

The home of charging

Terra DC wallbox. A compact wallbox ev charger for residential, office, commercial, and public assets applications.



- Intelligent design: compact, convenient, connected
- Future-proof: ROI maximized
- Safety: built-in protection

At ABB, we have 130 years of heritage in accessible technology leadership and a world-leading AC and DC charging portfolio – for safe, smart and sustainable mobility.

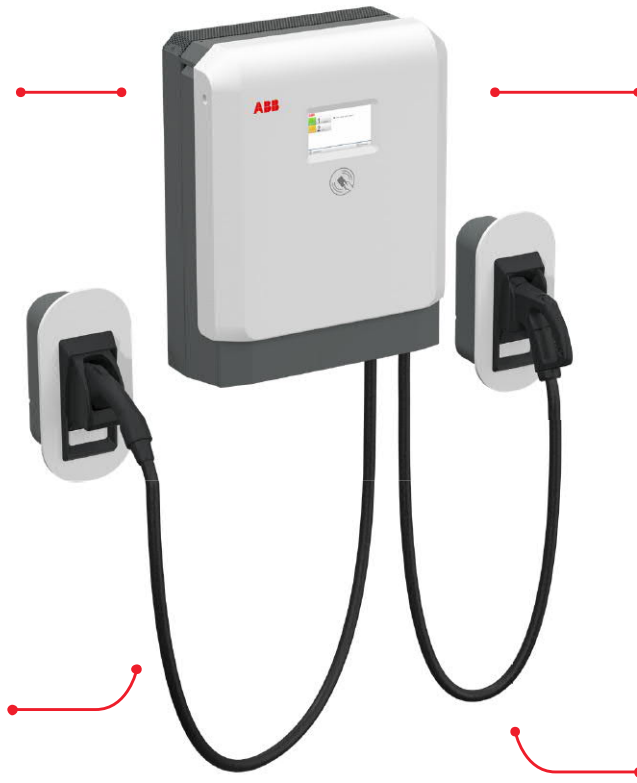
That's why some of the world's biggest brands trust us to provide market-leading e-mobility solutions from highway to home.

Terra DC wallbox

The smart e-mobility investment

Limited changes required to existing electrical infrastructure due to reduced power requirements

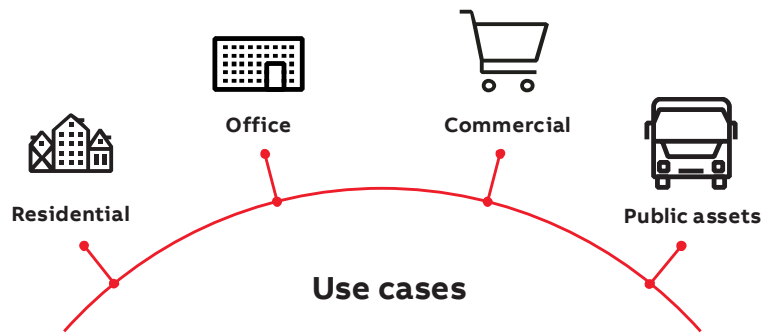
Enabled for smart charging via OCPP to balance load demands and reduce infrastructure costs



Increasing revenue opportunities for operators and owners by supporting current and future electric vehicles with high voltage charging

Developed with leading electric vehicle manufacturers, trusted by energy suppliers and governments, the Terra DC wallbox makes fast charging safe, smart and future-compatible

Terra DC wallbox is a future-proof investment supporting current and future EVs with high voltage charging, applicable to a wide variety of use cases, in an ultra-compact footprint, that is safe and reliable, for residential use too.



