Generator protection

- internal generator fault protection
- network fault protection
- driving machine fault protection
- RTD temperature monitoring (ANSI 38/49T)
- voltage and frequency monitoring.

Protection of a separate generator: Sepam G40 or G60

Earth fault protection:
- 50G/51G
- 59N.

Protection of a generator coupled to other generators or to a network: Sepam G62 or G82

Short-circuit detection on generator side.
Control fault protection.

Earth fault protection:
- 50G/51G
- 59N.

Earth fault protection:
- 100 % stator earth fault 64G.

Earth fault protection:
- 64REF and 50G/51G
- 50N/51N.
## Generator applications

**Generator differential protection:** Sepam G87
- **Phase protection by self-balancing differential scheme:** 0/50/51.
  - Earth fault protection: 50G/51G.

<table>
<thead>
<tr>
<th>Sepam G87</th>
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<tr>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
<td><img src="image3.png" alt="Diagram" /></td>
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**Generator differential protection:** 87M.

**Earth fault protection:** 0G/1G.

**Earth fault protection:**
- 50G/51G
- 59N.

**Note:** monitoring of generator insulation must be ensured by another device.

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**Generator-transformer unit protection**
- Generator and transformer protection against internal faults
- Network fault protection
- Driving machine fault protection
- RTD temperature monitoring (ANSI 38/49T)
- Voltage and frequency monitoring.

**Separate generator-transformer unit protection. Sepam G40 or G60**
- Earth fault protection:
  - 50G/51G.

**Note:** monitoring of generator insulation must be ensured by another device.
Protection of a generator-transformer unit coupled to other generators or to a network: Sepam G82

- Short-circuit detection on generator side: 67.
- Control fault protection.
- Internal transformer protection: Thermostat / Buchholz (ANSI 26/63).
- Generator earth fault protection: 50G/51G
- Transformer secondary earth fault protection:
  - 50G/51G
  - 59N.

Generator applications

Generator-transformer unit differential protection: Sepam G88

- Generator-transformer unit differential protection: 87T.
- Generator earth fault protection: 50G/51G
- Transformer secondary earth fault protection:
  - 50G/51G
  - 59N.