Gas-insulated switchgear
Type ZX1.2
Gas-insulated switchgear

Medium voltage switchgear

**Type ZX1.2**

Single busbar systems

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Current</th>
<th>Short Circuit Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 kV</td>
<td>2500 A</td>
<td>31.5 kA</td>
</tr>
<tr>
<td>24 kV</td>
<td>2500 A</td>
<td>31.5 kA</td>
</tr>
<tr>
<td>36 kV</td>
<td>2500 A</td>
<td>31.5 kA</td>
</tr>
</tbody>
</table>
## Gas-insulated switchgear

Medium voltage switchgear

### Type ZX1.2

With IAC classification

<table>
<thead>
<tr>
<th>AFLR 31.5 kA 1s</th>
<th>AFL 31.5 kA 1s</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Rated voltage kV</th>
<th>12</th>
<th>24</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated current of busbars A</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
</tr>
<tr>
<td>Rated current of tee-offs A</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
</tr>
<tr>
<td>Rated short-circuit breaking current kA</td>
<td>31.5</td>
<td>31.5</td>
<td>31.5</td>
</tr>
<tr>
<td>Rated short-circuit making current kA</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Insulation gas SF$_6$</td>
<td>SF$_6$</td>
<td>SF$_6$</td>
<td>SF$_6$</td>
</tr>
<tr>
<td>Width mm</td>
<td>600 / 800</td>
<td>600 / 800</td>
<td>600 / 800</td>
</tr>
<tr>
<td>Height mm</td>
<td>2100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth mm</td>
<td>1400-1900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heigth of cable fixing point mm</td>
<td>1250</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Higher values as per international standards on request
2. Sulphur hexafluoride
3. Double feeder panel up to 25 kA, 2 x 630 A
4. Rated feeder current > 1250 A
5. Depending on quantity of cables per phase with a 500 mm deep LV compartment

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Gas-insulated switchgear

**Feeder 1250 A**

1. Density sensor
2. Circuit-breaker operating mechanism
3. Multifunction Protection and Switchgear Control unit
4. Three position disconnector operating mechanism
5. Three position disconnector
6. Busbar
7. Pressure relief disk
8. Pressure relief duct (optional)
9. Ring type current transformer
10. Cable plug
11. Cable socket
12. Measuring sockets for capacitive voltage indicator system
13. Test socket
14. Circuit-breaker

SF₆
Gas-insulated switchgear

Operation of a switchgear panel without multi-functional protection- and control-unit

**Typ ZX1.2**

Bay Control Unit
- Modern solution of a conventional switchgear control in ZX
- Integral control, indication and annunciation unit
- Conventional control without active components
- Control via conventional push-buttons and key operated local / remote switch
Gas-insulated switchgear

Single lines of switchgear variants (SBB)

Typ ZX1.2

Feeder
Cable connection
Sectionalizer
Riser
Busbar metering
# Gas-insulated switchgear

## Feeder 2000 A

### Type ZX1.2

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plug-in voltage transformer</td>
</tr>
<tr>
<td>2</td>
<td>Disconnecting device for voltage transformer</td>
</tr>
<tr>
<td>3</td>
<td>Density sensor</td>
</tr>
<tr>
<td>4</td>
<td>Circuit-breaker operating mechanism</td>
</tr>
<tr>
<td>5</td>
<td>Multifunction Protection and Switchgear Control unit</td>
</tr>
<tr>
<td>6</td>
<td>Three-position disconnector operating mechanism</td>
</tr>
<tr>
<td>7</td>
<td>Three-position disconnector</td>
</tr>
<tr>
<td>8</td>
<td>Busbar</td>
</tr>
<tr>
<td>9</td>
<td>Pressure relief disk</td>
</tr>
<tr>
<td>10</td>
<td>Pressure relief duct</td>
</tr>
<tr>
<td>11</td>
<td>Cable plug</td>
</tr>
<tr>
<td>12</td>
<td>Cable socket</td>
</tr>
<tr>
<td>13</td>
<td>Measuring sockets for capacitive voltage indicator system</td>
</tr>
<tr>
<td>14</td>
<td>Test socket</td>
</tr>
<tr>
<td>15</td>
<td>Circuit-breaker</td>
</tr>
<tr>
<td>16</td>
<td>Combined current and voltage sensor or current transformer</td>
</tr>
<tr>
<td>17</td>
<td>Plasma diverter</td>
</tr>
</tbody>
</table>

**SF₆**
Gas-insulated switchgear

Double feeder panel up to 24 kV 630 A for each feeder

Type ZX1.2

1. Pressure sensor (temperature-compensated)
2. Multifunction Protection and Switchgear Control unit
3. Circuit-breaker operating mechanism
4. Circuit-breaker
5. Three-position disconnector
6. Three-position disconnector operating mechanism
7. Busbars
8. Pressure relief disk
9. Pressure relief duct
10. Current transformer or Rogowski coil
11. Inner cone cable plug
12. Inner cone cable bushing
13. Measuring sockets for capacitive voltage indicator system
14. Test socket
15. Plasma diverter

SF6

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Gas-insulated switchgear

Bus sectionalizer 2000 A with option

**Type ZX1.2**
Integrated voltage metering
Gas-insulated switchgear

Bus riser 2000 A with option

Type ZX1.2
Integrated voltage metering
Gas-insulated switchgear
Type ZX1.2 – Plug-in components

- Dummy plug
- Test plug
- Surge arrestor
- Voltage transformer
- Cable plug
- BB plug-in system
Gas-insulated switchgear

Advantages

**Type ZX1.2**

- Partitioned function compartments ➤ maximum safety
- Completely shockproof enclosures
- High voltage section totally independent of environmental influences
- No effect of site altitude on dielectric strength
- Maximum availability for the operator
- Independence of the environment makes for extremely long system life
- Minimum maintenance requirement
- Longer life than other system types