ELECTRIFICATION SOLUTIONS

# EHOUSE AND POWER DISTRIBUTION CENTERS

Less complexity, more reliability

ENGINEERED
TO OUTRUN

# ABB ELECTRIFICATION SOLUTIONS

## Delivering custom engineered solutions with safety, speed and reliability

ABB is a global leader in electrical products and systems, delivering safer, smarter and more sustainable electrification solutions across industries. With a legacy spanning over a century, ABB continually evolves to meet the demands of modern energy systems, combining engineering expertise with advanced digital technologies.

ABB Electrification offers a comprehensive product portfolio that includes medium and low voltage switchgear, motor control centers (MCCs), circuit breakers, wiring accessories, energy management systems and automation platforms. These solutions are designed to enhance energy efficiency, improve safety and enable intelligent control across a wide range of applications.

Serving industries such as data centers, oil and gas, transportation, utilities, manufacturing and commercial buildings, ABB tailors its offerings to meet the unique challenges of each industry. The electrical house (eHouse) solution supports rapid deployment, digital integration and operational reliability.

With a global footprint and a commitment to innovation, ABB Electrification is shaping the future of energy distribution — delivering performance, flexibility and peace of mind where it matters most.

# IMAGINE YOUR ELECTRIFICATION PROJECT, SIMPLIFIED

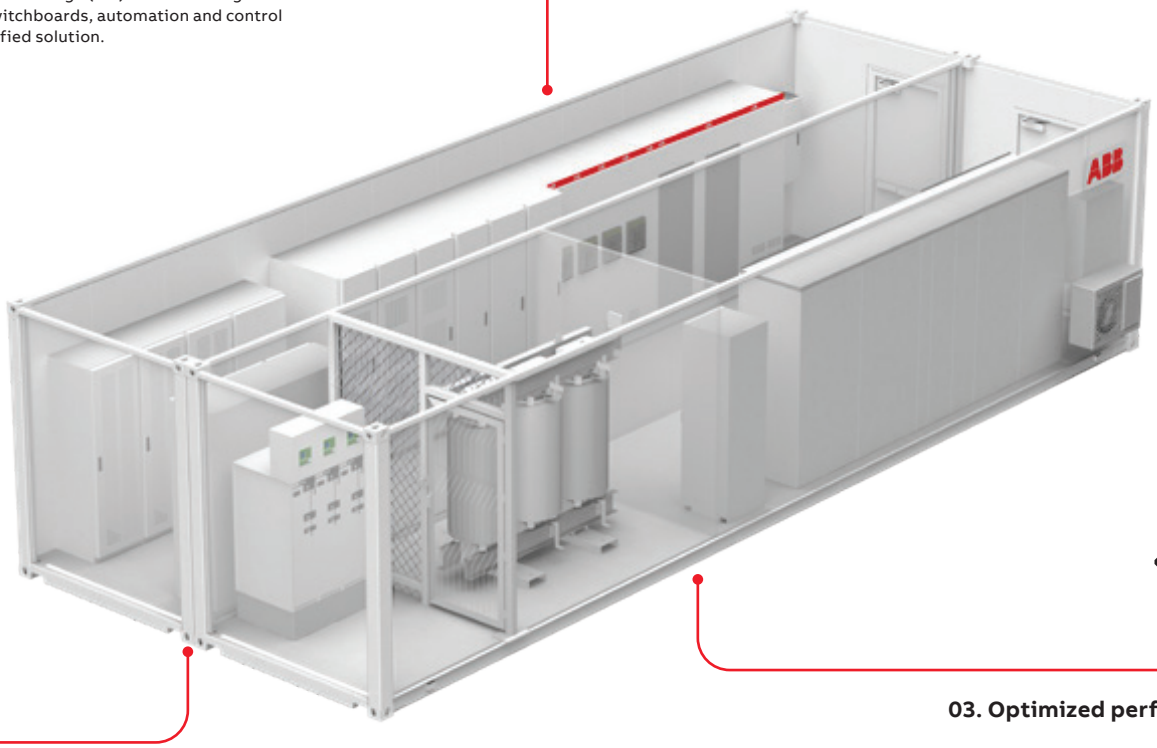
ABB's eHouse is a modular, prefabricated electrical building designed to streamline power distribution in demanding environments. Built to house medium and low voltage switchgear, MCCs and digital automation systems, the eHouse offers a packaged solution that minimizes on-site construction and accelerates project timelines.

