smart Home! I love it.

—
More experiences are
available in the following

Proves character: Busch-axcent® pure

A frame, a uniquely designed surface – is that art? The switch is not merely an eyecatcher. It invites to be touched almost audibly. Materia, design, haptic - here everything is correct. Busch-axcent® pure is the switch range for individualists. With a lot of elegance and style. Modern materials such as concrete, slate, pressed paper and glass integrate harmoniously into the personal environment, have a noble effect and lend the rooms that special touch.

BUSCH-AXCENT® PURE
SLATE GREY
BLACK MATT

01 SLATE* / BLACK MATT
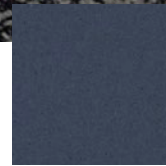02 CONCRETE* / BLACK MATT
03 PAPER BLUE* / BLACK MATT
04 PAPER BROWN* / BLACK MATT
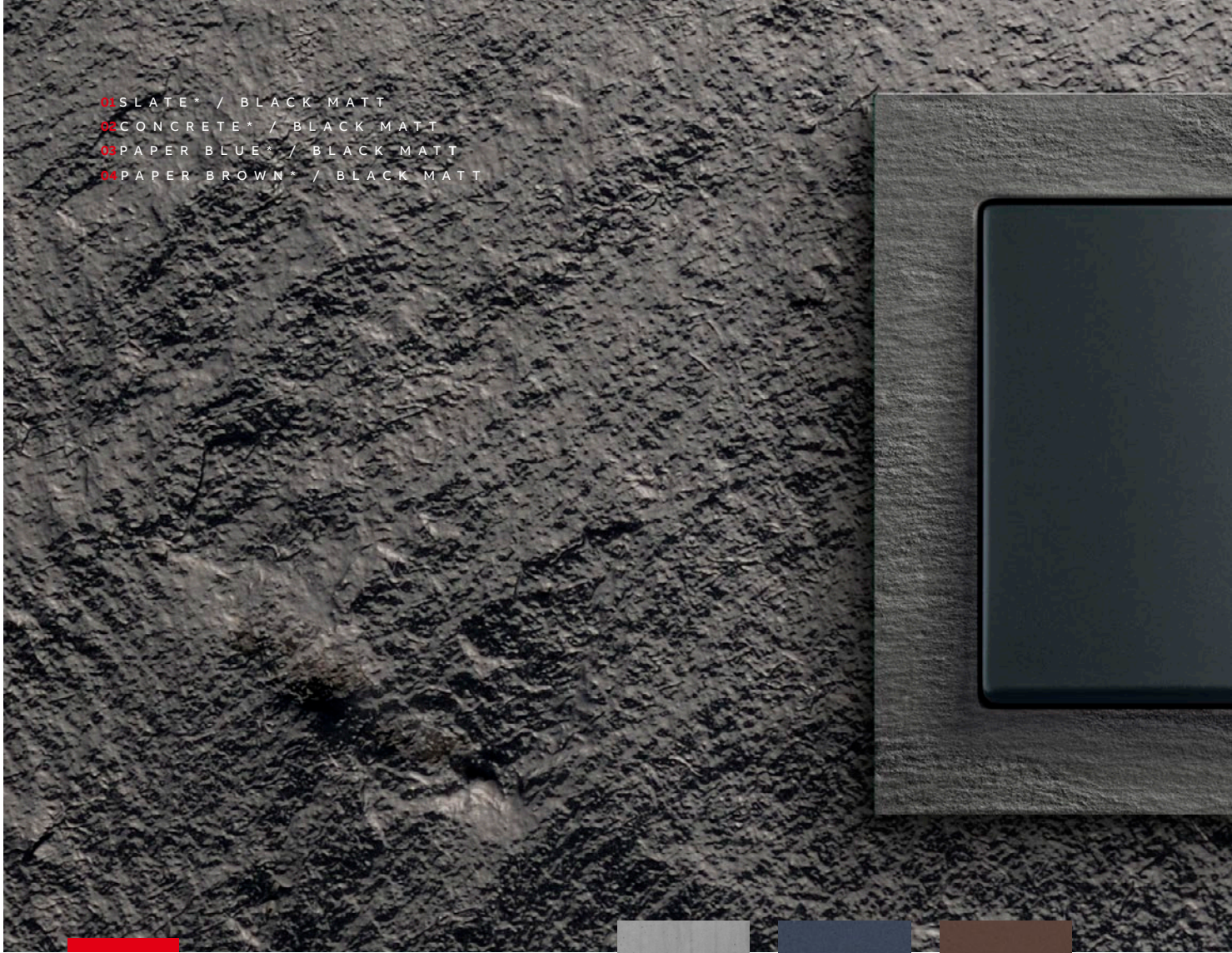
01
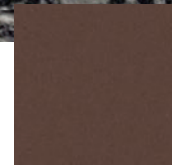
02   03   04

Haptics with optics

The genuine materials of the axcent® pure enhance the intelligence of your Smarter Home. Puristic in design, profound in the selection and processing of the material. The result is pure enjoyment at your finger tips.

+ Available materials: Concrete, slate, composite material of paper and resin from Richlite (FSC certified)
+ Each frame is unique
+ Frames available in 1 to 5gang

COVER FRAME 1GANG FRAME, PAPER BLUE

Article no.	1721-248
Order no.	2CKA001754A4785
Available	

01 G L A S S   C O R A L   /   S T U D I O   W H I T E   M A T T
02 G L A S S   O Y S T E R   /   S T U D I O   W H I T E   M A T T
03 G L A S S   S U *   /   S T U D I O   W H I T E   M A T T
04 G L A S S   P U R P L E   /   S T U D I O   W H I T E   M A T T
05 G L A S S   A V O C A D O   /   S T U D I O   W H I T E   M A T T
06 G L A S S   O C E A N   /   S T U D I O   W H I T E   M A T T

01
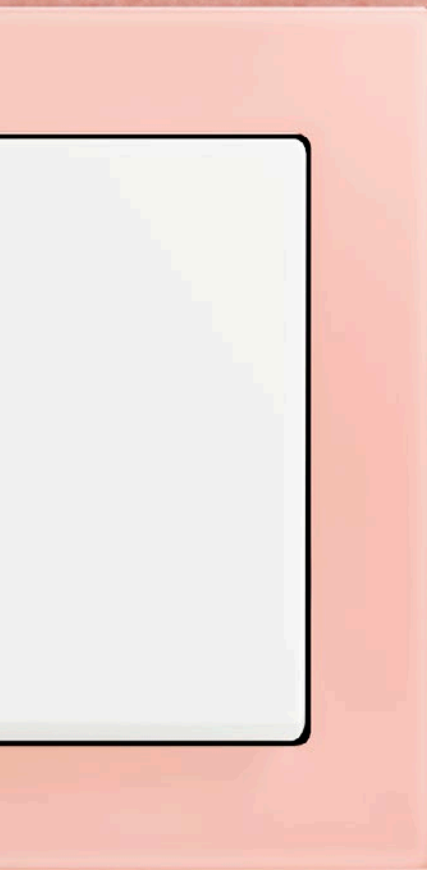
02　　　　**03**　　　　**04**　　　　**05**　　　　**06**

WINDOW FOR INSPIRATION

The new Busch-axcent® pure range uses modern colours and interprets them in the context of glass. An exciting and striking connection that lends the rooms profile in detail.

+ Genuine glass frame with discreetly
   satin-glazed surface
+ In modern trend colours (NCS colour shades)
+ Frames available in 1 to 5gang

COVER FRAME 1GANG FRAME, GLASS OCEAN

Article no.	1721-228
Order no.	2CKA001754A4755
Available	

Room details with a lot of charm

01
Rocker Switch,
1gang 2way

02
Rocker Switch,
2gang 1way

03
Blind switch SP,
push switch

06
SCHUKO® socket outlet
Safety+
07
SCHUKO® socket outlet

08
Stereo loudspeaker
connection box

09
HDMI connection unit

10
USB connection unit

11
Blank plate

Decento®

The Decento® switch program is made of porcelain and with this retrospective is a reflection of the good old times. Round forms, visible screws in high-gloss and the unmistakable haptic nostalgia combined with modern technology.

Classic both in look and operation. The socket outlet with "integrated shutter" was already patented by ABB in the 1960s. Today it has been further developed - with the most modern technology, which meets all demands.

+ Socket outlets also with insert Safety+
+ Large selection (HDMI, USB, blind buttons, etc.)

DECENTO®

Article no.	**04** 2002/6 UJDR-64
	06 20 EUJB-64
	08 0248/04-101 J-64
Order no.	**04** 2CHK600634C5300
	06 2CHK201359C5300
	08 2CHK290404C5300
Available	

Figure 1:1:
87 mm diameter, 17.6 mm
depth

04
Rotary switch off 2-way circuit

05
Rotary switch cross

Switching into a minimalist universe

—

Zenit

Zenit is the most comprehensive modular range for all kinds of homes and commercial buildings. A number of appreciated designs and beautiful finishes that add value to the facility, with advanced features that provide greater comfort and performance level. With Zenit you can make any type of installation, can enjoy benefit of technical advantages that make it easier and faster. This range has the guarantee of a brand renowned for its quality such as ABB.
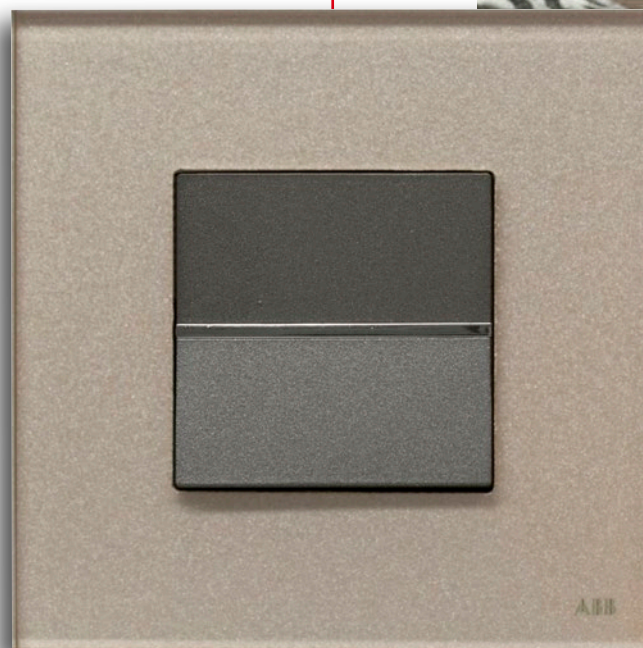
Figure 1:1:
87 mm diameter, 17.6 mm depth

07
pearl glass frame /
champagne switch

08
coffee glass frame /
silver switch

09
champagne glass frame /
anthracite switch

01
white

02
slate frame / silver switch

03
slate frame / silver switch

04
wenge frame / silver switch

05
stainless steel frame /
anthracite switch

06
graphite glass frame /
white switch

Making home automation easier than ever. Simply smart. Zenit and ABB-free@home® transform the house or the apartment into an intelligent home. Whether it's blinds, lights, heating, air conditioning, door communication or scenes. Easy to control via a switch on the wall or with your laptop and smartphone. Very convenient, extremely comfortable, fantastically energy efficient and especially attractive in design. Only minimal costs are involved when compared with conventional electrical installations.

+ Wide range
+ Lighting in green and white, styling trim in chrome, anthracite, white and champagne
+ High-quality and durable finishes, noble materials in frames
+ Following the Eco-Design ISO 14006 regulations, made in Spain with 100% renewable energy
+ More than 100 functions in four finishes

ZENIT

| Article no.	**09** N2201 AN N2271 CH
Order no.	**09** 2CLA220100N1801 2CLA227100N3902
Available	

With a luxurious touch

—

Impressivo

Impressivo range gets reinforcements from new black matt color. Black matt brings new dimensions to Impressivo design with its deep color and matt surface. The black matt fits perfectly with different surface materials: timber, polished and semi-raw concrete to name a few. Black matt is the perfect partner to complete an astonishing setup. With Impressivo, you can complete installations from all different size of households to challenging commercial facilities and public buildings.

Impressivo is reinforced by the new black matt colour. Combine the best installability on the market with uncompromising elegance in both new construction and renovation projects. The series is suitable for both flush and surface mounting in common dry and wet environments.

The charm of the black matt lies in its uncompromisingly sleek design that together with deep dark colour and matt surface creates a modern impression.

+ Wide range of functionalities
+ Fully compatible with the existing colour range
+ Soft touch surface
+ Products for both flush and surface mounting
+ Suitable for common wet and dry environments

01
black matt
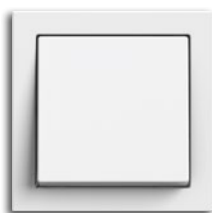
02
white

03
aluminium

04
anthracite

IMPRESSIVO, BLACK MATT

|	
Article no.	**01** 1066UC-885
	1721F85-885
Order no.	**01** 2TKA00004297
	2TKA00004071
Available	

Ready for a warmer future

Millenium

Today more than ever, whether at home or when a visiting hotel, we need spaces that provide a sense of safety and comfort.

Marble, glass, and metal have given way to new design trends where warmer colors inspired by natural elements such as coffee beans, earth or sand evoke a greater sense of well-being.
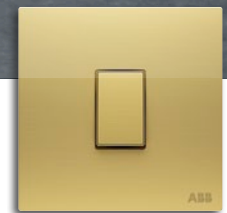
03
matt gold

04
antique gold

01
Mocha Brown

02
Dune Sand

Mocha Brown and Dune Sand are inspired by these familiar elements to bring a warm feeling to the interior design of contemporary spaces. A 0.6 mm paint coating is applied over the top quality steel resulting in an unobtrusive piece of furniture that is both tactile and visually appealing.

+ Premium British Standard light switch range with more than 32 functions
+ Compatible with building automation solutions from KNX to ABB-free@home®
+ Slim design, only 4mm cover frame height
+ Three different rocker sizes: Standard, Premium and Multi-gang
+ Ecodesign certificate
+ In compliance with international standards: CE, BS, G-Mark, SASO, SS-Mark and ISI

05
stainless steel

06
stainless steel,
BS switched socket outlet

07
silk black

MILLENIUM

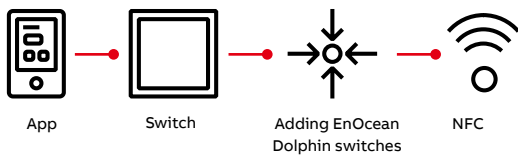|	
Article no.	**01** AMD43044-MO
	AMD5144-MO
	02 AMD43044-DU
	AMD5144-DU
Order no.	**01** 2CLA620400N6601
	2CLA627100N6601
	02 2CLA620400N6201
	2CLA627100N6201
Available	

Smart Switches make it easy

With the smart switches from ABB you use a reliable and energy-saving technology - without battery and free of current. Installed here is the EnOcean Bluetooth module. It makes possible maximum compatibility with the partners from Casambi, Helvar, Vassloh-Schwabe, Xitaco, Wirepas.

+ Smart Switch, for example, is added to a network via the Casambi app
+ Supports the identification and connection with NFC (Near Field Communication)
+ The switch can now be occupied with up to four functions with the app
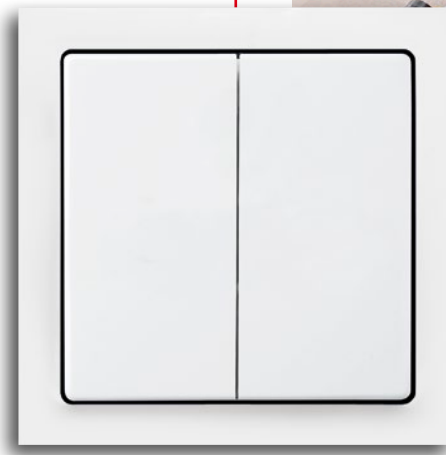
Added to an existing network via the Casambi app.

App — Switch — Adding EnOcean Dolphin switches — NFC

Smart switches can be easily integrated into the existing electrical installation or installed as separate operating location.

