

E-mobility Compact Secondary Substation (CSS)

Skid-mounted CSS with integrated fast charging



Internally arc tested as per IEC 62271-202, a safer design for equipment, personnel and public environment



Plug-and-play solution – simply connect to grid and start operation



Ease of handling, transportation, unloading and connecting



Conveniently sized for installation in a car parking space to feed surrounding cars

E-mobility skid mounted Compact Secondary Substation with integrated fast chargers

The e-mobility skid-mounted CSS solution with integrated fast chargers provides connection to the medium voltage network and is ideal when EV chargers are in a public area where safety is of paramount importance. It is also a plug-and-play pre-tested solution, which can provide a DC charging station in just one day of site work. Conveniently sized, it can be placed in a regular parking area, taking up only one car parking space.

Features of solution

- Available in multiple enclosure materials
 - Steel for rural areas
 - Glass reinforced polyester (GRP) for harsh and challenging environmental conditions
- Internal arc tested design assures high safety standards for service personnel and public
- Lockable enclosure to prevent unauthorized entry
- Compact design to reduce footprint installation
- Fire tested according to ISO 834
- Flammability according to UL 94
- Toxicity according to EN 45545

Equipment description

The skid is comprised of a CSS typically housing medium voltage switchgear (up to 40.5 kV), transformers (oil or dry type) and a low voltage switchboard with protection devices, ie circuit breakers or fused disconnects, and integrated fast chargers. The CSS is compartmentalized to isolate the sections to reduce risk of accidental handling.

Technical data

Key specifications	
Medium voltage level	from 2.4 - 40.5 kV
Typical ratings (kVA)	up to 1250 kVA
Secondary voltage	400-480 V
Number of chargers	Up to 4
Trafo type	Oil or dry
Protection degree	IP 54/23D (MV SWGR/trafo)
Applicable standards	IEC, GB, AS, GOST, ANSI, CSA, and more

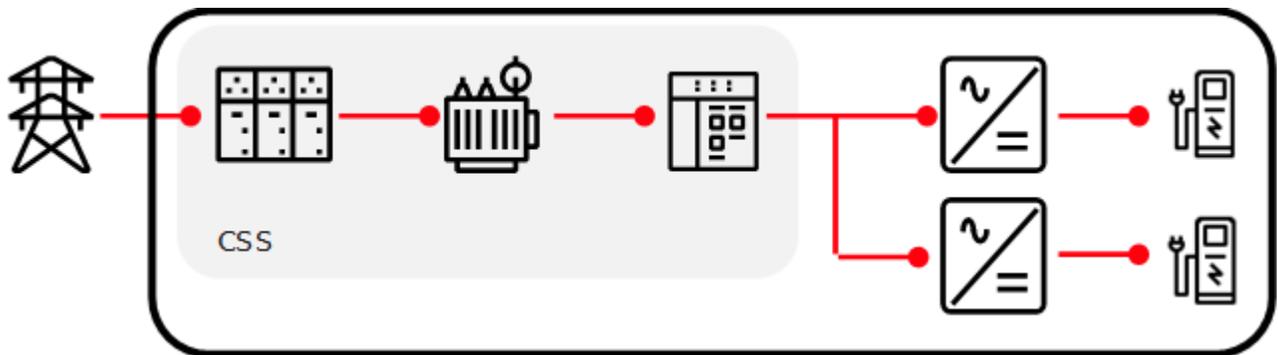
Optional equipment

- Seismic certifications
- IP35 or IP45 protection for demanding locations
- Added ventilation for hot climate
- Remote monitoring
- Remote monitoring and control
- Different switchgear insulation available
- SCADA ready

Installation

- One-piece delivery factory assembled and tested
- Only MV connection is needed
- Reduced site works
- Compact design for reduced footprint
- No heavy crane needed

Single line diagram



E-mobility skid-mounted CSS with integrated fast chargers

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