**SOLUTION SHEET**

**E-mobility Compact Secondary Substation (CSS)**

Skid-mounted CSS with integrated fast charging

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

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