Study of nuisance tripping of residual current circuit breakers with electronic loads

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Residual current circuit breakers (RCCBs) are often used to provide protection against indirect contacts in a grounded electrical installation. However, there are situations where the use of RCCBs presents certain problems. In circuits that feed electronic loads usually occur nuisance trips of RCCBs. This article discusses the reasons of the nuisance tripping of RCCBs in this type of circuits based in previous cases studied by the author and some tests performed in a power flexible laboratory. A theoretical circuit used to explain the phenomena is also presented.

Biography
Guillermo Escriva-Escriva has received his degree in Electrical Engineering from the Universitat Politècnica de València (UPV), Spain in 1999. He has worked in a construction company as an Installation Director for five years. He is a Professor in the Department of Electrical Engineering in the UPV since 2005. His research interest areas include energy efficiency, power markets and power system quality.

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