— Download app now

Download on the App Store

GET IT ON Google Play

Casambi-App

Via the manufacturer's app you intuitively control all functions - from simple light control up to complex colour controls, scenes, grouping of lamps, etc.
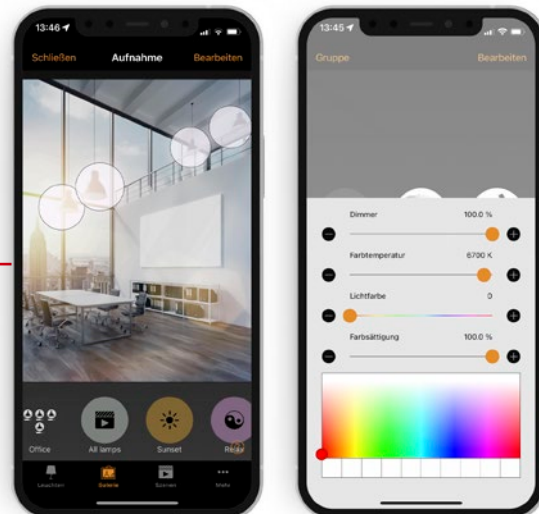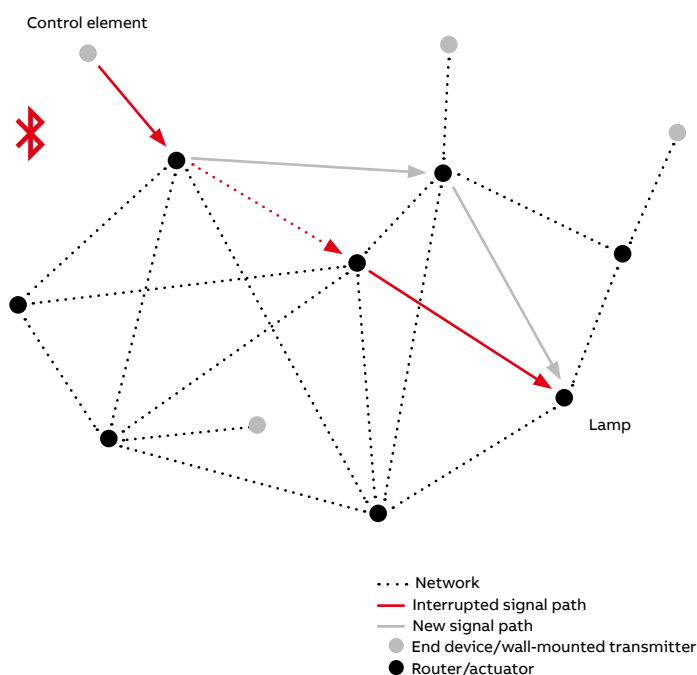
SMART-SWITCH

Article no.	6716 UBT
Order no.	2CKA006710A0015
Available	

—

The Mesh network

The Mesh network creates a basically solid connection with reliable functionality.

Control element

Lamp

··· Network
— Interrupted signal path
— New signal path
● End device/wall-mounted transmitter
● Router/actuator

Electronic room temperature controller
The new electronic room temperature controllers can be operated precisely via a large adjusting handwheel. This adjusts the room temperature in no time at all. The flush-mounted inserts are 25 mm flat and are easy to wire.

+ Design integration inti the switch range
+ Precise operation with a large adjusting handwheel
+ Low mounting height of the control element
+ Also for setting the heating an cooling

COVER PLATE FOR ROOM THERMOSTAT

Article no.	1794 R-84
Order no.	2CKA001710A4201
Available	February 2023

ROOM TEMPERATURE CONTROLLER HEATING COOLING, FM

Article no.	1099 UHK-101
Order no.	2CKA001032A0530
Available	February 2023

100% – everywhere, at all times

02
Busch-powerDock charging cradle
with Apple lightning connection

Mobile devices are in continuous use. They are taking on more and more functions and even today one cannot imagine life without them - for some not even for just a day. This makes it necessary to set the basis for constant readiness.

The right charging option for each use and connection. Whether in the kitchen where a coffee machine or toaster must be supplied at the same time. Or as powerDock charging station in the bathroom as quietness/charging place and in its entirety in switch design.

+ USB type A, C and Apple Lightning
+ Overload protection
+ Also as powerDock with charging cradles

USB POWER ADAPTER INSERT, FM

Art.-Nr.	**01** 6475 U
Bestell-Nr.	**01** 2CKA006400A0398
Available	

LET THE
MUSIC PLAY!

—

Busch-Radio DAB+

Its biggest strength is the inconspicuousness: integrated into the flush-mounted box the radio makes its services available very discreetly. The high resolution colour display shows all information, such as station, music title, album cover image, etc.

DAB+ is the digital radio format which guarantees the best sound quality. After commissioning, the stations are ready independent from the Internet without frequency search. If desired, the package includes: loudspeakers, that can also be installed in the wall or ceiling.

+ First-class sound quality without error
+ Alarm call function
+ Matches perfectly with the ABB switch ranges

—
High-performance loudspeakers with high sound quality - also for flush-mounted installation

01

Welcome to Welcome!

Intelligence at ABB already starts in front of your house. The door communication is also the most important showpiece of your home and with it also for yourself. ABB-Welcome not only guarantees an extremely stylish reception, it also cares for maximum safety and comfort. Now new: ABB-Welcome operable via ABB-free@home® app next.
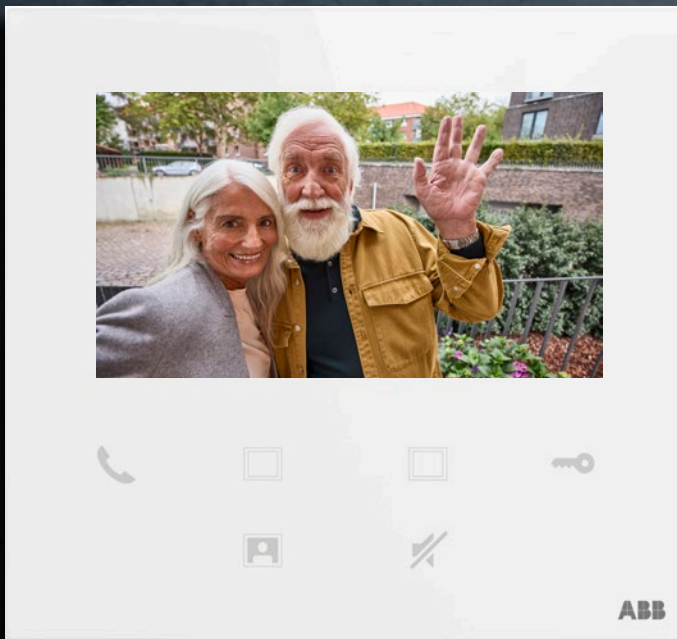
—
ABB-Welcome
indoor video station 4.3 WLAN

Your operating station internally is unbelievably compact and very easy to operate. Handling is intuitively understandable also for children. The display consists of glass and is therefore an enjoyment not only haptic, but it also brilliantly reproduces the picture of the camera. It is coupled to the ABB-Welcome bus with a 2-wire connection and is also supplied with power in this way.

The indoor station can be connected with the home network and WLAN without any problem. With the ABB-Welcome IP gateway you can respond to the bell call at the door also while traveling. Make the video contact with a mobile terminal device via myBuildings portal, speak and, if necessary, open the door if your child has left the key at home.

+ Up to 8 mobile phones, tablets and similar can be connected via the station with myBuildings
+ Control from the couch or even while travelling
+ Minimal and intuitive user interface
+ User-friendly installation and commissioning

ABB-Welcome gateway also allows the door to be opened while travelling

—
Easy commissioning via QR code

ABB-WELCOME INDOOR VIDEO STATION 4.3 WLAN

Article no.	M22401-W
Order no.	2TMA220050W0022
Available	

NEW
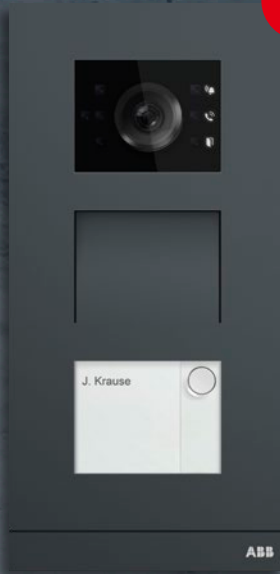
ABB-Welcome IP outdoor station 5" –
Door opening with QR code

The door opens via the QR code? This is now possible thanks to a new Firmware for the outdoor video station touch 5" of ABB-Welcome IP. The QR code is created fast and easily via the ABB-Welcome app. The runtimes of the QR code can be adjusted individually according to the requirements. Whether the QR code is only used once, four times on a defined day or during a time from x to z, is entirely up to the user. QR codes can also be created that allow permanent access.

This new application offers an easy and time-saving alternative for many areas - whether for Airbnb, normal holiday flats or simply for the private home. This allows you to permit the neighbours to water the flowers during your holiday or tradesmen to already gain access while you are still stuck in the traffic. With this solution a physical key is no longer necessary.
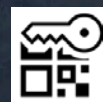
When IP cares for IQ
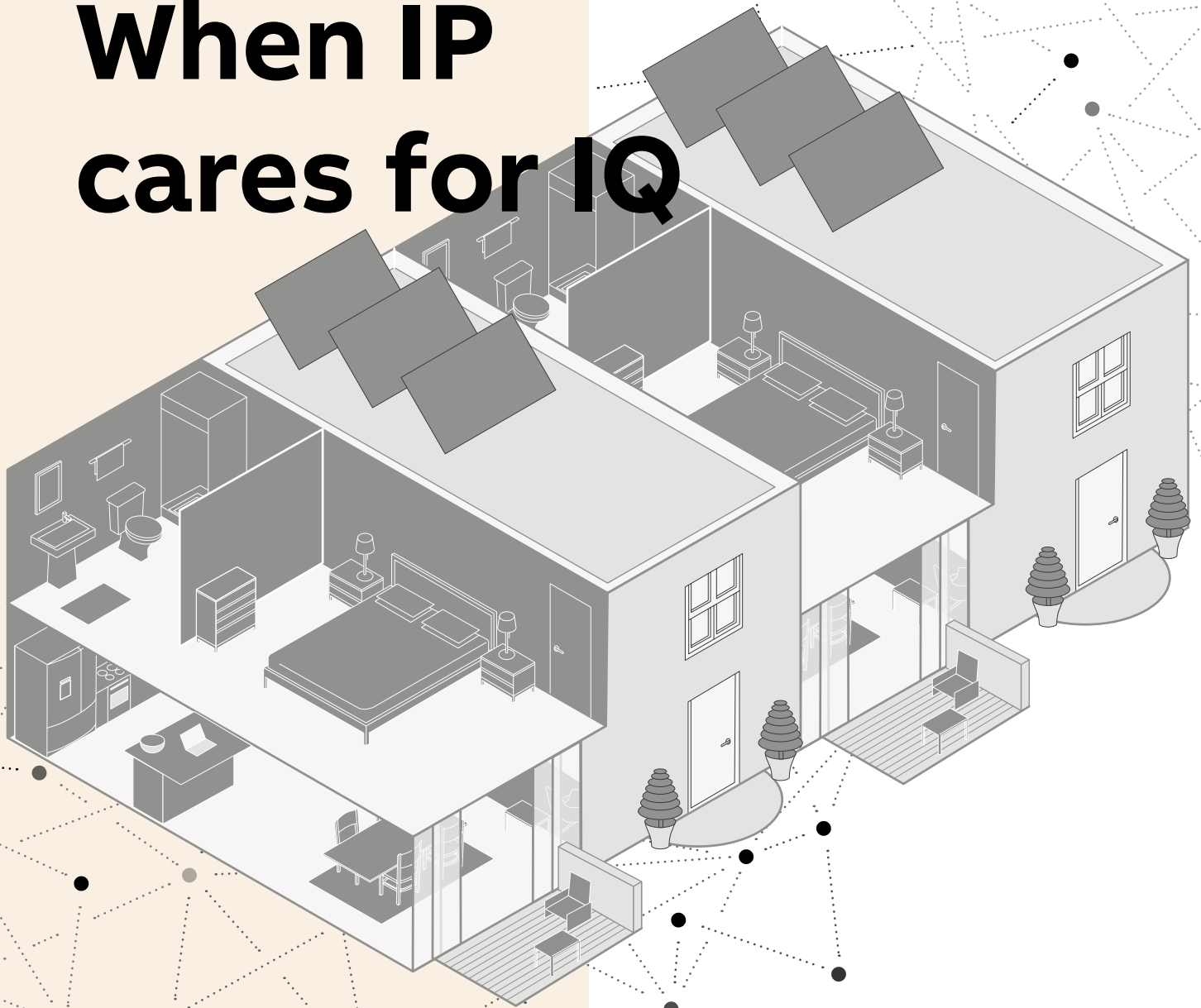
The new generation of door communication - with indoor and outdoor station of the very best. HD video communication, that is also possible remote controlled. The Internet-based solution is safe and free of errors. This makes building control at the entrance a pleasure.

01
IP touch 10

Your solution without cables. Easy to install and easy to intuitively operate with the devices of the new generation. For example, the IP touch 10, which makes perfect access control possible. The touch display made of glass feels very good and impresses with its sophisticated characteristics.

Contact from door to door

02
Outdoor video station

03
Outdoor audio station

04
Outdoor station mini

05
Indoor audio station

—
ABB-Welcome IP modular outdoor stations

Whether audio or video - the outdoor stations make an excellent initial impression on your guests. In this way you have already expressed half a welcome. For single or multi-family houses, many doorbell buttons can be installed individually.

You are also flexible in the design of your outdoor station: the audio/video module and the push-button module can be arranged differently. They are easily latched into the front plate and connected with an especially robust flat ribbon cable.

MINI VIDEO OUTDOOR STATION, 1 BUTTON, ID,FM

| Article no.	H81363P1-A
Order no.	2TMA130010A0007
Available	

Encryption instead of key

—

ABB-AccessControl

Safety is taken very, very seriously. With ABB-AccessControl digital cylinder locks take over the access and data is transmitted highly encrypted. The perfect access control that is not only especially safe, but also extremely comfortable. And very stylish. New: with 8 mm cylinder, also for extremely modern doors with security lock.

Via the myBuildings portal access to the system from anywhere is possible at all times.
This means that you can also allow people standing at the door to enter when you are not at home yourself. The courier can safely put down the package, or your child can start with the homework. The online management system is intuitively operable. Decentralized control and installation options also effectively protect the system against unauthorized access.

ABB-AccessControl can be combined with ABB-Welcome IP via the Smart Access Point.

+ Safe entry without key
+ Individual access control
+ Easy to scale to each project size
+ Different lengths for different door strengths
+ Battery operation with intelligent status notice

Secure keyless access

01
Euro-semicylinder

Individual access control
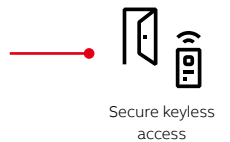
02
Euro-cylinder
with rotary knob

03
Transponder

EURO-CYLINDER WITH ROTARY KNOB, 30 MM/30 MM

Article no.	**02** D01EU303008TF1-04
Order no.	**02** 2CKA008300A0765
Available	

PERFECT SUPPLEMENT FOR SUB-DISTRIBUTION

IP Switches

IP-based systems such as the ABB-VideoControl, ABB-AccessControl and ABB-Welcome IP assert themselves more and more. No wonder, because the networked operability of smarter functions knows no limits for the number and transmission range of terminal devices. Added are the advantages of flexibility, comprehensive access options that independent of location and time, as well as simple handling. Care for perfect IP connectivity.

Power supply via Ethernet/PoE

IS/S 8.1.1

+ Suitable for the industry
+ Compact construction (8 module width)
+ Plug-and-play
+ MDRC devices for fast installation on modular DIN-Rail Components
+ Supports an extend range supply voltage 110 – 240 V AC
+ LEDs for a clear display of the status
+ QR code for better traceability
+ 8 Ports (IEEE 802.3)
+ Fast Ethernet (100 MBits)
+ Unmanaged

ISP/S 8.1.1.1

+ Power via Ethernet (55 W)
+ Power supply integrated
+ Suitable for the industry
+ Compact construction (12 module width)
+ Plug-and-play
+ MDRC devices for fast installation on modular DIN-Rail Components
+ Supports an extend range supply voltage 110 – 240 V AC
+ LEDs for a clear display of the status
+ QR code for better traceability
+ 8 Ports (IEEE 802.3)
+ Fast Ethernet (100 MBits)
+ Unmanaged

KNX IP ECO-System

ABB EQmatic energy management
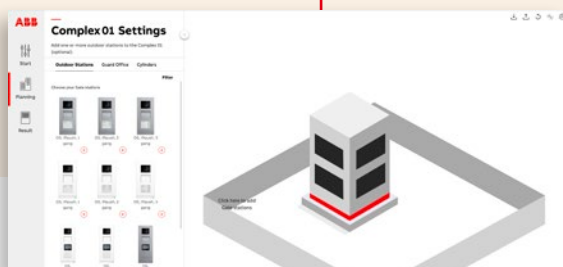
Power circuit monitoring system CMS

IP door communication

Additional IP devices

Start your welcome-project
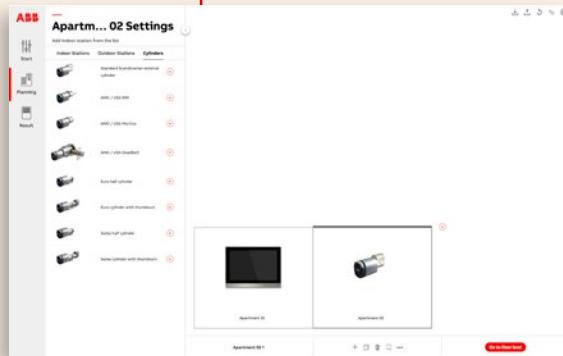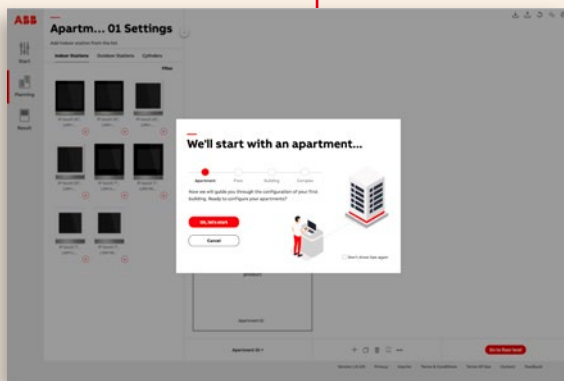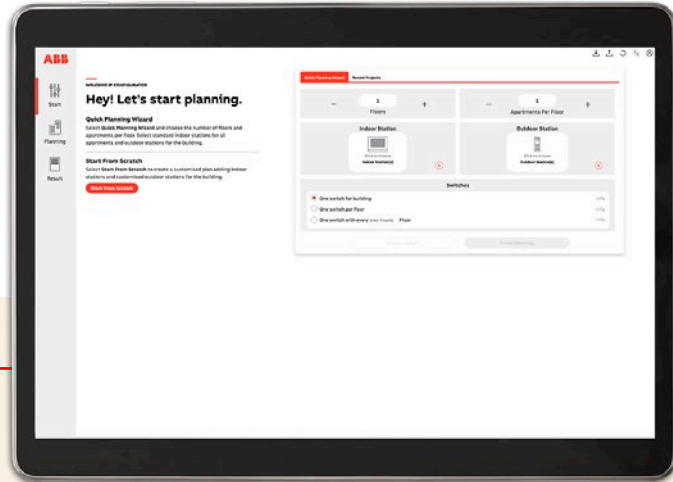
ABB-Welcome IP Planner

Intelligent door communication significantly increases the esteem of your home and definitely its value. With the installation you not only increase your level of safety, but additionally also a sustainable investment.

