



# **ABB-Smart Locks**

## The smarter way to control your door







# Electrical installation solutions for buildings

## ABB-Smart Locks

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# Smart Locks

## The smarter way to control your door

Digital locking cylinders has long been the system of choice in both private and commercial daily life. ABB-Smart Locks ensures easy scalability, even for large-scale projects.

ABB-Smart Locks comes along with maximum encryption transmission to ensure all cyber security demands. It can be planned as standalone solution or can be easily part of a bigger Building system due to smart connectivity via IP.

ABB-Smart Locks as professional solution supports remote access and management possibilities that makes people's lives easier, thus for operators and end-users. The MyBuildingportal powered by ABB Ability provides the right and secure remote service.







# Smart Locks

## The smarter way to control your door

### **Quick and easy retrofit to traditional mechanical cylinder**

Electronic wireless cylinders provide an ultra-modern solution that will compliment any type of door wherever they are used.

### **Maximum security by sophisticated encrypted communication**

The DESfire EV1 key fob with sophisticated encryption technology makes duplication impossible. Plus the real-time cancellation to a lost or stolen key fob from management software, the door is secured all the time.

In addition, it is the encrypted radio frequency communication to transfer information from cylinder to Smart Access Point Pro. Both RF repeater and RF/IP gateway are also equipped with the same encryption mechanism.



### **Triple reminder guarantees on-time battery replacement**

Despite the latest BLE low energy consumption technology, the battery can run with low power for quite a long period of time. When the reminder time has come with its self-counting algorithm, there will be visual indication from flash light every time swiping the card, in addition, the App will also receive the notification to change the battery. Finally, the email will be altered with the same information. With the help of local device App and email placement reminder, no need to worry about low battery power of your smart cylinder.

### **Scalable to big project**

ABB-Smart Locks is not restricted with wireless transmission, which is superb in short distance projects. The versatile system can flexibly scale up thanks to the RF/IP gateway. No limits of distance and capacity to decentralize each RF/IP gateway to manage up to 16 cylinders. This makes the new and big construction projects as easy as small projects to plan and to install.

### **User-friendly management system with intuitive web design**

To intuitively visualize and manage the interlink between different user groups and door groups, is the key job of digital access control system. Administrator can quickly and easily execute all access plan updates on the system such as instant changes to user access privileges and can control the entire property. Meanwhile, administrator also can handle users' specific access rights to specific openings by setting the right mode from the choices of options.



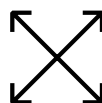
# Make a door smart

## Example of full profile cylinder



### Visual and acoustic indication

On-site feedback for permitted or non-permitted access and other notification



### Different lengths and profiles

Different lengths for different door thicknesses and profiles for EU, US, SCAN, SWISS standards



### MIFARE® DESFire® EV2

Transponders in three color variants are available as modern keys



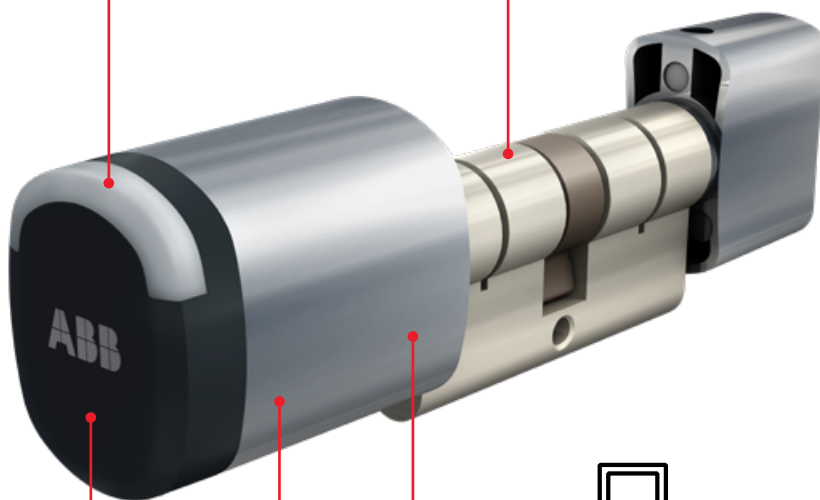
### Interior and exterior doors

All the cylinders are suitable for interior and exterior doors, with IP66 protection level