The eHouse simplifies execution by integrating all critical systems into a factory-tested enclosure by reducing interfaces, improving quality control and enabling faster commissioning. Each unit is custom engineered to meet project-specific requirements and built in controlled facilities — fully integrated and tested before delivery.

Whether deployed in data centers, mining, oil and gas or utilities, ABB's eHouse is backed by ABB's product experts and a team of solutions execution professionals.

**01. Single source advantage**

Consolidates medium voltage (MV) and low voltage (LV) switchgear, switchboards, automation and control from ABB into a unified solution.




**02. Seamless integration**

Helps ensure optimal compatibility and communication between all electrical and control components, eliminating interface issues.

**03. Optimized performance**

Maximizes efficiency, reliability and safety across the entire electrical system through coordinated design and functionality.

# 01. SINGLE SOURCE ADVANTAGE

ABB's electrical protection, distribution and control portfolio includes medium and low voltage switchgear, medium and low voltage circuit breakers, motor and lighting controls, protection and control relays, switchboards, power and lighting panelboards, load centers and fully integrated digital power management, SCADA, paralleling switchgear (PSG) and protection and control offerings.

ABB offers a complete package for your eHouse electrical needs. We combine our technology with transformer, DC systems (UPS and battery) and integration partners to deliver the complete solution your project specifies.

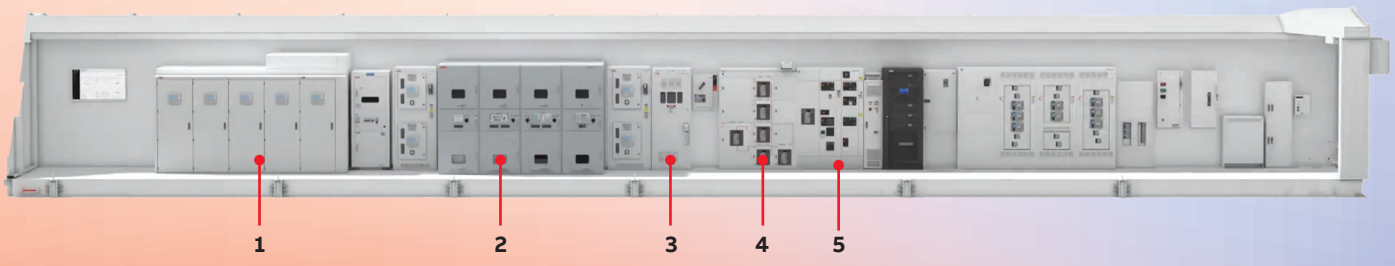
**Seamless integration:** We help ensure all components work together flawlessly.

**Expert support:** Our team provides comprehensive support throughout the entire process, from design and configuration to application, training and beyond.

**This translates to:**

- Simplified project management
- Reduced risk and errors
- Optimized performance

The Digital Systems Center team at ABB is your trusted partner, providing ongoing technical and functional support throughout your journey.




**Medium voltage (MV)**

1. **MV gas insulated switchgear** for primary and secondary distribution to suit every medium voltage application up to 37.5 kV.

2. **MV air insulated switchgea**r provides a centralized assembly of vacuum circuit breakers and advanced protective relays.

3. **MV motor control centers (MCCs)** meet demanding applications while adhering to the most stringent industry standards.

**Low voltage (LV)**

4. **LV switchgear** solutions for arc flash protection combine power distribution protection, control, monitoring, diagnostics and ease of use.