To give you an initial insight as to how your coming project is designed, we offer you the ABB-Welcome IP planner. With a few questions and clicks you receive a specific idea about the components you need and what they cost. This creates planning safety - and raises the anticipation for a system that offers you new living comfort.

Directly to the
ABB-Welcome
IP planner

The detailed planning then makes the project definite. With just a few clicks you have created a fully extensive plan which specifies the calculation and the implementation. This also provides a clear overview of complex projects that include several apartments in the one house. Everything up to the access control is quickly

—
Directly to the
ABB-Welcome
configurator

ABB-Welcome IP configurator

Also specialists find genuine benefit with our new online service ABB-Welcome IP configurator. Because the planning, calculation and setup of an ABB-Welcome IP System has never been so easy.

A quick planning wizard assists you in a fast process for setting up a project. This enables you to plan overviews and details totally individually and with a maximum of ease. Floors and apartments in a unit are quickly recorded and equipped with all devices.
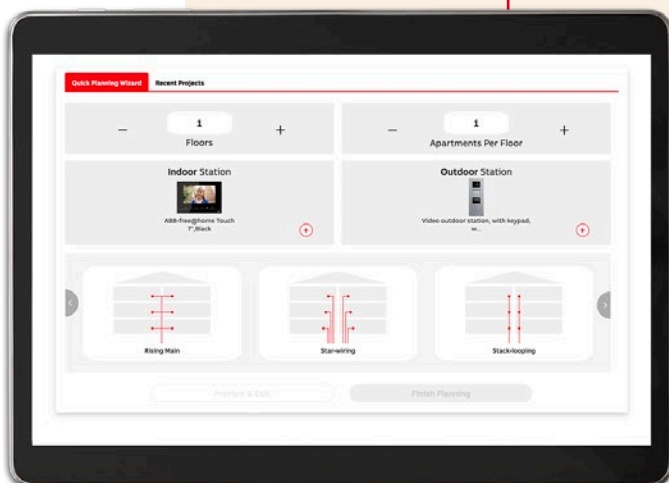
+ Web-based planning tool
+ Fast planning for electrical wholesale trade
+ Detail planning for electrical installer
+ Creating a total concept with just a few clicks

Smarter Building

Entering the future

Smart Building is the standard already today. And it is turning into a necessity to an ever greater degree. Because only intelligent house technology can meet the demands of the future. Heating, air-conditioning and a lot more can in reality only be controlled automated.

The contribution you make to the use of intelligent building automation is incredibly valuable. Not only for the stakeholders of your project but in a holistic social sense. You accept responsibility and exert yourself for a better and more sustainable future.

Yet, one should not forget that it is also a lot of fun to plan and develop a Smarter Building. Designing comfort, offer safety - all that is very satisfying and generates even more enjoyment when the right partner is at your side. We at ABB are happy to accompany you.
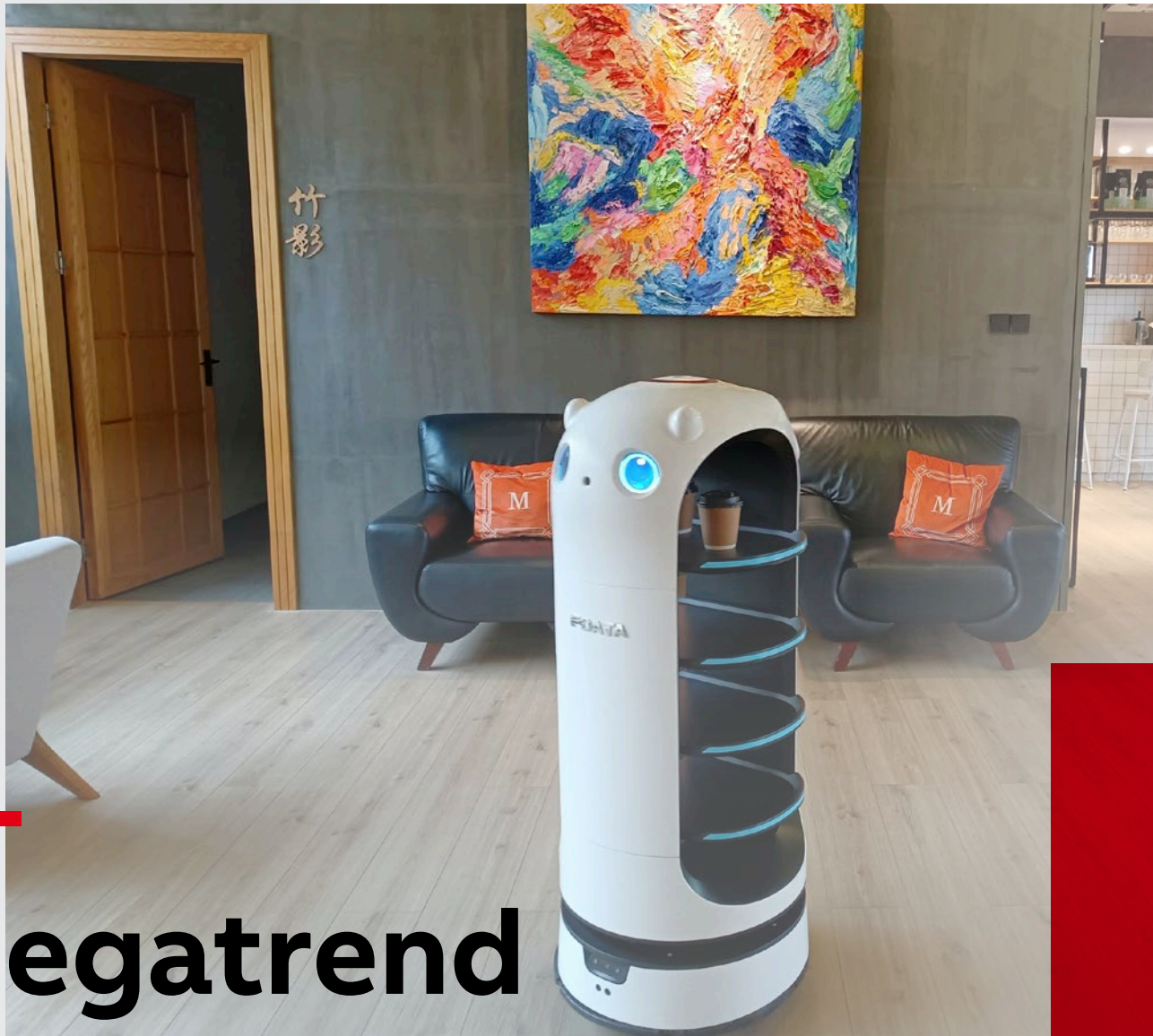
Megatrend Connectivity

Context Awareness as target

Intelligent programming that is in a position to foresee human desires and requirements - that is how our future personal assistants will be equipped. Thanks to context sensitivity we recognize our environment and suspect what we are currently desire - or maybe not desire because our senses are not yet focussed. The male or female assistant has studied our habits and preferences during a period of time. And, as a result, the light is dimmed and the radio is switched on automatically at a particular time in the evening.

Smart Metering and Smart Grids will ensure that we design the consumption of water, power and gas optimally. No longer any unnecessary loss. They also ensure that we acquire our supplies as inexpensive as possible. But also with the inclusion of what is important to us, e.g. Sustainability.

Robotics finds its way from production in industrial plants to services in private and commercial buildings.

We are networking ourselves more and more. Private connections are increasing because they are created with click thanks to social media and messenger and are cared for uncomplicated, even across foreign languages. And even in professional regard we are expanding our horizon with a growing network. And there the development of the Smarter Home and especially the Smarter Building is only logical.
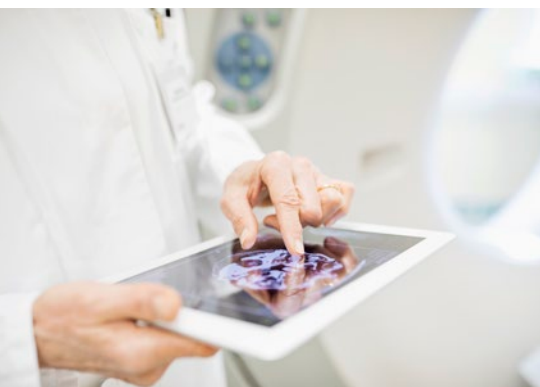
Artificial intelligence and robotics, which we considered to be science fiction not so long ago, will soon be noticeably present. A special main emphasis, that will make life considerably easier, is the cleaning. This applies to ones own home and is of an even greater dimension in the commercial level.

Door communication and the associated safety will in future no longer be managed with keys and encoding, but with intelligent cameras that control the access. But that also control gas flows, fire, air quality and even electric lines and water pipes.

—

Digital health

That the own four walls are a safe place is especially important for elderly people. This applies to ones own home, but also for temporary stays, such as in hotels. A special main emphasis of the intelligent innovations is located in this sector. Because to maintain the independence for a maximum period is the deep desire of every person.

Mirrors that analyse the skin image and detect changes in the pigmentation, armchairs measure health data, carpets detect a crash, mattresses generate alarms, when the person does not rise. Added are robots as caring helpers that massively increase the independence - and with it the quality of life.

The latest researches in the lighting technology will advance the intelligence of light even further. LEDs get more similar to daylight, even the course of the day can be simulated with angular displacement and additional settings and so attain a very important factor of wellbeing. Very relevant for people at work. Because lighting that makes happy, also cares for health in the long term.

Smart technology will also be no end in itself in future - it always has to do with intelligent solutions from person to person

Five stars for intelligent solutions

Hotels have their specific demands. Because where guests want to enjoy their time, there is no place for complicated technology. Maximum simplicity in operation, intuitive in design - in quiet service with discreet charm. And when the technology on the side is a powerful manager in matters of energy efficiency - perfect!

Electronic push-button

As 1gang, 2gang and 3gang design for use in the KNX sector, but also suited for ABB-free@home®. The digital push-buttons with LED lamps can be used for different functions: light, blinds, scenes. Each electronic push-button has two clamp blocks that make possible a very comfortable connection, simple wiring and clamping.

+ Ideal in connection with room controller (binary inputs)
+ Additional options with integration into the KNX system
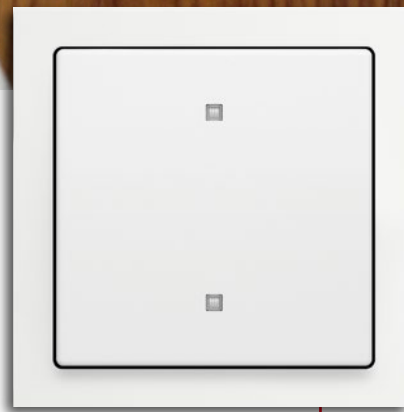
01
Electronic push-buttons 1gang
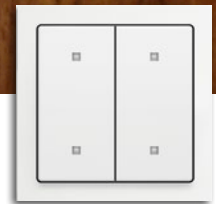
02
Electronic push-buttons 2gang
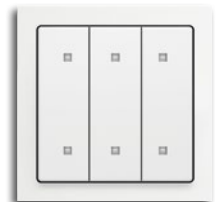
03
Electronic push-buttons 3gang

04
DND/MUR Corridor
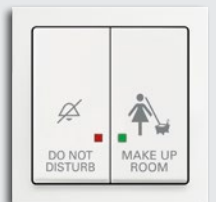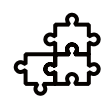
Service switches

"Do not disturb" and "Make up room" – the minimum communication between guest and personnel that is very important. Your guest controls it with a movement of the hand. Switched inside, the message is displayed outside.

The mechanical switch is now also designed with extra-low voltage (24 V) and compatible with bell wires and common hotel networks.

+ Installation in multi-frames
+ Available in many switch designs

05
DND/MUR room unit

RFID card switch

Something your guest is already used to: opening the room with a card. Yet, the RFID card can do even more. It activates the lights and heating, and so creates a welcoming reception. If the card is then inserted into the card switch inside the room, the guest is then present and the air-conditioning system and heating are kept in operation. Now something new: if the card is removed, the guest is then absent and the functions are successively ended according to the set mode. A genuine contribution to environmental protection and the saving of energy.

+ 4 different modes for individual use
+ Available in many switch designs

Automatic switch-on and switch-off of the lighting

Switching the TV on/off when entering/exiting

Automatic control of heating/air-conditioning during presence/absence

COVER 3FOLD, ELECTRONIC PUSH-BUTTON

Article no.	**03** 2570-30-84	
Order no.	**03** 2CKA001751A3280	
Available		

BELL PUSH-SWITCH DND/MUR

Article no.	**03** 2059 UC-84	
Order no.	**03** 2CKA001751A3240	
Available		

Using the television or beamer as a second screen

Replaying music via the television on the media equipment

Loading via USB of smartphones and Co.
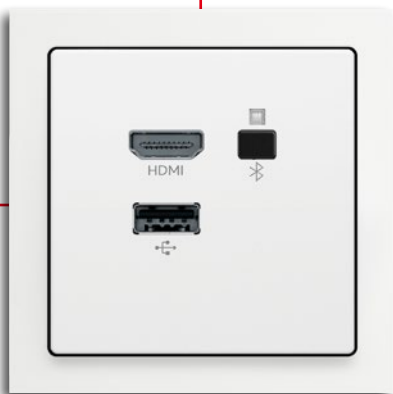
Multimedia Connector

With one switch you offer your guests the entire range of the use of media. Streaming of audio and video as well as charging of various terminal devices. That makes your guest feel right at home - no matter whether in the guest room or the conference room.

Thanks to an HDMI socket, a television can be used as a second monitor. The integrated Bluetooth interface makes possible the transmission and playing of music. A USB connection offers the option of charging the mobile phone.

+ Also possible as extended installation
+ Available in many switch designs

—

The ABB i-bus® Tool

The ABB i-bus® Tool is a software concept that actively supports your system integrators during the installation and continuous care of the KNX system. It practically supplements the configuration software of KNX, the so-called ETS, and makes monitoring of the devices and insight into the device status possible.

Each KNX device gets its own user interface, a plug-in. Special information is displayed and settings are made possible. This makes you independent from an ETS specialist and you can carry out your maintenance as usual with the system integrator you trust.

The ABB i-bus® Tool is updated regularly and made available free of charge. Each update takes new KNX devices into consideration and supplements functions. The latest integration: our proven ABB i-bus® KNX switch actuator range.

Make your building intelligent - it not only increases in value, but also saves money every year.

SUCCESS FACTOR: ACTUATOR

The latest generation of switch actuators that expands you KNX system with many options. Combi, Standard and Professional – in all areas we replenish.

Special design

Easy installation
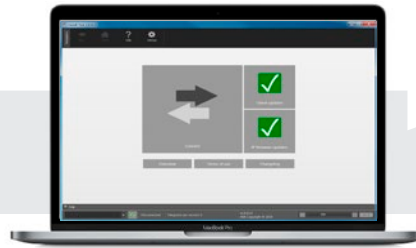
Compact technology

ABB i-Bus® KNX Combi switch actuators are joined mostly in apartment building projects and care for the highest flexibility with the combination of switching and blind functions.

+ Switching and shading in one device
+ Compact design: half the size
+ Large selection of nominal currents and wide range of channel offers
+ Intuitive operation
+ Increased security levels

ABB i-Bus® KNX Standard Switch Actuators are used in all areas and cover the basic functions in modern commercial projects.

+ Mounting and dismantling without tools
+ User-friendly interface
+ Suitable for all popular switching requirements
+ Simplified commissioning thanks to template pages and central group objects in the ETS
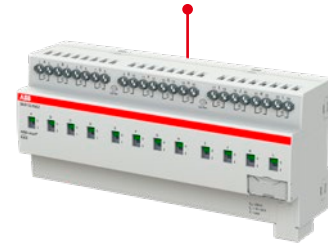
ABB i-Bus® KNX Professional Switch Actuator specially for major projects that have their own demand for intensive energy management.