### In-built batteries

For up to 130,000 openings and reminder for soon necessary battery change





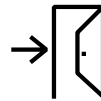
# Control everything

## Smart Access Point Pro



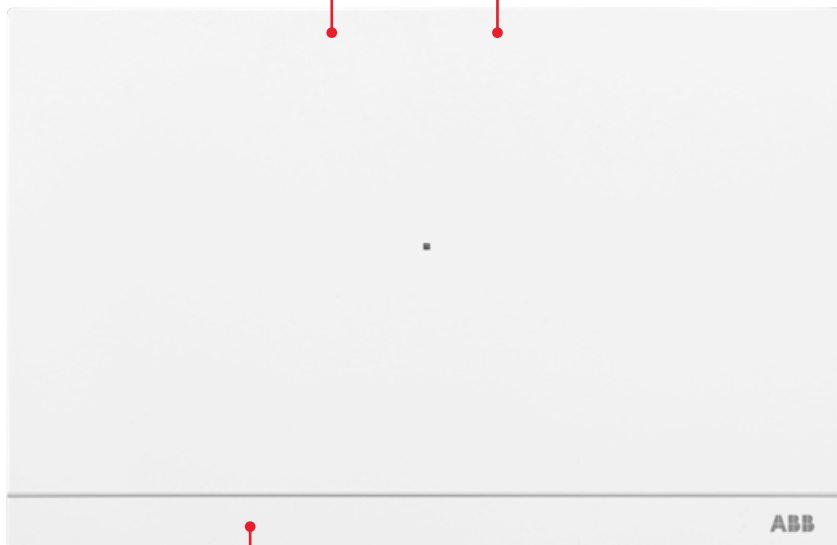
### Access all possibilities

Central management device for AccessControl and Welcome IP systems. Support up to 600 devices and 2000 Users.



### Who, where and when

Access rights management for controlling up to 2000 users with manageable access



### Easy commissioning and remote control

Web interface, no additional commissioning software is required

## ABB-AccessControl

Offering

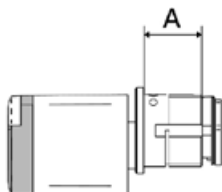


### Cylinder - Mortise profile

The cylinder is suitable for any interior or weather-proofed exterior door, making it a very versatile solution. As there is no wiring whatsoever, mounting and replacement is completed in next to no time, whether you are installing a cylinder for the first time or retrofitting. The cylinder can be operated offline, in a local networked configuration or online through internet.

#### Technical details:

- Supported RFID standards: MIFARE (DESFire EV1)
- Radio interface: IEEE 802.15.4 2.4GHz radio
- Power supply/service life:
  - Battery: 4x LR1 Alkali
  - Battery life at 20 °C: up to 130.000 or up to 3 years
- Environment:
  - Temperature: -35 °C to 55 °C
  - Protection type: up to IP66
  - Humidity: 0 to 95%, non-condensing
  - Certification symbol: CE, FCC, IC, IP66, EAC, WEEE



| ANSI mortise profile |           |
|----------------------|-----------|
| <b>B</b>             | <b>00</b> |
| <b>A</b>             |           |
| <b>32</b>            | 0986      |
| <b>35</b>            | 0987      |
| <b>38</b>            | 0988      |
| <b>41</b>            | 0989      |
| <b>44</b>            | 0990      |
| <b>50</b>            | 0991      |

**Article number:** D01MOAABB03NF1-04

Replace in the article number “**AA**” with measure A and “**BB**” with measure B.

**Order number:** 2CKA008300XXXX

Replace in the order number “**XXXX**” with the corresponding code in the measures table.

