Reduce shock hazards with ground-fault protection

Enhanced safety for marinas, boat yards and other applications

30 mA ground-fault protection (also known as “equipment protection”) can be required for specific loads or at times by the NEC®. For many applications, a residential circuit breaker can be used and is sufficient for the amperage and voltage required. However, customers are seeing increasing demand for 30 mA ground-fault protection on loads larger than what these breakers are rated for.

Eaton’s enclosed circuit breakers with 30 mA ground-fault protection provide a complete UL® Listed product for these applications. These assemblies include ground-fault relay/ module, cover controls, CPT, CT and a molded case breaker with an electronic, adjustable trip unit. The adjustable trip unit allows for flexibility on the job site. As load demands change, the breaker can be adjusted to change with them.

These assemblies can be used on a wide range of applications including AC shore power systems where there is a code requirement, as well as heat trace systems and other industrial installations. The addition of ground-fault protection on these circuits helps to reduce the risk of injury or property damage that may result from stray fault currents.

Features and benefits

- NEC 555.3 compliant
- Padlockable enclosure
- Cover controls, including red LED indication light (light ON when tripped on ground fault) and ground-fault relay reset
- Three-position handle (ON/Tripped/OFF)
- Padlockable in the OFF position (optional factory modification can allow locking in the ON position. The breaker will trip as usual, even with the handle locked ON)
- Assembly is fully factory wired and ready to go out of the box
- Enclosure painted white as standard

MODIFICATIONS

Additions are available such as custom paint, lock-on provisions and more. Call the Flex Center at 1-888-329-9272 for more information.
Catalog numbering system

Enclosed circuit breaker with 30 mA ground-fault protection

Ampere rating/frame
- 1 = 80 A, FDE frame
- 2 = 160 A, FDE frame
- 3 = 225 A, FDE frame
- 4 = 250 A, LG frame
- 5 = 400 A, LG frame
- 6 = 600 A, LG frame

Trip unit
- B = LSI

Neutral
- N = With neutral
- D = No neutral

CPT voltage
- 1 = 480 V
- 2 = 208 V
- 3 = 240 V
- 4 = 600 V

Terminals
- L1 = (1) 14–1/0, FDE frame
- L2 = (1) 4–4/0, FDE frame
- L3 = (2) #2–500 MCM, LG frame

kAIC performance at 480 V
- H = High (65)

Options/modifications
- 00LO = Lock-on provision
- 00A1 = 1NO/1NC auxiliary
- 00A2 = 2NO/2NC auxiliary
- 00OR = Painted orange
- 00NP = Custom nameplate
- 00TK = Trapped key interlock (Kirk key)
- 0100 = GF relay set to 100 mA

Technical specifications

Dimensions in inches (mm)

<table>
<thead>
<tr>
<th>Breaker frame</th>
<th>Maximum amperage</th>
<th>Height (H)</th>
<th>Width (W)</th>
<th>Depth (D1)</th>
<th>Depth (D2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDE 225</td>
<td>32.63 (828.9)</td>
<td>21.26 (540.0)</td>
<td>11.27 (286.1)</td>
<td>6.15 (156.1)</td>
<td></td>
</tr>
<tr>
<td>LG 600</td>
<td>53.37 (1355.6)</td>
<td>23.10 (586.7)</td>
<td>14.10 (358.1)</td>
<td>8.97 (227.8)</td>
<td></td>
</tr>
</tbody>
</table>

Short-circuit ratings

<table>
<thead>
<tr>
<th>Breaker frame</th>
<th>kAIC ratings</th>
<th>240 V</th>
<th>480 V</th>
<th>600 V</th>
<th>Catalog numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDE 100</td>
<td>65</td>
<td>25</td>
<td></td>
<td></td>
<td>MG1H, MG2H, MG3H</td>
</tr>
<tr>
<td>LG 100</td>
<td>65</td>
<td>35</td>
<td></td>
<td></td>
<td>MG4H, MG5H, MG6H</td>
</tr>
</tbody>
</table>

Certifications
- UL
- NEC

For more information, email flexswitches@eaton.com

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

© 2019 Eaton
All Rights Reserved
Printed in USA
Publication No. PA008025EN / Z21981
August 2019

Eaton is a registered trademark.
All other trademarks are property of their respective owners.

Follow us on social media to get the latest product and support information.