Residential
Multi-tenant homes, residential communities

Office
Small and large offices, business parks and complexes

Commercial
Hotels & hospitality sports institutions, shopping centres, commercial fleets, public or private campus, parking structures, car dealerships, race tracks

Public assets
Bus depots, utility, sensitive grid applications

Terra DC wallbox benefits

Intelligent design: compact, convenient, connected



The DC wallbox with **ultra-compact footprint** enables flexibility in installation to serve a variety of site conditions



Intuitive interface with a **user-friendly 7-inch color touch screen** and easy-reach cables for convenient parking and charging



Broad range of connectivity options including **3G/4G modem, Ethernet and GSM for easy control** and integration with existing infrastructure

Future-proof: ROI maximized



High voltage charging capabilities supporting the EVs from today and into the future



Enabled for **smart charging via OCPP** to balance load demands and reduce infrastructure costs



Connection to ABB Ability platform manages over-the-air-authentication and payment, remote diagnostics, software updates and **asset monitoring**

Safety: built-in protection



Evaluated and tested to the highest standards by independent, third party safety certification organizations



Certified with EMC Class B protection for safe use in residential areas



Integrated ground-fault and trip protection protect both user and car

Smarter charging

EU portfolio, three phase

Description

DC charger for electric vehicles, CCS2 and CHAdeMO
 Total weight 10 kg backplate + 60 kg main body and cables
 Power supply network: 3 phase 400 V AC +/-10 % (50/60 Hz)
 Connectivity: Cellular connection, 3G / 4G, 2 port RJ45, Ethernet
 Metal Connector/cable holders for inside use provided standard with the product



TWB CE 24 C 7-7M-0-0

| Rated continuous power (kW) | Rated peak power (kW) | Charging standard | EMC classification | Cable length (m / ft) | Type | Order code | Weight Pkg (1pce) (kg) |
|-----------------------------|-----------------------|-------------------|--------------------|-----------------------|------------------------|------------|------------------------|
| 22.5 | 24 | CCS2 | Class B | 3.5 / 12 | TWB CE 24 C 3T-7M-0-0 | 6AGC077815 | 70 |
| 22.5 | 24 | CCS2 | Class B | 7 / 23 | TWB CE 24 C 7T-7M-0-0 | 6AGC077816 | 70 |
| 22.5 | 24 | CHAdeMo / CCS2 | Class B | 3.5 / 12 | TWB CE 24 CJ 3T-7M-0-0 | 6AGC077814 | 70 |
| 22.5 | 24 | CHAdeMo / CCS2 | Class B | 7 / 23 | TWB CE 24 CJ 7T-7M-0-0 | 6AGC077817 | 70 |

US portfolio, single phase and three phase

Description

DC charger for electric vehicles, CCS1 and CHAdeMO
 Total weight 10 kg backplate + 60 kg main body and cables
 Power supply network: 1 phase 200 - 240 V AC +/-10 % (60 Hz), 3 phase 480 V AC +/-10 % (60 Hz)
 Connectivity: Cellular connection, 3G / 4G, 2 port RJ45, Ethernet
 Metal Connector/cable holders for inside use provided standard with the product






TWB UL 24 C 0-7M-A-0

| Rated DC output power 208 V (kW) | Rated DC output power 240 V (kW) | Charging standard | Cable length (m / ft) | Type | Order code | Weight Pkg (1pce) (kg) |
|----------------------------------|----------------------------------|-------------------|-----------------------|-----------------------|------------|------------------------|
| Single phase | | | | | | |
| 19.5 | 22.5 | CCS1 | 3.5 / 12 | TWB UL 24 C 3-7M-A-0 | 6AGC079380 | 70 |
| 19.5 | 22.5 | CCS1 | 7 / 23 | TWB UL 24 C 7-7M-A-0 | 6AGC079381 | 70 |
| 19.5 | 22.5 | CHAdeMo / CCS1 | 3.5 / 23 | TWB UL 24 CJ 3-7M-A-0 | 6AGC079378 | 70 |
| 19.5 | 22.5 | CHAdeMo / CCS1 | 7 / 23 | TWB UL 24 CJ 7-7M-A-0 | 6AGC079379 | 70 |



| Rated continuous power (kW) | Rated peak power (kW) | Charging standard | Cable length (m / ft) | Type | Order code | Weight Pkg (1pce) (kg) |
|-----------------------------|-----------------------|-------------------|-----------------------|------------------------|------------|------------------------|
| Three phase | | | | | | |
| 22.5 | 24 | CHAdeMO/CCS1 | 3.5 / 12 | TWB UL 24 CJ 3T-7M-0-0 | 6AGC080248 | 70 |
| 22.5 | 24 | CHAdeMO/CCS1 | 7 / 23 | TWB UL 24 CJ 7T-7M-0-0 | 6AGC081362 | 70 |
| 22.5 | 24 | CCS1 | 3.5 / 12 | TWB UL 24 C 3T-7M-0-0 | 6AGC081363 | 70 |
| 22.5 | 24 | CCS1 | 7 / 23 | TWB UL 24 C 7T-7M-0-0 | 6AGC081364 | 70 |