+ For high and capacitive loads up to 20 A C-load
+ Cost and time-saving commissioning
+ Mounting and dismantling without tools
+ Highest quality
+ Extended energy management function available

ABB I-BUS® KNX NOVELTIES

62

TOOLS FOR REAL PROFESSIONALS
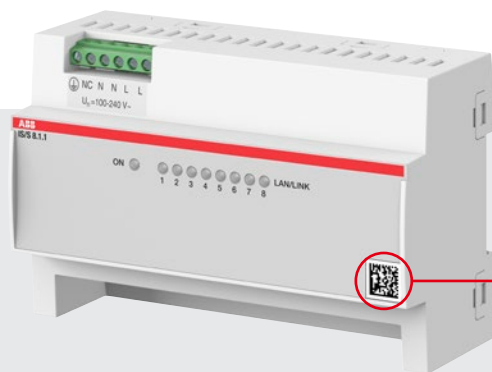
—

ABB product scanner app

ABB devices and components that we have fitted with a QR code can be read out with the app. Ideal for installers, the technical support of ABB employees, but also for operators.

The readout of stored data significantly simplifies fault analysis. Additional safety offers the option of being able to send a device list directly to ABB to gain quick support.

—
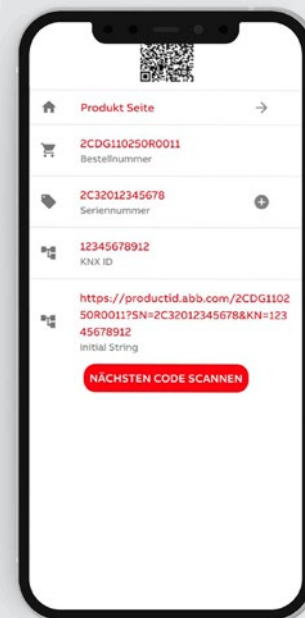
Traceability on principle

The ABB product scanner app is an active contribution for traceability and therefore proof that we respect the value-added chain and its importance. The traceability of our products and their components is a reflection of our sense of responsibility: the objective of the traceability system is not merely the reduction of costs, but also the economizing of resources and minimization of risks.

Download app now

Download on the **App Store**

GET IT ON **Google Play**

The system that lives

ABB Update Copy Convert

The ETS app searches automatically for updates for KNX devices and takes care of trouble free functioning. Very time-saving: you can also update several devices at the same time.

The conversion also proceeds extremely comfortably. Transmit the configurations of existing devices simply into a new one, e.g. when you want to replace an 8gang switch/blind actuator with a 16gang one. Simply select and assign - finished. Parameter settings have never been carried out so quickly.

Also exporting and importing of device configurations is possible.
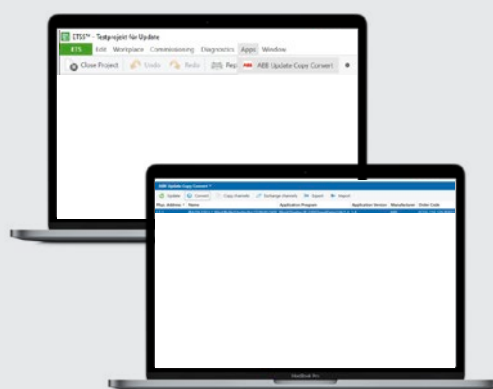
ABB Update Copy Convert is available as brand-new version in the ABB myKNX-Shop for downloading free of charge.

ETS-APP
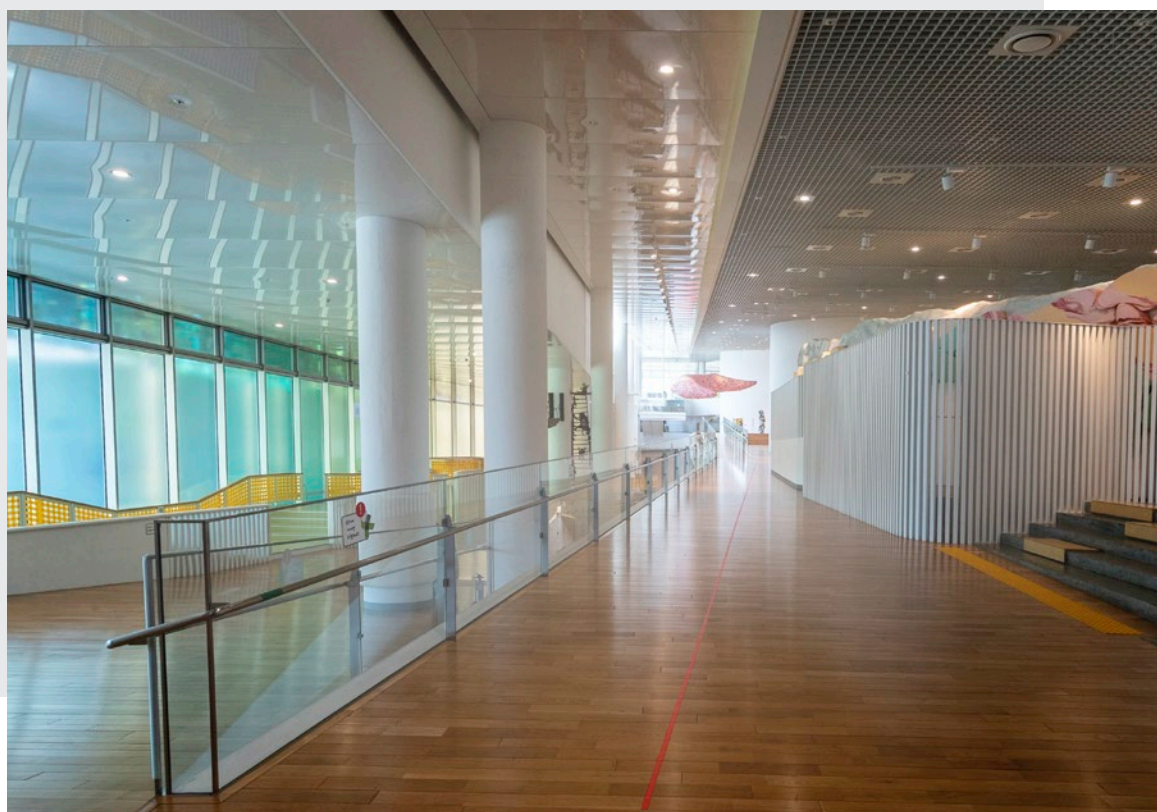
Light as a factor of well-being

DALI lighting control system

DALI Gateway Premium

Illumination is often underestimated. Yet light intensively determines the biological and emotional senses of a person - their mood, their productivity and their health.

The DALI Gateway Premium opens the maximum of intelligent lighting control. It makes dimming of LED lamps possible with variations of the colour temperature, as we know it from incandescent lamps. Thanks to the DIM2Warm function an atmosphere of the activity and concentration can be created as well as one of relaxation and comfort. Even the simulation of daylight with its entire time sequence can be simulated, key word: Human Centric Lighting (HCL).
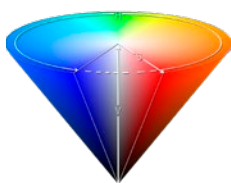
The RGB colour system: each light colour is composed of red, green and blue and can be created with the DALI Gateway. Yet the control is made more intuitive, because the saturation and intensity are taken into consideration during the setting.

Added are the control of light colours, that achieve a totally individual effect. If desired, the entire colour spectrum can be set into the scene, even in complex sequences that are easy to program.

BESTELLDATEN

Article no.	**01** DG/S1.64.5.1, **02** DG/S2.64.5.1
Order no.	**01** 2CDG110273R0011, **02** 2CDG110274R0011
Price	**01** 536,00 € **02** 608,00 €
Available	

Truly the one

ABB Caldion®

ABB Caldion®, part of the ABB i-bus® KNX portfolio is a Room-Temperature Controller for fan coil units with either 2 pipes, 2 pipes with electric heater or 4 pipe system application. Flush Mounted, BS standard; it can be installed as a standalone configuration or with built-in integrated bus coupling as a KNX device.

It is equipped with a temperature sensor and 2 x binary input for either presence detection, window, dewpoint alarm or condensate alarm. It has an integrated actuator for valve control of on/off or 0-10V with 3 x fan speed control. It has dedicated capacitive touch control button for intuitive control and mode operation selection. Its frameless design equipped with a large display ensures the ease of viewing and elegance to complement the surrounding.

Benefits:

+ Easy replacement for existing conventional thermostat
+ Cost-effective installation
+ Intuitive design for ease of controls
+ Simple and effective application with option for expansion

01
ABB Caldion® for KNX
Room temperature
controller
Black

02
ABB Caldion® for KNX
Room temperature
controller
White

Features:

+ An integrated (control and actuator) room temperature controller
+ One device supports multiple types of application
+ Option to select standalone or KNX configurations
+ Enhance function configurable via ETS application

ABB CALDION®

Article no.	**01** CAR/U4.1.1.1-71
	01 CAR/U4.1.1.1-84
Order no.	**04** 2TAZ740010R2001
	06 2TAZ740010R0001
Available	
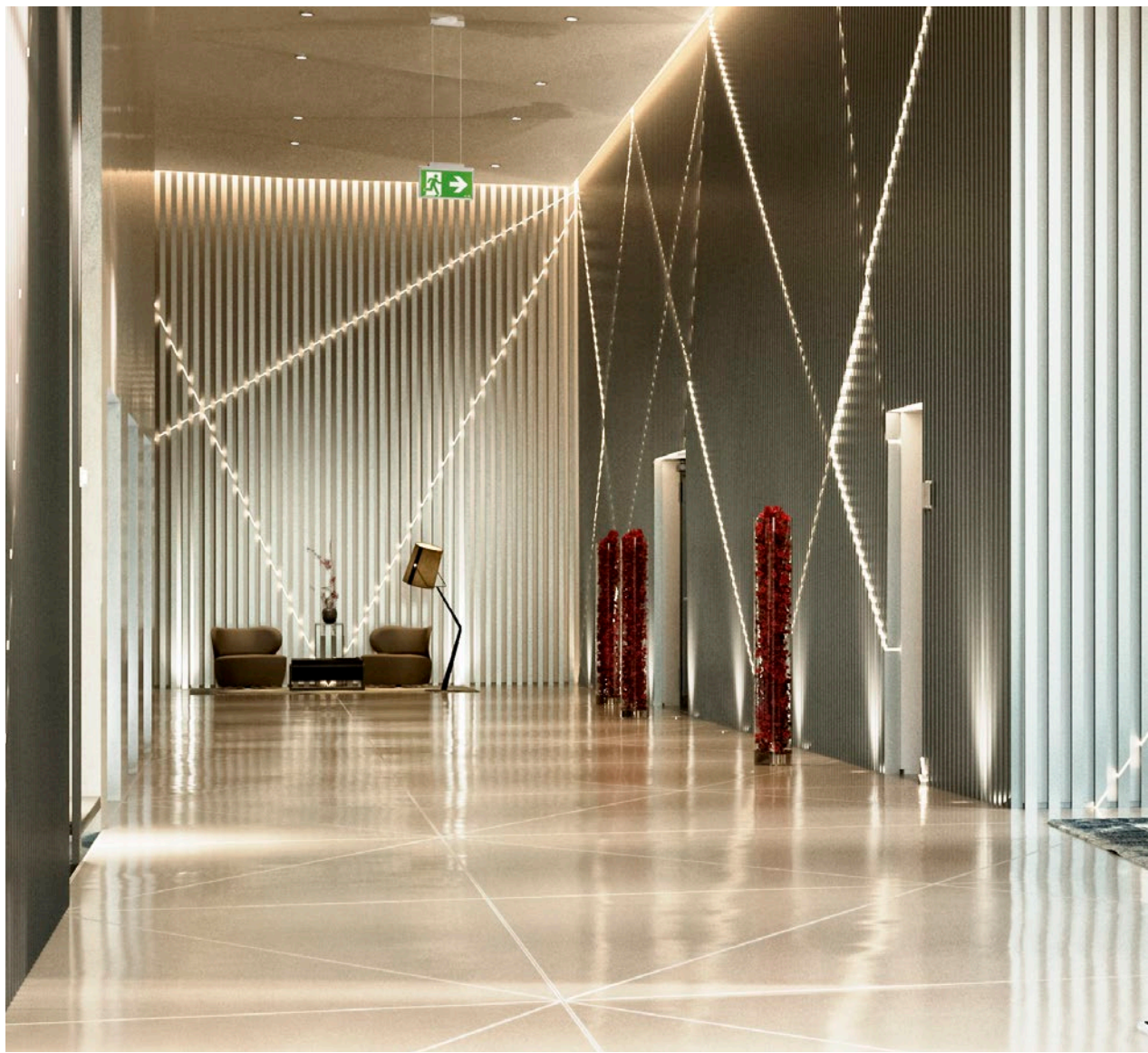
Always safe: DALI – Security illumination

Important for life and survival; the security illumination and emergency lights in buildings. Mounting and maintenance are subject to strict legal regulations.
This results in high expenditure of time and considerable costs. Good reasons for introducing intelligence into the system - with the safe and reliable single-battery solution of the DALI security illumination.

Test reports
Download

DALI control unit DCU as
autonomous System

DALI Bus line A

DALI Bus line B

Network

DALI

Significant reduction of
maintenance costs and
expenditure of time
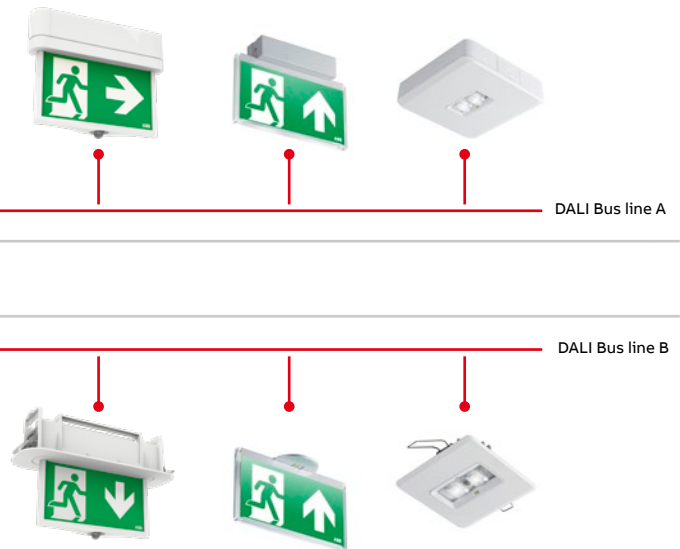
Monitoring system for emergency lamps

The single battery solution is ideal in case of power failures. Because the reliability of the security illumination in cases of emergency is everything. The status of the emergency lamps is monitored via the DALI bus, necessary test commands are sent and the results are signaled back. This guarantees the 100-percent functionality of the emergency illumination.

The system is controlled by a 7-inch touch panel that is not only intuitively operable, but also has the maximum control over the entire system. Even daytimes can be programmed and recorded. This is perfect reliability.

Easy to install as on-wall and in-wall mounting. The SMISSLINE TP plug-in base system cares for flexible mounting and allows contact-protected and finger-safe work.

It can be extended at all times when special extension is planned, but also open for third-party system components to the extent they are compatible and can communicate with each other.

+ Fully addressable system with central monitoring according to EN and IEC standards.
+ Reducing maintenance times and costs
+ Easy to install and to group

DALI EMERGENCY CONTROL UNIT

Article no.	ELDCS1/DALI/ABB
Order no.	7TCA305060R0005
Available	

Safety in an emergency

Modular and energy efficient - the range of security lamps and rescue signs for escape routes.

24/7 digital overview

Save time and costs for inspection and maintenance

Fast and intuitive app

MOVION®

—

Innovative modular technology

Developed especially for commercial rooms such as hotels, restaurants, offices and retail trading, the Movion® can also be mounted on the ceiling and walls for schools. The hybrid lamp combines rescue signs and security lamps. The lamps offer the option for throughput wiring and with a 3C adapter they are always suitable for power rail connection. Batteries are exchangeable without tools, which also saves time.

+ In the scope of delivery of the hybrid lamp:
  1 lux escape route illumination and
  5 lux for places to be highlighted
+ The optics are rotatable replaceable, and therefore have very flexible use

ABB GATEWAY

—

Security center

Your solution for inspection and maintenance for safety illumination with single battery. Via Cloud you get an overview on the Naveo®Pro App over of all devices and their status messages. The system of the security illumination manages itself and takes over the prescribed tests in the entire building.

The individual lamps are connected with the ABB Gateway via a bus line. It transmits the information via the Cloud to the app. The ABB-Ability™ Platform at the same time offers you integrated cyber security for high protection and reliability, makes better maintenance planning possible and reduces the operating costs.

