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Residual current devices (RCDs) associated with additional function (s)

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Foreword

This guidance technical document was drafted in accordance with the rules given in GB/T 1.1-2009.

This guidance document uses the redrafting method to modify the residual current protection using IEC /T R62710.2015 with additional functional combinations.

Protective appliances.

The technical differences and reasons for this guidance document and IEC /T R62710.2015 are as follows.

--- Regarding the normative reference documents, this guidance technical document has been technically adjusted to adapt to the technical regulations of our country.

The adjustments are concentrated in Chapter 2, "Regulatory References", and the specific adjustments are as follows.

* Replace IEC /CISPR14-1 with GB 4343.1 equivalent to the international standard;

* Replace IEC /T R60755 with GB/T 6829 modified to adopt international standards;

* Replace IEC 60898 (all parts) with GB/T 10963 (all parts) equivalent to international standards;

* Replace IEC 60479 (all parts) with GB/T 13870 (all parts) equivalent to international standards;

* Replace IEC 60364 (all parts) with GB/T 16895 (all parts) equivalent to international standards;

* Replace IEC 61008 (all parts) with GB/T 16916.1-2014 modified to international standards;

* Replace IEC 61009 (all parts) with GB/T 16917.1-2014 modified to international standards;

* Replace IEC 61543.1995 with GB/T 18499-2008 equivalent to the international standard;

* Replace IEC 61540 with GB/T 20044 modified to adopt international standards;

* Replace IEC 62423 with GB/T 22794 equivalent to the international standard;

* Replace IEC 62640 with GB/T 28527 modified to adopt international standards;

* Replace IEC 62335 with GB/T 29303 modified to international standards.

--- "The connection between RCBO and CB" in Note 3 of Chapter 1 is changed to "the connection between RCCB and CB";

--- 9.4 title "4.3 classification" was changed to "4.2b) classification";

---Modified the contents of Table 1.

* In the header, "Example. Test f according to IEC 61009-1.2010" is modified to "Example according to GB/T 16917.1-2014

(IEC 61009-1.2012, MOD) test f", clause number and test items are changed accordingly;

* "10.3" in test procedure D1 was changed to "9.5.4 of this guidance technical document";

* In test procedure I, the "radiation high frequency phenomenon" is modified to "radiation electromagnetic field";

* In test procedure J, the two test contents were modified to. "Common mode conducted disturbance in the frequency range below 150 kHz" and "static

Discharge".

The following editorial technical documents have been edited as follows.

--- According to the requirements of GB/T 1.1-2009, according to the normative reference in the text, IEC /T R62710.2015 reference

IEC 61540, IEC 61543, IEC 62335, IEC 62640, IEC 60364, IEC 60479 and IEC /CISPR

14-1 is adjusted to a normative reference (see Chapter 2).

This guidance technical document was proposed by the China Electrical Equipment Industry Association.

This guidance technical document is under the jurisdiction of the National Low Voltage Apparatus Standardization Technical Committee (SAC/TC189).

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Introduction

This guidance document presents information that allows manufacturers to combine additional functions with residual current protection appliances. To this end, this guide

Sex technical documents introduce requirements and trials. This guidance document will also assist in the RCD of laboratory testing combined with additional features.

This guidance document does not include the additional functionality itself (as defined by the additional functional standards), nor does it include the functionality and features of the RCD (by RCD)

standard regulation). In the absence of additional functional standards for home and similar purposes, this guidance document is limited to checking for additional features.

Any function that damages the RCD. In the case of additional functional standards related to household and similar uses, the relevant standards apply. This means

The combination of RCD and additional functions works as described above.

This guidance document is drafted in accordance with the following basic principles.

--- In order not to limit innovation, this guidance technical document is not related to additional features, and this guidance technical document applies to any additional

Features;

Note. It is not possible to list all of the additional features that may be present and future, and several examples are given in the definition.

--- Verification is limited to a combination of one RCD and one or more additional functions (integral or non-integral);

---The purpose of verification is to prove that one or more additional features (declared to match a particular protective device) and RCD combination is

All, and the combination does not impair the basic characteristics of the RCD;

--- requires additional features and assembly of the RCD is limited to the same manufacturer or the same trademark. Therefore, the manufacturer or trademark holds

It should be stated what additional features the protective device can be assembled with.

Residual current protection device combined with additional functions

1 Scope

This guidance document gives the following information that may be used.

--- Dedicated additional features declared by the manufacturer to be assembled with residual current protection appliances (RCDs) that meet household and similar use standards;

--- A specific RCD with built-in additional features that meets household and similar usage standards.

Note 1. The term RCD is a generic term that applies to a family of products that automatically break when the residual current equals or exceeds its rated residual operating current, Ideltan.

This general term is usually applied to the following appliances.

---RCCB residual current operated circuit breaker without overcurrent protection;

---RCBO residual current operated circuit breaker with overcurrent protection;

---SRCD socket type residual current appliances with or without overcurrent protection;

---PRCD Mobile residual current device without overcurrent protection.

This guidance document identifies the applicable test procedures for determining the effects of a particular RCD on a normal function, and the specific RCD declared is appropriate.

Built in or assembled with one or more additional features.

This guidance document can also be used to draft additional requirements for additional functional standards that are expected to be combined with home and similar use RCDs.

This guidance document provides an evaluation-based procedure to clarify the necessary tests to meet the appropriate requirements. If built in

There is no additional test according to this guidance document, as the additional functions in the RCD are evaluated without damaging the RCD.

Multiple additional features can be combined with one or more RCDs to check for the most severe combinations.