



# 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 with Grid Approval

Since 2018, we have been using vehicles bidirectionally as energy storage with VDE-AR-N-4105 approval. This new wallbox from Switzerland connects to the power grid across the rest of Europe. The grid codes can be configured specifically for each country and grid operator.

- Independent CO<sup>2</sup> neutral
- International Grid Codes
- MEB 77kWh compatible
- 22kW bidirectional



## Store self-generated electricity in your car: crema&charge bidirectional

Since 2018, the first grid-approved bidirectional wallbox from EVTEC has been available. Starting in 2025, the crema&charge bidi will connect the next generation of vehicles to the home network in compliance with grid standards. The vehicle's battery capacity will then function like a stationary home storage system, helping to avoid peak loads or increase self-consumption. Electric vehicles can thus promote the energy transition.

### VW compatible Approved

for commercial distribution for all VW ID models with min. 77kWh battery & software 3.5 or higher.

Based on approval from 14.8.2024 to use the proprietary VW protocol (ISO 15118-2) for bidirectional charging.



## License partner

production, sales & service

## wanted !

license@evtec.ch

## 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

## EVTEC AG

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| Charging Station crema&charge bid <sup>*</sup> |  |
|--|--|
| 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   |

<sup>\*</sup> Preliminary specifications: Values may vary in series production.

## 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.