+ Software for smartphone and tablet
+ Cloud-based information in real time
+ Reliable LED displays
+ Available now also in wireless

MOVION®

Article no.	EL800R-M3/ST ER
Order no.	7TCA305020R0104
Available	

NAVEO®PRO GATEWAY

Article no.	Naveo®Pro Gateway
Order no.	7TCA305060R0000
Available	
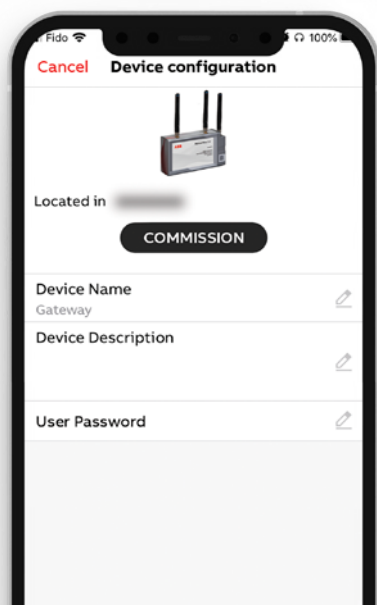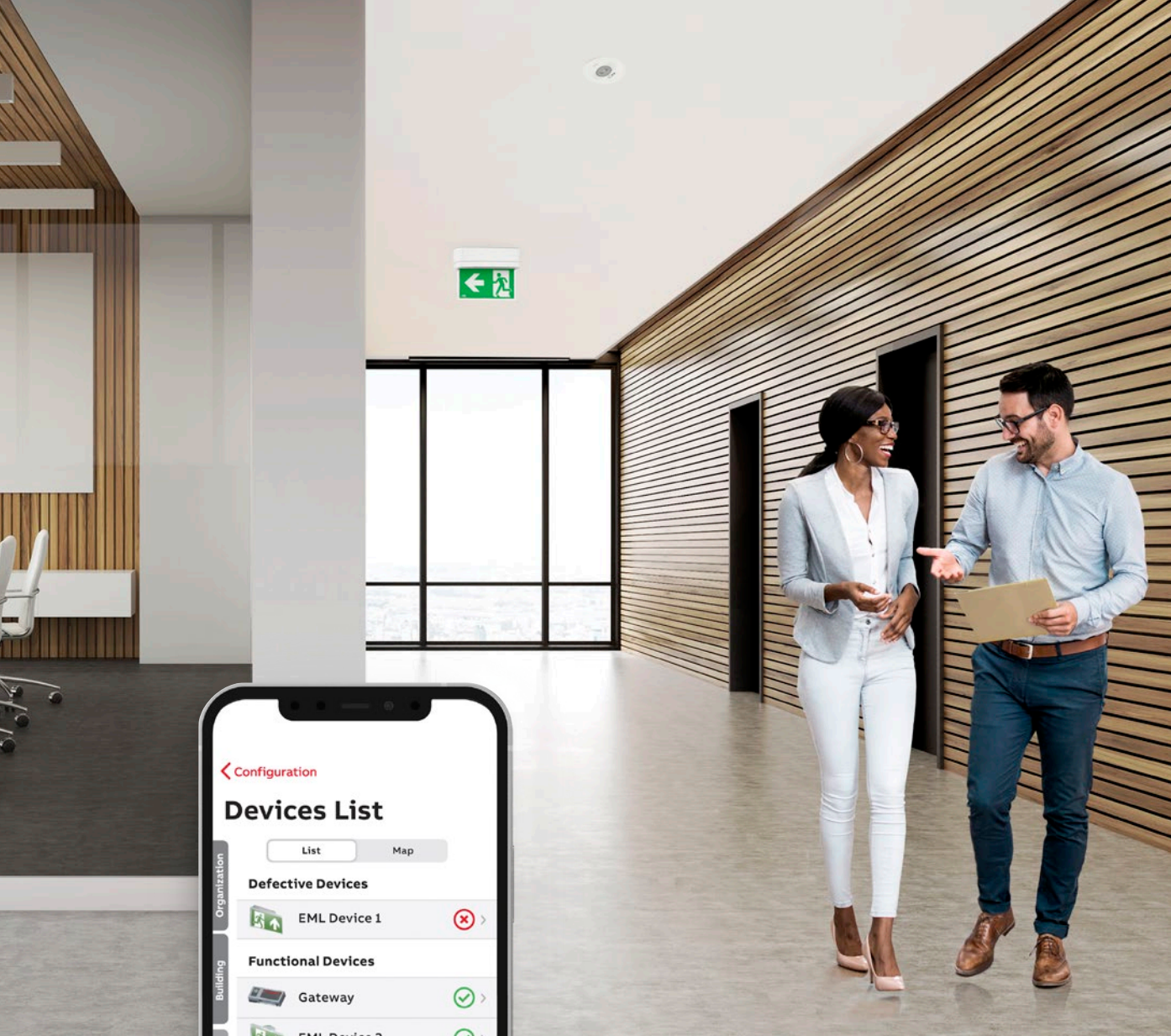
NAVEO®PRO APP

—

APP

The Naveo®Pro app offers a real-time overview of the entire security illumination of your organization. It puts you in a position to monitor every single floor in different buildings at different locations, and all that in just one application.

+ Test reports can be called up at any time and from everywhere
+ Creating and managing maintenance reports
+ Spare parts data of all lamps are always up to date

ABB Cylon® – the concept for the future

—

Energy management for trade and industry

With ABB Cylon® you implement more than just one concept, it is the sustainable ticket into the future. Control, monitoring and analysis in real time turn commercial buildings and public buildings into Smarter Buildings. With the entire potential that intelligent automation and digitalization offers.

The result: the highest efficiency in the consumption of energy for heating, ventilation and air-conditioning systems. But also illumination, shading and security illumination. This is how deviations in consumption are discovered and optimum adjustments are made. The energy analysis is made via open protocols and Cloud-based tools.

ABB Cylon® is a well-thought-out interaction of components, supported by the proven ABB i-bus® KNX system and other digital solutions and has versatile application both in new buildings as well as in the retrofitting of existing systems.

ABB bundles its experience in the building automation sector and energy management for commercial buildings and turns it into the solution for the future. Intelligence with a perfect interaction of devices and software create a system that is scalable for all applications.

Open integration into building management systems

The best side effects: with the implementation of ABB Cylon® also the comfort and the safety are increased in your building.

ABB FusionAir® Smart Sensor

The FusionAir Smart Sensor is a compact
room control device, available with and without
LCD display with integrated touch function.
The device range is switched directly onto
the BACnet controller and can be freely pro-
grammed. Also standard macros can be applied
and operation via smartphone or tablet is
possible.

Measurement functions such as temperature,
air humidity, CO_2 and VOC are implemented in
several versions.

BACnet® Controller/CB-Line and FLXeon

The automation controller of ABB Cylon® offers
comprehensive connectivity for overriding and
subordinate systems. BACnet and Modbus here
are the standard protocols.
The connection of hardware data points directly
to the CB-Line controllers or the mounting of
extension modules for the FLXeon range is
made uncomplicated and fast.
The connection to the building management
system ABB Cylon ASPECT® is just as self-
evident as the local operation via the ABB
Cylon® eXplore display.

MATRIX-11

The new control engine offers up to 750 data
points and supports a controller terminal
device. It serves for the setup of management
and control levels on the basis of ABB Cylon®
ASPECT for simple and medium applications,
such as the visualisation of a heating centre or
the control of time schedules.

Increase in the economic efficiency of your building

+ Reduction of energy consumption due to
  transparent energy data recording and
  downstream optimization measures
+ Reduction of the CO_2 footprint due to the
  optimization of the control behaviour
+ Resultant investment protection and
  increase in value

Remain sustainable in the competition
Intelligent automation and
digitalization reduces costs,
increases values and raises the
long-term investment yield

Optimizing energy efficiency
Drastically reducing operating
costs and CO_2 consumption
with Cloud-based solutions

Improving operation processes
Scalable management and operating
level access of ABB Cylon® ASPECT® to
the technology and analyses and
protocols around the clock
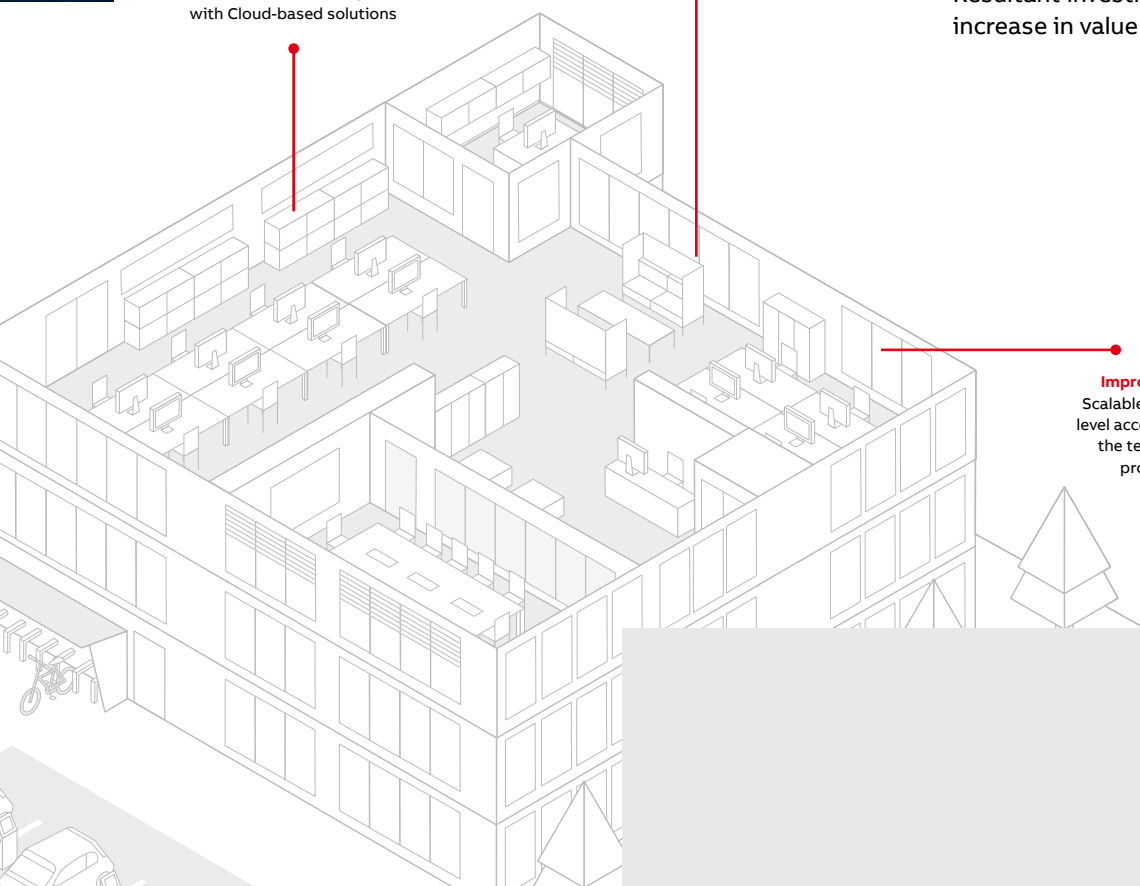
"I like my guests. I like taking care of them."

I have taken the hotel over during a phase in which it was completely renovated. During this phase I could quietly consider how much building automation could support me and my employees. The advice was excellent and covered areas about which I had never thought. Since a large part of the electric lines were laid anew, it seemed practical to care for a KNX system at the same time.

At the start it was important for me to automate the control functions: security illumination, smoke detectors, alarm sensors for carbon dioxide and also for water pipes - to always check this is costly since there are requirements that must be complied with. And then I had wishes with regard to energy management, and I wanted ideas for increasing the comfort of my guests.

The demands were of a wide range, but the offer was a lot larger. Now the rooms run down with regard to energy technology as soon as the guests leave the room, the heating and air-conditioning are decreased, lamps switch off automatically. This saves energy enormously.
A so-called card switch cares for this intelligent setting. And every guest can control the blinds, illumination and heating with via an attractive glass panel. This goes down well.

"THE CUSTOMERS LOVE THE INTELLIGENT HOUSE TECHNO-LOGY. THEY REGULARLY TELL ME THIS. AND IT SAVES ME A LOT OF TIME. THAT I GLADLY USE TO CARE FOR MY GUEST EVEN MORE. AND THAT THEY ALSO APPRECIATE."

MAJA GEIGERS, 50
HOTEL MANAGER,
KIEL

Yes, I find the result excellent. And it is not yet concluded. I can expand at all times, which I also appreciate very much. The basis is installed and I am completely open for new things. Especially for innovations that promote sustainability. I also gladly speak with my guests about this, and they find that interesting, make inquiries. The number of my regular guests is increasing. Who knows, maybe the appreciate the smart concept.

Electrical installations should always have the highest standard of safety. Our portfolio for interior installations are all components of the latest generation. More safety is impossible.

Act local – think global,
Energy distribution systems,
discover on Youtube

Safety up to date

Flexible

Safe

Quick

ComfortLine of interior fittings
For the innovative ComfortLine cabinet range, mounting friendliness and future capability were the main focus. This makes things go a lot faster.

+ 50% time saving during the wiring of intelligent measuring systems through innovative wiring channels
+ Main line branch terminals are integrated into the counter support plate
+ A patch panel for E-DAT and keystone modules
+ 50% larger flanges

TwinLine
The TwinLine N wall and stationary cabinets for the distribution setup fulfil all wishes: uniform range in both protection classes and faster and more flexible interior fitting at high mounting friendliness.

+ Innovative flange technology
+ Clearly more usable space for wire lead-in
+ Flexible interior fittings with CombiLine N modules
+ Optimum accessibility of 180 degree door opening angle
+ Fast, clear planning and calculation with the StriePlan software

CombiLine – Interior fittings with system
The interior fitting system for all cabinets: CombiLine from ABB Striebel & John is a well-thought-out system that makes everything possible. This, for example, makes modules for modular DIN-Rail components, bus bars or NH separators available that can be flexibly combined. The range also has modules available that are specially customized for the SMISSLINE TP system. Comprehensive accessories round the system off.

COMFORTPLANNER

The new software that enables the configuration of 100 counter places in record time. And, because this happens browser-based, you can do this at all times and all places.

Operation is extensively intuitive. You know which applications your customer wants to have connected and how many? Very good.

Then it can start. The ComfortPlaner supports you with automatic functions and accompanies you in this way through the entire configuration. Fast and orderly with a final graphic overview of results. Via the ComfortPlaner you can also at the same time place the orders at your electrical wholesaler.

Direct start now –
with your ComfortPlaner

Start configurator

Select the network

Select the application

Overview: parts list

Everything under control

Novolink™: Motor start and motor protection

With a communication module and a sensor module you make available a reliable support for the digitalization of the motor. The intelligent supplementation always results in immense advantages: foresighted maintenance, remote control as well as protocols and analyses of performance data increase the reliability of your industrial plant on the one hand, and the Novolink™ significantly saves operating costs on the other.

+ Preventive machine maintenance with the use of live data
+ Remote control of the protection and status monitoring
+ Maximization of performance with analysis and adjustment

CP-S.1 – Power adapter range

The latest generation of power adaptors that offer a maximum of efficiency, safety and performance. Suited ideally for machine construction, but equally in the robot technology, packaging industry, food and beverage industry, renewable energy and many other areas of application.

The CP-S.1 series has an integrated power reserve of 150% for up to 5 s and operates with an efficiency of up to 94%. The power adaptors are equipped with overheating protection and active power factor correction.

+ Space-saving construction type
+ High efficiency, long service life
+ Power reserve for starting heavy loads
+ Worldwide approvals

Analysis of operating times close to real time

Increase of plant availability

Cost savings

Remote control of Novolink protection

Motor protection and control
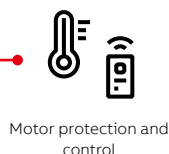
CM-TCN – Temperature monitoring relay with display and NFC

The new range of temperature monitoring relays contains different innovations. Aside from the illuminated LCD display, which supplies status messages and measured values at a glance, the device is NFC-capable and is therefore easy to parameterize directly on the device and or via a smartphon, saving time. Thanks to compatibility with various sensors such as PTC, NTC and PT100/1000, its use is also flexible.

+ User-friendly display
+ Setting without tools
+ Comprehensive settings, password protection, event history
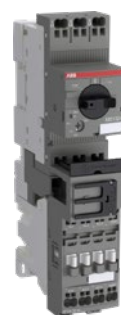
Push-in spring connection technology

The new way of wiring motor starter combinations: with the use of the push-in clamp, simple plugging for an extremely fast and maintenance-free connection is generally sufficient. This makes tools unnecessary. With the 'push-in' you save up to 50% of wiring time when compared with the conventional spring connection solutions. For greater efficiency, comfort and reliability.

+ Complete accessories (for power control circuits also compatible with screw connection versions)
+ Easily wired and reliably connected up to 18.5 kW 400 V AC-3
+ The 2-in-one connection makes possible the use of braids with wire end sleeves as well as ridged busbars (push-in method) or braids without wire end sleeves (spring method)

Smallest dimensions, greatest protection

Easy and safe installation

The latest smallest large protection. DS301C plus RCBO 1P+N in one module width

QR code: important information and data can be called up per smartphone

Fault current display
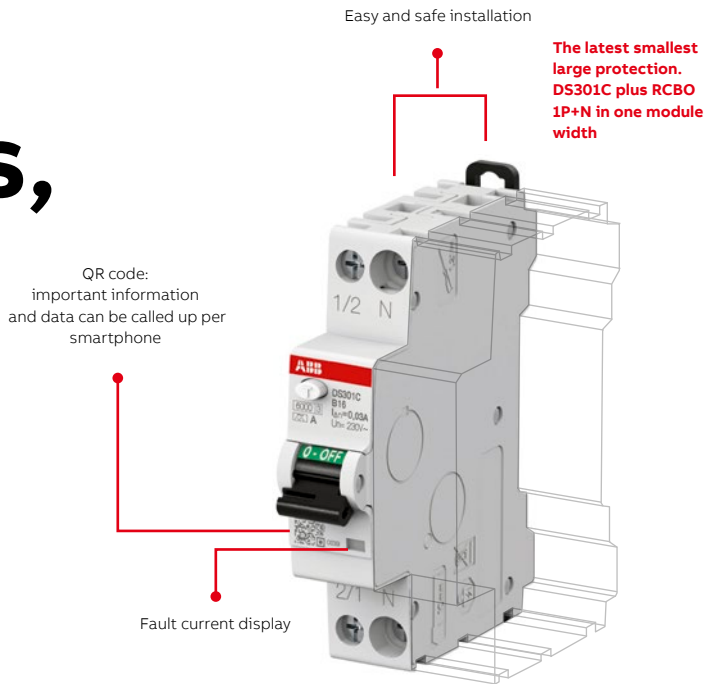
DS301C – the compact FI/LS
Your major safety in the electrical installation is the compact FI/LS of the latest generation. It reliably protects against short-circuit, overload and fault currents and protects your system against a total failure.

