

SMART MOBILITY

# The home of charging

## Terra AC wallbox



- High-value quality
- Futureproof flexibility
- Safety and 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.**

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**ABB: The home of charging**

# Terra AC wallbox

## To serve a growing market

### Reducing cost of EVs

EVs will be cheaper than internal combustion engine (ICE) alternatives by the mid-to-late 2020s in almost every market

### Global EV sales

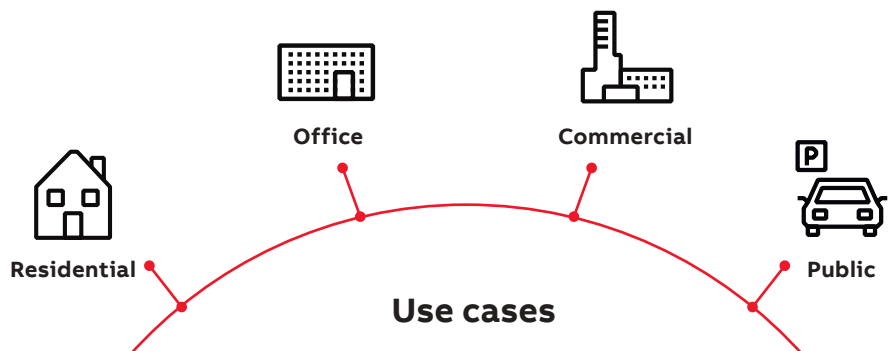
Electric vehicles will represent 57% of global passenger car sales by 2040



### Passenger EV sales

Passenger EV sales will rise to 28 million in 2030 and 56 million by 2040

Terra AC wallbox provides tailored, intelligent and networked charging solutions for any business, home or location.



#### At home

From private homes to multi-tenant homes and residential communities

#### At work

From small offices to large offices, business parks and complexes

#### Commercial locations

From hotels to sports institutions and shopping centres

#### While parking

While on the street or in a car park

# Terra AC wallbox benefits

## High-value quality



The **best value AC charger** on the market, providing the exceptional quality expected of the world leader in EV charging.



Enabled for **remote software updates** to ensure optimal performance while minimizing the need for onsite intervention.



**Broad range of connectivity options** including Wifi, Bluetooth and Ethernet for easy control and integration with existing infrastructure.

## Futureproof flexibility



**Smart functionality** means the wallbox can adapt its power usage and provide optimal charging, today and into the future.



Set up for **energy meter integration** to provide dynamic load management, reducing energy costs and preventing nuisance tripping of distribution protective devices.



**Dedicated App** provides easy authentication and control of the AC charger, along with insight into charging status for users.

## Safety and protection



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



**Current limiting protection** allows maximum charging power without nuisance tripping, aligned with the design of a given building's electrical distribution system.






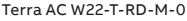
**Integrated protections** including DC ground fault and over voltage protect both user and car.

# Smarter charging

## IEC portfolio

AC charger for electric vehicles, type 2



Power supply network: 220 ... 240 V single phase and 380 ... 415 V three phase, 50 / 60 Hz

