**CT23 Spring Operating Mechanism**

**Summary**

CT23 spring operating mechanism applies to vacuum circuit-breaker that rating below 12kV/25kA, ZW8 model and ZW1 vacuum circuit-breakers and those of equivalent closing power. It conforms to relevant standards in IEC62271 & GB/T1984: AC High-voltage vacuum circuit breaker, and IEC standards. The mechanism store energy by electric motor and manual, and operate by motor and manual.

**Ambient condition**

1. Altitude: ≤1000m;
2. Ambient temperature: -25~+40°C;
3. Relative humidity: daily average 95%, monthly average <90%;
4. Earthquake intensity: ≤8 degree;
5. Applicable occasions should free from inflammables, explosives, corrosives and severe vibration.

**Model**

- Design serial No.:
- Spring:
- Operating mechanism:

**Technical specification**

1. **Technical specification of storage motor**

<table>
<thead>
<tr>
<th>Item</th>
<th>Closing coil</th>
<th>Opening coil</th>
<th>Overcurrent trip coil</th>
<th>Storage motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated voltage</td>
<td>AC, DC 220</td>
<td>AC 220</td>
<td>DC 220</td>
<td>AC, DC 220</td>
</tr>
<tr>
<td>Rated operating current (A)</td>
<td>AC 2.9 DC 2.8</td>
<td>AC 2.4 DC 0.9</td>
<td>5A or 2.5A</td>
<td>70W</td>
</tr>
<tr>
<td>Normal operate voltage and current range</td>
<td>AC, DC 65%~120% of rated voltage</td>
<td>65%~120% of rated voltage (do not trip when voltage is less than 30%)</td>
<td>Opening when higher than 100% of rated current, do not trip when less than 90% of rated current.</td>
<td>+10% of rated voltage</td>
</tr>
</tbody>
</table>

2. **Mechanism output turning at 55°~60°**

The mounting position:

![Mechanism Diagram]

**CT20 Spring Operating Mechanism**

**Summary**

CT20 spring operating mechanism applies to apparatus that rating below 12kV/25kA and ZW20A model outdoor vacuum circuit breaker, as well as those VCB with equivalent closing power. The mechanism is of small volume, compact structure and small input power. The mechanism store energy by motor and manual, and operate by motor and manual.

**Ambient condition**

1. Ambient temperature: -45~+40°C;
2. Wind speed: ≤35m/s;
3. Altitude: ≤2000m, earthquake intensity ≤8 degree;
4. Ambient humidity: monthly average <90%, daily average <95%;
5. Mounted on occasions without explosives, inflammables, corrosives and severe vibration;
6. Air pollution degree: .

**Model**

- Design serial No.:
- Spring:
- Operating mechanism:

**Technical specification**

1. **Technical specification of storage motor**

<table>
<thead>
<tr>
<th>Model</th>
<th>Rated voltage</th>
<th>Rated output power</th>
<th>Normal operate voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>53ZY-CJ02-DN-S</td>
<td>DC220 DC110</td>
<td>24V</td>
<td>70W</td>
</tr>
</tbody>
</table>

2. **Technical specification of CO electromagnet and over current tripping coil**

<table>
<thead>
<tr>
<th>Rated power (W)</th>
<th>Rated current (A)</th>
<th>Over-current trip coil</th>
</tr>
</thead>
<tbody>
<tr>
<td>860</td>
<td>3.9</td>
<td>5A</td>
</tr>
<tr>
<td>480</td>
<td>4.4</td>
<td>Open when larger than 100% rated current, do not open at 90% rated current</td>
</tr>
<tr>
<td>480</td>
<td>10</td>
<td>Open when larger than 100% rated current, do not open at 90% rated current</td>
</tr>
<tr>
<td>480</td>
<td>12</td>
<td>Open when larger than 100% rated current, do not open at 90% rated current</td>
</tr>
<tr>
<td>288</td>
<td>2</td>
<td>Close at 65%~110% rated operate voltage</td>
</tr>
</tbody>
</table>

3. **Manual storage is operated by handle, the moment is less than 100N**

4. **Mechanical life 10000 (times), mechanism output angle 38°~45° (degree), outline dimension 420 x 300 x 225mm.**

**Outline dimension**

![Outline Dimension Diagram]