



# Data center door specification

Unmatched door security solutions for critical environments

**ASSA ABLOY**

Experience a safer  
and more open world

# Contents

The challenges of access management for data centers – and how ASSA ABLOY helps you overcome them	4
Two types of data centers	5
Meeting your challenges	6
Critical compliance: regulations for data protection	7
The 3-layer solution to data center security	8
Key technologies and solutions for data centers	9
Expert door specification services for critical security environments	10
Mastering door solutions digitally with Openings Studio	11
Openings Studio / Case study	12
Doors / Specialized doors for data center protection	13
Doors / Security steel doors	14
Doors / Steel security doors	15
Doors / Security doors	16
Doors / Fire-rated doors	17
Doors / Fire curtains	18
Doors / Blast doors	19
Doors / Water-resistant, airtight & acoustic doors	20
Doors / Electromagnetic doors	21
Doors / High-speed doors	22
Doors / Sliding doors	23
Doors / Gates	24
Doors / Swing doors	25
Aperio / The low-impact, cost-efficient way to add or extend digital access control	26
Aperio / Three layers, one solution	27
Aperio / Aperio digital access products for data centers	28

Aperio / Aperio advantages for data centers .....	29
CLIQ / CLIQ range.....	30
PROTEC <sup>2</sup> CLIQ camlocks / Smart key control without the complexity.....	31
SMARTair / Out-of-the-box digital access for self-contained or in-house data centers.....	32
ABLOY CUMULUS / Cloud-native access control for data centers.....	33
Electric locks / ABLOY electric locks: Power to your door security.....	34
Electric strikes / A simple effective access control solution .....	35
Escape route technology / Guiding people to safety with intelligent and compliant emergency technology .....	36
HID / Smarter identity where credentials meet control.....	37
Door closers / Barrier-free access and secure spaces with the help of innovative ASSA ABLOY door closer .....	38
Door closers / Why choose an ASSA ABLOY door closer? .....	39
Door seals / Maintaining temperature and reducing dust ingress: Planet drop seals .....	40
Panic exit devices / Ensuring rapid and secure exits.....	41
Panic exit devices / Panic and emergency exit hardware .....	42
ABLOY PROTEC <sup>2</sup> / Patented disc locking with key control for data centers.....	43
Code Handle / Code Handle range .....	44
Master-key range / The ASSA ABLOY master-key range .....	45
Master-key range / Benefits for data center access management.....	46
Master-key range / Case study .....	47
Cylinders / Standard defending the premises.....	48
Cylinders / Standards. Grading EN 1303 .....	49
Cylinders / Standards. Grading EN 12320 .....	50
Cylinders / Why patent protection matters for protecting servers and data.....	51





# The challenges of access management for data centers – and how ASSA ABLOY helps you overcome them

Today's connected world relies on a nonstop flow of data to power devices, networks and businesses. If this source of data is compromised, daily operations may grind to a halt. This growing reliance on flawless data center operations requires an investment in security to prevent breaches. In fact, according to IBM's 2023 Cost of a Data center Breach report, the global average cost of a data breach in 2023 was USD 4.45 million, a 15% increase over three years.

In addition to customer dissatisfaction, the cost of unprotected data includes business disruption, damage to brand reputation, and fines and penalties for non-compliance to security regulations.

Data center managers, faced with an increasingly stringent regulatory environment, need to rely on the latest access technology and the industry's best practices to provide viable and cost-effective physical security for their facility.

As a global leader with decades of expertise in door and access specification, ASSA ABLOY understands the specific needs and regional regulations which impact you. We offer comprehensive support throughout every phase of your project, from initial planning to the renovation of existing structures, ensuring your facility meets the highest standards of safety and functionality – and is a safe, efficient, compliant environment for everyone who uses it.

The expertise and support from ASSA ABLOY's specification consultants help in creating robust and effective door solutions that can handle the demands of high-security facilities. We have teams based locally across Europe and the Middle East, ready to offer a local perspective on trends and regulations. Get in touch with our data center security experts today to assess your current infrastructure and discover how ASSA ABLOY can help secure your critical assets.



# Two types of data centers



## Enterprise, hyperscale data centers

Companies that own and maintain data centers as part of their business infrastructure demand seamless operation from these high-tech warehouses. A data mishap can severely damage their brand reputation. Corporations make a significant investment to ensure seamless operations and no interruption in service.

Several layers of security are required to adequately protect the facility, starting with perimeter fencing and exterior doorways. Exterior doors lead to interior corridors, which lead to server rooms and server cabinets. At each point in this process, proper protections must be taken to ensure the security of the data.



## Colocation data centers

Colocation data centers allow several companies to rent servers in a third-party data center or rent square footage to house and operate their own servers in a controlled environment. These facilities share the same door security needs as enterprise data centers, but with an additional layer of access control requirements.

Since the facility is shared among several companies, authorized users must be assigned access privileges to their specific areas of the building.

# Meeting your challenges



## Ensuring physical protection, confidentiality and privacy for critical data

Secure door and access solutions help prevent unauthorized access and reduce the risk of data breaches and theft



## Ensuring access to server rooms, private offices, and equipment stores is always available for audit

Implementing traceable, flexible access with the latest digital solutions



## Operating more efficiently, on a 24/7 basis, enabling staff, contractors and visitors to move around seamlessly

Automating door entry, including with hygienic touchless solutions, saves time when staff need specific access



## Meeting the demands of compliance and regulations, both local and regional

ASSA ABLOY solutions are designed to meet regulatory standards for data security, fire safety, accessibility and more



## Reducing the cost of ongoing repair and replacement of doors and related solutions

High-traffic leads to wear and tear, but ASSA ABLOY solutions are designed and tested for durability, minimizing maintenance



## Maintaining strict separation between administrative and technical spaces

Not all areas should be freely accessible, but reserved for staff with specific authorizations





# Critical compliance: regulations for data protection

The pressure to safeguard data continues to grow. Legislation and security standards aim to protect businesses and the public from the risks associated with data breaches. There are a few of the most important regulatory environments.

## **EU General Data Protection Regulation (GDPR)**

All organizations who do business in Europe must comply with this overarching data regulation, which came into force in 2018. The GDPR mandates that you improve protections for storage of all personal data, including customer and employee data. These protections must include both electronic (e.g. encryption) and physical barriers to unauthorized access. Your systems must embrace “*privacy by design.*”

## **Sarbanes-Oxley and US data regulation**

The Sarbanes-Oxley Act (2002) was designed to protect shareholders and the public, and improve accuracy of corporate disclosures. Complying with the act requires security controls to ensure integrity of financial data. The USA also has state-level compliance frameworks, including the California Consumer Privacy Act (2018) and New York’s Cybersecurity Requirements for Financial Services Companies (revised in 2023).

## **ISO**

The ISO 27000 family of standards helps organizations manage the security of assets such as financial information and employee data. ISO/IEC 27001 details requirements for information security management systems (ISMS).

## **PCI data security standard (PCI-DSS)**

This helps organizations proactively protect customer financial information. The standard requires access to system information and operations be restricted and controlled – both electronically and physically. The PCI Hardware Security Module (HSM) incorporates standards for physical security, including of servers.

## **SOC/CSA certification**

Important Service Organization Control (SOC) and Cloud Security Alliance (CSA) certification frameworks cover the integrity of all elements in a cloud computing service, including data center security.



# The 3-layer solution to data center security

According to the UK's Centre for the Protection of National Infrastructure\*, *"Data center operators should be able to demonstrate they have used a risk-based layered approach to security"*.

The ideal access control solution for a data center usually demands three levels of security, all working together within an integrated system.



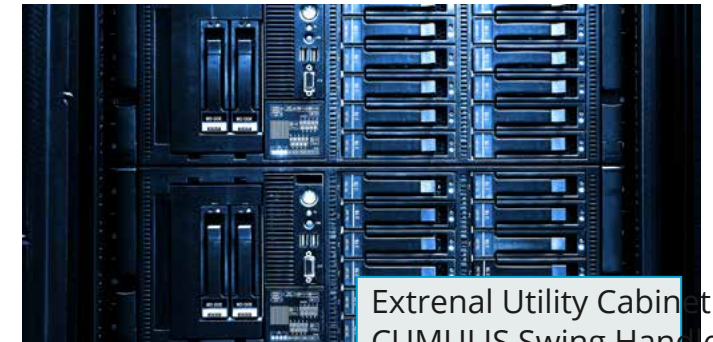
## Level 1 – Perimeter security

On the outer level, this ensures only authorized personnel enter a building. Here, high-security door and gate locks can work alongside the complementary systems and devices like CCTV and monitored fencing. This is the first line of defence against a physical security breach.



## Level 2 – Room access

This can be monitored and controlled with a range of mechanical, electromechanical, and digital access solutions. They enable monitored and filtered movement around the center, balancing convenience with security. All devices should be integrated within a single access control system. This system must be able to handle fine-grained access to separate rooms or zones by user, security level or time of day or week.