5. **LV motor control centers (MCCs)** for any industry need, with up to 3200 A bus, are available in both standard and arc flash mitigation (AFM) units, provide a safer, smarter and more sustainable means to protect and control motors.

# SINGLE POINT OF CONTACT

## Your direct line to project success

In multi-vendor projects, clarity and coordination are essential. That's why ABB assigns a dedicated single point of contact to every eHouse project. That person's role is to provide you with streamlined communication, accountability and alignment from start to finish throughout your electrification project.

Your single point of contact acts as the central hub for all project activities, from design reviews and technical clarifications to scheduling, logistics and issue resolution. This eliminates the need to navigate multiple departments or interfaces, reducing delays and miscommunication. For program directors managing tight timelines and high-risk scopes, this direct line to ABB simplifies execution and enhances responsiveness.

Beyond project management and coordination, your single point of contact provides access to ABB's broader technical and leadership teams, helping ensure that decisions are made quickly and helping you deliver on your commitments with confidence.

# 02. SEAMLESS INTEGRATION

Whether this is your first eHouse project or the next one, ABB provides a tried and tested execution process.

ABB's eHouse execution process is designed to deliver precision, predictability and reliability from start to finish. It begins with detailed client engagement and design alignment, followed by rigorous factory testing of switchgear and the integrated systems.

Each eHouse is assembled, tested and validated before shipment, making for faster installation and commissioning on site. With a single point of contact and experienced project management, ABB simplifies coordination, reduces risk and accelerates delivery.

Delivering a high-quality, reliable eHouse solution requires precision at every step. ABB's execution model is built around two core phases — design and build. Each phase is led by a dedicated project manager to ensure alignment, transparency and performance.

**Design phase**

The process begins with ABB's project manager engaging your team to understand your goals, technical requirements and site conditions. Within the first two to three weeks, a formal kickoff meeting is held to align on the project schedule, communication plan and key milestones. ABB and its partners then begin developing a detailed design package for your review. Once all design elements are approved and frozen, the project transitions into the build phase.

**Project kick-off**

- Team introductions
- Scope reviews
- Schedule review
- Technical review

**Design reviews**

- Review with client engineering
- PE generates interconnect list
- Present vendor integration test plans (ITPs) for factory acceptance test (FAT)

**Design freeze**

- After design freeze, the manufacturing processes begin
- Issue the integrated FAT ITP for the eHouse

**Build phase**

ABB manages all aspects of the build, proactively addressing any changes and keeping your engineers informed. All equipment undergoes factory acceptance testing (FAT), which you are invited to witness. As the eHouse structure is assembled, ABB's quality team inspects critical milestones to help ensure compliance. Once equipment is integrated, the system undergoes integrated FAT (IFAT). After final testing and punch list completion, the eHouse is prepared for shipment and delivered to your site, ready for commissioning.

**Equipment FAT**

- Each vendor will execute the FAT according to the approved ITP and present:
  - Punch list
  - Internal test records
  - Yellow/red line drawings
- All punch list items are closed prior to equipment shipment

**eHouse IFAT**

- Client will witness ABB perform the integrated FAT to the approved IFAT ITP
- IFAT punch list will track all items from sub-vendors
- Project engineer will update red line drawings, if needed, and as-built drawings

**Shipping release and shipment**

- Pre-shipment check list completed
- All punch list items completed and closed
- Punch list shared with client
- Arrange shipment with client

# INTEGRATION PARTNERSHIP

ABB's eHouse solutions are delivered through a trusted network of integration partners strategically located across the United States. While ABB does not manufacture or integrate eHouses in-house, we align each project with partners based on their technical capabilities, geographic proximity and track record to help ensure the best fit for the client's needs and schedule.

This model allows ABB to scale efficiently while maintaining high standards of execution. To support this, ABB has built a dedicated quality department that oversees every phase of the build process. Through multi-step inspections and milestone reviews, we help ensure that both ABB's standards and client expectations are upheld throughout fabrication and integration.

