

Short Circuit Current Rating Executive Summary

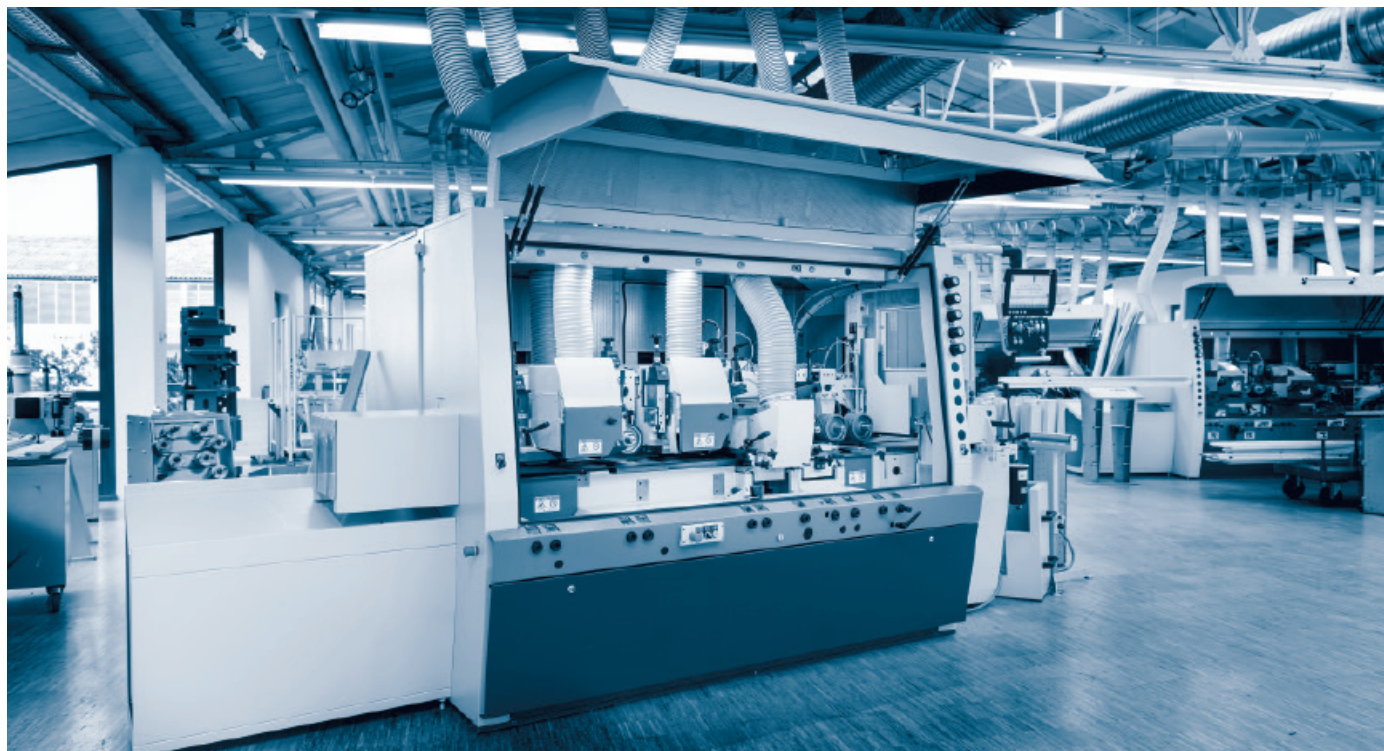


Current-limiting devices: Strengthening the weakest SCCR link Build it in.



Manufacturers looking to improve electrical safety need to ensure that they are adhering to the latest regulations and standards such as those provided by the North American Electrical Code (NEC). However, understanding the various legislations worldwide can be complex, and is it particularly challenging for machine builders and original equipment manufacturers (OEMs) who export globally.

In 2017 the NEC will include several new short-circuit protection requirements including an update to equipment short-circuit current rating (SCCR) marking and documenting. This white paper explores the standards and best practices for determining equipment SCCR and is an essential read for those wanting to learn how to realize the correct ratings, and understand the approved methods to increase them.



Equipment with insufficient SCCR can pose a risk to personnel, equipment and can even create a fire hazard, but OEMs that can build equipment with enhanced safety and reliability, and for a larger range of available fault currents, means they can better support their end user customers.

OEMs and machine builders can struggle with developing an equipment SCCR, an SCCR plan or solution for their panels and assisting end users with equipment SCCR specifications that will help support electrical code compliance. Often the rules involved are unclear or difficult to apply. However, this paper simply explains how current-limiting devices can be used to achieve desired SCCR. In turn, this improves safety and reliability of the machines, enabling end users customers to increase personnel safety, ensure equipment is properly protected, and reduce downtime.

Furthermore, the paper highlights that by specifying the requisite SCCRs into equipment design specifications at the beginning of a project, OEMs are better able to control project costs and duration, helping end users to increase ROI. It gives two practical examples to demonstrate this, advising how machine builders can ensure that their equipment control panels meet the SCCR guidelines, therefore preventing shock, fire, and impact hazards if a short circuit should occur.

To learn how to achieve equipment SCCR code compliance easily and efficiently download the white paper here www.eaton.eu/export