

Preface

The method of residual current monitoring has gained recognition in expert circles for some years with more and more application possibilities for residual current monitors (RCMs). Besides the standard IEC 62020:1998-08 and Amendment 1: 2003-09 – Electrical accessories – Residual current monitors for household and similar uses (RCMs), other standards are currently in progress. The various Technical Committees (TCs) of the International Electrotechnical Commission (IEC) in Geneva as well as various European National Committees are working on drafts for standardising RCMs, some are already giving recommendations for their application (for example the German VdS-recommendations of the Association of Insurances – GDV).

The 2nd German edition of “Fehlerstrom-Überwachung in elektrischen Anlagen” [1] contained the recommendations of the European Standard EN 61140:2001-12, for the protection against electric shock, with various methods of protection for electrical installations and equipment, coordination of electrical equipment and protective provisions, as well as methods of limiting leakage currents.

This translation follows the book at large. However for the international application, the German and European standard references have been adapted to the respective International Standards of the IEC or left out, if not relevant for international use. This necessitated omitting some sections and hence results in a different structure of some chapters.

The interested reader will be informed on the current state of the respective International standards for fault current monitoring through the method of measuring the residual current with residual current monitors (RCMs).

A note to the American readers of this book: The author has chosen to use the English terminology for “earth” instead of the American terminology “ground”. An “earth-fault” is therefore to be translated as “ground-fault”, “unearthed” as “ungrounded” and so on.

Special Appreciation

The search, compilation, verification, collation and summing-up of information is tedious and is hard to be achieved alone. Writing the book I had many helping hands and eyes:

- Colleagues from various national and international committees,
- Colleagues from the BENDER company, especially Mr. K. H. Kaul,
- Friends from various sections of the industry.

My special appreciation is extended to Mrs. Monika Patterson, who completely translated this English edition and at the same time adapted the whole book to the current International standards. At this point it is explicitly mentioned that the exemplary support in many ways from BENDER in Gruenberg has been very well appreciated.

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- [1] Hofheinz, W.: Fehlerstrom in elektrischen Anlagen,
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