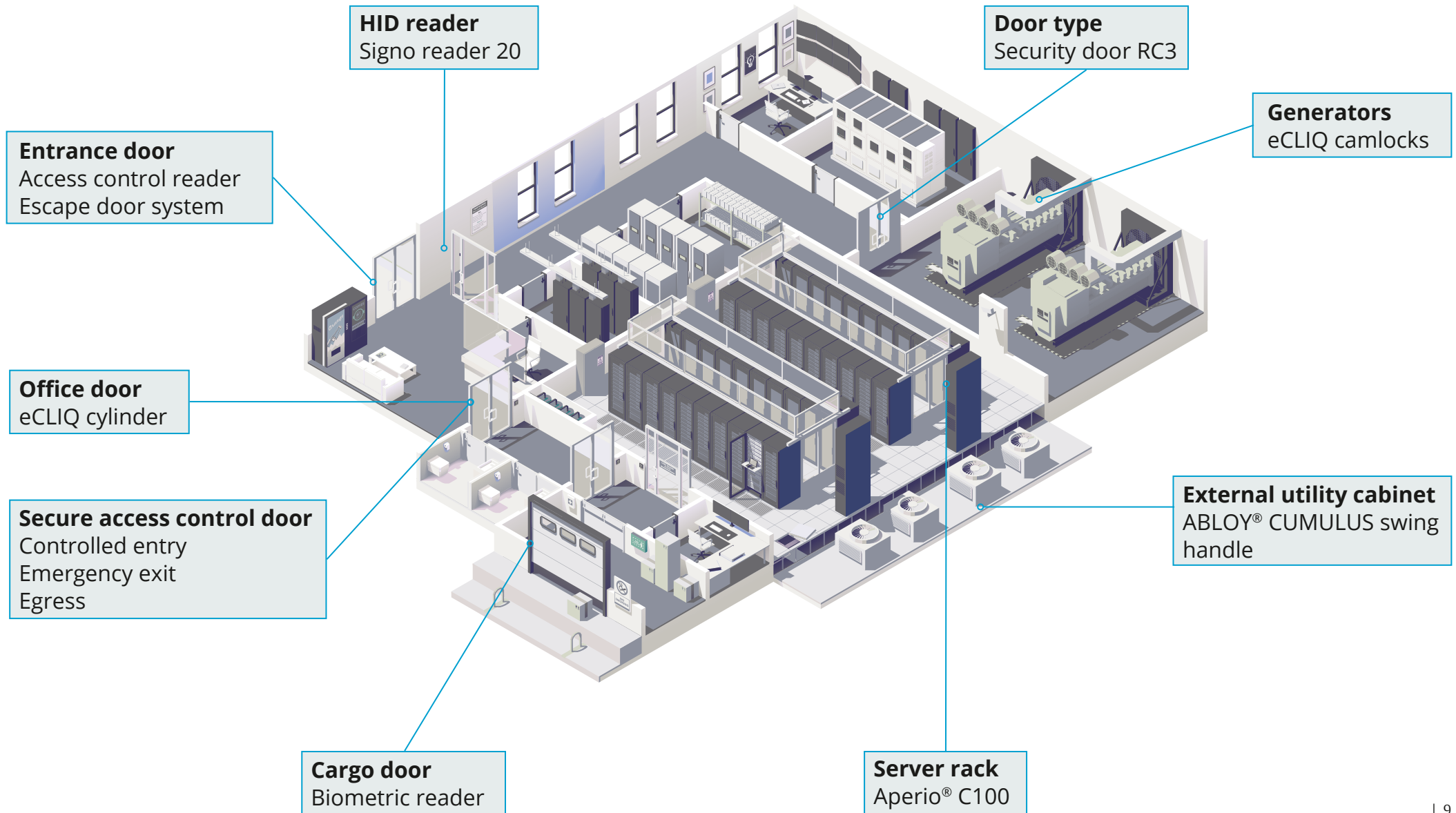
## Level 3 – Server rack access

The third, final level of physical data security is the server cabinet itself. Server rooms get a steady flow of authorized traffic: cleaners, maintenance staff and technicians, for example. Employee screening cannot be perfect — and accidents happen. The right rack or cabinet locking can be deployed in-house or installed on rented servers at a co-located data center. This is the last line of defence against a physical breach, whether malicious or accidental.

\*: [www.npsa.gov.uk/system/files/documents/13/a4/data-centres-guidance-users.pdf](http://www.npsa.gov.uk/system/files/documents/13/a4/data-centres-guidance-users.pdf)



# Key technologies and solutions for data centers



# Expert door specification services for critical security environments

Data centers house critical infrastructure and sensitive data, so the main objective is to provide robust security and operational efficiency with ASSA ABLOY solutions that address the unique demands of these facilities. To achieve this, ASSA ABLOY offers comprehensive door specification services designed to meet the specific needs of data centers.

Our door specification services ensure that every aspect of door security and functionality is meticulously planned and executed. Our team of specification consultants prepares objective and accurate specifications for all building types, based on industry standards and in compliance with applicable codes, regulations, and laws. This includes:

**Customized solutions:** Tailored to the specific requirements of each data center, ensuring that doors and hardware meet the highest standards of security, access control, and durability.

**Compliance with codes and standards:** Ensuring that all products meet local and international standards, including fire protection, egress requirements, and data center-specific regulations like SOC 2 and GDPR.

**Sustainability:** Incorporating high-performance doors and hardware that enhance the sustainability features of data centers, contributing to desired sustainability ratings.

**Advanced technology:** Utilizing tools like the Openings Studio™ BIM software to create and visualize 3D models of doors, frames, and hardware, facilitating better design, construction, and facility management.

**Professional services:** Offering fire door inspections, door surveys, and life safety plans to ensure that all doors and hardware meet compliance standards and function reliably in high-security environments.



# Mastering door solutions digitally with Openings Studio



Discover ASSA ABLOY's cutting-edge BIM software collaboration tool, Openings Studio. Designed for seamless integration with platforms like Autodesk® Revit® and GRAPHISOFT® Archicad®, Openings Studio enables you to design, construct, and manage openings from a project's inception throughout the lifecycle of the building.

With Openings Studio, you can effortlessly craft parametric door families in real-time. View detailed 3D door models, complete with hardware, in an interactive building view or floor plan. As well as explore an extensive, non-proprietary product database with manufacturer list pricing to support budgeting and alternate comparisons.

In addition, you can easily access a wealth of product information, from PDF catalogs and technical sheets to sustainability details and wiring diagrams—all in one convenient platform.

## **Intelligent cloud-based software**

Openings Studio's cloud-based platform ensures secure access to opening information from your phone, computer, or tablet, wherever you are. All openings information is stored in the cloud, simplifying sharing with all stakeholders throughout the process.

## **Openings Studio mobile app**

With the Openings Studio mobile app, you can readily access and update your building projects from any smart device. The mobile app allows you to quickly document existing openings, update openings, and complete walkthroughs for new constructions. Throw away the pen and paper, use our app to efficiently perform compliance checks, including fire, egress and smoke inspections.

With the mobile app:

- Create and affix unique smart tags to each opening
- Identify and flag issues on openings, door-by-door, floor-by-floor
- Take and upload photos, videos, and voice memos
- Access product catalogs, technical data sheets, wiring diagrams and templates
- All this and more...

All your information is synced to the Openings Studio cloud and accessible from your desktop computer.

Contact a BIM consultant | ASSA ABLOY



# Openings Studio case study

## Streamlining door specification and project collaboration with Openings Studio

**Edifice**  
Delhi, India

### Challenge

A major challenge in the project was to adopt a rigorous door specification process to ensure accuracy and minimize human error, which is critical in such complex construction environments. Additionally, there was a strong need to accelerate specification iterations in order to shorten the revision cycle, improve time management, and meet ambitious project deadlines.

### Solution

To address these challenges, the project leveraged Openings Studio, a powerful specification and BIM tool that integrates with Autodesk® Revit®. This software enabled precise management and visualization of over 750 fire-rated and non-fire-rated doors, ensuring specifications were accurate and revisions were implemented swiftly. Its intuitive interface and cross-device compatibility streamlined collaboration among

stakeholders, allowing quick updates and supporting on-time project delivery. Openings Studio also facilitated the entire lifecycle of door openings — from planning and estimation to installation and maintenance — reinforcing its value as an essential tool in complex construction projects.

### Feedback

Gaurav Nirmalkar, Designer at Edifice: *“Openings Studio has always been helpful in projects,”*  
*“Personally, I have used it in three of the data centers and it never disappoints. The simple and crisp interface is a plus point.”*

### Devices installed

750 fire-rated and non-fire-rated doors.



## Specialized doors for data center protection

A server room's first – and most critical, barrier against all threats – is its door. Complementing door and building access technologies, fire and security door solutions protect lives, servers, and business reputation. Identifying and installing the right solution across a range of fire and other applications around the data center requires a supplier with experience and expertise.

**Performance:** ASSA ABLOY offers specialized doors and frames that help maintain optimal environmental conditions, such as temperature and humidity control, which are crucial for the longevity and performance of servers. In addition, the range includes windstorm-rated, blast-resistant, and sound-attenuating doors to protect data centers from natural disasters and other physical threats.

