Product Features

- Indication of earth fault currents by LED and mechanical flag
- Remote indication via relay contacts
- Optional: external signal lamp

The EARTH ZERO device is an earth fault indicator. It is designed to detect, locally indicate and remotely report earth fault currents in medium voltage distribution networks. A wired earth fault current transformer monitors the summation current of all three conductors. The electronics of the display unit evaluates the measurements. When the fault sensitivity threshold is exceeded, a red LED will start flashing and a mechanical flag becomes visible (EARTH ZERO Flag). In addition to that, the remote indication contacts are energised. A system-related external signal lamp (optionally available) is also activated.
# Technical Data

<table>
<thead>
<tr>
<th></th>
<th>EARTH ZERO</th>
<th>EARTH ZERO Type Flag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth fault indicator</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Ie&gt; Earth fault trip current</td>
<td>25, 50, 75 or 100 A(^1)</td>
<td></td>
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<tr>
<td>tIE&gt; Response delay</td>
<td>80 or 160 ms(^1)</td>
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<tr>
<td>Accuracy</td>
<td>±15 %</td>
<td></td>
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<tr>
<td>Indication</td>
<td>1 red LED, flash rate 2 s</td>
<td>1 red LED + mechanical flag</td>
</tr>
<tr>
<td>Reset</td>
<td>• Manual reset</td>
<td>•</td>
</tr>
<tr>
<td></td>
<td>• Automatic time reset: 2, 4 or 8 h</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Voltage restoration (110–240 V AC)</td>
<td></td>
</tr>
<tr>
<td>Remote signal</td>
<td>1 Relay contact and input for external signal lamp</td>
<td></td>
</tr>
<tr>
<td>Remote contact</td>
<td>Potential-free permanent or momentary contact (1 s), adjustable</td>
<td></td>
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<tr>
<td></td>
<td>Contact capacity: 230 V AC/1 A/62.5 VA max.</td>
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<tr>
<td></td>
<td>220 V DC/1 A/60 W max.</td>
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<tr>
<td>Power supply</td>
<td>Long-life lithium cell, shelf life ≥20 years,</td>
<td></td>
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<tr>
<td></td>
<td>&gt;1,200 h total flashing time (&gt;500 h when using the external signal lamp)</td>
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</tr>
<tr>
<td>Housing</td>
<td>Polycarbonate, IP40 (plug-in housing), IP65 (surface mount housing)</td>
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<tr>
<td>Temperature range</td>
<td>-30 to +70 °C</td>
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</tr>
</tbody>
</table>

1) Further trip currents on request
Dimension drawing see on page 49, M6 and on page 50, M7

# Equipment set

<table>
<thead>
<tr>
<th></th>
<th>EARTH ZERO</th>
<th>EARTH ZERO Type Flag</th>
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</thead>
<tbody>
<tr>
<td>Display unit</td>
<td>• 1 Display unit</td>
<td>•</td>
</tr>
<tr>
<td>Summation current transformer</td>
<td>1 Summation current transformer</td>
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</table>

# Article

<table>
<thead>
<tr>
<th>Article</th>
<th>Order No.</th>
<th>EARTH ZERO</th>
<th>EARTH ZERO Type Flag</th>
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</thead>
<tbody>
<tr>
<td>Display unit in plug-in housing</td>
<td>32-0513-001</td>
<td>32-0512-002</td>
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</tr>
<tr>
<td>Display unit in surface mount housing</td>
<td>32-0503-001</td>
<td>32-0502-002</td>
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<tr>
<td>Summation current transformer, 3 m connection cable</td>
<td>49-6013-029</td>
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<td></td>
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<tr>
<td>External signal lamp, 1 LED, 5 m connection cable, excluding battery</td>
<td>49-0701-010</td>
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<td></td>
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<tr>
<td>External signal lamp, 1 LED, 12 m cable, excluding battery</td>
<td>49-0701-012</td>
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