MEDIUM VOLTAGE PRODUCTS

ZS8.4 Digital

Improve reliability and efficiency in your electrical network.

With ZS8.4 Digital you gain unprecedented flexibility for any application. The digital solution takes full advantage of well-proven components: current and voltage sensors, protection and control relays with IEC 61850 digital communication to ensure a reliable and efficient electrical network.

ZS8.4 Digital benefits

Safe and reliable
• Increased equipment reliability and safety in your substation
• Extended communication supervision functionality

Intelligent and ready for the future
• Implement changes easily as requirements change
• Flexibility towards varying load flows

Simple and efficient
• Minimized lifetime costs
• Late customizations and changes possible

Lower environmental impact
• Lowers energy consumption up to 250 MWh, which represents saving of 13 000 EUR
• Saves up 150 tons of CO₂, that is equal to emissions produced by mid-size European car driven for 1 250 000 km

ZS8.4 Digital represents an advanced switchgear solution as it meets important requirements of the future:
• Unprecedented flexibility
• Increased process efficiency
• Lower cost of operation
• Maximized integration
• Reliability and safety

With ZS8.4 Digital you avoid many of the practical challenges you face in today’s complex applications - you simply have less to worry about in your electrical network.

ZS8.4 is an air-insulated switchgear for primary distribution up to 24 kV. It is suitable for indoor installations and it is designed to provide maximum flexibility and the highest possible safety for circuit-breaker systems, switch-disconnector or contactor installations.

* compared to typical substation with 14 switchgear panels of ZS8.4 type over 30 years of operation
### Switchgear

<table>
<thead>
<tr>
<th>Property</th>
<th>12 kV</th>
<th>17.5 kV</th>
<th>24 kV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated voltage</td>
<td>12</td>
<td>17.5</td>
<td>24</td>
</tr>
<tr>
<td>Rated power frequency withstand voltage</td>
<td>[kV 1 min]</td>
<td>28</td>
<td>38</td>
</tr>
<tr>
<td>Rated lightning impulse withstand voltage</td>
<td>[kV]</td>
<td>75</td>
<td>95</td>
</tr>
<tr>
<td>Rated frequency</td>
<td>[Hz]</td>
<td>50 / 60</td>
<td>50 / 60</td>
</tr>
<tr>
<td>Rated current</td>
<td>[A]</td>
<td>... 1 250</td>
<td>... 1 250</td>
</tr>
<tr>
<td>Rated short-time current (IEC 62271-200)</td>
<td>[kA x 3 s]</td>
<td>16 / 20 / 25</td>
<td>16 / 20 / 25</td>
</tr>
<tr>
<td>Arc proof withstand current (IEC 62271-200)</td>
<td>[kA x 1 s]</td>
<td>16 / 20 / 25</td>
<td>16 / 20 / 25</td>
</tr>
<tr>
<td>Internal arc classification - gas exhaust into switchgear room</td>
<td>AFL</td>
<td>AFL</td>
<td>AFL</td>
</tr>
<tr>
<td>Internal arc classification - gas evacuation out of switchgear room</td>
<td>AFLR</td>
<td>AFLR</td>
<td>AFLR</td>
</tr>
</tbody>
</table>

### Loss of service continuity

#### Width

<table>
<thead>
<tr>
<th>Component</th>
<th>650 mm</th>
<th>650 mm</th>
<th>800 mm</th>
</tr>
</thead>
</table>

#### Depth

<table>
<thead>
<tr>
<th>Component</th>
<th>1 000 mm</th>
<th>1 000 mm</th>
<th>1 200 mm</th>
</tr>
</thead>
</table>

#### Height

<table>
<thead>
<tr>
<th>Component</th>
<th>2 100 mm ... 2 240 mm</th>
<th>2 100 mm ... 2 240 mm</th>
<th>2 100 mm ... 2 240 mm</th>
</tr>
</thead>
</table>

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**ZS8.4 Digital**

- **Combined current and voltage sensor**

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