The DS301C is currently the smallest FI/LS on the market. Your advantage: a lot more space in your distributing cabinet. And with the printed QR code you also have all technical documentation available at all times - simply scan and you immediately have all information available.

+ With QR code
+ Space saving of up to 50%
+ Fast installation with phase rails

DS301C	
Article no.	DS301CA-B16/0,03
Order no.	2CSR255163R1165
Available	Q4 2022

MODULAR AND CHANGEABLE

Every few seconds the main components, the Firmware and the register of the micro controller are checked for reliability and safety

Insulation test up to 1,000 V

Tmax up to 70°C constant (32 A)

Extra minimal consumption during standby and lower power consumption

S300P – the new miniature circuit breaker
It was invented by the founder of our firm, Hugo Stotz in 1924. Since then we have constantly optimized it, to open new demands. The latest generation is called S300P - and it is probably the most highly efficient automatic circuit breaker on the market.

The highly efficient automatic circuit breaker, with its uniform breaking capacity of 25 kA, is ideally suited for use in critical installations in the manu- facturing, railway infrastructure or the electric mobility. It is also directly integrated into the OVR ZP+ overvoltage protection for applications in the meter cabinet. It is mounted on the mounting rail without a tool. This allows the devices to be changed easily and quickly also in the interconnection.

The S300P has an integrated fault display at the front, that can reduce the maintenance time during a system failure. It is available in different character- istics in rated currents up to 63 A. The technical details can be called up directly via a QR code on the device.

Fault current circuit breaker F200B Type B
Regulate failure times to a minimum – the new FI cares for the early detection of fault currents at high frequencies and in this way significantly reinforces not only the operational safety but also the productivity, because failures are minimized.

The FB200B is compatible with all accessory parts of the Pro M compact® system of the F200 series and is extremely robust and reliable, operating efficiently at temperatures from – 25°C to + 70°C. With the optimization of the latest generation, the degree of contamination was raised to 3 and the standby power consumption greatly reduced.

New: the self-diagnosis per button, where a micro controller checks the status of the most impor- tant electronic components and the integrity of the firmware.

For the use in medical devices, photovoltaic systems, data centers, control for roller gates, lifts, escalators, in laboratories, charging station, and a lot more. An adhering QR code leads imme- diately to the product website with information, documentation, data sheet, certification and operating manual, also in the built-in status.

F200B TYP B

Article no.	F204B-40/0,03
Order no.	2CSF204568R1400
Available	

Overvoltage protection OVR ZP+ T1+2+3

Lightning and overvoltage protection for the electrical system in one device. The installation is easily made by inserting it into the bus bar without a tool. Long service life and more protection against failure times are the assets of the latest generation. Also the intelligent measuring system (iMSys) is supported with regard to the overvoltage protection and power supply.

The plus stands for the double voltage tap that supplies the iMSys. Optionally with or without automatic circuit breaker. In total, the protection can be installed space-saving in three sub-units.

+ For TNC, TNS, TT networks
+ Meets all relevant requirements
+ Supports the intelligent measuring system (iMSys)

OVR ZP+ T1+2+3

Article no.	OVR ZP+ 3N 7.5-255 MCB6
Order no.	2CTB815799R2800
Available	

InSite web server

InSite control
unit SCU200

Smart accessories

**The evolution of smart and
interconnected energy distribution**

No matter if it's an industrial, commercial or residen-
tial application - with the System pro M compact®
InSite energy management solution, the energy flow
of connected devices can be visualized, monitored
and controlled through automated actions to achieve
advanced load management.
For increased interconnectivity, more and more
devices are becoming smart, expanding the capabili-
ties of the whole system. Perfect example are DIN rail
accessories for protection devices and the new eOVR
surge protection device. This allows them to be easily
integrated into the InSite system, enabling remote
monitoring, access to real-time data, predictive
maintenance and even energy cost calculations via
the integrated InSite web server.

+ Optimized size of control unit SCU200 with
  enhanced functionalities
+ More flexibility as more devices can be connected
  through mapping of third-party devices (EV
  charger, heat pumps)
+ Direct connectivity to the cloud (ABB Ability™
  Energy & Asset manager, ABB-free@home®, third-
  party clouds)

eOVR digital SPD

SAVE ENERGY
ANYWHERE

ORDERING INFORMATION

Article name	InSite control unit SCU200
Price	on demand
Available	Q1 2023

Smarter Mobility

Our power for your power

The possibility to be able to move from A to B, and at all times, is generally called freedom. And, because this happens electrically with regard to sustainability, we use our engagement and our power. We promote them wherever it is required to ensure that you have the best possible charging infrastructure. Here ABB is right up front when it means making an intelligent and low-emission mobility possible.

Mobility concepts develop permanently. Of course, also networking with digital services play an important role. We accompany this process and share in its design. In the public sector with DC quick-charging stations or with AC wall solutions for the private sector. And also in a big way when it has to do with commercial and public vehicle fleets. Let us jointly share in sustainably reducing CO_2 emissions.

"There is just an incredible energy in development."

My father and I are an excellent team. We jointly run a catering company with currently seven locations in Germany. We have just now completed a test phase: we have changed 20 of 41 vehicles over to E-vehicles and documented the differences for three months. And here, apart from the factual data such as consumption and costs and the function of charging during the night, we considered a large number of other things.

First: the pure distances made with the E-vehicles rose considerably. The people had a lot of fun with the new mobility and had not chosen the shortest paths. This we rated very positively because in our line of business it is important to really live joy and passion and to convey this impression also to our customers. The response, that we perceived in management, was 100% positive. 100%! And that is not what we had really expected.

"WHEN I THINK ABOUT THE POSSIBILITIES FOR THE FUTURE, I GET VERY ENTHUSIASTIC. MAYBE WE CAN SAVE THE WORLD! WOULD THAT NOT BE FANTASTIC?"

MICHAELA HAUBRICHT, 34
BUSINESS WOMAN
AND FRIEND OF NATURE,
HAMBURG

I'll make it brief: also the calculable is impressive. We quickly decided to also change over the rest of the vehicle fleet. Because - and that is the amazing thing - it has significantly changed the attitude of our employees: the aspect of sustainability of the E-mobility has also had an effect on the working day. We are disposing a lot less, operating costs have been reduced due to a more sensible use, and the whole atmosphere among our employees has improved. WOW!

This development I see also in myself. Now, whenever it is possible, I travel privately with the cargo bike. I am fitter and less stressed. And that makes a lot of sense. I had never thought that sustainable business activities do not necessarily cause costs but can actually cause savings.

—
Design engineers in the e-mobility sector are facing the enormous challenge to interpret the high demands of the market and turn them into new products of the charging infrastructure.

Charging and driving

The fastest charging station in the world: Terra 360

Our latest generation of DC quick charging devices sets standards: The Terra 360 is currently the globally fastest all-in-one charging device. A charging time of 3 minutes is sufficient for a travel distance of 100 km. This makes driving not only fun, but even the charging process turns into an experience. The modular construction allows up to four vehicles to be charged simultaneously. Each vehicle receives the optimum charging power at all times. The optional 27-inch screen allows customer information, advertising, discounts and much more to be placed.

Fields of application: Petrol stations, commerce

Terra AC Wallbox

Whether at home or at work, in retail trade or catering trade: The Terra AC Wallbox is a safe an reliable charging solution that is suitable for all application.

The Wallbox can be integrated into an energy management system via Modbus and OCPP. Also a connection of the Terra AC Wallbox to a Smart Home or a photovoltaic system is possible.

WITH US YOU CHARGE STANDARDS
COMPLIANT WITH LEGAL STANDARDS

Comfortable charging at home

Activity details

Your session

	Total sent	40 kWh
	Estimated cost	8 €
	Starting date	10.10.2021
	Time frame	10:00 - 18:00
	Duration	08h 00min

☑ Company car charging session

Select this option to easily export the list of the company car charging sessions for reimbursement
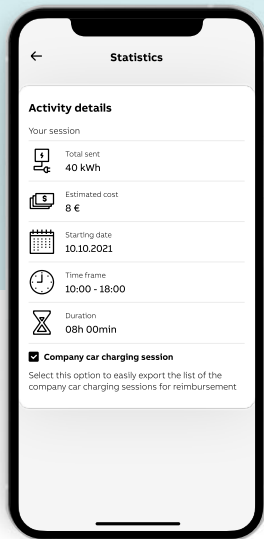
—
Discover the ChargerSync™ app now!

Download on the App Store

GET IT ON Google Play

The apps TerraConfig and ChargerSync™

The Terra AC Wallbox is available as a compact total package. Also included are two apps: the TerraConfig app for fast and easy installation and the ChargerSync™ app for the control and management of the Terra AC Wallbox. Soon both apps will be aglow with a new look. Aside from the intuitive user-optimised design, they then also have several new functions in the package:

ChargerSync™ App
+ Control of the Wallbox via WLAN
+ Remote access to the ChargerSync™ app
+ Integration into ABB-free@home®
+ Optionally charging with maximum solar energy or maximum charging speed
+ Many more applications

TerraConfig App
+ Offline use of the app
+ Pre-configuration and creation of reusable configuration masters for simplified installation
+ Load management with unbalanced load management
+ Many more applications

Many aspects of charging

The requirements are numerous. Infrastructure, performance, safety and costs are requirements that are different in their relationship to each other with everyone. Practical is the planning in private and commercial vehicles as well as standard and fast charging systems.

You have a private E-car with which you go to work and back. For you it is sufficient to charge the battery slowly during the night. Or you want to offer your employees the option of charging their E-car during the working day. Our solution: the ABB Terra AC range, charging station type 2, which takes your battery to 100% in 4 – 16 hours.

Your commercial vehicles only need a full charge during the day, and to "charge" them during the night is sufficient. Our solution: ABB HVC Depot with 2 – 10 hours of charging time.

Your guests in the restaurant or your customers in the retail business would like the opportunity to charge during their presence. Our solution: die ABB DC Wallbox range, which only needs 0.5 – 2 hours to charge the battery.

You operate a petrol station in the city or a highly frequented multi-storey car park. A charging station may prove an attraction to customers. Our solutions: die ABB DC Terra range cars with a charging period of only 15 – 45 minutes or ABB PantonUp for commercial vehicles with charging times between 0.5 and 2 hours.

You operate a motorway petrol station and would like to create charging options. Our solutions: ABB DC HP range for cars and ABB Pantograph Down with 5 – 20 minutes charging times each.

DID YOU KNOW?

Also ships are increasingly taking a course toward electrification. A prime example is the new generation of the world-famous "Maid of the mist" ferries at the Niagara falls, which thanks to the support of ABB are driven fully-electric. A spectacle of nature that can be enjoyed immediately with exhaust emissions, without vibrations and without the noise of motors. There will also be further advancements in this area in the future.

ABB FIA Formula E World Championship

Also in the new season is ABB the title sponsor of the race and decisively presses the motor sport of the future forward. Our heart too is excited when the racing drivers extract everything from their electric motors.

—

Electrically sparked adrenalin

The ABB Formula E was called to life in 2011 with the objective to speed up the electric vehicles in their development, to emphasize the advantages of electric driving and to show that clean mobility can counteract the climate change. Sustainability was the main focus right from the start.

The ABB FIA Formula E World Championship is the first global type of sport that was certified right from the start with a net zero carbon dioxide footprint. And the first and only category in the racing sport that meets the international standard for sustainability during events. ABB gladly continues to share in the organization of the motor sport of tomorrow.

ABB FORMULA-E
FIA FORMULA-E CHAMPIONSHIP

Smarter Sustainability

Our view toward the future

COVID-19 has made many of us pensive. It has, among others, sharpened our focus on the essential. Because those who see the effects of the pandemic as drastic and compare these with the consequences of the much more serious climate change, feel the urge to act. We at ABB have been pursuing this mission for a long time.

We can do something and ideally with the confident attitude of finding a solution that brings people and the environment back into harmony. This requires consciousness, and the right attitude. And a will.

We at ABB are market leaders in the electrical installation technology and are therefore positioned in such way as to accomplish something with our experience. Solutions for energy management and ideas for electrification we implement not only for ourselves. We gladly pass our know-how also on to others.

Visions with objective

Accountability is no load.
Accountability kindles passion and
produces meaningfulness in every
activity. Responsibility makes one
great and proud. Inner values that
cannot be acquired with any money.

We have taken over that responsibility, long
before all legal directives and political expres-
sions of will, and we are on the path that. On the
one hand, surprises even us and makes us very
happy on the other. Because success impresses
and shows again what can be accomplished
when all work unitedly together. Our objective is
to minimize the ecological footprint.

Up to 2030 we have the following objectives:
+ We intend to implement carbon neutrality in
  our operating locations.
+ For at least 80% of our products
  we intend to attain a circular economy by
  means of a recycling system, but also by
  means of the avoidance of waste.
+ We want to promote social justice - in our own
  plants and in the entire global supply chain.

An to gain steel strength toward the outside and
to have an effect beyond our boundaries, we
have an ambitious plan:

+ We want to support our customers in the
  reduction of their annual CO_2 emissions by at
  least 100 megatons.

Those are realistic goals. Even though they
require a high commitment from our employees.
We are convinced that our objective is correct.
ABB and Busch-Jaeger make its data transparent
in this regard, so that all who cooperate have
orientation, so that they know that they are on
the right track and that everything they do has
an effect.

Busch–Jaeger Elektro GmbH

has successfully achieved **Cradle to Cradle Certified® Bronze**
for the product(s) under the name:

future® linear, Busch–axcent®, Busch–balance® SI

future® linear, Busch–axcent®, Busch–balance® SI. Please see the List of Certified Products for all
products covered within the scope of this certificate.

Certification Number
5196

Standard Version
3.1

Lead Assessment Body
Eco Intelligent Growth

Material Health
Assessment Body
EPEA GmbH – Part of Drees &
Sommer

Effective Date
11 February 2022

Expiration Date
24 March 2023

President & CEO
Cradle to Cradle Products Innovation Institute

See the Cradle to Cradle Certified Product Registry at www.c2ccertified.org for additional details
Use of the certification marks is subject to the terms and conditions of the C2CPII Certification Agreement and Trademark Use Guidelines.
Cradle to Cradle Certified is a registered trademark of the Cradle to Cradle Products Innovation Institute

Cradle to Cradle

Our mission also includes the sustainable conservation of raw materials and resources. With an ever improving circular economy. This principle includes production as well as design and is measured by the criteria of material health, recyclability, the use of renewable energy, dealing responsibly with water and social justice.

The Cradle to Cradle system is gaining more and more followers worldwide. The objective is the increase of ecological effectiveness that tries to unite nature, work and technology so that there is possibly no more waste.

The registered association CO_2 NGO (Cradle to Cradle) has set itself the target to network economy, science, education, politics and civil association and to pursue the setup of a consistent circular economy.

Certification of Biomass according to ISCC

In 2023 we will change over the polycarbonate of our future® linear switch range to ISCC (International Sustainability & Carbon Certification) certified material. This replaces crude oil up to 70% with renewable raw materials and also reduces the CO_2 emission during production by around 70%. In addition, we will have our production locations ISCC certified in order to guarantee the traceability across the entire value-added chain, from raw material cultivation up to marketing.

Busch-balance® Si

Busch-axcent®
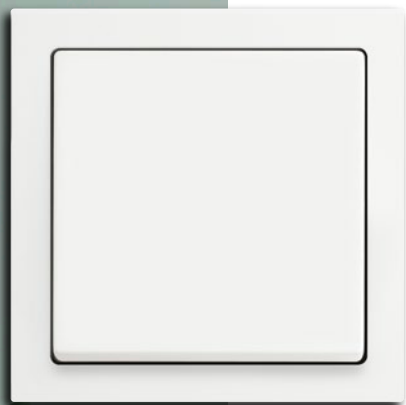
future® linear

The colours studio white, anthracite and ivory white are C2C certified.

Busch-Jaeger has received the certificate for these products.

Cradle to Cradle Certified® is the global standard for products that are manufactured safe, recyclable and responsibly.

40% less
energy

Up to 33% less
CO₂ emissions

Increase
in demand

Up to 33% increase
in property value
and rental sales

ABB

Together, we can shape the future of green buildings

At ABB, we are committed to innovating new products and solutions that support our customers to achieve the highest level of sustainability targets.

Green buildings certification - BREEAM

The UN Environment Programme (UNEP) estimates that buildings consume 40 per cent of global energy and produce a third of greenhouse gas (GHG) emissions. Integrating smart technology into new builds and retrofitting on existing sites is therefore becoming a long-term strategic decision for companies. Clear regulations and robust certifications programs are key to effect the urgent change and acceleration of measures needed to meet sustainability goals.