**Expertise:** Specifying a security and/or fire door is complex, requiring a balance of fire safety, security standards, and building codes. It must provide fire resistance while meeting security needs, fitting within the building configuration, and ensuring durability. Factors like materials, hardware, and environmental conditions add to the challenge, making compliance and functionality equally critical.

**Range:** Each ASSA ABLOY door in the portfolio is engineered and manufactured by a sector specialist to meet the highest standards for performance and reliability, even in the toughest environments. ASSA ABLOY's door business segment unites nine market-leading brands, each recognized for its expertise in high-performance door solutions.

- **Donimet** specializes in doors for military and public sector applications;
- **Sunray** is known for louvred systems and high-security steel doors;
- **Małkowski-Martech** focuses on fire curtains;
- **Mercor, Portafeu, Metalind, and Fichet** deliver industry-leading fire and technical door solutions.



## Security steel doors

ASSA ABLOY's security door range includes solutions from specialists such as Donimet and Sunray Engineering, offering options tailored to demanding environments and compliance needs.

### Steel security doors

Discreet strength for high-security environments

Engineered for environments where both security and discretion are paramount, the Steel Security Door delivers robust protection against both opportunistic and targeted attacks.

- **Certified to LPS 1175 issue 8:** Independently tested to meet stringent security standards.
- **Subtle, professional appearance:** Designed to blend in with standard personnel doors—ideal for data centers requiring secure yet unobtrusive access points.
- **High-performance construction:** Built for durability and resistance without compromising on design or usability.

### Safeguard security doors

Timber security with fire protection and design flexibility

The Safeguard range of timber security doors combines LPS 1175 SR3 & SR4 security ratings with fire resistance and aesthetic versatility.

- **Rigorously tested:** Against heavy-duty mechanical and powered tools.
- **Fire-rated:** Up to 60 minutes fire resistance as standard.
- **Flexible configurations:**
  - Single or double leaf
  - Inward or outward opening
  - Wide range of locking systems





## Steel security doors

### Robust protection for high-risk stadium zones

ASSA ABLOY's steel door solutions from Mercor, Portafeu, and Metalind are engineered to meet the demanding safety and security needs of stadium infrastructure. These doors combine reinforced steel construction with high-performance insulation—mineral or basalt wool—to deliver reliable protection against forced entry, fire, and physical threats. Mercor's ALPE EI60 door offers certified fire resistance and burglary protection for service corridors and technical rooms. Portafeu's P1C120 steel door is designed for public facilities requiring EI120 fire rating and RC-certified

intrusion resistance. Metalind's PV Series delivers robust steel doors with hydraulic braking and access control integration, ideal for logistics zones and secure back-of-house areas. Across the range, doors are available in RC3 to RC6 classifications, with multi-point locking, anti-tamper features, and optional ballistic resistance. These solutions support high-traffic use and integrate with access control systems, helping stadium operators maintain a secure, compliant, and efficient environment.



## Security doors

### Steel and aluminium profile doors

These are fire-rated glazed doors, crafted from high-quality steel and aluminium, are engineered to meet the demanding requirements of data centers and other high-security environments. These doors combine robust fire protection with a clean, contemporary design, offering both safety and style without compromise.

Custom-built to comply with EN 1634 and EN 13501 standards, they are available in fire resistance classes ranging from E30 to EI120, ensuring reliable performance in critical situations.

### Construction

Each door is constructed with fire-resistant steel or aluminum frames and can be tailored with a wide range of glazing options to suit specific operational needs. These include:

- Smoke tightness (Sa and S200)
- Burglary resistance (RC2 to RC4)
- Bullet resistance (FB4-FB6)

### Designed for versatility and durability

Steel and aluminum profile doors are available in a variety of finishes—including powder-coated, stainless steel, and corrosion-resistant coatings—making them suitable for both interior and exterior use. They also support a full suite of advanced hardware options, such as access control systems, panic exit devices and automated opening mechanisms.

This ensures seamless integration into modern building management systems and long-term reliability in high-traffic or sensitive areas.

Whether installed in data centers, commercial buildings, or industrial facilities, Steel and aluminum profile doors deliver a high-performance barrier against fire and environmental threats—without compromising on aesthetics or functionality.

These doors are available from ASSA ABLOY specialists such as Mercor and Metalind, who are recognised for their expertise in fire-rated steel and aluminium profile systems.



## Fire-rated doors

### Fire doors

Fire doors provide essential fire protection for data centers, supporting fire compartmentalisation to safeguard critical infrastructure and personnel while enabling smooth access. Constructed from high-corrosion-resistant steel or stainless steel (grades 304/316), these doors outperform timber, UPVC, and aluminium in fire resistance and durability.

The range is certified to British and European standards, offering up to 4 hours of fire resistance

from FD30 to FD240 according to BS476 Part 22 and from EI30 to EI120 according to EN1634-1. Fire Doors are fully customisable with options including single and double leaf configurations, overhead and side panels, various frame profiles, and vision panels with single, double, or triple glazing.

ASSA ABLOY's fire door range includes solutions from specialists such as Mercor, Metalind, Portafeu and Fichet, offering a wide array of customisable options to suit your project:



**Door handings**



**Single and double leaf configurations**



**Overhead panels and side panels**



**Frame profiles and frame fixing options**



**Hardware**



**Vision panels including single, double and triple glazed**



**Fire-rated louvre**



**Durable frame profiles**





## Fire curtains

### Smoke curtains & fire-rated gates for data centers

In data centers, controlling fire and smoke spread is vital to protect sensitive equipment and ensure personnel safety. Smoke curtains and fire-rated gates from Małkowski-Martech provide reliable compartmentalization, helping maintain operational continuity and comply with strict safety regulations.

#### Marc-OK® fire curtain

The Marc-OK® fire curtain is a flexible, gravity-fail-safe fire barrier engineered to provide up to 120 minutes of fire and smoke containment. It's specifically designed for large, open-plan environments like data centers, where traditional fire doors are impractical or disruptive to airflow and layout.

- **High fire resistance:** Certified to provide up to 2 hours of protection against fire and radiant heat, helping to delay fire spread and protect critical infrastructure
- **Smoke and heat compartmentalization:** Effectively contains smoke and hot gases, which are often more damaging to sensitive IT equipment than flames themselves
- **Discreet integration:** Housed in a compact headbox above the ceiling, the curtain remains hidden until activated, preserving the clean, open design of modern data centers

#### Automatic smoke curtains

Fire resistance: D DH60

##### • Marc-KDA

These products are mainly intended for large-footprint facilities. The Marc-KDA mobile smoke curtain is made of fire-resistant glass-fibre fabric and includes a shaft, electric drive, and protective enclosure, with optional guides for added stability. It's customizable in size, shape, and colour, with steel components ensuring durability and smooth operation.

##### • Marc-KDS

A system of smoke control curtains ensures control over the distribution of combustion gases and smoke inside of buildings. The Marc-KDS fixed smoke curtain consists of a curtain fabric, a mounting element tailored to the building structure, and a bottom weight bar. The curtain is made of non-combustible fiberglass fabric in a standard grey-silver color and can optionally include guide rails.



## Blast doors

The blast doors range offers critical protection against intentional or accidental blasts, safeguarding lives, assets, and infrastructure. Designed to withstand static and dynamic pressures, these heavy-duty doors are tested to British and European standards for proven performance.

Available in single or double leaf configurations with inward or outward opening, Blast doors feature reinforced single rebate frames for durability. They support hardware customization, fire-rating upgrades, and integration with access control systems.

Constructed from galvanized or stainless steel, finishes include primed, powder coated, or stainless steel surfaces. Doors meet LPS 1175 Issue 8 D10 [SR4] standards, with fire ratings up to FD180(S) for internal doors and E240 for external doors.

Among the most advanced solutions in this category is the Donimet Tighten door (Air Blast TITAN), engineered to withstand shockwaves up to 7 bar and certified to EXR5 and RC6 standards. It resists a 20 kg TNT explosion at 3 meters, making it ideal for stadiums with elevated security needs.



**LPS 1175 Issue 8 D10 [SR4] certified**



**Fire ratings up to FD180(S) / E240**



**Single or double leaf options**



**Inward or outward opening**



**Reinforced single rebate frames**



**Galvanized or stainless steel construction**



**Custom hardware & locking options**



**Powder coated or stainless steel finishes**



## Water-resistant, airtight & acoustic doors

### ProMetal series steel doors

Constructed from galvanized or stainless steel (grades 304 or 316) with mineral wool or structural honeycomb cores, the ProMetal series delivers robust performance for demanding environments. These doors offer water resistance for humid or wet areas, airtightness to minimize air leakage, and acoustic insulation up to Rw 50 dB for sound-sensitive applications. Fire-rated up to 120 minutes, they also feature corrosion-resistant stainless steel options for enhanced durability. Available in single or double-leaf configurations, finishes include powder coating, epoxy primer, or stainless steel.

