ABB

The home of charging

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

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

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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.
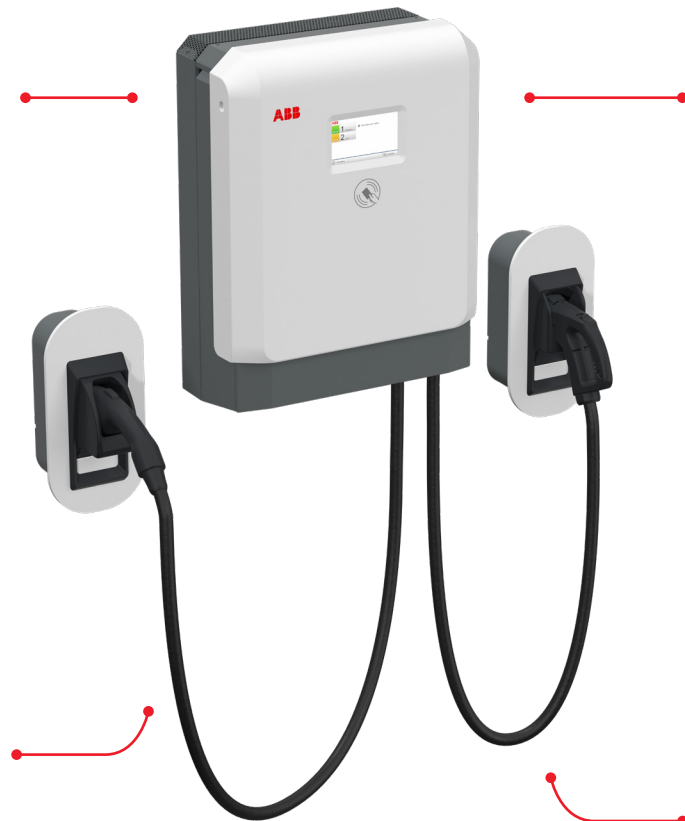
Terra DC wallbox
The smart e-mobility investment

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

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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.

Office

Commercial

Residential

Public assets

Use cases
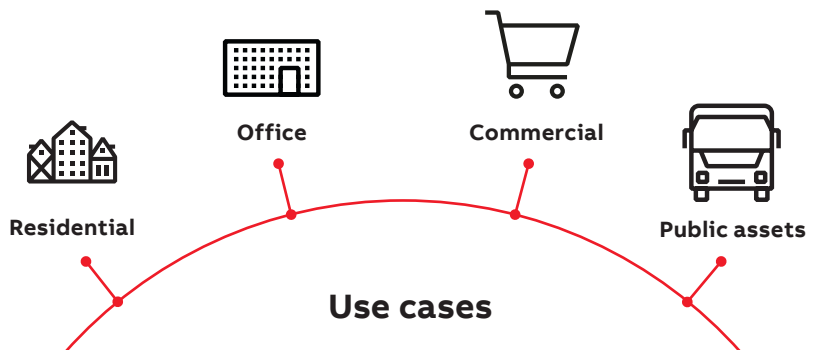
Residential
Multi-tenant homes, residential communities

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
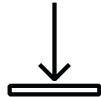
Public assets
Bus depots, utility, sensitive grid applications

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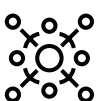
Certified with EMC Class B protection for safe use in residential areas

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

Smarter charging

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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 provided standard with the product

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

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

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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 provided standard with the product

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 / 12	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

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

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 to be ordered separately * Metal cable holders 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 CCE inlet connector 63A 5P IP67 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	-

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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 V DC CHAdeMO: 150 … 500 V DC	CCS: 150 … 920 V DC CHAdeMO: 150 … 500 V DC	CCS: 150 … 920 V DC CHAdeMO: 150 … 500 V DC
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, 32 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 compatiblity	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 athentication	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	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	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	OCPP support of ISO 15118 Plug&Charge is according to publicly available and commonly recognized implementation whitepaper Please contact your ABB local organization	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 extention possible	24 months Warranty extention possible	24 months Warranty extention possible

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