BREEAM (Building Research Establishment Environmental Assessment Method) is considered the world's leading method for assessing sustainability in the construction sector. The system assesses the environmental, social and economic sustainability performance of buildings, communities and infrastructure projects.

Some ABB Electrification solutions have been recognized valuable to reach up to 21 BREEAM credits across 7 out of 10 BREEAM categories, according to the following BREEAM certifications:
+ BREEAM International New Construction 2021(v6)
+ BREEAM NL Nieuwbouw 2020
+ BREEAM UK New Construction 2018

Let's collaborate on your next project.
Visit go.abb/greenbuildingcertifications

INTRODUCING ABB ECOSOLUTIONS™ COMING FULL CIRCLE

Together with our customers and partners, ABB is innovating to make circular, more sustainable solutions and operations a reality. ABB's new EcoSolutions label provides full transparency to environmental impacts across the entire product lifecycle.

—
To know more, scan the below QR code or visit
go.abb/EcoSolutions

ABB
Eco
Solutions™

At ABB, we actively seek partnerships with our customers and suppliers to drive sustainable development. To reduce environmental impact and preserve the Earth's resources for future generations, we enable our customers and suppliers to become more circular and drive circularity within our own operations.

To support our customers' circularity journeys, we have created a new product label, ABB EcoSolutions, providing full transparency on the circularity value and environmental impact of our products.

ABB EcoSolutions products comply with a minimum set of key performance indicators defined in ABB's circularity framework and carry either an environmental product declaration (ISO 14025) or an independently verified product lifecycle assessment (ISO 14040).

For our customers, the ABB EcoSolutions label is an assurance that, where relevant, the product they are buying is:

+ Designed to last and manufactured with the maximum amount of sustainably sourced raw materials
+ Made with processes that are designed to avoid waste and maximize the use of sustainable packaging materials
+ Designed to increase resource and process efficiency while in use, be upgradable and optimize the lifetime of equipment and facilities
+ Supported by take-back services leading to refurbishment, re-use or recycling of products and components, and is accompanied by instructions for responsible end-of-life treatment.
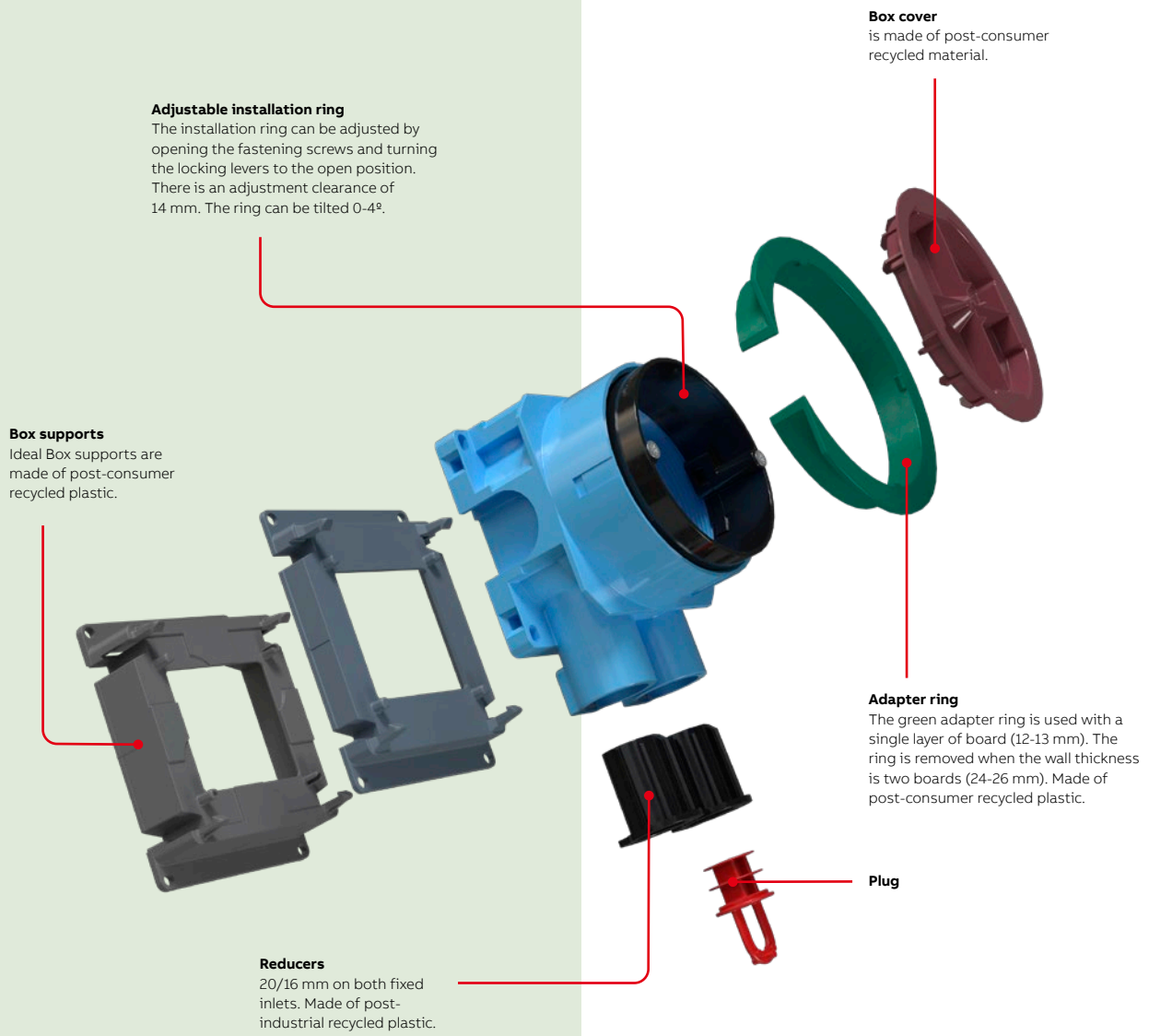
Customers can now access the environmental product declaration or lifecycle assessment of all ABB products that carry the EcoSolutions label and may use them as external validation to confirm the product's environmental impact.

Box cover
is made of post-consumer recycled material.

Adjustable installation ring
The installation ring can be adjusted by opening the fastening screws and turning the locking levers to the open position. There is an adjustment clearance of 14 mm. The ring can be tilted 0-4º.

Box supports
Ideal Box supports are made of post-consumer recycled plastic.

Adapter ring
The green adapter ring is used with a single layer of board (12-13 mm). The ring is removed when the wall thickness is two boards (24-26 mm). Made of post-consumer recycled plastic.

Plug

Reducers
20/16 mm on both fixed inlets. Made of post-industrial recycled plastic.

—

Universal hollow wall box AU60.10

Small and almost invisible- but extremely relevant to the majority. That is why it was important for us to also set an example for sustainability. The plastic of the inserts is not demanding. This increases the potential of subjecting the material to a critical examination and to make changes that are environmentally friendly and we have acted.

+ Production immediately with recycled plastic that has been disposed of by households
+ Use of minimum colour pigments, although the colours per charge vary, this is not important
+ Production in climate-neutral production site
+ Result: 36 tons of CO_2 savings per year

Flush-mounted boxes and installation boxes with green thumb

OUR CONTRIBUTION FOR SUSTAINABILITY

Step towards sustainability

We are working towards making System Ideal and System ABB the most sustainable ranges of flush mounted boxes on Nordic market. By the end of 2021 ranges will be produced in carbon neutral Nordic based production site with highest content of recycled base material on market (up to 50%).

The most flexible installation boxes on the market - with a rotatable, continuously variable installation ring for easy height adjustment.

+ For 1 to 3 gypsum plasterboard walls with a thickness of 12.5 to 40 mm
+ Installation ring tiltable up to 4°
+ Compatible with all ABB accessory products
+ Produced with recycled materials

Efficiency and productivity is
no contrast to sustainability
- totally the opposite.

Mission to Zero

Ede, Netherlands

Lüdenscheid, Germany

Porvoo, Finland

Dalmine, Italy

Beijing, China
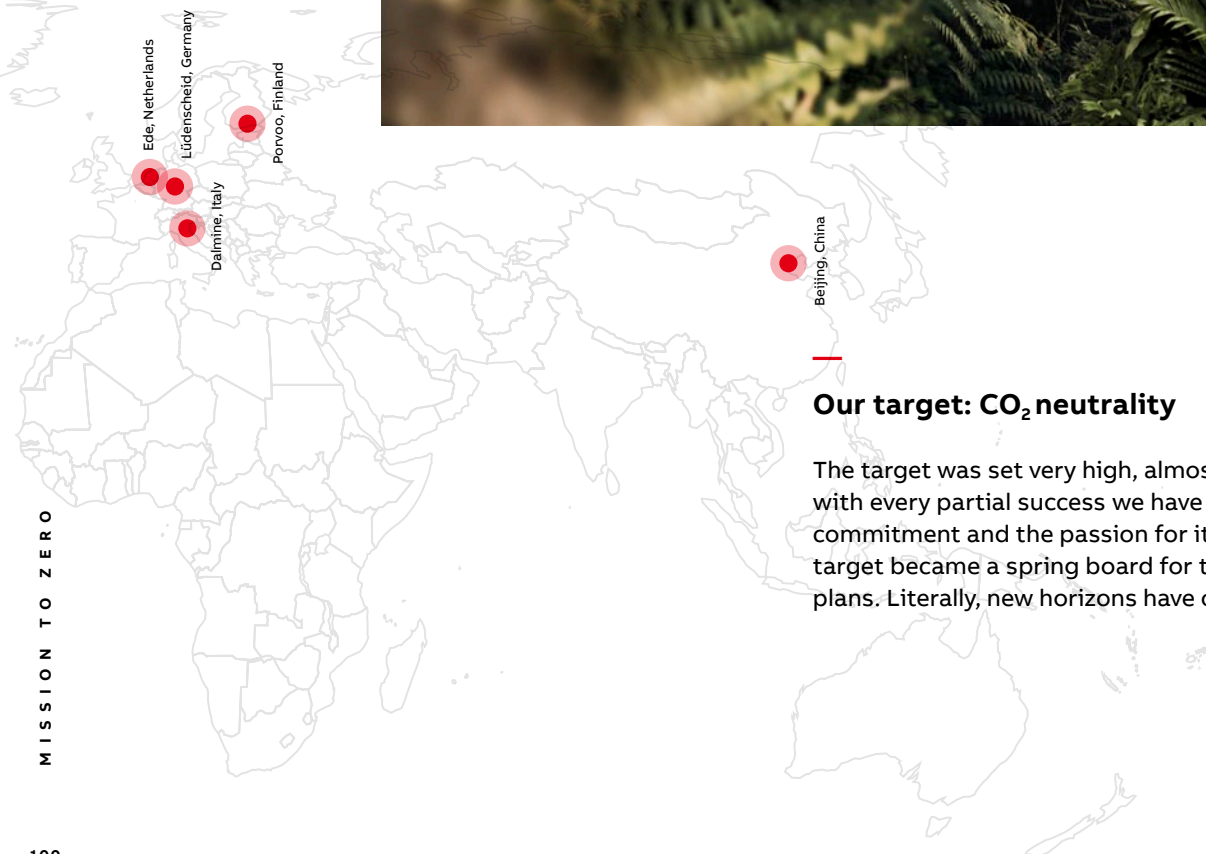
Our target: CO$_2$ neutrality

The target was set very high, almost boldly. And
with every partial success we have raised our
commitment and the passion for it. The result: our
target became a spring board for totally different
plans. Literally, new horizons have opened.

Electrification - a wide field for sustainable development

More information on "Mission to Zero" is available here.

Our Lüdenscheid location

The Busch-Jaeger location in Lüdenscheid is now the first climate neutral production location of the company. The utilization of proven technology as well as innovations by Busch-Jaeger and ABB have systematically led to a stepwise reduction of emissions. A 3,500 square metres large photovoltaic surface cares for self-sufficiency of energy. The setup of a system for charging stations as well as intelligent switch installations use the energy gained sustainably. The result is the concept for a sound energy management system which we have give the following name: ABB Ability™ OPTIMAX®.

+ Progammable, scalable energy management ABB Ability™ OPTIMAX®
+ Photo voltaic system with 7,300 m^2 of solar panels
+ Energy bank (BEES) with 200 KW power and 275 KWh of storage capacity
+ Modular, flexible energy distribution with detailed energy measurement and monitoring
+ Combined heat and power station on the basis of combined heat and power
+ Charging infrastructure for electric vehicles

The intelligent energy
management system:
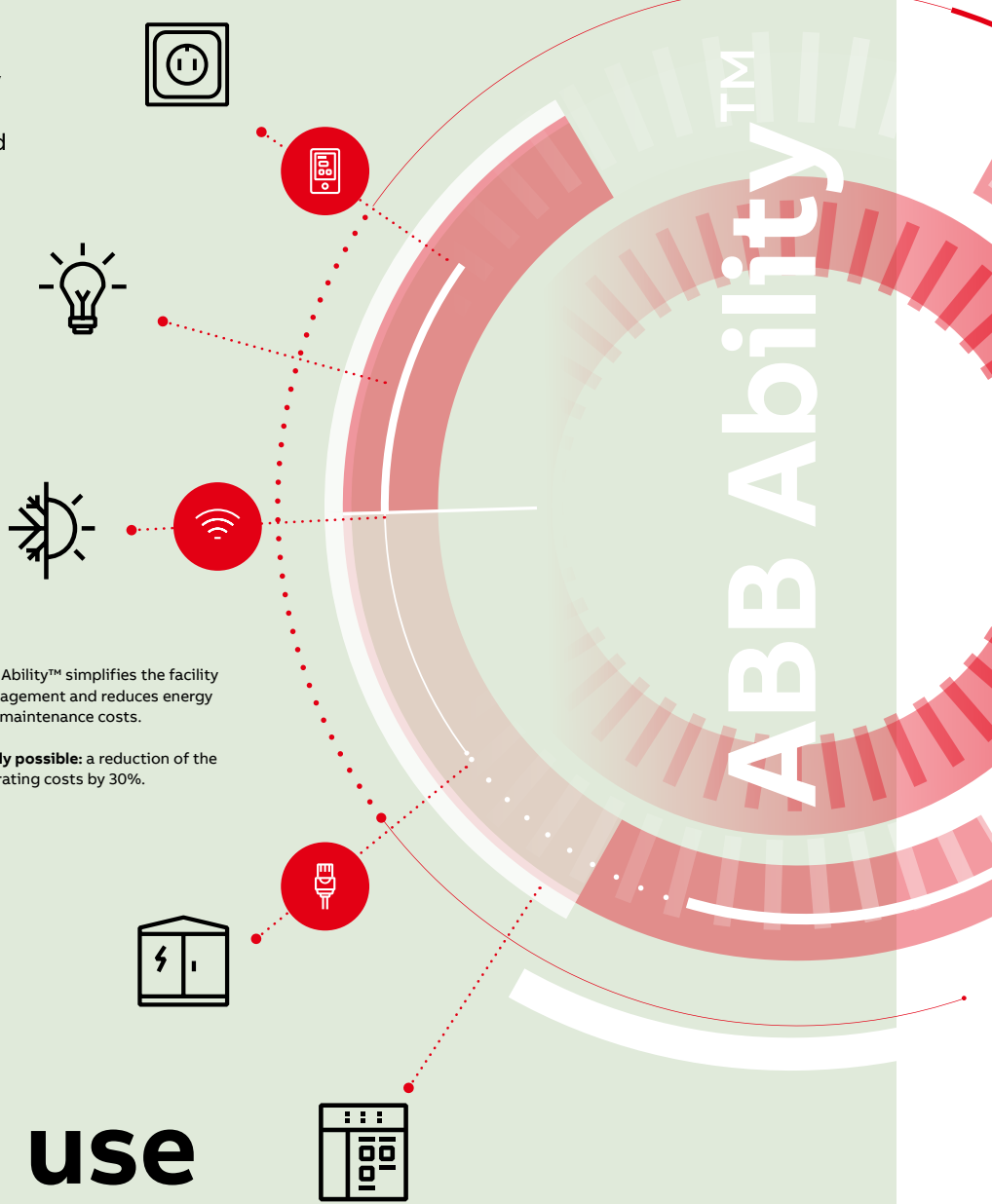adaptive, scalable and
can be individualized

ABB Ability™ simplifies the facility
management and reduces energy
and maintenance costs.

Easily possible: a reduction of the
operating costs by 30%.
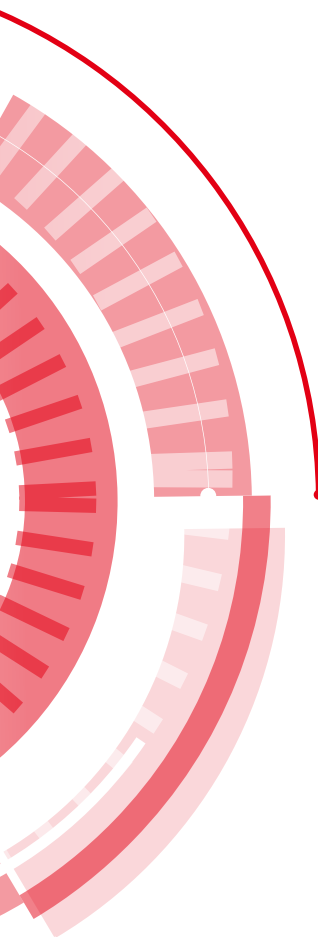
ABB Ability™

Efficient use
of energy

Our experience – your solution

Our energy management system ABB Ability™
uses not only intelligent components, it itself is
intelligent: adaptable, scalable and can be
individualized. And best suited to work beyond
our boundaries. You also can profit from our
research.

