

SWARCO

eVOLVE 25 DC CONTROLLER-RECEIVER POST THE FASTEST MULTI-CHARGING SOLUTION WITH MINIMAL COSTS

APPLICATION

The eVolve DC series is designed to adapt DC charging to a compact format, applying it to contexts where AC charging is insufficient, thereby improving charging speed and reducing the required investment. The controller-receiver system, which can be combined with the entire eVolve (AC) and Raption (DC) range, also makes it ideal for all multi-point and multi-speed charging scenarios. It is available in two formats, depending on the installation: wallbox and post.



CONCEPT DESIGN

The worlds of AC and DC come together in the eVolve DC to maintain high charging power in the typical compact AC format, making it possible to supply 25 kW of DC power to all electric vehicles. The controller-receiver system minimises the initial investment (CAPEX) and operating expenses (OPEX) in facilities with various chargers. In turn, this makes it simple to manage all receiver chargers through the controller, both in terms of communication and the user interface: a solution that avoids loss of performance and reduces costs.

PRODUCT HIGHLIGHTS

- Using a typical **small AC enclosure**, eVolve DC is capable of supplying **25 kW of DC power in a fast charge** to any electric vehicle, cutting down charging times.
- The eVolve and eVolve DC chargers can be used as controllers and/or receivers within the same charging system, and a Raption charger can be used as a controller for the set. This allows for a **unique mixed modular charging system, combining controller-receiver and AC-DC**, adapting any charging environment to meet any need.
- A single modem of the controller device can be used as a **back-office integration point** (through OCPP 1.5, 1.6J or future 2.0), reducing operating costs.
- For environments without access to **backend systems** (OCPP), an AC charge balance function is available with user control via RFID.
- The **door at the front with lock and security key** enables maintenance access and makes it more difficult to vandalise. It also allows it to be installed next to a wall.
- As a **controller charger**, it can operate up to 5 eVolve DC receivers or 8 eVolve receivers (16 AC outlets), and they can be combined with each other. For example, 3 DC outlets and 8 AC outlets can be installed to work together. User authentication from a single point reduces CAPEX costs.
- The eVolve DC range has been designed with Raption family technology to work within a **voltage range of 200 to 920 V**. This enables it to adapt to new and future EV models and facilitates the charging of other heavier vehicles, such as buses or lorries.
- Its 8-inch **anti-vandal colour touchscreen** can be read in daylight, not only displaying clear charging instructions and the operational status of the charger, but also allowing users to select their language from among over 30 options.
- The eVolve DC Controller/Receiver features a **contactless payment** system that offers easy, intuitive and quick transactions.
- To meet the most stringent billing requirements, the eVolve DC series includes **MID-certified meters**.

eVOLVE 25 DC CONTROLLER-RECEIVER POST

GENERAL SPECIFICATIONS

AC power supply	3P + N + PE
AC input V	400V +/- 10% three-phase
Power factor	> 0.98
Efficiency	94% at nominal output power
Frequency	50 / 60Hz
Power supply capacity	27 kVA
Maximum AC input current	39 A
Maximum output current	70 A
Compliance	CE / Combo-2 (DIN 70121; ISO 15118) IEC 61851-1; IEC 61851-23 IEC 61851-21-2
Enclosure material	Aluminium and ABS
Enclosure rating	IP54 and IK10
Operating humidity	Up to 95%
Operating temperature	Between -35 °C and +45 °C (Low Temperature Kit)
Storage at room temperature	Between -40 °C and +60 °C
Environment	Outdoors
Indicator light	RGB colour indicator
Enclosure door locking	Key lock
Enclosure access	Door at front
Cable length	5.5 metres
Cable support	Holder support and integrated cable roller
Dimensions (W x H x D)	480 x 1750 x 290 mm
Weight	70 kg
Meter	MID Meter Class 1 - EN 50470-3

Controller	
Connections	10/100TX (TCP-IP)
Protocol	OCPP 1.5 / 1.6J / 2.0 HW Ready
HMI screen	8" anti-vandal touchscreen
RFID reader	ISO/IEC 14443 A/B MIFARE Classic/DESFire EV1 ISO 18092 ECMA-340 NFC 16.53MHz
Wireless connection	EMEA - 4G LTE/WiFi Hotspot/ GPRS/GSM
Connectivity	Switch TCP ethernet 8 ports

Receiver	
Communication with the controller	UTP ethernet
Connectivity	Switch TPC ethernet 8 ports


OPTIONAL DEVICES

Customisation	Frontal Labelling
Wireless connection*	LATAM/APAC - 4G LTE/GPRS/ GSM
Connectivity*	Switch TCP ethernet 16 ports
RFID extension*	Legic Advant / Legic Prime ISO 15693 / ISO 18092, Sony FeliCa
Contactless payment *,**	Built-in credit card payment terminal

* Controller only

** Ask for availability

MODEL SPECIFICATIONS

MODELS	Controller CCS	Receiver CCS
Maximum output power	25 kW	25 kW
Output voltage	150-920 V DC	150-920 V DC
Safety protections	Type B RCD 30 mA C-curve MCB	Type B RCD 30 mA C-curve MCB
Connection	CCS2 	CCS2 