Ideal for data center support zones (e.g., UPS, plant, corridors), ProMetal doors help maintain cleanroom conditions, acoustic separation, and environmental control while ensuring fire containment and moisture resistance.

- **Fire-rated up to 120 minutes:** Certified to BS (and UL), with options up to 4 hours for utility spaces
- **Exceptional acoustic performance:** Up to Rw 50 dB, ideal for sound-sensitive areas
- **Water resistance & airtight seals:** Precision gasketing maintains humidity control and HVAC integrity
- **Customisable sizes & vision panels:** Single or double leaf, glazed or louvered, to match data center layout
- **High-performance cores:** Filled with mineral wool or structural honeycomb and high-density stiffeners for strength and insulation
- **Durable finishes:** Galvanized or 304/316 stainless steel skins, with powder-coat, epoxy primer, wooden-look Decoral, mirror or brushed finishes
- **Robust frames & seals:** Welded corner or butt weld frames, integrated thresholds, EPDM, smoke or acoustic seals
- **Built for compliance:** Tested to BS/UL fire standards, acoustic ISO norms, and engineered for easy maintenance





## Electromagnetic doors

### RC4 electromagnetic emanation resistant door

The DC3.1 XL TEMPEST door offers RC4 burglary resistance combined with electromagnetic tightness, specifically designed to protect critical data center environments and sensitive electronic equipment. Its 90 mm thick leaf, made from two 2.0 mm zinc-plated steel sheets reinforced with steel profiles and mineral wool insulation, provides robust physical and EMI shielding. The 3 mm thick zinc-plated steel frame with copper coating and metal rebate seals ensures airtight protection.

### EMI-RFI/STC shielded door assemblies

ASSA ABLOY's EMI-RFI/STC shielded door assemblies provide combined electromagnetic shielding and sound insulation, essential for data centers requiring protection of sensitive communications and electronic equipment. Designed to absorb EMI and RFI signals, these doors also offer certified sound transmission class (STC) ratings to minimize noise interference. They comply with standards such as IEEE 299 and ICD-705, ensuring suitability for high-security, noise-sensitive environments.



**RC4-rated for burglary resistance**



**Electromagnetic shielding (TEMPEST compliant)**



**Tested to IEEE 299 and ICD 705 standards**



**Sound insulation options (STC-rated)**



**Optional door closers and locking upgrades**



**Suitable for high-security data center zones**



## High-speed doors

### HS-series exterior high-speed doors

High-speed exterior doors for data centers

ASSA ABLOY's high-speed exterior doors are ideal for data centers requiring tight environmental control, security, and operational efficiency. Built to withstand high-wind loads and operate at high-speeds, they help maintain internal climate stability while reducing energy loss and downtime.

All models feature airtight sealing, frequency-controlled motors for smooth and reliable performance, flexible safety curtains, and self-repairing break-away systems. Optional vision panels and enhanced static insulation are available to support lighting needs and thermal performance.

#### HS8010P

Medium-sized for heavy-duty exterior use.

#### HS8010PL

Large-format version for high-demand applications.

#### HS8020P

Medium-sized with reinforced wind resistance (up to class 5, EN12424).

#### HS8020PL

Large-format with reinforced side guides for smooth operation in high-wind areas.

ASSA ABLOY's HS-series exterior high-speed doors are designed to meet rigorous standards for wind resistance and airtight sealing, ensuring optimal climate control and energy efficiency for data centers. These doors integrate seamlessly with access control and building management systems, providing enhanced security and operational oversight. With fast cycle times and self-repairing break-away systems, they minimize downtime and support continuous, reliable operation in demanding environments.



## Sliding doors

### Sliding door operators

In data centers, automatic doors must balance security, efficiency, and reliable access control. ASSA ABLOY offers a range of sliding and swing door operators designed to meet the specific needs of high-security, climate-controlled environments like data centers.

- Access control integration (RFID/biometrics)
- Fire-rated options
- Sealing for HVAC zones
- Status monitoring (door open/close)
- Fail-safe/fail-secure support
- Redundancy and backup power support for uninterrupted operation during outages

### Sliding doors

#### SL500

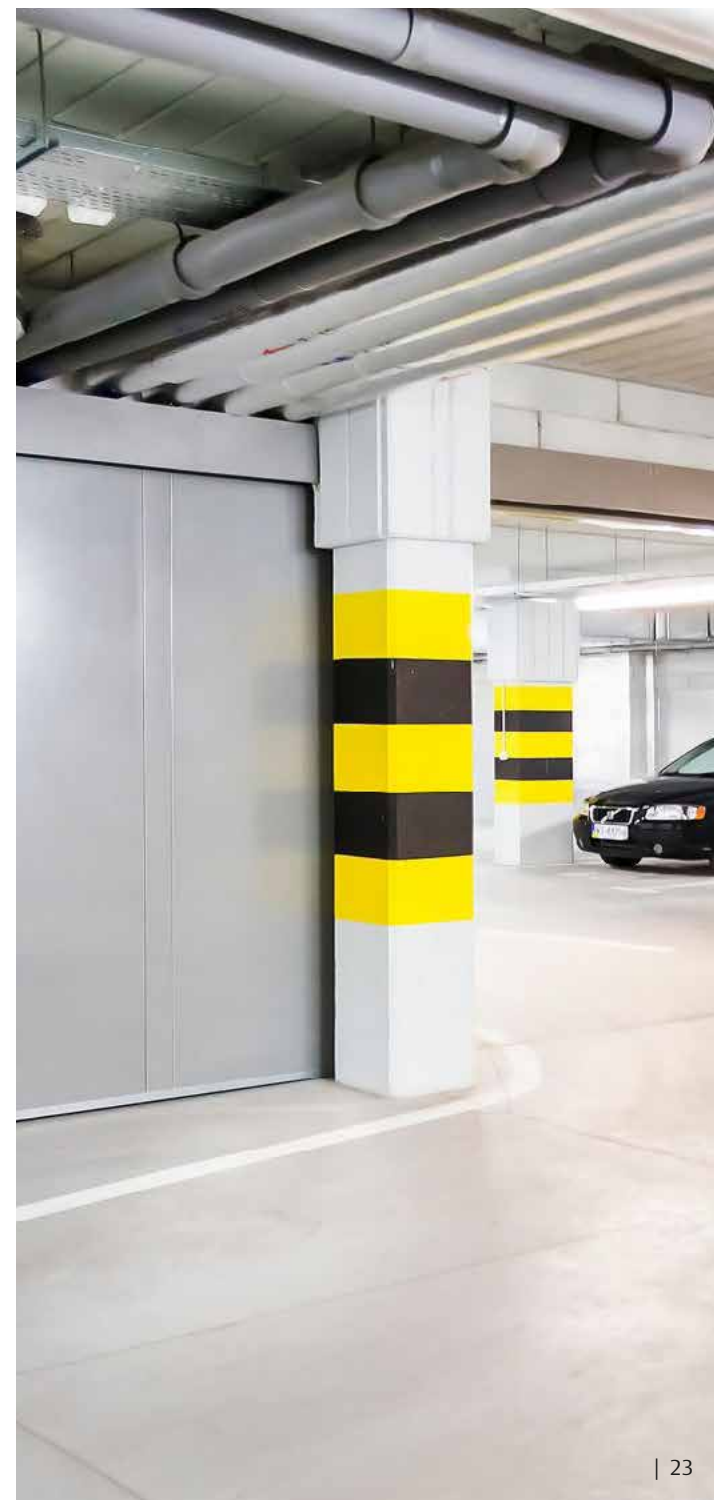
High-security, access control compatible.  
Best for main entrances.

#### SL510

Slim design, good for space-limited internal zones.

#### SL521

Telescopic, ideal for wide openings or equipment access.





## Gates

### Sliding gates

Fire-resistant sliding gates designed for internal use in facilities requiring fire protection. Available in EI2 60 and EI2 120 fire resistance classes, with options for increased smoke tightness.

Constructed from durable, fire-rated materials, the gates are engineered to automatically close in the event of a fire, triggered by a fire alarm or thermal fuse. This ensures rapid compartmentalization to prevent the spread of flames, smoke, and heat.

- Compact sliding design ideal for wide openings in logistics centers, warehouses, and industrial facilities.
- Optional smoke-tight configurations (Sa and S200 classifications) to enhance protection against smoke migration.
- Manual or automatic operation, with integration options for building management and fire alarm systems.
- Customizable dimensions and finishes to suit architectural and operational requirements.
- Low-maintenance construction with long service life and reliable performance under frequent use.

### High-speed gates, overhead and roll-up entrances for data centers

Data centers demand rapid, secure access while maintaining strict environmental controls. High-speed gates and roll-up doors enable efficient traffic flow, minimize climate disruption, and enhance physical security, supporting smooth day-to-day operations.

#### HS9120GAT cleanroom doors

High-speed door designed for cleanroom environments, offering rapid opening and closing cycles. Helps regulate particles in lower ISO certified cleanrooms, enhancing operational efficiency.