By combining ABB's engineering ability and project management with the specialized capabilities of our partners, we offer a flexible and scalable approach to eHouse delivery and can meet the demands of power projects across industries.

Our long-standing relationships with integration partners foster strong mindshare and attention to ABB orders, helping us maintain priority focus and responsiveness. These partnerships are built on mutual trust, shared goals and a commitment to delivering reliable, long-lasting eHouse solutions.

# 03. OPTIMIZED PERFORMANCE

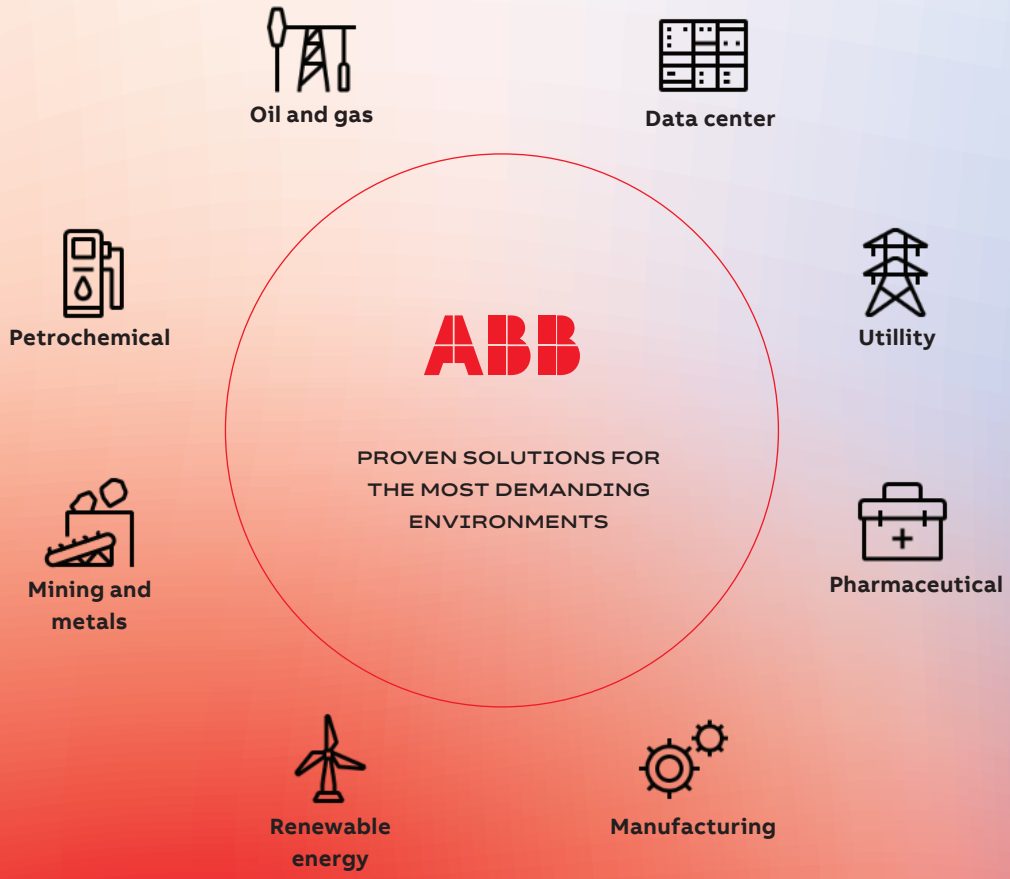
Digitally enabled ABB equipment for intelligent, efficient operations.

ABB's medium and low voltage switchgear and MCCs are engineered for high performance, safety and reliability. Designed to operate in the most demanding environments, ABB's equipment delivers consistent power distribution, advanced protection and seamless integration with automation and control systems.

By combining proven hardware with intelligent software, ABB delivers a fully integrated power solution that's ready to perform the moment it arrives on site. Whether supporting critical infrastructure, industrial operations or remote facilities, ABB's eHouse solutions offer efficiency, safety and control and are backed by global engineering expertise and a single point of contact throughout the project lifecycle.

