**Description**

The SE-703 is a microprocessor-based earth-fault relay for resistance- and solidly earthed systems. It offers sensitive earth-fault detection as low as 25 mA and can be used on systems with significant harmonic content. The SE-703 provides feeder-level protection or individual-load protection. The output contacts can be connected for use in protective tripping circuits or in alarm indication circuits. The analog output can be used with a PLC or a meter. The SE-703 is specifically designed to be AS/NZS 2081 compliant to either 2011 or 2002 (see ordering options).

**Features & Benefits**

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustable pickup</td>
<td>Adjustable trip setting provides a wide range of low-level protection and system coordination</td>
</tr>
<tr>
<td>(25 - 500 mA)</td>
<td></td>
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<tr>
<td>Adjustable time delay</td>
<td>Adjustable trip delay allows quick protection and system coordination</td>
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<tr>
<td>(INST-500 ms)</td>
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<tr>
<td>Output contacts</td>
<td>2 Form C ground-fault output contacts for operation of separate annunciation and trip circuits</td>
</tr>
<tr>
<td>Analog output (0-5 V)</td>
<td>Allows for connecting an optional meter (PGA-0500) or control system</td>
</tr>
<tr>
<td>CT-Loop monitoring</td>
<td>Alarms when CT is not connected</td>
</tr>
<tr>
<td>Contact operating mode</td>
<td>Fail-safe operating mode for undervoltage applications, optional non-fail-safe mode available</td>
</tr>
<tr>
<td>Harmonic filtering</td>
<td>Eliminates nuisance tripping</td>
</tr>
<tr>
<td>Non-volatile trip memory</td>
<td>Retains trip state while de-energized to simplify troubleshooting</td>
</tr>
<tr>
<td>Microprocessor based</td>
<td>No calibration required, saves maintenance cost</td>
</tr>
<tr>
<td>Universal power supply</td>
<td>Allows operation in application where one side of PT is faulted, provides flexibility for numerous applications</td>
</tr>
<tr>
<td>Global certifications</td>
<td>Compliant with US, Canadian, European, and Australian standards for applications in almost any country</td>
</tr>
</tbody>
</table>

**Accessories**

- **EFCT Series Ground-Fault Current Transformer**
  - Required zero-sequence current transformer specifically designed for low-level detection.

- **PGA-0500 Analog % Current Meter**
  - Optional panel-mounted analog meter displays ground-fault current as a percentage of the set-point or 5 A.

- **PMA-60 Series – Mounting Adapter**
  - Required when panel mounting for AS/NZS 2081:2011 compliance.

**Specifications**

- **IEEE Device Numbers**
  - Ground fault (50G/N, 51G/N)
  - See ordering information

- **Input Voltage**
  - H 75 mm (3.0”), W 35 mm (2.2”), D 115 mm (4.5”)
  - 25-500 mA

- **Trip Level Settings**
  - INST-500 ms

- **Contact Operating Mode**
  - Fail-safe (x=0 models) or selectable (x=2 models)

- **Harmonic Filtering**
  - Standard feature

- **Test Button**
  - Standard feature

- **Reset Button**
  - Standard feature

- **CT-Loop Monitoring**
  - Standard feature

- **Output Contacts**
  - Two isolated Form C contacts

- **Approvals**
  - CSA certified, UL Listed (E340889), CE (European Union), RCM (Australian)
  - AS/NZS 2081:2011 (x=0 models) or AS/NZS 2081:2002 (x=2 models)

- **Analog Output**
  - 0-5 V

- **Conformally coated**
  - Yes

- **Warranty**
  - 5 years

- **Mounting**
  - DIN, Surface (standard)
  - Panel (with PMA-55 or PMA-60 adapter)

**Ordering Information**

<table>
<thead>
<tr>
<th>ORDERING NUMBER</th>
<th>CONTROL POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE-703-0U-0x</td>
<td>120/240 Vac/Vdc</td>
</tr>
<tr>
<td>SE-703-0D-0x</td>
<td>12/24 Vdc</td>
</tr>
<tr>
<td>SE-703-0T-0x</td>
<td>48 Vdc</td>
</tr>
<tr>
<td>SE-703-03-0x</td>
<td>24 Vac</td>
</tr>
</tbody>
</table>

**Accessories Requirement**

- **EFCT Series Required**
- **PGA-0500 Optional**
- **PMA-60 Optional**
- **SE-EFVC Voltage Clamp Optional**

**Note:**

- x=0 for AS/NZS 2081:2011 compliance (fail-safe output contacts)
- x=2 for AS/NZS 2081:2002 compliance (selectable fail-safe or non-fail-safe output contacts)