#### RR392 RapidRoll exterior doors

High-speed roll-up door suitable for exterior applications requiring frequent opening and closing. Offers high-wind load resistance and fast opening speed, improving traffic flow and energy efficiency.

#### RP2000 machine protection doors

Machine protection high-speed door designed for safety in automated processes and production lines. Ensures safety with fast opening and closing cycles, suitable for high-traffic industrial environments.



## Swing doors

In data centers, controlled access, operational efficiency, and compliance with safety standards are essential. ASSA ABLOY's range of automated swing door operators is designed to meet these demands, offering secure, smooth, and reliable entry solutions for both staff and service areas. All models are engineered for integration with access control systems, low maintenance, and compliance with EN 16005 for safety in use of power-operated doors.

### **SW200** – Heavy-duty operator

Best for: Main entrances, security checkpoints, and high-traffic zones

- Robust design for continuous operation in demanding environments
- Supports large and heavy doors
- Compatible with fire and smoke-rated doors
- Smooth, quiet operation with adjustable opening/closing speeds

### **SW300** – Slim profile, smart control

Best for: Areas with limited space or architectural constraints

- Sleek, compact design ideal for modern data center aesthetics
- Advanced microprocessor control for precise door movement

### **SW100** – Low-energy, silent operation

Best for: Internal doors, meeting rooms, and noise-sensitive zones

- Ultra-quiet operation for minimal disruption
- Low-energy mode for enhanced safety and energy efficiency
- Ideal for staff-only areas or where accessibility is a priority
- Easy integration with card readers and biometric systems

### **SW60** – Compact and cost-effective

Best for: Standard applications with moderate usage

- Budget-friendly without compromising reliability
  - Compact footprint for easy installation
- Basic automation with optional safety sensors

### **SW500** – High-performance for specialized needs

Best for: Custom or mission-critical applications

- Designed for large, heavy, or high-security doors
- High torque motor for demanding use cases
- Advanced diagnostics and programmable settings
- Ideal for integration with fire doors, airlocks, or secure zones



## The low-impact, cost-efficient way to add or extend digital access control

A whole range of Aperio battery-powered digital cylinders, escutcheons, handles and locks manage access across all three layers.

Aperio's platform design ensures they all integrate natively and work seamlessly with access management systems from over 130 different manufacturers. These integrations provide data center managers with the choice and flexibility

required to match their needs to a device for every individual application.

With the right access control in place, data center managers react quickly to events, while simultaneously offering convenient access to data center staff, authorized visitors, customers and technicians.

### Where can you integrate Aperio?



Axis Entry Manager



Genetec Synergis



Siemens  
SIPORT & SiPass



Tyco CEM Systems/  
Software house/  
Kantech

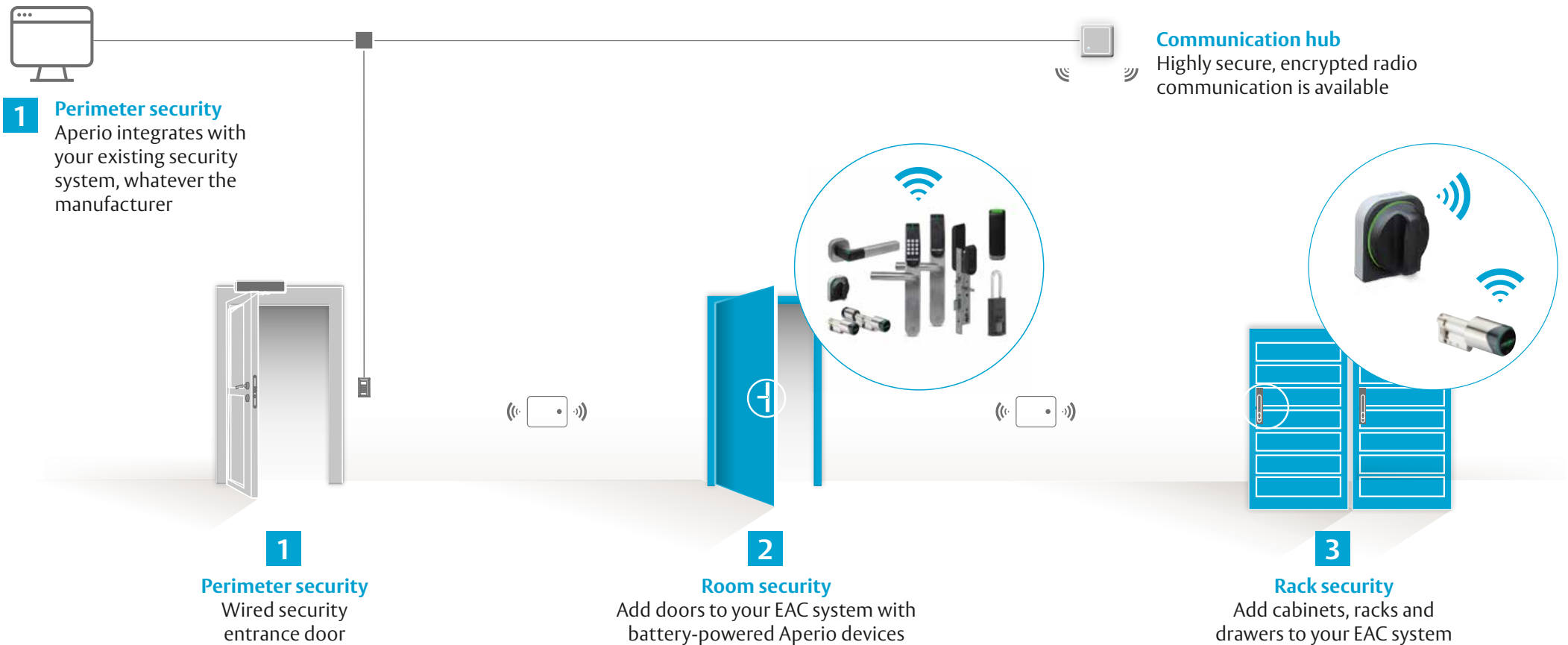
**and more...**





## Three layers, one solution

Aperio extends, wirelessly, perimeter security inside your building:  
Add wireless access control to your doors and server racks with Aperio locking devices



## Aperio digital access products for data centers



### E100

Battery-powered escutcheon designed for high-traffic doors



### H100

Sleek, battery-powered handle suited to interior doors including staff areas.



### P100

This weather-resistant digital padlock is perfect for securing portable assets and storage units, such as IT equipment or packing crates



### L100

The innovative, battery-powered wireless security lock offers an easy way to extend an existing access control system to doors with higher security levels



### C100

A wireless cylinder ideal for adding digital management to doors throughout the data center or to locking server racks and cabinets individually



### KL100

Compact, battery-powered lock designed for furniture such as cabinets, lockers, and drawers anywhere at the facility



### DR100

Robust access management for high-traffic, electrically operated doors, including glass doors

## Aperio advantages for data centers

Every ASSA ABLOY Aperio device is designed to enhance security, boost efficiency and ensure compliance. By choosing Aperio, you can be confident that sensitive areas and confidential information are properly protected.



### Effortless installation

No wiring required, making it perfect for quick, minimum or no drilling upgrades or retrofits in existing data centers



### Seamless integration

Easily integrates with your existing access system, upgrading security without an infrastructure overhaul



### Multi-credential support

Compatible with multiple RFID and mobile technologies, providing flexible access options for staff



### Greater security

Provides real-time access control and audit trails, ensuring only authorized personnel access sensitive areas



### Enhanced privacy

Available with a PINpad and other multi-factor options for sensitive areas



### Energy efficiency

Uses standard batteries, minimizing operational costs and ensuring continuous operation



### Low maintenance

Long-lasting battery life minimizes the need for frequent replacements, reducing maintenance disruptions



### Durability

Built to withstand the rigorous demands of data center environments, ensuring long-term reliability



### Smart credential handling

Can store up to 1,000 credentials, ensuring emergency access and efficient management of staff permissions





## CLIQ range

Discover a full range of programmable **eCLIQ cylinders** and **smart keys** designed to meet the complex access needs of data centers.

Ensuring the physical protection of data storage requires more than just a key. When a mechanical key is misplaced, it poses a security threat to your premises, rectifiable only by replacing locks. This process is costly and labour-intensive, particularly if a master key is lost. The CLIQ® system combines patented, high-end mechanical and electronic protection.



**Over 60 cylinder types** available — ideal for securing everything from doors, gates, lockers and storage rooms to perimeter fences and technical enclosures.



**Robust, climate-resistant design** – built to perform reliably in high-security, temperature-controlled environments typical of modern data centers.



**Smart keys** are compact, durable, and easy to use. Each key can be individually programmed to unlock specific cylinders, helping you control access with precision.



Keys can also be **updated remotely via Bluetooth**, reducing the need for on-site visits and saving valuable time for facility managers.



**Time-based access permissions** allow keys to operate only during defined maintenance windows or shift schedules, enhancing control in sensitive server areas.



