Electric Vehicle Infrastructure
Terra 94/124/184 UL DC Fast Charging Station

The Terra all-in-one DC fast charger offers power up to 180 kW, with convenient charging times for every EV – including those with HV batteries.

The compact, modular design makes it perfect for retail, highway or fleet use, with power sharing to further optimize utilization. All Terra chargers feature connectivity for remote services and OCPP enablement.

Flexible configuration
Terra DC Fast chargers with power up to 180 kW are designed for the most compact, reliable and future-proof demands. In addition to a range of power selections, Terra chargers can be configured with CCS and CHAdeMO connector cables, in single or dual outlet format. Cable management, payment enablement and connectivity choices also offer owners, operators and site hosts options tailored to the needs of every charging site, from public to fleet needs.

The most reliable, scalable choice
ABB’s Terra chargers offer redundant power architecture for the highest uptime in the EV infrastructure industry. Additionally, Terra chargers can meet the needs of high voltage BEVs up to 920V, making these systems fully compatible with all current and future EVs. With a host of configuration options, Terra DC fast chargers are ready to support EV market growth over time.

Power sharing for high utilization
Enabling every business model is critical for EV charging infrastructure. With this goal in mind, ABB has designed the Terra 124 and Terra 184 models with power sharing technology, which is capable of charging two vehicles at the same time. Simultaneous charging can deliver higher utilization for every charging asset, a major key to public and fleet electrification success.

Terra 94
one EV up to 90 kW

Terra 124
one EV up to 120 kW
Terra 124
two EVs each up to 60 kW

Terra 184
one EV up to 180 kW
Terra 184
two EVs each up to 90 kW
Key features

- A compact, all-in-one charger from 90 kW to 180 kW
- Terra 124 and Terra 184 can fast-charge two vehicles at the same time
- Paralleled power module topology with automatic failover offers high uptime through redundancy
- Delivers output power continuously and reliably over its lifetime
- Flexible configurations include CCS-single, CCS-dual and CCS+CHAdeMO-dual outlets
- Up to 920 VDC for every passenger or fleet EV
- Bright, daylight readable touchscreen display with graphic visualization of charging session
- High short circuit current rating
- EMC Class B certified for safe use at fuel stations, retail centers, offices, and residential-adjacent sites
- Design enables ADA compliant installations
- RFID authorization modes
- Always connected, enabling remote services, updates and upgrades
- Robust all-weather powder-coated stainless steel enclosure
- Quick and easy installation as well as serviceability

Optional features

- Reliable cable management system available as ordered or field upgrade
- High current option can deliver up to 400 A for faster peak charging without liquid cooled cables
- Customizable user interface
- Integrated payment terminal
- Web tools for statistics and PIN access management
- Integration with OCPP networks, payment platforms and energy management
- Autocharge and ISO 15118 enabled

Why charging operators and fleets prefer ABB

- ABB offers the most advanced, safe and reliable EV infrastructure and grid connected technologies
- ABB Connected Services enable every business and remote services model
- ABB’s decade of EV charging experience and close cooperation with EV OEMs, networks and fleets

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Terra 94</th>
<th>Terra 124</th>
<th>Terra 184</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum output power</td>
<td>90 kW</td>
<td>120 kW</td>
<td>180 kW</td>
</tr>
<tr>
<td></td>
<td>or 60 kW x 2</td>
<td>or 90 kW x 2</td>
<td></td>
</tr>
<tr>
<td>AC Input voltage</td>
<td>480Y / 277 VAC +/- 10% (60 Hz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Input connection</td>
<td>3-phase: L1, L2, L3, GND (no neutral)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal input current and input power rating</td>
<td>115 A, 96 kVA</td>
<td>153 A, 128 kVA</td>
<td>230 A, 192 kVA</td>
</tr>
<tr>
<td>Recommended upstream circuit breaker(s)</td>
<td>150 A</td>
<td>200 A</td>
<td>300 A</td>
</tr>
<tr>
<td>Power Factor*</td>
<td>&gt; 0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current THD*</td>
<td>&lt; 5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short circuit current rating</td>
<td>65 kA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC output voltage</td>
<td>CCS-1: 150 - 920 VDC; CHAdeMO: 150 - 500 VDC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC output current</td>
<td>CCS-1: 200 A; CHAdeMO: 200 A</td>
<td>CC51 200 A; CHAdeMO: 200 A; Optional CC51 300 A (nominal) and 400 A (peak) high current cable(s)</td>
<td></td>
</tr>
<tr>
<td>Efficiency*</td>
<td>95%</td>
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</tbody>
</table>

Interface and Control

- Charging protocols: CCS1 and CHAdeMO 1.2
- User interface: 7” high brightness full color touchscreen display
- RFID system: ISO/IEC 14443A/B, ISO/IEC 15393, FeliCa™ 1, NFC reader mode, Mifare, Calypso, (option: Legic)
- Network connection: GSM/3G/4G modem; 10/100 Base-T Ethernet
- Communication: OCPP 1.6 Core and Smart Charging Profiles; Autocharge
- Supported languages: English (others available on request)

Environment

- Operating temperature: -35 °C to +55 °C / -31 °F to +131 °F (de-rating characteristics apply at extreme temperatures)
- Recommended storage: -10 °C to +70 °C / +14 °F to +158 °C (dry environment)
- Protection: IP54, NEMA 3R; indoor and outdoor rated
- Humidity: 5% to 95%, non-condensing
- Altitude: 2000 m (6560 ft)

General

- Charge cable: 6 m (19.6 ft)
- Dimensions (H x W x D): 1900 x 565 x 880 mm / 74.8 x 22.2 x 34.6 in
- Weight: 350 kg / 775 lbs; 365 kg / 800 lbs; 395 kg / 870 lbs
- Compliance and safety: UL 2202, CSA No. 107-1; UL 2231-1, UL 2231-2, CSA STD C22.2 No. 107.1; NEC Article 625, EN 61851, EN 62196; CHAdeMO 1.2; DIN 70121, ISO 15118; IEC 61000-6-3; EMC Class B, FCC Part 15

*Data shown at nominal output power