Are you in compliance with the new 2017 NEC SCCR requirements?

What has changed?
The 2017 National Electrical Code® (NEC) requires marking the available fault current for more equipment within the power distribution system than previously mandated. At the location where the equipment is installed, the available short-circuit current must be marked/documented and dated. These markings now need to be applied to equipment such as industrial control panels, HVAC, elevator control panels, motor control centers and industrial machinery.

Who is affected? How are they affected?

- **Inspectors and approvers**: Easier to confirm proper short-circuit current rating (SCCR) protection.
- **Contractors and installers**: Will likely need to label the available fault current on the equipment being installed.
- **Equipment manufacturers**: Must be made aware of the available fault current.
- **End users**: Must comply with NEC by ensuring all equipment is marked with the available fault current and the equipment SCCR is equal to or greater than the available fault current.

New label showing available fault current at the compressor is to be applied by the contractor/installer.

The elevator control panel has an SCCR rating of 5 kA. Under the 2017 NEC, the equipment SCCR must be equal to or greater than the available fault current. Because the available fault current is 65 kA, this panel is not compliant under the new code.

The available short-circuit current (also known as available fault current) is the amount of current that is available during a short-circuit event and is unique to the installed equipment's location.
Eaton enclosed drives and enclosed control provide SCCR protection levels up to 100 kA to ensure system compliance with the 2017 NEC

<table>
<thead>
<tr>
<th>Component type</th>
<th>Eaton solution</th>
<th>Maximum kA rating with fuse</th>
<th>Maximum kA rating with breaker</th>
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</thead>
<tbody>
<tr>
<td>Enclosed variable frequency drives</td>
<td>Low harmonic drives</td>
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<td>Industrial drives</td>
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<td>HVAC drives</td>
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<td>Enclosed control</td>
<td>NEMA® starter</td>
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<td>IEC starter</td>
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<tr>
<td>Enclosed soft starters</td>
<td>Soft starter</td>
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</tbody>
</table>

Eaton provides tools for analysis, component selection and calculation

**E ASCR Protection Suite**

Quickly finds components with the SCCR you need

With just a few simple selections from drop-down lists, you can easily find all the available Eaton components and their respective SCCR based on your system needs. You can reduce the number of results by setting various component preferences. SCCR Protection Suite also allows the application of an upstream current limiting device to determine if the branch circuit SCCR can be raised.

To access SCCR Protection Suite, go to Eaton.com/SCCR.

**FC2 Available Fault Current Calculator**

Easily calculates available fault current anytime, anywhere

Our FC2 mobile and web-based app quickly delivers fault current calculations in the palm of your hand. The program:

- Calculates both single- and three-phase system fault current levels
- Generates NEC compliant labels, one-line diagrams and documents
- Features fuse sizing guide for main, feeder and branch circuits
- FC2 considers transformer size, conductors and conduit in calculating the fault current.

For more information, visit Eaton.com/bussmannseries and search for “FC2”.

**OSCAR™ 2.1**

Calculates and documents assembly SCCR for a control panel

Eaton’s OSCAR software allows you to enter a one-line diagram of a control panel circuit, identify the components in that circuit and calculate the SCCR for the entire assembly. OSCAR contains over 60,000 part numbers and thousands of component SCCR. The program also applies current limiting rules per UL® 508A that permit the SCCR of branch circuits to be raised. What’s more, you can view, print and save SCCR analysis reports.

For more information, please go to oscar.eaton.com.

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