**Remote key disabling** ensures lost or compromised keys can be instantly deactivated to maintain strict access control across data center zones.



## Smart key control without the complexity

The ABLOY PROTEC<sup>2</sup> CLIQ camlock system merges mechanical strength with electronic intelligence, delivering a powerful, flexible access control solution for environments where both physical security and auditability are critical.

### Dual-layer security

- Mechanical protection: Built on the patented PROTEC<sup>2</sup> disc detainer system with nine rotating discs, offering exceptional resistance to picking, bumping, and wear.
- Electronic control: Integrated CLIQ technology enables programmable access rights, time-based permissions, and remote key management.

### Smart + simple

This hybrid solution combines the reliability of mechanical locking with the intelligence of electronic access control, making it ideal for:

- Data centers
- Telecom infrastructure
- Utilities and energy sectors
- Transportation and logistics hubs

### Key features

- No wiring or batteries in the lock: The cylinder operates without an internal power source, simplifying installation and eliminating maintenance related to power or battery replacement.
- Audit trails: Every access event is logged, allowing administrators to track usage and support compliance with security standards.
- Flexible key removal: The key can be removed in both locked and unlocked positions, supporting various operational workflows.
- Wide compatibility: Available in multiple camlock formats to suit server cabinets, enclosures, control panels, and more.
- Remote access management: Permissions can be updated remotely, reducing the need for on-site rekeying or lock changes.



## Out-of-the-box digital access for self-contained or in-house data centers

Designed for small or medium-sized server rooms and data facilities, SMARTair® makes switching to digital access much easier than you think.

It transforms secure movement into and around a building, making life simpler and safer for everyone who enters or manages it.

Everything you need is inside one box. Installation is wire-free: fast, cost-efficient and low impact. Daily work routines will hardly be disrupted. Initialize the software and it's accessible right away from a desktop or via the secure TS1000 web portal. Devices are available for almost any imaginable access point, including doors, main entrances, cupboards, carts, drawers, storage boxes and car park gates.

SMARTair technology works hard to safeguard a data center and everyone who enters it. Innovative functions like remote access or site lockdowns are just a click away, helping keep data center staff and visitors safe in an emergency.

Thanks to the system's flexibility, SMARTair can also integrate with existing business software. SMARTair's Openow app makes mobile access easy to implement, whenever you choose.

When you open a SMARTair box, simplicity, security, flexibility and scalability are waiting inside.



## Cloud-native access control for data centers

Data centers demand the highest levels of security, flexibility, and operational efficiency. Traditional key-based systems can't keep up with the pace of change, especially when managing multiple users, contractors, and remote sites. ABLOY CUMULUS offers a smarter way forward.

This cloud-native access ecosystem combines durable, IP-rated locking hardware with encrypted mobile credentials and real-time access management. Whether you're securing server racks, cages, or perimeter gates, CUMULUS gives you full control—without the complexity of physical keys. Hardware options include: Swing handles, padlocks, cylinders, and key deposits—engineered for harsh environments and high-security applications.



### Keyless by design

Replace physical keys with secure mobile credentials to reduce risk and simplify operations.



### Real-time access control

Grant or revoke access instantly from anywhere via the CUMULUS cloud platform.



### Offline-capable hardware

Maintain full control even in shielded or remote server rooms—no constant connectivity required.



### Audit-ready

Full access logs and traceability support compliance with ISO/IEC 27001, SOC 2, and GDPR.



### Integration-friendly

Open APIs enable seamless integration with DCIM, BMS, and ITSM platforms.



**Tamper alerts and environmental monitoring** for enhanced physical security and operational awareness.





## ABLOY electric locks: Power to your door security

ABLOY electric locks deliver advanced, self-locking security solutions tailored for modern data centers. Designed for high-traffic, high-security environments, they offer both single- and multipoint locking, with fail-safe/fail-secure modes and real-time monitoring for rapid response to irregularities.

Compatible with all major access control systems—ensuring safe & secure access and exit. Select models support low-energy operation for wireless integration. Ideal for internal zones and perimeter exits, ABLOY locks also integrate seamlessly with door automation and hands-free systems.



### **EL560 electric lock**

Medium-traffic interior lock with electric control of the outside handle (inside always allows exit). Supports fail-locked/unlocked modes, access systems, timers, keypads, and push buttons. Suitable for exit and fire-rated doors, with mechanical key override.



### **EL566 multipoint lock**

Medium-traffic interior lock with electric outside handle control and three locking points. Supports access systems, timers, keypads, and push buttons. Microswitch monitoring, mechanical override, and certified for escape (EN 179/1125) and fire doors.



### **EL520 motor lock**

Ideal for high-traffic, push & pull doors, the EL520 integrates with access control, remote systems, door automation, and alarms. It features microswitch monitoring, full status reporting (bolt, door, REX (Request to Exit), cylinder override), and is certified for escape (EN179/1125) and fire doors.



### **EL060 mechanical lock**

Single-point europrofile mortice lock with 30–45 mm backsets. Opens via key (outside) and handle (inside), with automatic deadlocking on close. Features double-action latchbolt and deadbolt, constant key override, and fire resistance. Certified to EN12209 (mechanical resistance) and EN179 (emergency exit).



### **EL166 mechanical multipoint lock**

For interior and exterior use, including fire and exit doors. Automatically deadlocks on closing. Operable by key from outside and handle from inside.

# Electric strikes

## A simple effective access control solution

The world-renowned effeff electric strike range delivers top-tier security technology tailored for the stringent demands of data centers. With exceptional holding force, robust construction, and high-resistance to tampering, effeff strikes are ideal for securing both internal zones and perimeter access points. Their broad compatibility with all types of access control systems ensures seamless integration into complex security infrastructures, making them a reliable choice for safeguarding critical IT environments.



### **effeff Profix 2 (332)**

Strike for escape route doors. Unlocks reliably under preload. Certified for electrical locking systems.



### **effeff 118**

Compact fail-locked strike with  $\pm 3$  mm FaFix<sup>®</sup> adjustment and optional monitoring features.



### **EX118R**

Fail-locked strike for EX fire doors. 10 m cable, FaFix<sup>®</sup>, monitoring contact, 9,000 N holding force.



### **Escape door strike 332<sup>®</sup>**

Compact strike for emergency exits. Operates under preload and power failure. prEN certified.



### **Escape door strike 331<sup>®</sup>**

For high-demand doors. Unlocks under 5,000 N preload. Flexible mounting. Certified device.



### **ATEX electric strike**

For explosive areas. Electric/pneumatic versions. Robust, safe, ATEX certified.

# Escape route technology

## Guiding people to safety with intelligent and compliant emergency technology



### ePED® escape door terminal switch

A modern, software-controlled emergency exit solution that simplifies wiring using 4-wire bus technology. It supports remote control via Ethernet, is easy to configure, and complies with EN 13637:2015 standards. The system allows for flexible installation, optional time-delayed release, and can be expanded with additional emergency buttons or bidirectional escape routes.



### 925-Touch control panel

Central operating and display unit in a plastic housing for up to 24 doors, supporting escape door control and TS bus networking. Features an integrated touch display for configurable door status monitoring and control. Compatible with TSB controller 970-TSBC-30. Includes TS bus interface for networking with effeff escape door systems and a built-in buzzer for acoustic alarm signals.



### ePED panic touch bar

The ePED panic touch bar combines mechanical reliability with smart electronic control, enabling secure, compliant emergency exits. With integrated visual feedback and Hi-O technology, it ensures safe egress while preventing misuse—ideal for modern, standards-compliant buildings.



## Smarter identity where credentials meet control

In high-security environments like data centers, identity management must balance airtight access control with operational efficiency. HID's advanced reader portfolio—including biometric, card, keypad, and mobile credential solutions—delivers robust, multi-factor authentication tailored for mission-critical infrastructure. With support for dual authentication, mobile credentials, and GreenCircle Certified low-energy operation, HID readers ensure secure, scalable, and sustainable access control across sensitive zones.



### **HID Signo biometric reader 25B**

A high-performance fingerprint reader with patented multispectral imaging for reliable reads—even with wet, dirty, or worn fingerprints. Supports dual authentication (biometric + card or mobile), 1:1 and 1:N matching, and stores templates securely on device or card. Ideal for high-security zones and server room access



### **HID Signo reader 20**

Compact, mullion-style reader supporting a wide range of credentials including HID Mobile Access®, Seos®, iCLASS SE®, and MIFARE DESFire. Perfect for narrow-frame doors or rack enclosures where space is limited but security is essential



### **HID Signo reader 40**

A full-featured wall switch reader offering broad credential compatibility and native support for bluetooth and NFC. Ideal for main entry points and high-traffic internal zones. Supports OSDP secure channel and dual authentication configurations



### **HID Signo reader 40K**

Combines keypad and contactless reader in one device for dual-factor authentication. Supports PIN + card/mobile credentials, making it ideal for perimeter doors or areas requiring elevated access control. Also supports GreenCircle Certified low-energy operation



# Door closers

## Barrier-free access and secure spaces with the help of innovative ASSA ABLOY door closer

Data centers can install all the digital and mechanical access they need, but the servers are not secure if a door is left open. Unfortunately, relying on people to close doors securely, every time, is not a realistic strategy. Even a momentary lapse can compromise physical security or environmental controls.

