



# crema&charge bi-directional

## The Wallbox for Bidirectional Vehicles

crema&charge bidirectional turns the car into a home power plant. In collaboration with automotive manufacturers, our new device series forms the basis for the next brand-specific offerings for integrating vehicle batteries. As a photovoltaic storage system, the car is not just a status symbol but a building block in the future energy system.

## Car Batteries as Storage for Self-Generated Electricity

With the crema&charge Bidi, bidirectional electric vehicles can be connected to the home network via three-phase power. The electrical contractor installs the safety equipment and Ethernet cable, preferably as a Plug&Play CEE32 socket depending on the country. The connection power is 3x32A, 400V. The wallbox can be either wall-mounted using a mounting plate or floor-mounted with a stand.

## Bidirectional Charging for VW ID models

For commercial distribution for all VW ID models with min. 77kWh battery and software 3.5 or higher. Based on VW approval for use of the ISO15118-2 protocol, including proprietary extension Volkswagen VAS (Value Added Services) for bidirectional charging.

Volkswagen compatible  
For MEB 77kWh  
International Grid Codes  
22kW bidirectional



## Grid Code Certified since 2018

Since 2018, we have been using vehicles bidirectionally as energy storage with VDE-AR-N-4105 approval. Starting in 2025, the crema&charge bidi will connect the next generation of vehicles to the home grid in compliance with grid standards. The battery capacity will function as a stationary home storage system, helping to mitigate peak loads and enhance self-consumption. The grid codes can be configured to meet the specific requirements of different countries and grid operators





## Easy Bidirectional Charging

crema&charge bidirectional is a new device platform designed to use additional European vehicle models with CCS2 plugs as storage for self-generated renewable energy. Since 2010, EVTEC AG, Switzerland, has been supplying electronics and charging devices for the electrification of modern vehicle fleets.



**crema&charge**

- 22kW Bidirectional
- Surplus charging and load management V2H
- Grid-friendly services V2G
- Integrate vehicle batteries as home storage

| Charging Station crema&charge bidi* |  |
|-------------------------------------|--|
| DC Plug                             | CCS-Type2, IEC 62196-3   |
| DC Charging and Discharging Power   | 22kW / 20kW with CEE32 plug  |
| DC Safety                           | Short-circuit protection, overcurrent protection, overvoltage protection, undervoltage protection, insulation monitoring, grounding monitoring                               |
| DC Current                          | 1x 73A   |
| DC Charging Cable                   | CCS2   |
| DC Voltage                          | 150-1000V DC (150-300V DC max.11kW)  |
| AC Network Connection               | L1, L2, L3, N, PE, 3x400V, 50/60Hz   |
| AC Current                          | max. 38A 22kW / 32A 20kW / 16A 11kW  |
| Combined Charging System (CCS2)     | DIN 70121, ISO 15118-2, VAS Bidi Extension, Plug IEC 62196-3   |
| Charging Cable                      | Cable length: 5.5m   |
| Display / HMI                       | 10" with good readability under all conditions / Power, energy display, battery status, and charging costs in real-time  |
| RFID                                | ISO/IEC 14443A, ISO7816, MIFARE Ultralight®, NTAG203, MIFARE Mini, MIFARE Classic® 1K, MIFARE Classic® 4K, FM11RF08  |
| Communication / Interfaces          | OCPP 1.5, OCPP 1.6, OCPP 2.0 (ready)<br>Ethernet-Port, GPRS, UMTS, LTE   |
| Access / Payment Systems            | RFID (eCarUp, Move, swisscharge, etc.),<br>Optional: NFC Authentication, Credit and Debit Cards such as Visa, Mastercard, Maestro, V-Pay, Apple-Pay, Google-Pay, Samsung-Pay |
| Environment / Vandalism             | IP 54<br>IK 10 (except display)  |
| Operating Temperature               | -20°C to +45°C   |
| Storage                             | -40°C to +75°C with RF 5% to 95% (non-condensing)  |
| Maximum Noise Level                 | 65dB(A) at 1m  |
| Short-Circuit Resistance            | 10 kA Icu  |
| EMC                                 | EN 61000-6-1, -2, -3, -4   |
| Compliance                          | EN 61851-1, -2, -3; EN 62479; EN55011 + A1   |
| Overvoltage                         | Type 2 + Type 3 / Class II<br>Optional: Type 1 + Type 2+ Type 3 / Class I + Class II   |
| Efficiency                          | 96%  |
| Power Factor                        | > 0.99 (at > 50% power)  |
| THDI                                | ≤5%  |
| Mounting                            | Wall mounting, floor mounting with stand   |
| Dimensions (W x D x H)              | 238 x 554 x 799 mm   |
| Weight                              | 60kg   |
| Max. Mounting Height a.s.l.         | 2000   |

\* Preliminary specifications: Values may vary in series production.

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## the &chargefamily

**EVTEC**



**moka.corretto system**

Up to 384kW DC charge power with distributed architecture and minimal footprint for dispenser.



**bricco.corretto system**

Up to 2x 192kW DC charge power with distributed architecture for depot applications.



**ristretto.&charge**

High power charger with up to 384kW DC and voltages up to 920V. Charge 3 vehicles simultaneously.



**cappuccino.&charge**

100kW DC, including dynamic load distribution, charges up to three vehicles at the same time.



**move.&charge**

Plug&play 20kW DC + 22kW AC charge. Optional version with 1000V, available with all DC-plugs.