SOLUTION SHEET

E-mobility high-power enclosure

EcoFlex with integrated low voltage distribution and high-power charging with optional charge posts

E-mobility EcoFlex HPC enclosure with integrated high-power chargers and low-voltage distribution board

Standard connection interfaces between power modules, chargers, and grid for easy start up and expansion

Reduces site activities and safety related risks

Plug-and-play solution offers simple and quick installation

The e-mobility EcoFlex HPC is a housing that can accommodate four to eight 175kW high-power charging cabinets and up to two withdrawable charging posts together with a low voltage (LV) distribution board in a plug-and-play solution.

As a variant, it can accommodate up to eight high-power charging cabinets when charging posts are on site. The low voltage distribution board comprises a main incoming breaker for grid connection, a battery energy storage (BESS) feeder and the electric vehicle site solution (EVSS) which provides advanced charging functionalities. The ease of installation drastically reduces the site activities in terms of manhours, excavation and civil works activities. The EcoFlex enclosure not only protects the high-power chargers from vandalism, it can also be easily relocated. The solution is prewired and tested at factory.

Solution features

- Easy to install; plug-and-play with charging posts on a sliding mechanism
- Integrated low voltage distribution panel for charger protection and control and BESS connection, as required
- Integrated EVSS control panel and an optional BESS connection (2 variants)
- Easy to relocate; all power modules and charge posts are mounted on heavy duty shock absorbers
- Lockable enclosure prevents unauthorized entry
- No direct sun radiation to the power modules

Technical data

	8 power modules	4 power modules and 2 charging posts
LV level	400-480V	400-480V
Number of power cabinets	8	4
Number of charge posts	NA	2
Total maximum charging power	1400kW	700kW
Protection degree LV compartment	IP54	IP54
Nominal current in LV busbars	3200A	2500A
Nominal current main breaker (grid side)	2500A	1600A
BESS feeder maximum power	500kW	500kW
Outgoing protection (charging cabinets)	400A NH3 fuse	400A NH3 fuse

Equipment description

The enclosure houses the high-power cabinets and charging posts as well as the LV distribution board.

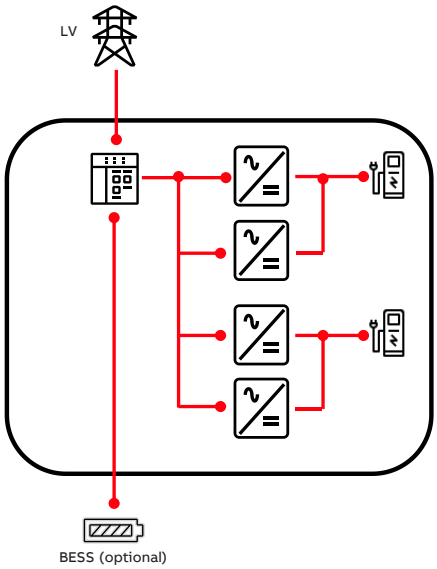
Optional equipment

- Lighting devices
- Remote monitoring and control
- Molded case circuit breakers as outgoing feeders

Installation

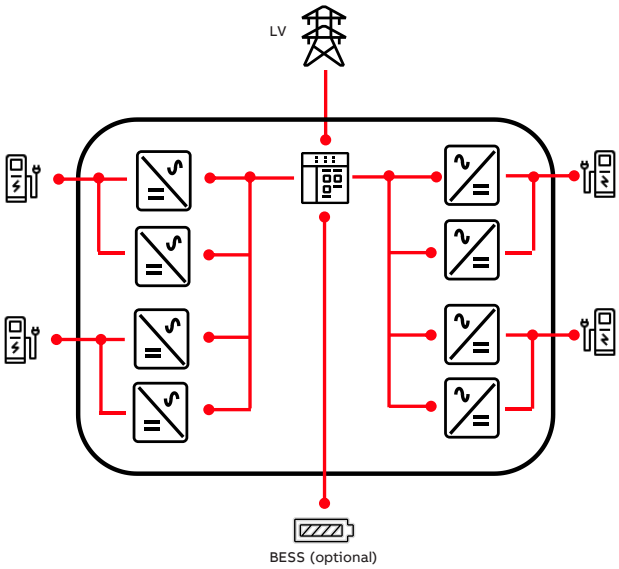
- LV network connection needed at site
- Reduced site works
- Compact design for reduced footprint

Single line diagram for:
2 x 350kW or 2 x 175kW



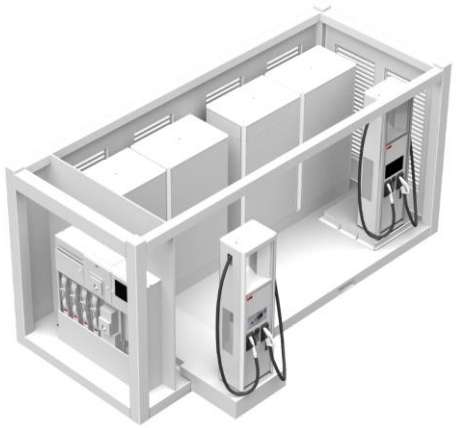
E-mobility EcoFlex HPC enclosure with integrated high-power chargers, charge posts and LV distribution panel.

4 x 350kW or 8 x 175kW



E-mobility EcoFlex HPC enclosure with integrated high-power chargers and LV distribution panel. (Charger posts installed externally.)

Internal view: EcoFlex HPC enclosure with charge posts integrated



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