	Rated power (kW)	Max. current (A)	Socket outlet or connector type	Other features	Type	Order code	Weight Pkg (1pce) (kg)
<b>Single phase</b>							
	3.7	16	Socket with shutter, type 2	-	Terra AC W4-S-0	ABB6AGC082587	3
			Socket with shutter, type 2	RFID	Terra AC W4-S-R-0	ABB6AGC085384	3
	7.4	32	Socket, type 2	-	Terra AC W7-T-0	ABB6AGC081278	3
			Socket, type 2	RFID	Terra AC W7-T-R-0	ABB6AGC085382	3
			Socket, type 2	RFID, 4G	Terra AC W7-T-R-C-0	ABB6AGC085383	3
			Cable 5 m, type 2	RFID	Terra AC W7-G5-R-0	ABB6AGC082155	5
Cable 5 m, type 2	RFID, 4G	Terra AC W7-G5-R-C-0	ABB6AGC085385	6.5			
<b>Single phase with display and MID certification</b>							
	7.4	32	Socket, type 2	RFID, 4G	Terra AC W7-T-RD-MC-0	ABB6AGC082174	3
			Cable 5 m, type 2	RFID, 4G	Terra AC W7-G5-RD-MC-0	ABB6AGC085386	6.5
<b>Three phase</b>							
	11	16	Cable 5 m, type 2	RFID	Terra AC W11-G5-R-0	ABB6AGC082156	6
	22	32	Socket, type 2	-	Terra AC W22-T-0	ABB6AGC081279	3
			Socket, type 2	RFID	Terra AC W22-T-R-0	ABB6AGC082152	3
	Socket, type 2	RFID, 4G	Terra AC W22-T-R-C-0	ABB6AGC082153	3		
	Socket with shutter, type 2	RFID	Terra AC W22-S-R-0	ABB6AGC082589	3		
	Socket with shutter, type 2	RFID, 4G	Terra AC W22-S-R-C-0	ABB6AGC082154	3		
	Cable 5 m, type 2	RFID, 4G	Terra AC W22-G5-R-C-0	ABB6AGC082157	6.5		
	<b>Three phase with display and MID certification</b>						
	22	32	Socket, type 2	RFID	Terra AC W22-T-RD-M-0	ABB6AGC081280	3
			Socket, type 2	RFID, 4G	Terra AC W22-T-RD-MC-0	ABB6AGC081281	3
			Socket with shutter, type 2	RFID, 4G	Terra AC W22-S-RD-MC-0	ABB6AGC081282	3
			Cable 5 m, type 2	RFID, 4G	Terra AC W22-G5-RD-MC-0	ABB6AGC081285	6.5

## UL portfolio

AC charger for electric vehicle, type 1

Power supply network: 110 ... 240 V single phase, 50 / 60 Hz

	Rated power (kW)	Max. current (A)	Socket outlet or connector type	Other features	Type	Order code	Weight Pkg (1pce) (kg)
<b>Single phase without display</b>							
	7.7	32	Cable 25 ft, type 1	RFID, 4G	Terra AC W7-P8-R-C-0	ABB6AGC082552	7
			Cable 25 ft, type 1	RFID, double ethernet	Terra AC W7-P8-R-D-0	ABB6AGC081287	7
			Cable 25 ft, type 1	RFID, 4G, double ethernet	Terra AC W7-P8-R-CD-0	ABB6AGC081288	7
<b>Single phase with display</b>							
	7.7	32	Cable 25 ft, type 1	RFID, double ethernet	Terra AC W7-P8-RD-MD-0	ABB6AGC081289	7
			Cable 25 ft, type 1	RFID, 4G, double ethernet	Terra AC W7-P8-RD-MCD-0	ABB6AGC081290	7

# Terra AC wallbox accessories

Description	Current (A)	Type	Order code	Weight Pkg (1pce) (kg)
<b>Pedestal</b>				
For floor standing installation				
Metal pedestal for 1 charger, free-standing	-	TAC pedestal single	ABB6AGC085345	9.12
<b>RFID card (MIFARE)</b>				
RFID cards with ABB logo, pack of 5	-	SER-abbRFIDtags	ABB6AGC082175	0.07
RFID cards, blank, pack of 5	-	SER-blankRFIDtags	ABB6AGC082176	0.07
<b>Charge cables</b>				
Length: 7 m				
Cables with 2 connectors of same or different types				
<b>Single phase</b>				
Type 2 to type 1	16	TAC-cable T2-T1 7m1P16A	ABB6AGC082538	2.56
Type 2 to type 2	32	TAC-cable T2-T2 7m1P32A	ABB6AGC082535	2.95
Type 2 to type 1	32	TAC-cable T2-T1 7m1P32A	ABB6AGC082539	3.77
<b>Three phase</b>				
Type 2 to type 2	16	TAC-cable T2-T2 7m3P16A	ABB6AGC082536	2.15
Type 2 to type 2	32	TAC-cable T2-T2 7m3P32A	ABB6AGC082537	4.18
<b>Spare parts</b>				
Water and dust proofing set for cable entries including 1 * 32 mm and 2 * 25 mm grommets	-	SER-Grommet	ABB6AGC085387	0.04
Front cover (non-display), 2 screws included	-	SER-Front cover (non-display)	ABB6AGC085388	1.50
Maintenance cover, internal (non-display), 6 screws included	-	SER-Maintenance cover (non-display)	ABB6AGC085389	1.50
<b>Spare cables</b>				
Length: 5 m				
For cable replacement of existing cable version charger				
Type 2, three phase	16	SER-TAC-cable T2 5m3P16A	ABB6AGC082555	1.41
Type 2, single phase	32	SER-TAC-cable T2 5m1P32A	ABB6AGC082554	2.05
Type 2, three phase	32	SER-TAC-cable T2 5m3P32A	ABB6AGC082556	2.95
Type 1, single phase	40	SER-TAC-cable T1 5m1P40A	-	-
Type 1, single phase	80	SER-TAC-cable T1 5m1P80A	-	-
<b>Warranty</b>				
Total warranty time of 3 years (standard warranty 2 years + 1 year)		TAC extended warranty 3 yr	ABB6AGC084053	-
Total warranty time of 4 years (standard warranty 2 years + 2 years)		TAC extended warranty 4 yr	ABB6AGC084054	-
Total warranty time of 5 years (standard warranty 2 years + 3 years)		TAC extended warranty 5 yr	ABB6AGC084055	-