ABB Ability™ is a holistic concept that allows
individual consultation, the latest software and
digital solutions as well as the latest generation
of products to interact, and its use is very
flexible and versatile. Energy management,
system management, building management
and E-mobility are the main focus we bank on:

reducing consumption, automate maintenance,
installing Smarter Buildings and making mobil-
ity more sustainable and cheaper with
electrification.

Our new product Edge Industrial Gateway is
here the main focus. It unites maximum connec-
tivity functions for all measurement sensors,
collects data and makes them directly manage-
able. Our proven tool for energy management,
System pro M compact InSite, makes controlling
perfect. Allow our experience to be your ticket
into the future.

Reliable and cost-saving monitoring and control of the energy flow in sub-distributors

Das Edge Industrial Gateway verbindet Leistungsschalter mit dem ABB Ability Energy & Asset Manager

ABB Ability™ Cloud

ABB Ability™ Local
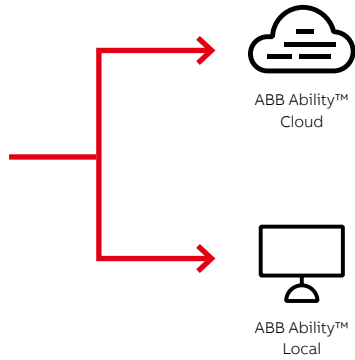
Cyber Security – the highest standards guarantee your safety

—

Trier: More power for tomorrow

Because for the city ABB has developed an energy management system for a new building sector with 9,000 inhabitants. It makes the integration and digitalization of numerous communal systems possible, including wind power, solar and biomass systems, combined heat and power stations, water and waste water power stations, sewage gas stations, battery storage and charging infrastructures for electric vehicles.

—

Kiel: Minimizing CO_2 emissions

ABB also supports the city Kiel, which is extending the capacities of its electric mobility to reduce the traffic-based CO_2 emissions and the air pollution. The target is to improve the stability of the planned supply network. For this, intelligent energy storage systems with a uniform information system are to be installed to control the flow of energy between the mains supply and the electric vehicles.

OUR CONTRIBUTION FOR SUSTAINABILITY

Interview with Benjamin Wilms, Section Manager for Product Management and Development at Busch-Jaeger Elektro GmbH and Global Research & Development Manager for section Building and Home Automation Solutions of the ABB-Group

—

To shape the future sustainably

Mister Wilms, do you get caught in a role conflict when you look into the future on the basis of different perspectives of the company and the private person?
Happily, not at all. As the father of three children I naturally desire a sustainable and peaceful future that we shape jointly. This I also wish with regard to the point of view of the company. I see us as innovation team at Busch-Jaeger and as a strong team player in the global innovation network of ABB with the special responsibility of making a contribution. This responsibility is both part of our Busch-Jaeger DNA and a clear order in our "ABB purpose": to continuously spur on the transformation to a more productive and sustainable future via technological progress.

What does sustainability mean at Busch-Jaeger and how does it express itself in the specific focus of actions and innovation plans.
Sustainability at Busch-Jaeger is the basis of the company policy. The consideration is holistic: the clear focus is on the design of sustainable products and processes. In addition, economic and social action with regard to all product groups including our customers, society and the coworkers is important for the company. A central aspect of the orientation of sustainability among others is the question as to how we implement a product with the lowest possible CO_2 footprint. Here we use many possibilities at Busch-Jaeger: the use of recycled materials in the plastics sector, low-power technology and efficiently embedded software architecture. We also optimize the

technical recyclability of our products. Our switch ranges future® linear, Busch-axcent® and Busch-balance® are already Cradle-to-cradle-certified and succeeding extensions are planned. We also have innovation projects in the pipeline that will help us to make significant advancement and are establishing intensive partnerships in the development of materials. One example of a product for low-power electronics and efficiently embedded software is our Smart Home system Busch-free@home® flex with the new Busch-flexTronics® inserts with which we can reduce the power consumption many times over in comparison with the predecessor generation. With our "Mission to Zero" in the production technology, which was created out of the vision of an energy self-sufficient and CO_2-neutral industrial production, we can demonstrate huge successes. Here we can name our almost climate-neutral production location in Lüdenscheid. On sunny days the photovoltaic system provides almost 100 percent of our power requirement. It produces approximately 1100 MWh of climate-neutral solar current per year, the annual requirement for around 340 private households.

Busch-Jaeger shares in pushing ahead with the digital transformation. What does digitalization have to do with sustainability - and how can Busch-Jaeger make a considerable contribution with the smart-certified home?

With Smart certification and digitalization we are setting a clear booster in the orientation of sustainability. This has nothing to do with the minimization of the footprint, it has to do with the maximization of the handprint, i.e. what we want to attain for our customers with the use of our solutions. This starts with simple, smart applications such as movement detectors or room temperature controllers that reduce the energy consumption by approximately 6 percent with every degree saved. It gets even more interesting when we enter comprehensive networking and join the power control in the building across trades. Here, for example, via KNX or our open Busch-free@home® Ecosystem we make possible energy control

> "OUR SWITCH RANGES FUTURE® LINEAR, BUSCH-AXCENT® AND BUSCH-BALANCE® ARE ALREADY CRADLE-TO-CRADLE-CERTIFIED AND SUCCEEDING EXTENSIONS ARE PLANNED."

dependent on requirement. This creates energy efficiency potentials with savings of up to 30% in building automation. Digitalization is the next step that builds on Smart certification. As Busch-Jaeger jointly with our specialist partners we annually address many millions of installation points. With the Smart certification of the installed basis we jointly have an opportunity to extend them with digital solutions. With the assistance of digital data we can make better decisions for the optimization of the use of buildings. This lever gets bigger the stronger we work together in open, digital ecosystems. Due to the continuing further development of ABB-free@home® we can not only use the opportunities that we have in the smart network of ABB for energy management and EV-Charging, but also work together with strong partners.

What challenges do we have to master in the Smarter Home sector with regard to acceptance and sustainability.

Here the complexity and compatibility of different applications are important topics. Here, too, open ecosystems, different communication standards and applications help with the integration into a uniform user experience. Here it will be interesting to see the role KNX, IoT or Matter will play in the future. A positive user experience includes both a convincing product design as well as smooth interaction between person and building. This applies to the complete living cycle in all stages of Smart certification and digitalization and up to artificial intelligence. What often dominates is the narrative that technology shifts completely into the background. On the other hand we see that technology can be experienced and can also be enjoyed. Aside from a safe , smart and sustainable electrification, in my view also the experience at the interface between person and building automation plays an important role.

—

Benjamin Wilms is the Section Manager for Product Management and Development at Busch-Jaeger Elektro GmbH and at the same time Global Research & Development Manager for section Building and Home Automation Solutions of the ABB-Group.
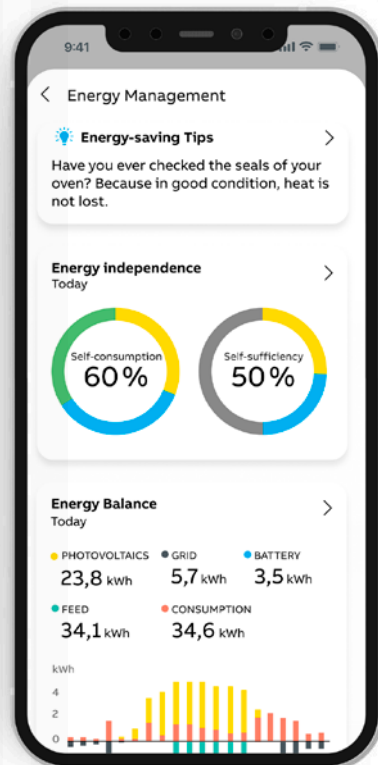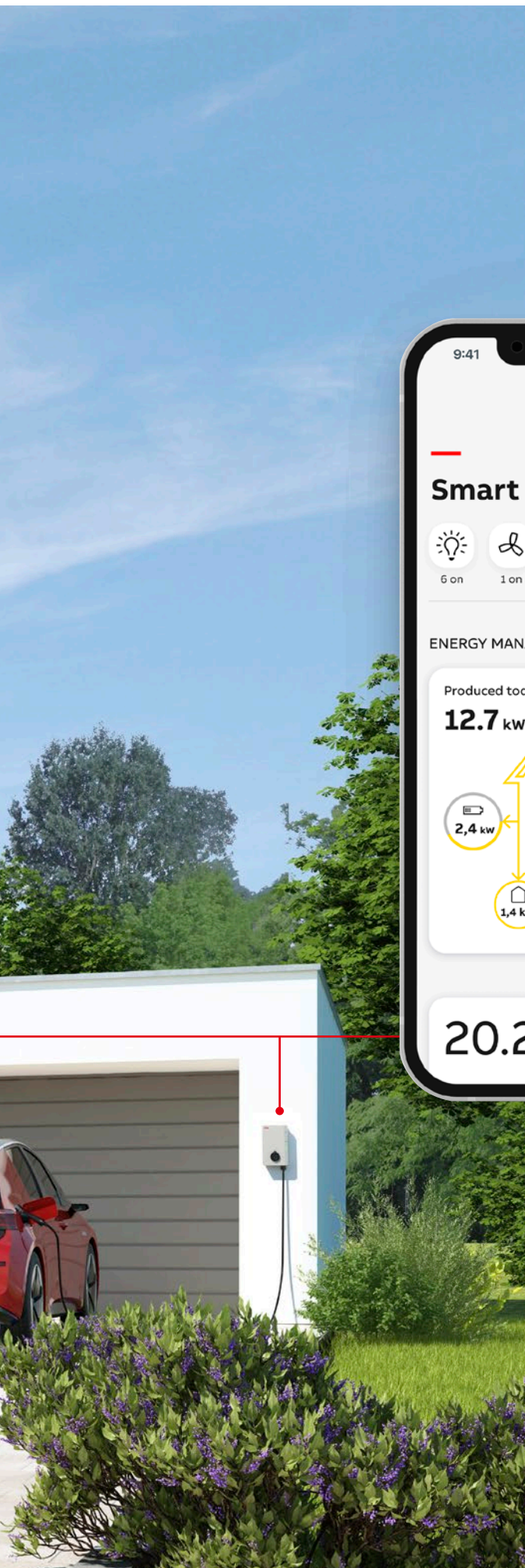
Energy management with ABB-free@home®

The future energy management with ABB-free@home® for residential buildings expands the system by an important field of application.

It will assist the users to gain greater transparency about the energy consumption and to optimize the energy consumption in the long term, e.g. in the one-family house. And finally, especially the interaction of the photovoltaic system and E-cars or also the heat pump results an inestimable advantage. The declared objective of more and more home owners: self-sufficiency of energy!

With the combination of energy distribution, home automation and the charging of electric vehicles the Smarter Home System ABB@home® experiences a totally new dimension. The intelligent control of electricity, gas and water as well as the smart monitoring are performed via the local panel or also the remote control via app from everywhere. Sustainability is no trend. Sustainability is the command of our time. And no doubt for all future times. Here energy efficiency is a key concept. Those who consume their self-generated power in an intelligent way are part of a community that takes over the active responsibility for the future of everyone.

Energy management with ABB-free@home® connects the photovoltaic system (the solar converter) with the charging column of the E-car and, if required, also with the heat pump and other electrical consumers. The result is an efficient energy management that saves emissions and money.

Two steps to optimum energy control:

+ First step: Connection of the charging station to ABB-free@home® or the KNX system: it then makes the control from an app possible
+ Second step: Implementation of the energy management via artificial intelligence, also centrally controllable

Every module a brain

Energy management with ABB-free@home® has the claim to monitor and optimally control the entire energy consumption of the house. From the solar system up to the charging station, via heat pump up to the smart home devices. In addition, also gas and oil consumption can be tied in and visualized with the use of appropriate meters.

Here automation is a key concept. Independent functions, or previously programmed settings, have an enormous potential to save energy. If artificial intelligence then continuously optimizes, this effect is then even strongly intensified. This, for example, allows the charging profile to be adjusted in such a way that consumption is then carried out cost sensitive. And the safety, of course, increases in the same dimension as the cost-saving.
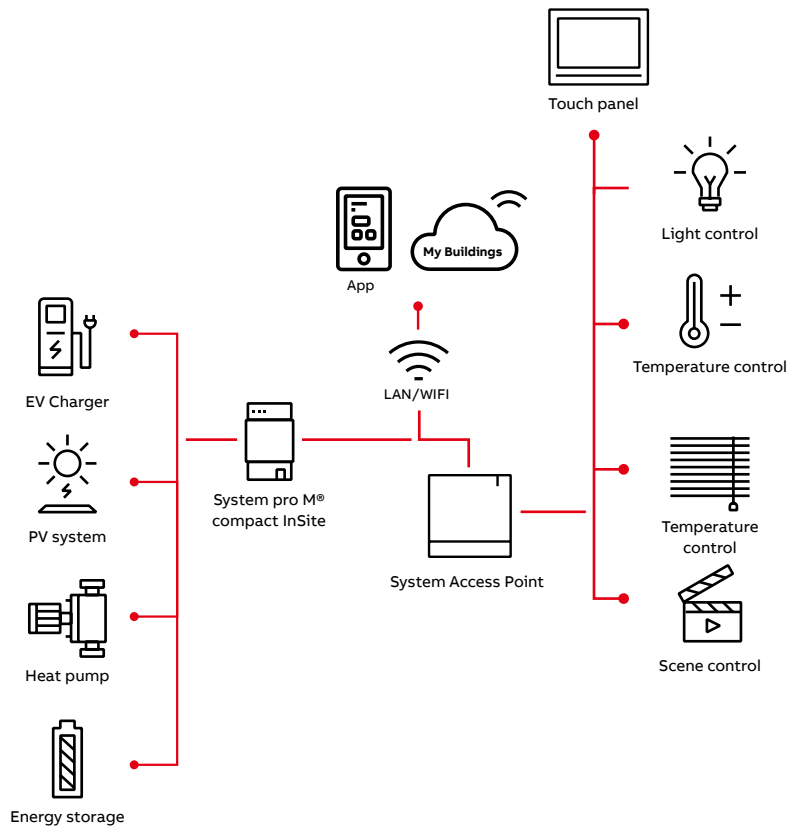
Two ways - one objective

Energy management with
ABB-free@home® in two steps.

Step 1: The charging station is integrated directly into the Smarter Home. This makes all important charging information and necessary control elements available via the app ABB-free@home® Next or a touch panel. Everything in one app - monitored, checked, controlled.

Step 2: A holistic energy monitoring and energy management system that visualizes all energy flows and controls or distributes according to requirement - with automation function and optimization potential. Also the entire system is integrated in ABB-free@home® up to 100% and can be visualized or operated via the app ABB-free@home® Next.

Touch panel

App

My Buildings

LAN/WIFI

EV Charger

PV system

Heat pump

Energy storage

System pro M® compact InSite

System Access Point

Light control

Temperature control

Temperature control

Scene control

OUR CONTRIBUTION FOR SUSTAINABILITY

New: System pro M® compact InSite

Central unit of 32 energy sensors and a guarantee for comprehensive energy management.

+ Easy Installation without any tools
+ Safe and flexible communication
+ Connectable with the ABB-free@home® System Access Point via WiFi or LAN, which makes all energy data reproducible in the ABB-free@home® app
+ With connection to ABB-free@home® connectivity to the speech assistants Alexa and Google Home

The European Green Deal

The Green Deal designates the objective of all 27 states of the EU, the world in future cleaner and healthier. An active counteraction of the climate change and the destruction of the environment. Ambitious objectives are to clean the air, water and ground, promote public means of transport, to produce clean energy, build energy-efficient buildings and to design a crisis-resistant and global competitive industry.

Energy management with ABB-free@home® will be a valuable contribution to reach these targets. Because with the promotion of heat pumps and solar systems, also intelligent energy distribution becomes necessary.

"A real enrichment for my life."

Sustainability – for me that could be the title for a nice song. One during which I would move the fingers in rhythm when the radio plays, and at a party I would dance to it. Sustainability is for me much more than just a category. It is a whole way of life. A part of life that I have really discovered for myself.

My employer ABB takes responsibility. For me the intensified efforts to develop more sustainably as a company in all areas was a real surprise. I did not have such an awareness for the environment, the climate, the responsibility toward the succeeding generations. But I also entered immediately and developed increasingly. Now I am

a co-developer of the OPTIMAX® energy management system. A concept that shaped itself during the course of our research and that we impart to other companies to attain similar excellent progress in matters of sustainability. Because we all have a prime objective.

This work has catapulted me far beyond the occupational field. I live with awareness and and set new targets for myself personally. Targets that set the focus not on growth but on caution and happiness. Also responsibility. And, as if everything is going to have an even deeper meaning, I am going to be a dad soon for the first time.

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**"I AM NOW EVEN MORE CON-
SCIOUS ABOUT MY FUTURE
CHILDREN. WHAT WILL I
BEQUEATH THEM? BUT TO BE
HONEST: I ALSO DO ALL THIS
FOR MYSELF. SIMPLY, BECAUSE
IT IS MEANINGFUL."**

TOBIAS NAUHEIM, 39
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2CKA000001A1867/9.22/0502-DP, dpi P22-0537