Terra DC wallbox accessories

| | Description | Type | Order code | Weight Pkg (1 pce) (kg) |
|---|---|---|------------|-------------------------|
| | Connector holder Plastic /cable holders for outside use: to be ordered separately * Metal cable holders for inside use are provided with the product | | | |
|  | CCS-1 | TWB Ext.Con.Hol. CCS1 | 6AGC076604 | 4.66 |
| | CCS-2 | TWB Ext.Con.Hol. CCS2 | 6AGC076603 | 4.14 |
| | CHAdeMO | TWB Ext.Con.Hol. J | 6AGC076601 | 4.24 |
|  | Mobile cart including Terra DC wallbox Perfect fit for workshops at car dealers or at bus and truck depots Wheels are made of stainless steel, providing grounding of the cart to the earth The mobile cart is pre-assembled in the factory and delivered as one with Terra DC Wallbox already installed. Total weight: Mobile cart 70 kg + Terra DC wallbox 70 kg AC cable from the wall plug to the mobile cart is not provided with the product | | | |
| | Terra DC wallbox CE 24 kWp, 3 phases, CCS, 3.5 m cable, EMC Class B including mobile cart, CE | TWB CE 24 C 3T-7M-0-0 + mobile cart, CE | 6AGC102583 | 140 |
| | Terra DC wallbox CE 24 kWp, 3 phase, CCS, 7 m cable, EMC Class B including mobile cart, CE | TWB CE 24 C 7T-7M-0-0 + mobile cart, CE | 6AGC102584 | 140 |
|  | Warranty | | | |
| | Total warranty time of 3 years (standard warranty 2 years + 1 year) | EVC Extended warranty 3 yr | 6AGC100306 | - |
| Total warranty time of 4 years (standard warranty 2 years + 2 year) | EVC Extended warranty 4 yr | 6AGC100307 | - | |
| Total warranty time of 5 years (standard warranty 2 years + 3 year) | EVC Extended warranty 5 yr | 6AGC100308 | - | |

