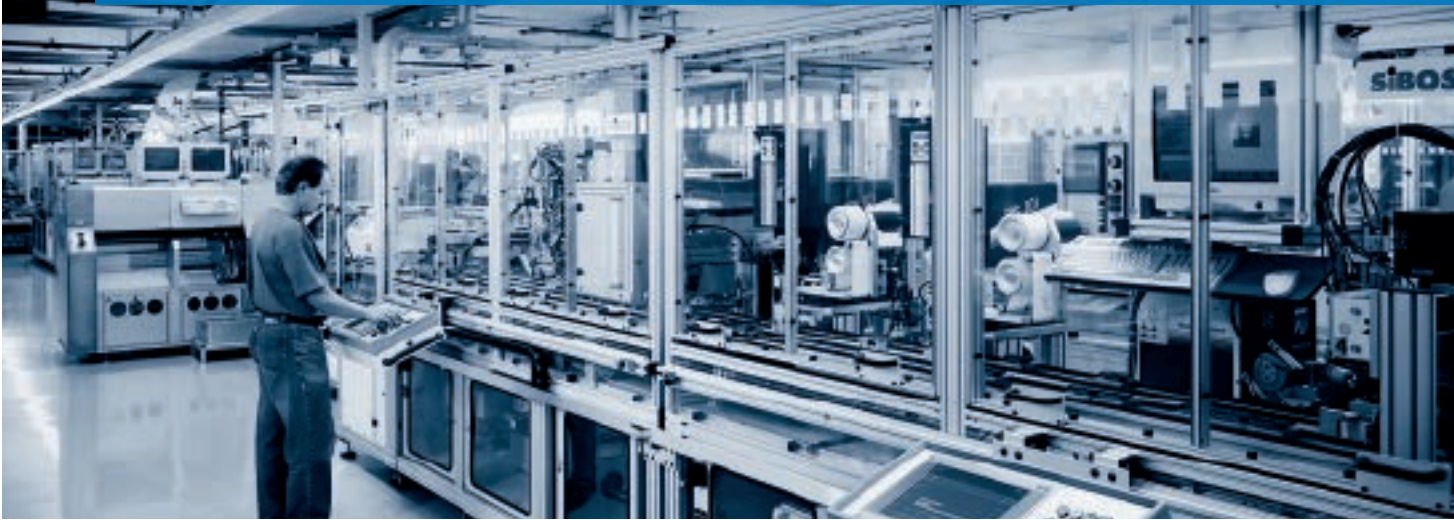


Residual Current Devices Executive Summary



Protecting man and machine against damaging residual currents. Build it in.



To remain competitive and succeed in today's busy global market place is one of the toughest challenges facing manufacturers.

With increasing demands to produce more efficiently, while at the same time faster and at a lower cost, there are a number of steps machine building companies can take to ensure they are operating efficiently, while best supporting their customers.

Machine reliability is vital to a business in reducing downtime and increasing productivity. This can ultimately be increased using the right technology according to appropriate standards and safety requirements. This includes circuit protection technologies such as residual current devices (RCDs) that protect both equipment and personnel from the devastating effects of residual current.



Powering Business Worldwide



In this white paper Peter-Lukas Genowitz, Product Manager RCCB at Eaton, reviews the life threatening effects of electrical current on the human body, the functioning of residual current devices (RCDs), their installation and role within an overall protection strategy. It is the first of three white papers that examines the topic of residual current and this paper delivers guidance for machine and system builders seeking to understand the issues involved in selecting and installing RCDs.

It is critical for machine builders to realise the importance of thoroughly understanding the electric faults that can impact the machines and manufacturing process, and this paper is an essential read for those wanting to ensure they are employing the correct technologies while adhering to local legislation. Only then can they improve efficiencies and profitability, at the same time as protecting operators.

The field of RCDs is vast and expert advice is invaluable. The paper gives classifications for RCDs, RCCBs, RCBOs and outlines the major global standards for RCDs. It then

goes on to recommend how to choose the most appropriate technology for the given application. For example, digital RCDs offer monitoring and pre-warning capabilities, enabling machine building customers to reduce machine downtime further.

Moreover, efficiencies in export can also be made, therefore saving machine builders and their customers additional time and money. Machines and components need to meet global regulations and standards and by working with trusted partners that have complete systems expertise and can offer one single source solution for use worldwide means machine building companies can simplify procurement.

To learn how RCDs can ensure increased health and safety of the operator, while providing maximum productivity and machine uptime, and ultimately profitability, download the white paper [here](#).

www.eaton.eu/en/cp/rcd