



# 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.

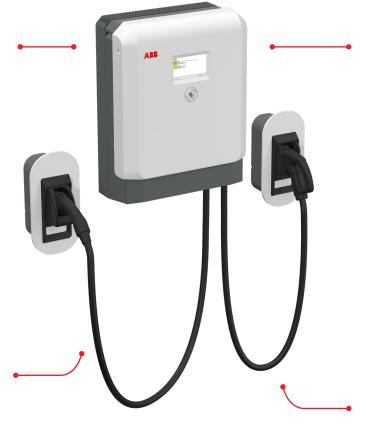
That's why some of the world's biggest brands trust us to provide market-leading e-mobility solutions from highway to home.

TERRA DC WALLBOX

### **Terra DC wallbox**

## The smart e-mobility investment

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

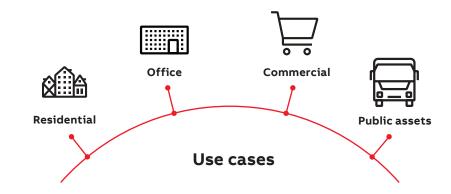


Enabled for smart charging via OCPP to balance load demands and reduce infrastructure costs

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











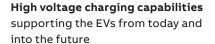
The DC wallbox with **ultra-compact footprint** enables flexibility in installation to serve a variety of site conditions

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

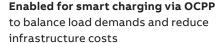
Broad range of connectivity options including **3G/4G modem**, **Ethernet and GSM for easy control** and integration with existing infrastructure

### **Future-proof: ROI maximized**











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

TERRA DC WALLBOX

# **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 provided standard with the product



c	Rated continuous cower	Rated peak power			Cable length			Pkg (1pce)
(	kW)	(kW)	Charging standard	EMC classification	(m / ft)	Type	Order code	(kg)
2	2.5	24	CCS2	Class B	3.5 / 12	TWB CE 24 C 3T-7M-0-0	6AGC077815	70
2	2.5	24	CCS2	Class B	7 / 23	TWB CE 24 C 7T-7M-0-0	6AGC077816	70
2	2.5	24	CHAdeMo / CCS2	Class B	3.5 / 12	TWB CE 24 CJ 3T-7M-0-0	6AGC077814	70
2	2.5	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

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



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



Rated DC output pow 208 V	Rated DC er output power 240 V		Cable length			Pkg (1pce)
(kW)	(kW)	Charging standard	(m / ft)	Туре	Order code	(kg)
Single phase	e					
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

Weight

Rated continuous power	Rated peak		Cable length			Weight Pkg (1pce)
(kW)	(kW)	Charging standard	(m / ft)	Туре	Order code	(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**

				Weight Pkg (1 pce)
	Description	Туре	Order code	(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
GGGG	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 (sta	andard warranty 2 years + 1 year)	EVC Extended warranty 3 yr	6AGC100306	_
, , (500	9 9 to 1 9 to 4			
Total warranty time of 4 years (sta	indard warranty 2 years + 2 year)	EVC Extended warranty 4 yr	6AGC100307	-

TERRA DC WALLBOX

# **Technical specification**

	DC Wallbox 24 kW	DC Wallbox 24 kW	DC Wallbox 24 kW
DC custout connection	IEC version	UL version 1-phase	UL version 3-phase
DC output connection	Type 4, CCS 3, CHAdeMO	Type 4: CCS 1 CHAdeMO	Type 4: CCS 1, CHAdeMO
Charging mode	Type 4: CCS 2, CHAdeMO	Type 4: CCS 1, CHAdeMO	**
Number of outputs	Standard: single output CCS2	Standard: single output CCS1	Standard: single output CCS1
Nb	Optional: dual output CHAdeMO + CCS 2	Optional: dual output CHAdeMO + CCS 1	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	CCS: 150 920 V DC	CCS: 150 920 V DC
	CHAdeMO: 150 500 V DC	CHAdeMO: 150 500 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	770 x 584 x 294 mm	770 x 584 x 294 mm	770 x 584 x 294 mm
HxWxD	30.31 x 22.99 x 11.57 inches	30.31 x 22.99 x 11.57 inches	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	I 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	English as standard	English as standard
	Others languages available via software configuration	Others languages available via software configuration	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,	RFID (ISO 14443 A + B to part 4 and ISO/IEC 15693 Mifare, NFC, Calypso, Ultralight,	RFID (ISO 14443 A + B to part 4 and ISO/IEC 15693 Mifare, NFC, Calypso, Ultralight,
	PayPass, HID; and more)	PayPass, HID; and more)	PayPass, HID; and more)
	On-screen PIN code authentication	On-screen PIN code authentication	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	Authentication	Authentication	Authentication
configuration via ABB Ability connected services	Payment Monitoring	Payment Monitoring	Payment Monitoring
TTCOCCO JCI VICCO	Remote diagnostic	Remote diagnostic	Remote diagnostic
	Repair	Repair	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- 1	EN 61851- 1
	EN 61851-2	EN 61851-2	EN 61851-2
	UL 2202	UL 2202	UL 2202
		III FCC FMC Class A	III FCC FMC Class P
Certification	CE, EMC Class B	UL, FCC, EMC Class A	UL, FCC, EMC Class B
Certification Warranty	CE, EMC Class B  24 months  Warranty extention possible	24 months Warranty extention possible	24 months Warranty extention possible



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### For more information please contact:

### ABB EV Infrastructure

Heertjeslaan 6 2629 JG Delft The Netherlands

Phone: +31 88 4404600 E-mail: info.evci@nl.abb.com

abb.com/evcharging

