MV/MV and MV/LV Substations for Substation Solutions

ormacontainer
Mobile and containerised substations
Up to 40.5 kV
IEC Standards

Reliable innovation. Personal solutions.
Preface

For almost three decades Ormazabal designs, develops, manufactures and supplies prefabricated transformer substations and switching substations.

During the past years all of these prefabricated substations have continuously evolved into a more extended range with flexible configurations for different applications both more metallic and concrete type finishing and in different sizes.

**ormacontainer** type mobile substations are the newest prefabricated and factory tested metallic substations that are designed and developed mainly to respond temporary or urgent needs for switching or transformer substations.

Besides **ormacontainer** type containerised substations also provide ideal solutions for renewable energy applications, such as, photo voltaic (PV) plants, and also for industrial applications, especially for the mining and oil & gas sectors.

Safety

» Same equi-potential earthing throughout the all structure
» Transformer fence with protection mesh

Reliability

» Industrialized uniform quality
» Fully factory assembled, process controlled and tested
» Plug & play philosophy for MV

Efficiency

» Walk in type switchgear operation
» No need of special permits for transport
» Simple and quick installation, optimizing times and costs
» Easy connection of MV cables thanks to access holes in the base

Sustainability

» Longer operational life against harsh environmental conditions

Continuous innovation

» Applications for off-shore wind farms
» Applications for PV plants
» Application for diesel generators

Technical Characteristics

All **ormacontainers** consist of a personalised metal container suitable for both land and maritime freight, and contain all the substation related elements, such as,

» Medium voltage (MV) cubicles
» Auxiliary or distribution transformer (MV/LV)
» AC/DC Low voltage (LV) board
» DC Battery chargers
» Inverters (In case PV Plants)
» Diesel generators
» Internal earthing
» Ventilation (extractor or aircon)
» Auxiliary components
  » Remote control box
  » Telecommunication aerial
  » Safety systems (Fire detection, emergency lighting, first aid, etc.)
  » etc...

**External dimensions**

<table>
<thead>
<tr>
<th></th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Total Height</th>
<th>Internal Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 feet</td>
<td>6096</td>
<td>2438</td>
<td>2895</td>
<td>2700</td>
<td></td>
</tr>
<tr>
<td>30 feet</td>
<td>9144</td>
<td>2438</td>
<td>2896</td>
<td>2700</td>
<td></td>
</tr>
<tr>
<td>40 feet</td>
<td>12192</td>
<td>2438</td>
<td>2896</td>
<td>2700</td>
<td></td>
</tr>
<tr>
<td>Mobile(*)</td>
<td>13176</td>
<td>2600</td>
<td>4200</td>
<td>2700</td>
<td></td>
</tr>
</tbody>
</table>

These dimensions, combined with a weight of less than 24 T, mean it can be transported on a lorry without the need for an escort vehicle.

For other dimensions, please consult with Ormazabal.

Design

**ormacontainer.20**

**ormacontainer.40-pv**

**ormacontainer.40-m**

Options:

» pv: For photo voltaic plants
» w: For wind farms
» gen: For diesel generators
» m: Mobile on wheels