Technical specification

| | DC Wallbox 24 kW IEC version | DC Wallbox 24 kW UL version 1-phase | DC Wallbox 24 kW UL version 3-phase |
|---|---|---|---|
| DC output connection | | | |
| Charging mode | Type 4: CCS 2, CHAdeMO | Type 4: CCS 1, CHAdeMO | Type 4: CCS 1, CHAdeMO |
| Number of outputs | Standard: single output CCS2 Optional: dual output CHAdeMO + CCS 2 | Standard: single output CCS1 Optional: dual output CHAdeMO + CCS 1 | Standard: single output CCS1 Optional: dual output CHAdeMO + CCS 1 |
| Number of simultaneous charging session | Single | Single | Single |
| Output power rating | 0 ... 22.5 kW, 24 kW (peak) | 19.5 kW - 208 V 22.5 kW - 240 V | 0 ... 22.5 kW, 24 kW (peak) |
| Output current | 60 A DC | 60 A DC | 60 A DC |
| Output voltage | CCS: 150 ... 920 VDC CHAdeMO: 150 ... 500 VDC | CCS: 150 ... 920 VDC CHAdeMO: 150 ... 500 VDC | CCS: 150 ... 920 VDC CHAdeMO: 150 ... 500 VDC |
| Average efficiency at full power | ≥95 % | ≥95 % | ≥95 % |
| AC input connection | | | |
| Earthing system | 3P, N, PE | 2 wire (e.g. L1 - N, L1 - L2) + PE Note that a neutral wire may not be available. | 3P, N, PE |
| Input current | 3-phase, 40 A | 100 A | 3 phase, 40 A |
| Input voltage | 3-phase 400 V AC +/- 10 % | 208 ... 240 V AC two wire +/- 10% | 3 phase 480 V AC +/- 10 % |
| Input frequency | 50 Hz | 50 / 60 Hz | 50 / 60 Hz |
| Input protection | External circuit breaker (not Included) | External circuit breaker (not Included) | External circuit breaker (not Included) |
| Power factor | > 0.96 | > 0.96 | > 0.96 |
| Harmonic distortion (THDi) | < 8 % | < 8 % | < 8 % |
| General characteristics | | | |
| Dimensions H x W x D | 770 x 584 x 294 mm 30.31 x 22.99 x 11.57 inches | 770 x 584 x 294 mm 30.31 x 22.99 x 11.57 inches | 770 x 584 x 294 mm 30.31 x 22.99 x 11.57 inches |
| IP rating | IP54 | IP54 | IP54 |
| IK rating | IK10 (IK08 for HMI) | IK10 (IK08 for HMI) | IK10 (IK08 for HMI) |
| NEMA enclosure type | | NEMA 3 outdoor | NEMA 3 outdoor |
| Operating altitude | 2500 m (8200 ft) | 2500 m (8200 ft) | 2500 m (8200 ft) |
| Operating temperature range | -35 ... +45 °C | -35 ... +45 °C | -35 ... +45 °C |
| Mounting | Wall or floor using a pedestal | Wall or floor using a pedestal | Wall or floor using a pedestal |
| Emergency stop button type | Push button | Push button | Push button |
| Electromagnetic compatibility | IEC 61000-6-3 Class B, suitable for residential environment | EMC Class A | IEC 61000-6-3 Class B, suitable for residential environment |
| User Interface | | | |
| Screen type | 7 LCD touchscreen display | 7 LCD touchscreen display | 7 LCD touchscreen display |
| Languages | English as standard Others languages available via software configuration | English as standard Others languages available via software configuration | English as standard Others languages available via software configuration |
| Standby indicator | Yes | Yes | Yes |
| Connectivity | Cellular connection 3G/4G 2 port RJ45 Ethernet | Cellular connection 3G/4G 2 port RJ45 Ethernet | Cellular connection 3G/4G 2 port RJ45 Ethernet |
| Communication protocol | OCPP 1.5 / 1.6 | OCPP 1.5 / 1.6 | OCPP 1.5 / 1.6 |
| User authentication | RFID (ISO 14443 A + B to part 4 and ISO/IEC 15693 Mifare, NFC, Calypso, Ultralight, PayPass, HID; and more) On-screen PIN code authentication OCPP support of ISO 15118 Plug&Charge is according to publicly available and commonly recognized implementation whitepaper Please contact your ABB local organization | RFID (ISO 14443 A + B to part 4 and ISO/IEC 15693 Mifare, NFC, Calypso, Ultralight, PayPass, HID; and more) On-screen PIN code authentication OCPP support of ISO 15118 Plug&Charge is according to publicly available and commonly recognized implementation whitepaper Please contact your ABB local organization | RFID (ISO 14443 A + B to part 4 and ISO/IEC 15693 Mifare, NFC, Calypso, Ultralight, PayPass, HID; and more) On-screen PIN code authentication OCPP support of ISO 15118 Plug&Charge is according to publicly available and commonly recognized implementation whitepaper Please contact your ABB local organization |
| Configuration | | | |
| Software update | OCPP 1.6, ABB web portal | OCPP 1.6, ABB web portal | OCPP 1.6, ABB web portal |
| Remote control and configuration via ABB Ability connected services | Authentication Payment Monitoring Remote diagnostic Repair | Authentication Payment Monitoring Remote diagnostic Repair | Authentication Payment Monitoring Remote diagnostic Repair |
| Remote control and configuration via local service tool | Please contact your ABB local organization | Please contact your ABB local organization | Please contact your ABB local organization |
| Certification and standards | | | |
| Codes and standards | EN 61851-1 EN 61851-2 UL 2202 | EN 61851-1 EN 61851-2 UL 2202 | EN 61851-1 EN 61851-2 UL 2202 |
| Certification | CE, EMC Class B | UL, FCC, EMC Class A | UL, FCC, EMC Class B |
| Warranty | 24 months Warranty extension possible | 24 months Warranty extension possible | 24 months Warranty extension possible |



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