# Technical specification

Product information	
Charging type	Mode 3 charging, level 2
Input/output power rating and current	IEC ratings: Single phase up to 7.4 kW / 32 A Three phase up to 22 kW / 32 A  UL ratings up to 7.7 kW / 32 A
Input/output voltage	Single phase: 110 ... 240 V Three phase: 380 ... 415 V, 50 / 60 Hz
Network type	TT, TN
Socket outlet or connector type	Type 2 socket with or without shutter Type 1 or type 2 cable. Cable can be wrapped around the charger
Protection	Overcurrent, overvoltage, undervoltage, ground fault including DC residual current protection, integrated surge protection
Overvoltage category	III
Energy metering	Revenue grade energy meter Class B (+/- 1%) , MID certification on display variants only
Mobile communication with nano SIM socket	EU: GSM, 4G, LTE, WCDMA US: 4G, LTE, WCDMA
Available configurable contacts	1 input, 1 output
User Interface	
Connectivity	Wifi, Ethernet (RJ45), Bluetooth, RS485, 4G / 3G
User authentication	ABB RFID card (1 included) or App
User interface	App, ABB web portal
Communication protocols	OCPP 1.6 and RS485 for energy meter connection
Status indication	5 LED's
Configuration	
Software update	OCPP 1.6, ABB web portal or App
Control and configuration	ABB web portal or App
General characteristics	
IP and IK rating	IP54, IK10 (IK8+ for operating temperature from -35 to -30 °C)
NEMA enclosure type	NEMA 3
Operating altitude	2000 m
Operating temperature range	-35...+50 °C (derating may apply)
Storage temperature range	-40...+80 °C
Mounting	Wall or floor using a pedestal
Dimensions	H x W x D 320 x 195 x 110 mm
	H x W x D 12.60 x 7.68 x 4.33 inches
Certification and standards	
Safety standards	IEC/EN 61851-1, EN 62311, EN 62479, IEC/EN 62955 TuV listed conforming to UL 2594, UL 2231-1, UL 2231-2, UL 1998, CSA C22.2. NO.280
Codes and standards	IEC 61851-21-2, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12 CE RED- WLAN / RFID / E-UTRA: EN 300 328 V2.1.1, EN 300 330 V2.1.1, EN 301 908-1 V11.1.2, EN 301 908-13 EN 50470-1, EN 50470-3 FCC Part 15 Class B ENERGY STAR
Certification	CE, CB, MID, UL
Warranty	24 months

## Smarter by design

- The App allows streamlined charger configuration
- Ready for integration with advanced smart building energy system
- Simple software updates via the App makes the charger future-ready

## With the user in mind

- Enables users to authenticate their charger via the App or RFID card. Configuration is easily done via the App or ABB web portal
- Sends charging status via the App
- Provides information about the status of chargers (availability, number of sessions, energy delivery)



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**ABB**

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[solutions.abb/terraacwallbox](https://solutions.abb/terraacwallbox)

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