## ABB-Smart Locks

### Cylinder - ANSI profile



#### Cylinder - RIM US profile for standard deadbolt

The cylinder is suitable for any interior or weather-proofed exterior door, making it a very versatile solution. As there is no wiring whatsoever, mounting and replacement is completed in next to no time, whether you are installing a cylinder for the first time or retrofitting. The cylinder can be operated offline, in a local networked configuration or online through internet.

#### Technical details:

- Supported RFID standards: MIFARE (DESFire EV1)
- Radio interface: IEEE 802.15.4 2.4GHz radio
- Power supply/service life:
- Battery: 4x LR1 Alkali
- Battery life at 20 °C: up to 130.000 or up to 3 years
- Environment:
  - Temperature: -35 °C to 55 °C
  - Protection type: up to IP66
  - Humidity: 0 to 95%, non-condensing
  - Certification symbol: CE, FCC, IC, IP66, EAC, WEEE

| Latch cylinder |                   |                 |
|----------------|-------------------|-----------------|
| Dimension      | Article number    | Order number    |
| 00/00          | D01US000003NF1-04 | 2CKA008300A0983 |



#### Cylinder - RIM US profile for Schlage® B-Series deadbolt

The cylinder is suitable for any interior or weather-proofed exterior door, making it a very versatile solution. As there is no wiring whatsoever, mounting and replacement is completed in next to no time, whether you are installing a cylinder for the first time or retrofitting. The cylinder can be operated offline, in a local networked configuration or online through internet.

#### Technical details:

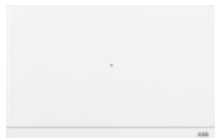
- Supported RFID standards: MIFARE (DESFire EV1)
- Radio interface: IEEE 802.15.4 2.4GHz radio
- Power supply/service life:
- Battery: 4x LR1 Alkali
- Battery life at 20 °C: up to 130.000 or up to 3 years
- Environment:
  - Temperature: -35 °C to 55 °C
  - Protection type: up to IP66
  - Humidity: 0 to 95%, non-condensing
  - Certification symbol: CE, FCC, IC, IP66, EAC, WEEE

| Latch cylinder |                   |                 |
|----------------|-------------------|-----------------|
| Dimension      | Article number    | Order number    |
| 00/00          | D01DB000003NF1-04 | 2CKA008300A1015 |



## ABB-Smart Locks

### System devices



#### Smart Access Point Pro

A central management device of AccessControl and Welcome IP, it can couple as sub-system, and also manage interworking of multiple sub-system of same type. Commissioning and remote

control is executed via web interface. No additional commissioning software is required.

Connection to the network via WLAN client mode or via CAT cable to manage all your access, configure all your devices, record your logs, etc.

- Easy to commissioning
- Access rights, who, where, when...
- Enhanced security with record event log and receive notification and alert
- Manage all connected devices
- Interaction between different systems
- Manage welcome App
- Event management and building-wide messaging
- Integrated chimey, easy for retrofit

#### Technical details:

- Dimension: 8.031" x 5.196" x 1.259"
- Network parameter:
  - Operating mode: LAN / WiFi-Client / WiFi-AP
  - Wireless transmission band: IEEE 802.11 a/b/g/n 2.4 GHz/5.8 GHz
  - Safety standard: WPA-PSK, WPA2-PSK, WPA, WPA2, IEEE 802.1x
  - Network connection standard: 10 / 100 Mbps, auto MDI/MDI-X
- Radio interface: IEEE 802.15.4 2.4GHz radio
- Power supply:
  - 24 V DC
  - PoE (Power over Ethernet)
- Environment:
  - Temperature: -10 °C to +45 °C
  - Protection type: IP30
  - Vandal proof: IK07
  - Humidity: 0 to 95%, non-condensing

| Smart Access Point |                |                 |
|--------------------|----------------|-----------------|
| Version            | Article number | Order number    |
| Pro                | D04011         | 2TMA400260W0002 |

## ABB-Smart Locks

### System devices



#### RF repeater

RF repeater is for indoor applications, wireless extension of radio range by integrated antenna. No network knowledge is required for the wireless network. The RF repeater is available in the elegant housings and can be combined with all VDE boxes, and also can be surface-mounted on the wall.

