
PRESS RELEASE

Unified Architecture Meets Segment-Specific Needs as ABB E-mobility Launches Trio of New EV Chargers

ZURICH, Switzerland – Apr 24, 2025 – ABB E-mobility today announced the expansion of its comprehensive EV charging portfolio, based on platforms addressing critical usability, reliability and scalability challenges that have hampered mass EV adoption. With the expansion of this portfolio through three new charging products: the field-upgradable A200/300 All-in-One chargers, the MCS1200 Megawatt Charging System for heavy-duty vehicles, and the ChargeDock Dispenser for flexible depot charging, ABB E-mobility is building on the success of the A400 and the C50, launched last year.

"The EV charging landscape is evolving beyond point products for specific use cases — we're building platforms that deliver consistent usability, reliability and scalability across the entire charging ecosystem," said Michael Halbherr, CEO of ABB E-mobility. "By implementing this modular approach with the majority of our R&D focused on modular platforms rather than one-off products, we've created a charging portfolio that delivers higher quality and higher consistency to end-users and service personnel. It reduces supply chain risks, while accelerating development cycles and enabling deeper collaboration with critical suppliers."

A platform approach delivers superior reliability, future-proof scalability, and better economics across multiple market segments in an industry projected to grow to \$35 billion globally by 2030.

A Portfolio to Serve Diverse Market Segments

User needs and product requirements can vary significantly across different segments. By configuring a common set of platforms to address the specific needs of each segment, ABB E-mobility is able to deliver tailored solutions for a wide range of use cases. The company is currently focusing on four key segments:

Public Charging: With the award winning A400 being the optimal fit for high power charging from highway corridors to urban locations, the latest additions to the A-Series All-in-One chargers offer a field-upgradable architecture allowing operators to start with the A200 (200kW) with the option to upgrade to 300kW or 400kW as demand grows. This approach offers scalability and protects customer investment, leading to Total Cost of Ownership (TCO) savings over 10 years.

Public Transit: The new ChargeDock Dispenser – in combination with the already in market available HVC 360 – simplifies depot charging with a versatile solution that supports pantograph-, roof-, and pedestal charging options with up to 360kW of shared power and 150m/490 ft installation flexibility between cabinet and dispensers. The dispenser maintains up to 500A output.

Transport & Logistics: Building the matching charging infrastructure for commercial vehicles and fleets represents a critical innovation frontier on our journey to electrify transportation. Following extensive collaboration with industry-leading truck OEMs, the MCS1200 Megawatt Charging System delivers up to 1,200kW of continuous power — 20% more energy transfer than 1MW systems — providing heavy-duty vehicles with purpose-built single-outlet design for the energy they need during mandatory driver breaks. To support other use cases, such as CCS truck charging, a dual CCS and MCS option will also be available.

Destination & Retail: The award winning C50 Compact Charger complements the family as the slimmest charger in its category at just 9.3 inches depth, optimized for convenient charging during typical one-hour retail experiences. With its large touch display, the C50 takes the award-winning A400 experience even further — setting a new standard for consumer experience.

Award-Winning Design and Configurable Brand Experience

The portfolio's excellence has already been recognized with prestigious awards, with both the A400 and C50 winning **Red Dot Design Awards** and the A400 receiving the coveted **iF Gold Award** in 2025 for its intuitive design that delivers the smartphone-style experience users expect. Beyond aesthetics, the portfolio enables customers to easily configure branding elements through the HMI Brand Configurator, including brand colors, logos, app icons, messaging, tone of voice, and language options that create a seamless, branded charging experience.

Platform Strategy Enables Rapid Innovation

ABB E-mobility's platform strategy has enabled remarkable development speed, delivering five distinct products over the last 12 months, including the A400 All-in-One charger and Compact C50 for destination charging already released in 2024.

For customers, this means more reliable charging experiences with the goal of 99% uptime, faster deployment of new stations, and less time spent waiting for repairs when service is needed. For drivers it means innovation focused on their experiences, including MCS1200's unique connector design that rotates at a precise angle to align perfectly with MCS truck inlets, eliminating cable torque and making charging significantly easier.

"This launch represents a milestone, completing the transition of our portfolio to a new technology generation," said Halbherr. "Our platform-based approach and telecom-style system architecture have enabled us to develop and launch five distinct products in just one year, a pace that would have been impossible with traditional point-product development methods."

Unique Architecture Ensures Reliability

At the core of ABB E-mobility's platform is a specific architecture that applies computer system-style domain separation to charger design, fundamentally improving subsystem development.

"We have built a system by logically separating a charger into four distinct subsystems—the user experience domain, the power delivery domain, the mechatronic domain, and the cloud domain—each functioning as an independent subsystem," explained Halbherr. "Unlike conventional chargers, where a user interface failure can disable the entire system, our architecture ensures charging continues even if the screen or payment system encounters issues. Moreover, we can improve each subsystem at its own pace without having to change the entire system."

This separation delivers enhanced reliability and quality, while improving serviceability and remote diagnostic capabilities. Each domain can be updated and tested independently, allowing for different update cycles tailored to specific needs. The result enables 99% uptime—crucial for commercial charging operations and key to ensuring customer satisfaction.

Strategic Innovation: In-House Excellence Where It Matters Most

The platform approach strategically focuses in-house expertise on critical components that drive performance. ABB E-mobility's Silicon Carbide power modules—developed and manufactured internally—deliver 97% conversion efficiency and enhanced grid support capabilities. Concentrating engineering resources on these high-value components while standardizing others ensures customers benefit from technological excellence where it most impacts their operations.

Comprehensive Service Concepts to Maximize Uptime

All products in the family are built with serviceability as a core principle. Standardized components across the product family streamline maintenance operations, allowing repairs to be completed up to six times faster than with conventional designs.

ABB E-mobility's comprehensive services include performance-based service level agreements with specific response and resolution rates. All chargers are connected to ABB E-mobility's cloud-based asset management platform with 24/7 monitoring and on-site service within 24 hours when needed.

Public Debut

The entire ABB E-mobility product family will be on display for the first time at the Advanced Clean Transportation Expo (ACT) in Anaheim, California, North America, from April 28-30, 2025 and then at Power2Drive in Munich, Germany, from May 7-9, 2025.



reddot winner 2025

About ABB E-mobility

ABB E-mobility enables a more sustainable and efficient mobility future as a global leader in electric vehicle (EV) charging solutions. The company is a partner of choice for the world's leading EV OEMs, EV charging network operators and fleet companies. It offers the widest portfolio of EV charging solutions from high-power chargers for destination charging to the highway stations of the future, solutions for the electrification of fleets, and charging for electric buses and trucks. With ~1,400 employees around the world, ABB E-mobility has sold over 50,000 high-power chargers and electrified more than 10,000 sites globally. e-mobility.abb.com

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C50

- [Brochure](#)
- [Data Sheet](#)

A200/A300/A400

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- [Data Sheet](#)

ChargeDock

- [HVC360 + ChargeDock Brochure](#)
- [ChargeDock Data Sheet](#)
- [HVC360 Data Sheet](#)

MCS1200

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Media Relations

Europe

Mona Streckert

mona.streckert@de.abb.com

+49 151 525 610 10

North America

Phil Johnson

phil.johnson@us.abb.com

+1 630 544 9799