ABB is a leading supplier of synchronous turbine-driven generators to power utilities, paper mills, sugar plants, oil and gas installations, and many other sectors. We have been manufacturing generators for more than 120 years and have extensive application experience with tens of thousands of installations all over the world. ABB offers reliable and efficient power generation with worldwide support.

For the pre-engineered generator line a carefully selected auxiliary equipment is available for collecting and transmitting information from the generator for safety and monitoring purposes. This equipment ensures that the generator meets the customer’s needs and the requirements of the installation.

### Auxiliary equipment included in standard scope of supply

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 simple PT 100 RTDs in stator (shielded 4-wire)</td>
<td>2 PT100 RTDs are mounted in each phase.</td>
</tr>
<tr>
<td>1 dual type PT100 RTD in hot air circuit (shielded 4-wire)</td>
<td></td>
</tr>
<tr>
<td>1 dual type PT100 RTD in each bearing (shielded 4-wire)</td>
<td>Used to measure temperature in the bearing shell. The tip of the PT100 RTD is located close to the metal but not embedded.</td>
</tr>
<tr>
<td>Anti-condensation heaters in machine and exciter</td>
<td>The anti-condensation heaters are installed between the stator gables and inside of the exciter housing and will prevent water from condensing on electrical surfaces when the generator is shut down.</td>
</tr>
</tbody>
</table>
Auxiliary equipment available as optional items

The following accessories are optionally available:

- 12 simple PT100 RTDs in stator (shielded 4-wire)
  - 4 PT100 RTDs installed per phase.

- seismic type vibration detectors (one per bearing)
  - used for measuring horizontal vibrations in the bearing housing

- proximity type vibration control
  - used for measuring electrical and mechanical shaft vibrations
  - proximity type vibration control in two radial planes (X & Y), 90° apart. 2 probes per bearing are mounted outboard the bearing centerline and 2 proximitors are mounted per bearing. Interconnecting cables are included in the delivery.
  - the available run out levels are 22.5µm and 16µm (acceptance level tests for shaft run out are performed in V-blocks during slow roll).

- keyphasor for speed control
  - used for shaft speed measurement.

- rotor earth brush on D end
  - used for earthing of the rotor.
  - one pair of carbon earth brushes connected to the rotor on the D end side (not suitable for installation in hazardous areas)

- rotor earth fault slip ring and brush on ND end
  - this solution is used to detect earth faults in the field winding (not suitable for installation in hazardous areas).

- rotor earth fault indication
  - the earth fault indication can be used to detect earth faults on generators installed in hazardous areas.

- auxiliary terminal box made of stainless steel (S316L) for termination of accessories

- water leakage detector
  - used to detect water leakage from the water cooler.

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