- Scale up system topology easily
- Easy and fast configuration
- Firmware update remotely

#### Technical details:

- Dimension: 3.543" x 3.513" x 1.102"
- Radio interface: IEEE 802.15.4 2.4GHz radio
- Power supply: 24 V DC
- Environment:
  - Temperature: -10 °C to +45 °C
  - Protection type: IP30
  - Vandal proof: IK07
  - Humidity: 0 to 95%, non-condensing

| RF repeater |                |                 |
|-------------|----------------|-----------------|
| Version     | Article number | Order number    |
| White       | D04021         | 2TMA400260W0003 |

## ABB-Smart Locks

### Accessories



#### RF/IP Gateway

RF/IP Gateway is an easy solution to connect the cylinders to IP platform, so it is one important device to extend the AC solution from residential to commercial, support more than 16 doors, even there is long distance between each door.

- Scale up wireless access control system topology easily
  - One RF/IP gateway can support another 16 cylinders
  - Maximum 64 gateways can be connected
- Easy and fast configuration
  - Graphical visual configuration through SmartAP web-based interface, pair and link the locks simply and fast
- Different power solution to meet different requests
  - PoE
  - 24 V DC
- Firmware update remotely through SmartAP and APP

#### Technical details:

- Dimension: 4.212" x 4.291" x 1.181"
- Radio interface: IEEE 802.15.4 2.4GHz radio
- Power supply: 24 V DC
- Environment:
  - Temperature: -10 °C to +45 °C
  - Protection type: IP30
  - Vandal proof: IK07
  - Humidity: 0 to 95%, non-condensing

| RF/IP Gateway |                |                 |
|---------------|----------------|-----------------|
| Version       | Article number | Order number    |
| White         | D04031         | 2TMA400260W0013 |



#### Tag

The tag is based on RFID chip technology. Available in electronic cylinders and ABB outdoor readers. With a special encryption to ensure secure controlled access.

- 13.56 MHz contactless RFID identification, DESfireEV1 (256, 2K, 4K, 8K bytes)
- Compatible in all ABB devices
- Multi-color design
- Modern design with ID-number layout
- Waterproof

#### Technical details:

- 13.56 MHz, Mifare DESfireEV1 chip

| Tag     |                |                 |
|---------|----------------|-----------------|
| Version | Article number | Order number    |
| White   | D081WH-04      | 2CKA008300A1001 |
| Grey    | D081GY-04      | 2CKA008300A1002 |
| Black   | D081BK-04      | 2CKA008300A1004 |



## ABB-Smart Locks

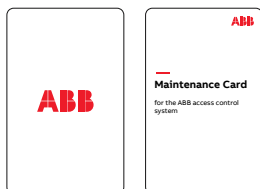
### Accessories



#### Maintenance tool

A tool for disassembling / mounting the knob, to install in new door, or replace battery.

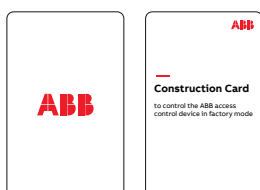
| Maintenance tool |                 |
|------------------|-----------------|
| Article number   | Order number    |
| D080MT-04        | 2CKA008300A1006 |



#### Maintenance card

Maintenance card to activate the digital cylinder into the smart access point.

| Maintenance card |                 |
|------------------|-----------------|
| Article number   | Order number    |
| D080MC-04        | 2CKA008300A1007 |



#### Construction card

Construction to control the digital cylinder in factory mode.

| Construction card |                 |
|-------------------|-----------------|
| Article number    | Order number    |
| D080CC-04         | 2CKA008300A1012 |



#### Battery pack LR1

Spare part, batteries already included in the digital cylinder package.

| Battery pack LR1 |                 |
|------------------|-----------------|
| Article number   | Order number    |
| D080BT-03        | 2CKA008300A1013 |



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**More information**