An automated door closer ensures key doors shut securely and reliably, every time. This simple yet critical solution helps maintain the integrity of secure zones, supports fire safety compliance, and reduces the risk of unauthorized access due to doors left ajar.

### **ASSA ABLOY door closers:** Engineered for performance

ASSA ABLOY's innovative range includes Cam-Motion® and Close-Motion® door closers, designed to deliver secure, smooth, and comfortable door closing for all types of interior and exterior doors. These closers are ideal for high-traffic environments like data centers, where reliability and ease of use are essential.

### **Advanced Cam-Motion technology**

Unlike traditional rack-and-pinion guide rail systems, ASSA ABLOY Cam-Motion guide rail door closers require a push-force that falls rapidly. This patented technology guarantees ergonomic and convenient opening for everyone, including staff carrying equipment or moving through with limited mobility.

The smooth, controlled motion also reduces strain on hinges and frames, extending the life of the door system.

### **Smart features for smarter access**

**Optional closing delay:** Gives users extra time to pass through, especially useful in accessibility zones or when transporting equipment.  
**Backcheck function (standard):** Slows the door's final opening section to protect the frame and prevent banging into walls—preserving your investment in doors and infrastructure.  
**Low maintenance:** Designed for long-term reliability with minimal servicing, making them ideal for mission-critical environments.



# Door closers

## Why choose an ASSA ABLOY door closer?



### Enhanced security

Our door closers provide reliable operation and can be combined with an ASSA ABLOY digital access solution for even greater security control



### Energy efficiency

Our door closers help reduce energy waste, contributing to more sustainable, energy-efficient operations



### Barrier-free access

Ensuring accessibility for all, our door closers meet standard CEN/TR 15894 and help you offer barrier-free site access



### Standards compliance

Our door closers comply with a range of important standards including EN 1154 for fire and smoke protection



### Easy installation

The symmetric cam design enables fitting to either frame or door, on hinge or non-hinge side, simplifying retrofits



### Durability and versatility

Our door closers are known for their high-durability, corrosion resistance, versatile applications, and ergonomic designs

## ASSA ABLOY door closers for data centers

### Cam-Motion

Make opening doors easier, because force required to open the door decreases significantly after the initial push, making it accessible for everyone. Doors close safely and slowly, reducing risk of injury.

### Close-Motion

Doors close quietly and securely, which is crucial in settings where noise reduction is important. The soft closing mechanism minimizes the risk of trapped fingers for any venue frequented by young children.

### Free-Motion

Combines Cam-Motion with a free-swing function so doors open with almost zero force, even heavy fire doors. The zero opening force occurs after the first opening after each power cycle. For access and safety, doors remain in free-swing mode until powered off.

### Floor springs & concealed closers

Equip high-traffic entrances and heavier doors. Concealed under the floor, they make a sleek impression while maintaining control. Particularly suited to areas like a main entrance where unobstructed floor space may be critical.

### Security door closer

Easily retrofit fire doors with access control to enhance security while ensuring compliance with fire safety regulations. Designed to integrate seamlessly with access systems, providing extra security without compromising accessibility.



## Door seals

### Maintaining temperature and reducing dust ingress: Planet drop seals

Configuring a data center inevitably means meeting its very specific needs for temperature control and management. A straightforward way to mitigate energy loss — while reducing costs and enhancing the building's sustainability performance — is to **ensure that doors are properly closed**. Installing intelligent ASSA ABLOY door closers at strategic openings is one solution. These guarantee reliable, secure closure while maintaining barrier-free access around the building.

However, neither door closers nor a digital access system can fully seal an opening. Inevitably, **“door gaps” – spaces between the bottom edge of**

**a door and the floor –compromise the door’s thermal barrier.**

The energy-efficiency advantages of a properly closed door are obvious. A tightly shut door also helps maintain temperature differentials, which may be critical – between a server room and the corridor, for example. Closed interior doors alleviate stack pressure, undesired inward airflow caused by rising warm air inside the building.

In addition, a properly sealed door helps to block one route for dust to enter areas where servers and other IT equipment are kept.



# Panic exit devices

## Ensuring rapid and secure exits

In an emergency, exiting a data center—a critical security environment—should be safe and straightforward: personnel may be in a state of stress and should not have to wrestle with complex exit mechanisms. ASSA ABLOY's panic exit devices (PEDs), available Europe-wide, ensure data center managers enable fast, easy escape through emergency doors without compromising overall security.

Each PED from the ASSA ABLOY range is designed and tested for quick, safe exit in an emergency while meeting building regulations and other important national and regional compliance standards.

To ensure barrier-free operation for every user, ASSA ABLOY PEDs have mechanisms constructed

to open with little force, and so may be operated even by people with reduced dexterity or strength. A single, intuitive action like pushing the door-bar releases the lock and aids escape.

ASSA ABLOY PEDs are built and tested to meet EN 1125 and UL standards, so data center managers do not have to worry about compliance. Durable engineering across the range makes ASSA ABLOY PEDs suitable even in challenging high-security environments like data centers, where low-quality alternatives quickly suffer wear and tear.

By installing a high-quality PED at key emergency exits, fire doors, and other important access points, data center owners and managers provide both security and safe escape routes.





# Panic exit devices

## Panic and emergency exit hardware



### Standard panic and emergency hardware

Reliable push-bar solution for everyday emergency exits. Simple operation ensures quick and safe egress



### Slimline panic and emergency hardware

Space-saving design ideal for narrow doors. Combines sleek aesthetics with fast exit functionality



### Touch bar panic hardware

Intuitive horizontal bar for rapid exit. Designed for high-traffic environments where speed matters



### Touch bar electronic latch retraction panic hardware

Electronically retracts the latch for seamless integration with access control. Enables fast, secure egress with minimal effort



### High-security panic and emergency hardware

Built for secure zones. Offers reinforced construction for dependable emergency exit in sensitive areas



### Concealed escape hardware for aluminium doors

Hidden mechanism preserves door appearance while enabling safe and easy emergency exit



### Scandinavian escape solutions

Tailored for Nordic-style doors. Combines ergonomic design with smooth, low-force operation

## Patented disc locking with key control for data centers

ABLOY PROTEC<sup>2</sup> is a high-security mechanical master key system built on patented **disc detainer technology**, offering unmatched resistance to picking, bumping, and wear. Ideal for data centers, it provides secure, key-controlled access across a wide range of locking points—including doors, server racks, padlocks, and camlocks—without the need for wiring or electronics.



**Patented rotating disc mechanism** for superior physical security



**Customizable master key hierarchies** for tiered access control



**Durable and maintenance-free**—ideal for high-use environments



**Scalable** across large, multi-site data center infrastructures



**No power or batteries required**, ensuring reliability in all conditions



**Audit-ready key control**  
Uniquely coded, traceable keys support strict access policies and regulatory compliance.



# Code Handle

## Code Handle range

Every data center has spaces where a simpler, lowsecurity solution is more appropriate for filtering access. For example, rooms may be set aside for storing for cabling and other items en route to be recycled. Cleaners and maintenance contractors may require rooms to store less valuable supplies. At these doors, Code Handle easily adds a layer of PIN protection to prevent unauthorized entry. Code Handle is an effortlessly integrable, secure solution which retrofits seamlessly over an existing locking cylinder. The process is straightforward: replace the current door handle with the sleek, low-profile Code Handle and secure it with two screws to instantly introduce PIN security to any room or equipment cupboard.



### Code Handle round rose

Discreet. Modern. Effortless. The Code Handle round rose is a compact, stylish electronic door handle that brings keyless convenience to modern interiors. With its minimalist round rose design, it's ideal for environments where aesthetics and subtlety are just as important as security.



### Code Handle longplate

Secure. Stylish. Seamless. The Code Handle longplate is a refined access control solution designed for interior doors where both aesthetic continuity and enhanced functionality are essential. Unlike the compact round rose version, the longplate model offers a more traditional, elongated backplate design, making it ideal for retrofit installations or heritage-style interiors.



### Code Handle accessories

We offer a full range of accessories to cover our Code Handle range.



# Master-key range

## The ASSA ABLOY master-key range

Our range of **mechanical master key systems** an effective access solution which provide security, operational efficiency, and compliance with regulatory standards.

### **Controlled access to sensitive areas**

Different areas within the data center require individual levels of access authority. Our master key system enables precise control over who can enter these areas, minimizing the risk of unauthorized access and ensuring sensitive data is protected.

### **Customizable key hierarchies**

The system allows for different levels of access depending on roles. For instance, senior staff might have master keys granting them access to all areas, while individual department staff can be given sub-master keys that only open specific areas, such as administrative offices.

### **Emergency access**

In emergencies, designated personnel can use master keys to quickly access all critical areas, ensuring that time-sensitive interventions can be carried out without delays caused by locked doors.