**Powering what matters most**

ABB eHouse solutions are trusted across a wide range of industries where performance, safety, and speed of deployment are critical. Whether supporting energy-intensive operations or enabling digital infrastructure, ABB delivers modular power systems tailored to the unique demands of each client. Our solutions are engineered to perform in the world's most challenging environments and optimized to scale with the industries shaping the future.



# HEAVY INDUSTRY, UTILITY, OIL AND GAS

ABB offers a full range of arc-resistant medium and low voltage switchgear and MCCs designed to improve personnel safety and equipment protection.

Equipment is designed and tested to IEEE C37.20.7 standards to contain and redirect arc flash energy. These solutions meet stringent ANSI/IEEE and IEC standards and are available in metal-clad and metal-enclosed configurations. By minimizing arc flash risk and downtime, ABB helps improve safety while maintaining operational continuity and system reliability. ABB's arc-resistant gear is ideal for critical applications in oil and gas, mining, utilities and heavy industry.

In combination with the arc-resistant equipment, the designs will include a blast plenum to direct the energy of an arc event to outside the eHouse. ABB is also able to provide eHouse solutions with the following to improve safety in the most demanding environments:

- Firewalls
- Blast-resistant buildings
- One-piece eHouse
- Integrated drive motors
- Paralleling switchgear
- Automation, protection and control
- SCADA

**SafeGear® and SafeGear® HD**

- Arc resistant
- 5/15 kV, up to 63 kA, up to 4000 A
- ADVAC® (spring-charged) or AMVAC™ (magnetically actuated) circuit breakers

**SafeGear MCC**

- Arc resistant
- Up to 7.2 kV, 50 kA, 3000 A; 400 A and 720 A contactors
- Metal-clad design mates directly to SafeGear

**MNS-SG switchgear**

- Arc resistant
- Up to 600 V, 100 kA, 5000 A
- Emax 2 100% rated UL 1066 circuit breakers

**MNS-MCC**

- Motor control center
- Up to 600 V, 100 kA, 4000 A non-arc resistant
- Up to 2500 A arc resistant

# TECHNOLOGY, INDUSTRIAL AND COMMERCIAL

Whether your project is a commercial project requiring basic power protection, or a large industrial automation project where monitoring and control are required, ABB Advance ® and ReliaGear® products provide the flexibility you need to customize your solution. Smart design makes ReliaGear smart power distribution products easy to install and maintain. Smart technology provides cutting-edge solutions to simplify the system and take it to a whole new level of flexibility. From basic protection to total monitoring and control, ReliaGear power distribution products give you the future of digital technology, today.

ABB can also provide:

- Grid-tied and off-grid renewable integration with intelligent control systems
- LV switchboard and lighting panels
- Microgrid controllers and EV charging controls
- Liquid-filled and dry-type transformers
- Backup battery power and battery energy storage systems (BESS)

**Advance® air insulated switchgear**

- Non-arc resistant
- 5/15 kV, up to 63 kA and 4000 A
- 27 kV, up to 25 kA and 2000 A
- ADVAC® or AMVAC™ circuit breakers

**ReliaGear® LV SG**

- Non-arc resistant
- Up to 600 V, 100 kA, 5000 A
- Emax 2 air circuit breakers

**ReliaGear® LV MCC**

- Non-arc resistant motor control center
- Up to 600 V, 65 kA, 3200 A
- Up to 480 V, 100 kA, 3200 A

# ABB Electrification Solutions is your partner in reliability, simplification and execution.

## Notes

**Additional information**
We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB Inc. does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB Inc.

**ABB Inc.**
305 Gregson Drive
Cary, NC 27511

**electrification.us.abb.com**

© Copyright 2025 ABB. All rights reserved.
Specifications subject to change without notice.

9AKK108471A7594 Rev A OCTOBER 2025