Medium Voltage Products

UniGear ZS1
Double level
Air insulated switchgear for power application

Each panel consists of a two overlapped units that can be equipped with circuit-breaker or contactor as well as with all the accessories available for the conventional units of the switchgear.

In the middle part of each panel is provided a cubicle to take the auxiliary instrumentation; in the top panel there is an extra compartment to accommodate additional instrumentation.

The units can be coupled together directly with UniGear ZS1 single busbar system, 550, 500R and MCC with the possibility to extend the switchgear on both ends.

All the service operations are carried out from the front.

Range
• ...17.5 kV, ...1600 A, ...50 kA
• Standard IEC
• Highly customized versions

Safety
• Fitted with safety interlocks
• Internal arc classification IAC AFLR
• Classified LSC-2B, PM
• CB racking with closed door

Flexibility
• Direct coupling with single level solution
• Wide applications
• Strong reduction of switchgear width
• Vacuum and SF6 circuit-breaker
• Vacuum contactor
• Traditional CT/VT and sensors
• Free-standing solution

Quality
• ABB quality
• Large installed base
• Installed in high number of Countries

Design includes
• Protection and control
• Earthing switch
• Bay computer

All the significant components are identical to those used for the single busbar system units and therefore the same service and maintenance procedures are guaranteed.
Available also in duplex version.
## Technical data

<table>
<thead>
<tr>
<th>Switchgear</th>
<th>UniGear 12</th>
<th>UniGear 17.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of construction - Internal Arc Classification</td>
<td>IAC AFLR</td>
<td>IAC AFLR</td>
</tr>
<tr>
<td>Rated voltage [kV]</td>
<td>12</td>
<td>17.5</td>
</tr>
<tr>
<td>Insulation levels / power frequency / lightning impulse [kV]</td>
<td>12 / 28 / 75</td>
<td>17.5 / 38 / 95</td>
</tr>
<tr>
<td>Rated frequency [Hz]</td>
<td>50-60</td>
<td>50-60</td>
</tr>
<tr>
<td>Rated main busbar current (40 °C) [A]</td>
<td>... 1600</td>
<td>... 1600</td>
</tr>
<tr>
<td>Rated feeder current (40 °C) [A]</td>
<td>... 1600</td>
<td>... 1600</td>
</tr>
<tr>
<td>Rated short-time current [kA x 3 s]</td>
<td>... 50</td>
<td>... 40</td>
</tr>
<tr>
<td>Arc proof withstand current (IEC 62271-200) [kA x 1 s]</td>
<td>... 40</td>
<td>... 40</td>
</tr>
<tr>
<td>[kA x 0.5 s]</td>
<td>... 50</td>
<td>–</td>
</tr>
<tr>
<td>Tested according to</td>
<td>IEC</td>
<td>IEC</td>
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<td>Overall dimensions</td>
<td></td>
<td></td>
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<tr>
<td>of the basic cubicle</td>
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<tr>
<td>H [mm]</td>
<td>2698</td>
<td>2698</td>
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<tr>
<td>W [mm]</td>
<td>750 / 900</td>
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<tr>
<td>D [mm]</td>
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<td>1976</td>
</tr>
</tbody>
</table>

## Single-line diagram of typical units

![Single-line diagram of typical units](image)

## Typical feeder unit

![Typical feeder unit](image)

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More product information: www.abb.com/productguide

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