### **Compliance with health and safety regulations**

Data centers must comply with stringent security and privacy regulations, such as those related to data (GDPR in the EU). Our high-security master key systems help ensure that only authorized staff can access servers or other regulated areas.

### **Integration with electronic systems**

Our master key systems can be integrated with digital access control solutions for a hybrid approach. For example, certain doors may be managed electronically, while others still use mechanical keys, providing flexibility and maintaining security even during power outages or system failures.

### **Durability and hygiene**

Our durable materials and designs are resistant to wear, ensuring long-lasting performance even in areas that are cleaned regularly to minimize dust accumulation or maintain hygiene standards.





## Benefits for data center access management



### Improved security

Control over who has access to sensitive areas, reducing the likelihood of breaches



### Operational efficiency

Fewer keys are required, simplifying access management and reducing the chance of lost or misplaced keys



### Emergency equipped

Swift access in critical situations where time is crucial, improving response times



### Compliance

Helps facilities meet legal and regulatory requirements for security and privacy



### Convenience

Single key access for multiple areas, simplifying staff operations and reducing the need to carry large sets of keys



### Cost-effectiveness

Reduced key management costs, enhancing operational efficiency and allowing better allocation of resources



# Master-key range case study

## Product range and expert specification support

**Edifice**  
Hyderabad, India

### Challenge

When leading architects Edifice were designing a new data center in Hyderabad, security was clearly a top priority. Every door at the new building required individual control. The complex's size also presented a challenge – with 270 doors in phase one of the project alone.

### Solution

Working with ASSA ABLOY's local dedicated BIM team helped Edifice work faster to implement accurate, differentiated functionality for each door and hardware set time-efficiently, and to optimize collaboration between the client and multiple teams working on the same project. Being able to specify both mechanical and digital solutions from ASSA ABLOY's vast range also helped streamline project

delivery. ASSA ABLOY products were supplied with Environmental Product Declarations (EPDs), helping the final building achieve LEED certification.

### Feedback

Abhay Bhandari, Architectural Consultant at Edifice: *"The project had to be delivered via BIM for all stakeholders, so it was imperative the door hardware team have the design-to-delivery process in sync. ASSA ABLOY's BIM plugin proved to be a game changer."*

### Devices installed

Fire-rated and standard mechanical locking and door hardware; door closers; ABLOY electric locks; sargent electric hardware for gates; ABLOY mechanical master-key system.



## Standard defending the premises

### EN 1303:2015

Mechanical security for cylinders and keys

This standard covers a wide range of performance criteria for mechanical locking cylinders and their keys, including:

- Strength
- Security
- Durability
- Corrosion resistance

EN 1303 uses an 8-digit coding system, where each digit represents a specific performance feature. Among the most relevant for building specifications are:

- Digit 2 – Durability
- Digit 4 – Fire/smoke resistance
- Digit 6 – Corrosion resistance
- Digit 7 – Key related security
- Digit 8 – Attack resistance

### EN 12320:2012

Security for padlocks and fittings









This standard applies to padlocks, their fittings, and keys, focusing on:

- Strength
- Endurance
- Safety
- General operation
- Low security
- Maximum security (for limited, high-risk applications)
- Corrosion resistance
- Durability
- Key-related security
- Resistance to physical attack





## Standards. Grading EN 1303

 Category of use	 Durability	 Door mass	 Fire resistance	 Safety	 Corrosion and temperature resistance	 Key-related security	 Attack resistance
<b>Grade 1:</b> Keys shall resist a torque of 2.5 Nm and still be usable. This is for use by people with a high-incentive to exercise care and with a small chance of misuse.	<b>Grade 4:</b> 25,000 test cycles  <b>Grade 5:</b> 50,000 test cycles  <b>Grade 6:</b> 100,000 test cycles	<b>Grade 0:</b> No requirement	<b>Grade 0:</b> Not approved for use on fire-resistant / smoke control door assemblies  <b>Grade A:</b> Suitable for use on smoke control door assemblies  <b>Grade B:</b> Suitable for use on fire-resistant and smoke control door assemblies	<b>Grade 0:</b> No requirement	<b>Grade 0:</b> No corrosion requirement, no temperature requirement  <b>Grade A:</b> High-corrosion resistance, no temperature requirement  <b>Grade B:</b> No corrosion requirement, temperature requirement from -25°C to +65°C  <b>Grade C:</b> High-corrosion resistance, temperature requirement from -25°C to +65°C	<b>Grade 1:</b> Min. number of effective differs: 100 Min. number of movable detainers: 2 Torque resistance of plug/cylinder: 2.5 Nm  <b>Grade 2:</b> Min. number of effective differs: 300 Min. number of movable detainers: 3 Torque resistance of plug/cylinder: 5 Nm  <b>Grade 3:</b> Min. number of effective differs: 15,000 Min. number of movable detainers: 5 Torque resistance of plug/cylinder: 15 Nm  <b>Grade 4:</b> Min. number of effective differs: 30,000 Min. number of movable detainers: 5 Torque resistance of plug/cylinder: 15 Nm  <b>Grade 5:</b> Min. number of effective differs: 30,000 Min. number of movable detainers: 6 Torque resistance of plug/cylinder: 15 Nm  <b>Grade 6:</b> Min. number of effective differs: 100,000 Min. number of movable detainers: 6 Torque resistance of plug/cylinder: 15 Nm	<b>Grade 0:</b> No resistance against drilling, no resistance against mechanical attack  <b>Grade A:</b> 3/5 minute resistance against drilling Resistance against mechanical attack except plug/cylinder extraction  <b>Grade B:</b> 5/10 minute resistance against drilling Resistance against mechanical attack except plug/cylinder extraction  <b>Grade C:</b> 3/5 minute resistance against drilling Resistance against mechanical attack including 10 kN pulling resistance  <b>Grade D:</b> 5/10 minute resistance against drilling Resistance against mechanical attack including 15 kN pulling resistance  <i>Mechanical attack includes chisel, twisting and plug/cylinder extraction.</i>



# Cylinders

## Standards. Grading EN 12320

Requirement	Grade	1	2	3	4	5	6	Unit
Minimum number of effective key differs		300	1,000	2,500	5,000	10,000	20,000	•
Non-interpassing of keys with just one interval differ		1	1	1.5	1.5	1.5	1.5	Nm
Resistance to force on cylinder plug or locking mechanism		•	•	4	5	10	15	kN
Resistance to torque on cylinder plug or locking mechanism		•	2.5	5	15	20	30	Nm
Resistance to pulling of shackle and staple		3	5	15	30	70	100	kN
Resistance to twisting of shackle and staple		40	100	200	450	1,200	2,500	Nm
Resistance to cutting of shackle and staple		6	15	25	35	70	100	kN
Resistance to impact on padlock body, shackle and staple at low temperature		•	•	-20 1,250 800	-20 3,050 1,000	-40 6,550 1,400	-40 7,150 1,500	°C g mm
Resistance to drilling of padlock body, shackle and staple		•	•	•	2	4	8	Min
Resistance to sawing of padlock body, shackle and staple		•	•	•	2	4	8	Min

## Why patent protection matters for protecting servers and data

Leading ASSA ABLOY mechanical locking solutions (see opposite) offer certified mechanical security with active **patent protection stretching into the late 2030s**. This long-term protection ensures that facilities of every type and size can rely on their locking system for many years.

Why is it more secure? Simply because **patented mechanical locking solutions make it harder for anyone to make unauthorized copies** of your keys.

### Fewer copies

With patents in place, the likelihood of unauthorized key copies circulating is minimized, preventing unauthorized access to confidential, commercial data, whether in server rooms, private offices or any other restricted area.

### Harder to copy

If lock cylinder designs are generic or sold with expired patents, the risk of unauthorized access increases.

## ASSA ABLOY master key systems for data centers



### CY110 dimple key system

Durable, high-performance locks and cylinders with 6-pin technology for complex or commercial buildings. **Robust, reversible keys save users time** and stress. One key operates multiple locking mechanisms. Patent protected valid through 2036. Durable design with 96-hour corrosion resistance and tested for 500,000 lock/unlock cycles.



### CYS10 sawn key system

Durable, high-performance locks and cylinders with 6-pin technology. The trusted sawn key design offers a **convenient user experience**. Double patent protection increases security. Patent protected to 2037. Durable design with 96-hour corrosion resistance and tested for 300,000 lock/unlock cycles.

# We put our team of experts at your disposal



We hope you have found this brochure useful. If you wish to receive more information, please contact us and one of our experts in your area will get in touch.

## Our technical advisor will help you to:

- Improve the security of your business
- Reduce costs
- Find out about real examples of companies making use of all the advantages of access control



Solutions for data centers | ASSA ABLOY

The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, door and window hardware, locks, access control and service.

**ASSA ABLOY**

ASSA ABLOY Opening Solutions EMEA  
Dukes Court  
Dukes Street  
Woking  
GU21 5BH  
United Kingdom

[assaabloy.com](https://assaabloy.com)